THE USE OF PLANTS AND OTHER NATURAL PRODUCTS FOR MALEVOLENT PRACTICES AMONG THE AZTECS AND THEIR SUCCESSORS [1]

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Introduction

The pre-Columbian Americans had an extensives knowledge of medicinal plants which were used against a wide range of diseases. The Aztecs of Mexico provide the best sources as documented by the Spanish conquerers. Apart from the *Badianus Codex,* Francisco Hernández, the personal physician of Felipe II of Spain, has described about fifteen hundred medicinal plants each of which was applied against one or more diseases in the "Aztec" region.[2] Bernardino de Sahagún described a smaller number of medicinal plants, but his texts are especially important in that they were based on dictations of the indigenous Nahuatl language. Sahagún posed questions to leading Aztec wise men (tlamatini), among them noted physicians, and the subsequent answers were given and recorded in Nahuatl.

In ancient Mexico pharmacologically active plants and animals were not only applied for treatment of diseases. From the descriptions of the chroniclers, it is certain that these natural substances were also used in malevolent practices to cause harm to other persons or to obtain the affection of an unwilling somebody in a love affair. This malevolent use of plants (and other natural products) is indeed more ancient than the Aztecs. The Chichimecs of Xolotl were in the Valley

[1] We would like to express our gratitude to Alfredo López Austin, José Luis Díaz and Mario Humberto Ruz for their helpful comments on this paper.

[2] The "Aztec" region included a considerable part of New Spain. Hernández actually worked in such different regions as e.g. the actual states of Morelos and Michoacán.

of Mexico before the Aztecs and they appear to have had extensive knowledge about the properties of toxic plants and their potential applications. About this Chichimec knowledge [Sahagún 1969: Book 10, Cap. XXIX] reports:

> ...and they know much about many herbs and roots, and about their virtues and qualities, and about the very poisonous ones with which they kill people immediately, or make then fade away slowly until they die...

In many instances, magic incatations, rituals and other sorcery practices were simultaneously applied with toxic plants by the ancient Mexicans to achieve malevolent purposes. The pre-Columbian Indians were convincend that the fate of other persons could be modulated in a positive or negative way by means of magic and sorcery. In many cases it is difficult to separate the pharmacological action of these plants from the rituals of sorcery; often both toxic plants and ritual incantations were used simultaneously to obtain a certain effect.

The term "malevolent" is a useful convenience to describe the widespread complex of beliefs and practices, originating to some degree in the pre-Columbian Indian culture, that have continued to exist in various forms of colonial and contemporary witchcraft in Mexico. These beliefs and practices have been aimed at manipulating evil natural and supernatural forces to cause specific sicknesses and deaths. There are several indications that the Aztecs frequently exercized malevolent practices and that their succesors still continue in transformed varieties of these practices. A first indication is that a large number of chroniclers mention that plants and sorcery were used to cause harm and to kill people who were disliked [López Austin 1974:75; *Relaciones Geográficas de Oaxaca,* 1981:203; *Relaciones Geográficas de México,* 1979:71; Acosta 1954-269]. The laws of the Aztecs explicitly mention the prohibition of these evil practices [Casas 1958: Cap. CCXIII; Torquemada 1975]. A plausible reason for the high incidence of malevolent practices in the pre-Columbian cultures is that murder and killing in any form was punishable by death. The use of toxic substances provided a possibility of eliminating an unwanted or detested person without being punished for the crime. Toxins that had their action after the lapse of some time further diminished the risk of being caught. Because of the relatively high likelihood of nondetection, killing another through poisoning and/or sorcery was considered an especially severe

crime in Aztec society. The offender was killed by blows with a truncheon [Casas 1958]. Given these severe social sanctions, the malevolent practioners appear have been relegated to the margins of society forced in most cases to work secretly.

In this paper the use of plants and other products for malevolent practices among the Aztecs and their successors (i.e. colonial and contemporary Mexican groups) is surveyed. For analytic purposes, these pratices are classified to include killing and causing physical, psychological or sociological harm to others. Mood modification for the purpose of taking advantage of others is also considered a harmful practice. For further clarification, the use of plants and other natural substances can be related to three distinct situations of administration. First, these products can be taken by a person himself — the situation of "self-administration". Second, these substances can be administered to another with "informed" consent. These two situations will not be classified as a malevolent practice even if the substances are used to harm or kill. However, if the substances (or actions) have been administered to cause harm, death or changes in mood without permission or under misleading or deceitful pretexts, these actions are classified as malevolent practices. The emphasis of this definition is placed upon the manipulative modification of a mood or state engendered by the intervention of a sorcerer.

In order to explicate these classifications, reliance is placed upon the numerous accounts of the Spanish chroniclers who systematically compiled and translated Aztec wisdom and folkways in many areas of everyday life. After the conquest and fall of the Aztec Empire by Spain and Christianity much of Aztec knowledge was preserved orally in various tribal and language groups. These peoples, the successors to the Aztecs, have been studied extensively by anthropologists and these studies provide sources of documentation on the use of plants and natural substances. In addition, the Mexican tradition of syncretism has allowed for a degree of cultural continuity that is absent in other lands of colonial conquest providing a rare opportunity for the researcher to study the relationships of the past and the "living" past.

Words, Feelings and Dees

A large number of words in the Aztec language refer to the use of sorcery, with or without the use of poisonous plants, "to cause harm to people" [Molina, 1970]. In Table 1 some of these words are

TABLE 1

Terms in the indigenous language which refer to malevolent practices

NAHUATL (Aztec language)

Cochtlaza	– to make someone drowsy with enchantment, to rob his property.
Tecocolizcuitia	– to cause a disease.
Tecocoliliztli	– disease, eternal pain; hate, dislike.
Tecocoliz tlapiuilia disease (Guerrero) (ahuyentar)	– to aggrevate someones Modern Nahuatl: to frigthen someones disease.
Micoani patli	– deadly poisonous beverage.
Tlapaitilli	– patient.
Tlaueliloc	– the devil in Guerrero Modern Nahuatl.
Tlacatecolotl (Guerrero modern Nahuatl) i.e. means	– he who is an owl-man, the devil. In Classical Nahuatl it "wizard".
Teipitzani	– he who blows evil to someone. (Guerrero Sp. Chapulinero, i.e. sorcerer).
Teyollocuani	– he who eats someone's heart.
Tetonallitlacoa	– to damage someone's *tonalli*.
Teyollopachoani	– he who oppresses someone's heart. (In Guerrero Modern Nahuatl it is used in a benevolent sense).
Tetlachihuia	– to witchcraft.
Tetlachiuicailpia	– to seduce.
Tlepan quetza	– to seduce.
Texoxohuitia (Guerrero modern Nahuatl)	– to cause harm to people by means of beating their body until it blood turns green.

given. The fact that the indigenous population had a rich vocabulary for malevolent practices suggests that these practices were frequently the subject of conversation and, therefore, quite commonly known and recognized. From a linguistic analysis of the words it appears that causing or aggravating a disease was so important that this practice was denotated by specific verbs.

The chroniclers have given some reasons of the Aztecs explaining why people performed malevolent practices. These reasons are not special to the Aztecs and seem to have been an almost universal human presence. A linguistic analysis of several examples of Nahuatl words show that hate and harm were closely associated with causing and aggravating a disease. Thus, the words *tecocolia* "to hate people", *tecocoani* "person who harms people", *tecoco, tecocolizcuiti* "thing that produces harm to people" are derived from the same stem [Molina, 1970]. Hate is frequently mentioned by several chroniclers as a cause to kill or harm another [López Austin 1974: 75]; *Relaciones Geográficas de Oaxaca,* [1981:203]. According to the *Relaciones Geográficas de Indias,* [1965] small reasons were sufficient enough to kill another with poisonous plants. Taking revenge on ones enemies is another reported reason for the use of poisonous herbs. The fifth king of the Aztecs, called Tizocic, is reputed to have been killed by means of poison.

It is not clear whether a specific verb exists to denote "to exercise a malevolent practice". In case such a verb would actually exist it is likely that it constitutes a suppletive stem. The Nahuatl word for sorcerer, "nahual-li", uses this kind of construction. Other related words also employ this construction such as the word for physician, "tici-tl" and cure, "tepatia-ni". From this linguistic evidence, these three words (as well as others) are associated by a similar construction that would support a hypothesis that both benevolent and malevolent practices are specialized supplemental senses of the same relational universe in which good and evil practices were relative.

The Aztec Sorcerer-Physician

In pre-Columbian America the medical profession was practised by a wide variety of persons. This variety of medical practices ranged on a continuum from the use of magical rites, prayers and incantations to the use of prescribed pharmacological preparations. On one side of this continuum were those who treated a disease exclusively with magic and

prayers [Ruiz de Alarcón 1953; Serna 1953]. On the other side were the herbalists who tried to cure with medicinal plants and other products [Hernández, 1959; Sahagún, 1969]. The real situation was, however, very much more complex because there were many fine gradations and intermediates of professional practice. As a consequence there were many types of physicians who treated their patients with a variable mixture of prayers, magic and medicinal plants and products. It appears that from each of these types of physicians there were a number of persons who "specialized" and applied their knowledge to cause diseases rather than to cure them, to cause physical or mental disability, to cause death or to interfere in love affairs [*Relaciones Geográficas de Oaxaca,* 1981:203]. Indeed, following Sahagún's contention, some of these specialists also were expert in diagnosing and countering the malevolence directed by others.

Midwives who procured abortion were also seen as a member of this class [Casas, 1958]. To classify abortion practices as "malevolent" is indeed ambiguous. Abortion was considered by the pre-Columbian Indians as highly objectionable and was severely punished. However, in the writings of the chroniclers there are many indications that it was frequently practiced. In a certain sense if can be considered as a malevolent practice [López de Gómara, 1946; Mendieta, 1973] in that many abortions were paid for and initiated mostly on orders of other persons who forced an unwilling woman into the situation [Cervantes de Salazar, 1971:135]. As with the other physicians, some midwives used magic, others poisonous plants and most combinations of both.

From the descriptions of the chroniclers, it is not always clear what is meant when the terms sorcery (and sorcerer) are used. Sometimes it refers indeed to the invocation of evil spirits to cause damage to other persons. At other times, however, it simply refers to the use of poisonous plants to cause harm and it is associated with evil and bad regardless of whether there is an invocation of supernatural forces. Because most indigenous physicians treated illness with a mixture of magic-religious incantations and medicinal plants, and because the performers of malevolent practices came from this class many chroniclers saw a close relationship between the sorcerer and the physician, and, therefore, called them sorcerer-physician [Cervantes de Salazar, 1971:135; Suárez de Cepeda, 1983:12]. Moreover, many chroniclers stressed the "evil" side of this prehispanic practice in order to justify religious repression. By contrast, from the point of view of the indigenous conceptualization, such practices could have both "evil" and "benevolent"

aspects. In other words, the absolute polarity between "good" and "bad" does not exist within the prehispanic system of ideas. Invocations of sorcerers were general ones, and took advantage of whatever ally appeared on their way while practicing their profession [López Austin, personal communication]. Cervantes de Salazar, [1971:135] describes the Aztec physicians and sorcerers together:

> ... most of the physicians and surgeons of the Indians are sorcerers and supersticious ... among these physicians are great sorcerers from which they say that they give herbs with which they reconcile those who abhor each other, forgetting all rancour ... among these sorcerer-physicians are some who reveal where lost things are, and say who had stolen them ...

While this statement provides further evidence of the importance and widespread use of malevolent practices in Aztec society as well as supporting the conception of the unified "physician-sorcerer" role, such descriptions depend more upon the colonizers negative evaluation of the prehispanic religious ideology as "demoniac" rather than upon an accurate viewpoint of the believers in this ideology. In contradiction to this unified "physician-sorcerer" conception, a sharp division between the "good" and "bad" physician is given in the *Florentine Codex* by the Aztec informants of Sahagún, [1950-1969, Book 10: Cap. XIV: 30, 53]:

> ... the bad physician is a fraud ... a killer with his medicines ... he betwitches; he is a sorcerer, a soothsayer ... he kills with his medicines; he increases [sickness]; he seduces women; he betwitches them". The bad female physician is not much better: "... she betwitches, [she is] a sorceress, a person of sorcery, a possessed one. She makes one drink potions, kills people with medications, causes them to worsen, endangers them, increases sickness ...". Sahagún has the same division and writes: "... she who is a bad physician uses supersticious sorcery in her profession, and she has a pact with the devil. She knows how to give beverages with which she kills men ...

In addition, the bad physician is also portrayed as the "false" physician. The counterpart, the "true" physician is one who is "a wise man, imparts life, a tried specialist, his remedies have been tested, he examines, he experiments, he alleviates sickness, etc." León-Portilla, [1990:26-27] has made much of this chronicle to support a theory that

the Aztec conception of the universe is one which counteracted true knowledge based upon knowledge and an indigenous scientific method with false knowledge founded on magic and witchcraft.

While the relationship between truth and falsity in medicine may have had something to do with the methods and body of knowledge applied, Sahagún has recorded evidence that bad is not categorically associated with sorcery in the Aztec mind. Thus, "the nahualli is properly called sorcerer; the man who is really into this art is able to explain everything about witchcraft, and he is clever and astute in its use; he takes advantage of it, and causes no harm. The man who is evil and dirty in this art causes harm to the bodies with such a witchcraft, he drives persons mad and soffocates; he is a deceiver . . .". [*Florentine Codex* 1950-1969: Book 10, Cap. XIV]. In fact, such sharp divisions between "good" and "bad" are not exclusivly related to sorcerers, but seem to have also been applied with equal moral weight to more conventional familial roles such as father and grandfather. At this point, it becomes important to stress that the dichotomy between "good" and "bad" is not indigenous to the pre-Columbian Indians. The origin of such dichotomy derives from the fashionable encyclopedic European model, prevalent when Sahagún wrote Book X of his *Historia General* and which he superimposed upon the Nahuatl descriptions of their indigenous practices. Thus, this rigid dichotomy which has obscured the intrinsic relationship between medicine and sorcery in Aztec culture is neither the property of Sahagún's nor of his informants [López Austin, personal communication].

To go even further, the ambivalent representation of the "nahualli" by Sahagún suggests a raison d' entre for the continuity of this social function after the collapse of the Aztec Empire. Although severely sanctioned, the widespread use of plants and other natural substances for malevolent purposes was present in all classes of society. for public as well as private reasons. The modulation of hate and revenge did not disappear as basic social functions with the conquests of Spanish culture and Christianity. On the other hand, the means provided by European civilization to cope with these strong human emotions were neither completely relevant nor credible to the indigenous population. A need existed to have specialized knowledge in these practices, not only for the purposes of doing harm, but for the related purposes of undoing or protecting against harm. The "nahualli" fulfilled this social function. Relegated to the margins of society and to secrecy, this occupation was indeed needed by those who had a problem involving such

base emotions as hate and revenge that could not be solved by conventional means offered by the European conquerers. Nevertheless, the indigenous aversion to the use of malevolent practices reinforced by Christian beliefs in a new syncretic cultural whole, the social status of sorcerers who had specialized knowledge of malevolent practices could become fairly stigmatized in specific local communities although this was not always necessary. The contemporary situation of the successers of the Aztecs indicate a similar ambivalent and peripheral status. Most generally stated, in the frame of Aztec culture and society many different kinds of sorcerers are recognized across various moral and emotional dimensions.

Plants and Other Natural Products for Malevolent Practices

The importance of medicinal plants and their usefulness for both malevolent and benevolent practices is an essential part of the Aztec creation myth. According to one version rendered in the *Historia de los Mexicanos,* the gods Quetzalcoatl and Huitzilopochtli created fire and then made the first man, Oxomoco and first woman, Cipactonal. Then to Cipactonal, the gods gave "certain grains of corn for making cures, for soothsaying and witchcraft, and thus the women use them to this very day [León-Portilla, 1990:34]."

Though many chroniclers mention the use of poisonous plants (and other products) to cause harm, they seldom provide detailed information about the nature of the plant. The Aztec informants of Sahagún give the names of some plants used for these practices. The descriptions of other plants lead to the supposition that they were probably used for similar purposes [López Austin, 1971, 97], [see Table 2]. In his chapter about inebriating plants Sahagún [1969: Book 11, Cap. VII] describes the *ololiuhqui* (Rivea corymbosa) as an inebriating and madening seed that was given by sorcerers and others to people in order to harm them. He further describes the very poisonous *tochtetepo* also used by sorcerers to bewitch people. The *teupochotl* was given to fatten animals rapidly. The same property was the reason for its use by ill-disposed people: they gave it in a meal or in a drink to a person they disliked thus causing severe obesity and eventually death [López Austin, 1971]. Probably it had to be given repeatedly. In the same sources the *tlapatl* (Datura spp.) the *mixitl,* and the *tecomaxuchitl* (Solandra nitida) are not explicitly mentioned for use in

malevolent practices, but their descriptions suggests that these products were likely candidates for these practices.

In Meso-America poisonous plants were often given in a cacao drink, probably becasue the consumer then did not notice the intake of poison [Alcedo 1967].

A number of animals were applied to cause harm (see Table 2). A certain butterfly, called *cotelachi* was used in Mexico by the Zapotecs to cause death after a certain time. The name means: "butterfly which kills within a year". The time needed to kill depended on the size of the butterfly. Large ones caused immediate death, somewhat smaller ones produced this effect in ten days, and when the butterflies were small and young, life was taken slowly and death occured after considerable time [*Relaciones Geográficas de Oaxaca,* 1981:203; Cervantes de Salazar 1971:135]. Some other animals, such as different types of snakes all indicated with the name *mazacoatl* were used to cause severe overstimulation of the male sexual desires, eventually resulting in death [Sahagún 1969: Book 6, Cap. XXII; Book 11 Cap. V].

Plants were not only used to cause harm, but also to counteract sorcery and malevolent practices. It is not always clear whether the plants acted as an antidote or merely had a "magic" action. The latter certainly applies to the *tlahuelilocacuahuitl* or "tree of insanity or hate". This tree was famous among the Indians because the evil spirits were supposed to be afraid of it and fled from the tree, and because the tree freed the Indians from harm due to sorcery [Hernández 1959: Book 4, Cap. LX]. Some other plants, such as *bervena* and *coanenepilli* [Boerhaavia spp.], are described as a means against sorcery [Monardes, 1580:88; Esteyneffer 1978: 526; Sahagún, *op. cit.,* Cap. XXX]. For the botanical identification of the plants used in malevolent practices see Table 2.

In Mexico beverages of unknown composition were frequently used to modulate affective feelings associated with sexual and erotic life. This was done in contrary ways. Sometimes feelings of hatred were induced for revenge and sexual conquest. On the other hand, often these beverages were administrated to induce feelings of love of a woman (or man). Especially when the love of a woman was wanted, magic incantations were used in addition to these beverages [Ruiz de Alarcón, 1953; Serna, 1953]. Modulation of erotic and sexual life was performed on two levels. Firstly, sorcery and products of natural origin were applied to gain the love or affection of someone. Similar to abortion, it is debatable whether these practices should be classified as malevolent.

TABLE 2

Plants and animals used in malevolent practices

Indigenous name:	Identification:	Ref:
Coanenepilli	Plant: Boerhaavia spp.	a
Huexolotl [1]	Bird	b
Mazacoatl [2]	Snake	c
Mixitl	Plant	d
Ololiuhqui [3]	Plant: Rivea corymbosa	b
Tecomaxuchitl	Plant: Solandra nítida	d
Teupochotl [4]	Plant	f
Toloatzin [5]	Plant: Datura spp.	g
Tochtetepo	Plant	e
Tlapatl	Plant: Datura spp.	g
Tlahuelilocacahuitl	Plant	h

(1) Spanish Guajolote; (2): Spanish Mazacoata; (3): Today's sesektsin; Spanish "La Purísima" or "Semillas de la Virgen"; (4): Spanish Ceiba, Pochote; (5): Spanish Toloache.

a: Esteyneffer 1978: 526; Hernández 1959: Book 21 Cap. xxx; b: Sahagún 1969: Book 11 Cap. II; c: Sahagún 1969: Book 4 Cap. XCIX; de López Austin, 1971; e: Sahagún 1969; Book 11 Cap. VII; f: López Austin 1974: 97; g: Sahagún, 1969: Book 11 Cap. VII, Furst 1982, López Austin, 1971, 1974; h: Hernández Book 4 Cap. LX.

Nevertheless, in most instances, these practices were conducted without the permission of the concerned person. Secondly, sorcery, plants and animals were administered to interfere with male potency either by causing overstimulation of sexual desires or impotency.

The Aztecs used several plants and animals as aphrodisiacs or as desaphrodisiacs. Some of these products were applied in malevolent practices. The fleshy increment of the beak of a Mexican bird called *huexólotl* was used as a desaphrodisiac. It was given secretly to a male

in the meal or drink and as a result the victim was unable to produce an erection [Sahagún, 1969: Book 11, Cap. II]. In the upper social classes an Aztec boy received traditionally a number of instructions and warnings from his father [Sahagún, 1969: Book 4, Cap. XCIX]. One of these concerned the avoidance of bad women. The description by Sahagún is illustrative because it suggests that malevolent practices in sexual matters were probably frequent:

> ... and especial the bad women ... often they add substances to the meal or in a drink to provoke lasciviousness, and these substances not only harm the body and the spirit, but they also kill ... he who eats or drinks it ... frequenting copulation until he dies ... the flesh of the mazacoatl ["deer snake"] which is a snake with horns ... be careful my boy, if someone gives you to eat or to drink, be suspicious and do not eat or drink before the one who gave it to you has taken from it ...

Abortion was considered by the pre-Columbian Indians as highly objectionable. It was severely condemned in the writings of the early chroniclers and there are many indications that it was frequently practised. In this sense it could be considered as a malevolent practice [López de Gómara, 1946; Mendieta, 1973]. However, because abortion occurred with the permission of the woman concerned it will not be dealt with in this paper.

An Outline of Malevolent Practices in Colonial and Modern Times

Malevolent practices suffered considerable transformations as an effect of the process of Spanish conquest and Indian Castilianization. This can be illustrated by recalling that most Colonial sources conceived Aztec pharmacopeia, mainly hallucinogenics, as demoniac witchcraft and sorcery [Furst, 1980: 245]. Aztec pantheon contained several gods which were also considered devil's advocations by the Spaniards. The concept of malevolent is not the same thing in Pre-hispanic, Colonial and Modern times, even when these three phases intermingle throughout Mexican history.

Despite the impact of the process of Castilianization and acculturation, prehispanic medicine could not be nevertheless eliminated. Rather,

it favored the emergence of indigenous medical practices. These new syncretic forms prevail today throughout Mexico.

Thus, not only the Indians make a continuous use of medical syncretic expressions, which combine practices of different cultural origins. We also find them among large portions of the rural and urban population. For instance, consider the distinction between 'black' and 'white' sorcery which was introduced with the Spanish conquest or the widespread practice of the 'limpias' (magic cleansings) which are precisely aimed at counteracting evil practices, bad luck, etc. Moreover, these practices (both benevolent and malevolent) do not exclude any social class. For example, among the famous *Otomies* of San Pablito, Puebla, producers of the *amate* paper, we find that just as there are practices linked to entities which are considered benevolent, we also find rituals associated with the "... devil, the rainbow, the moon ... and Moctezuma (...) which are considered malevolent because they cause sicknesses, evil and all sort of disgraces." [Scheffler, 1988].

In summary, although Spanish conquest did contribute to the stigmatization of the Pre-hispanic medical practices, by considering them as demoniac witchcraft and sorcery, syncretic expressions or even yuxtaposition of concepts were also developed in response to Spanish Colonial domination, succeding to maintain in different forms traditional medical practices and ideas. The complexity of tradicional folk mexican medicine must prevent us from distinguishing between different cultural origins of given practices. This task is not always completely possible. For instance, in Mexico, Spanish medicine introduced aspects of Medieval religion together with other ideas from the xvith century medicine. This also corresponded to Pre-hispanic medical practices. Taxonomy related to the "hot-cold" distinction is a good example. Some authors consider that such a distinction was introduced by Europeans whereas some others argue that it has a prehispanic origin [Madsen 1960; López Austin, 1984: 416].

> These two opposing positions explain the polarity in America as a belief brought by the Spaniards; the other claims that the polarity cold-hot is of Pre-hispanic origin. One presumes that today's belief is a degenaration of the hypocratic system; the other [claims] that it is the persistance of the native dual worldview [López Austin, 1984].

Another example: it is still debatable whether the famous "mal de ojo" (evil's eye) originates from prehispanic or European traditions.

The malevolent practices that we have depicted suffered considerable transformations as an effect of the process of Spanish conquest and Indian Castilianization. This can be illustrated recalling that most Colonial sources conceived Aztec pharmacopeia as demoniac withcraft and sorcery [69]. Aztec pantheon contained several gods which were also considered devil's advocations by the Spaniards. Of course the concept of malevolent is not the same in Pre-hispanic, Colonial and Modern times, even when these three phases intermingle throughout Mexican history.

The impact of the process of Castilianization and acculturation on Mexican Pre-hispanic medicine could nevertheless eliminate indigenous medical practices. Rather, it favored the emergence of the new syncretic forms that today prevail throughout Mexico. Not only the Indians make a continous use of medical syncretic expressions, which combine practices of different cultural origins. We also find them among large portions of the rural and urban population. For instance, consider the distinction between 'black' and 'white' sorcery which was introduced with the Spanish conquest or the widespread practice of the 'limpias' (cleanings) which are precisely aimed at counteracting evil practices, bad luck, etc. Moreover, these practices (both benevolent and malevolent) are nor exclusive of a given group or social class. For example, among the famous Otomies of San Pablito, Puebla, producers of the *amate* paper, we find that just as there are practices linked to entities which are considered benevolent, we also find rituals associated with the "... devil, the rainbow, the moon... and Moctezuma (...) which are considered malevolent because they cause sicknesses, evil and all sort of disgraces" [Alvarez 1987].

Although Spanish conquest did contribute to stigmatize and in cases even root out some of the Pre-hispanic medical practices, considering them as demoniac withcraft and sorcery, syncretic expressions were also developed in response to Spanish Colonial domination, succeding to mantain in different forms traditional medical practices and ideas. This complexity must prevent us to distinguish between different cultural origins of given practices, a task that is not always completely possible. For instance, in Mexico Spanish medicine introduced aspects of Medieval religion together with other ideas which origin stems from xvith century medicine, which also corresponded to Prehispanic medical practices. The case of the taxonomy related to the hot-cold distinction is a good example. Some authors consider that such a distinction was intro-

duced by Europeans whereas some others argue that it has a Pre-hispanic origin [Alvarez 1987; Montoya 1964].

> The two opposite positions are the one that explains this polarity in America as a belief brought by the Spaniards, and the one that claims that the polarity cold-hot is of Pre-hispanic origin. The first one estimates that today's belief is a degenaration of the hypocratic system; the second one [claims] that it is the persistance of the native dual worldview. [López Austin, 1984].

The use of the term malevolent is surely productive to describe the widespread complex of beliefs on witchcraft and sorcery, which still prevail throughout Mexico. Such practices are aimed at manipulating evil natural and supernatural forces to cause different sicknesses and even death.

Some malevolent practices among contemporary Nahua population

We have already considered some of the malevolent practices that prevailed in Aztec society. Let us turn to more contemporary data. In Mexico —particularly in Los Tuxtlas, Veracruz— we find Nahua groups which exercise sorcery aimed at producing harm, diseases and even death.

A number of malevolent practices have been reported for the Nahua of Hueyapan in the state of Morelos, Mexico:

> in this community different names are associated with witchcraft: *chichiotl* or witchcraft ... sicknesses so produced are known as evil, people's evil, sickness given as a gift, spiting sickness and harms. [Álvarez, 1987, 134].

More linguistic evidence from different Nahuatl areas demonstrate the continuity of malevolent practices. For instance, in the Mexican state of Guerrero, the word *nahualli* is still used to refer to a person who practices both 'white' and 'black' sorcery. This represents a case of continuity in the use of the transe inducer, *ololiuhqui* (Rivea corymbosa). In Guerrero nahuatl the contemporary name of this plant is seseltsin. To cure a wide range of diseases the nahualli collects the seed during the rainy season, grinds it with water, and while talking to

it asks it to reveal the origin of the patient's disease, including divination of evil practices done by some other nahualli (e.g. to foretell the origin of a given sickness or find something stolen or lost, actions which of course are all considered malevolent).

Another linguistic evidence is provided for the Nahua groups of the Mexican states of Puebla and Tlaxcala:

> ... today there is the belief in a particular type of sorcerers who are dedicated to harming people ... There are various words in Nahua to refer to them: *tlahuelpuchi, tetlachihue, tlacique* and *tetlachihuique* [Scheffler, 1988].

Another illustration of malevolent practices among contemporary nahuatl groups is reported for the Nahuatl from Tlaxcala. They beleive that sorcerers are born with the capacity to cause harm, even if there are other persons that can make a deal with evil spirits to help them to cause harm. To develop such evil practices they spread salt in the victim's house, put substances in his food, they put scorpions close to their house, or use soil from a graveyard [Scheffler, 1988].

In Atla [Montoya, 1964] it is believed that *aires* (winds) can be both malevolent or benevolent. The first type can cause serious sicknesses and harm. Similarly the Nahuas from the Tuxtlas, Veracruz, believe that the evil *aires* are produced by the sorcerers who disguise themselves as animals to produce damage or sickness. It is also beleived that some *aires* are produced by murdered persons who frighten human beings at night [Madsen, 1960]. These *almas* (souls) are the source of many malevolent practices in contemporary Nahuatl communities.

In the Sierra Norte de Puebla the indians:

> use an as yet unidentified species of *Salvia,* known by the name of *Xiwit* [herb] ... [Mayagoitia, *et. al.,* 1986].

This herb is used for purposes of divination while dreaming. Strictly speaking divination is not a malevolent practice. Nevertheless, it is indirectly related to malevolent practices because divinatory practices have to deal with the malevolent effects due to 'bad' or 'evil' sorcery. A good example of this is the similar use of *sesektsin* that we have described in the case of the Nahuatl from Guerrero.

As has already been suggested, besides harm being produced by supernatural forces, we can also find professional specialists who are

skilled in manipulating different techniques to produce evil. In the region of Xalitla, Guerrero, the *nahualli* "sorcerer" (the verb is tenahualtia "to hide, deceive, disguise someone"; i.e., to witchcraft someone) is considered an evil person. His activities are not necessarily conceived as a prestigious practice. Even if the distinction between sorcerer and *tepatiani* (*curandero* "curer") can actually be associated with the division between 'evil' and 'benevolent' practices, the difference is a matter of degree. People's unwillingness to provide information about the existence of sorcerers appears to be an additional evidence for their stigmatized status and constitutes a strategy to avoid commitment to a dangerous identity. Moreover, it is more or less clear that many *nahualte* (plural of *nahualli*) also perform as *tepatianime* (*curanderos* plural of *curandero*), even when it is generally beleived that there are "good" and "bad" *nahualte* and that the *tepatianime* are basically "good".

The phenomenon of nagualismo consist of the capacity, specific of the sorcerers, to transform themselves in different animals, basically to harm people [López Austin, 1984]. The nagualismo originates in Prehispanic times, survived throughout the Colonial period and it is still operating today.

Final remarks

In spite of many differences between the Aztecs and their successors due to almost 500 years of acculturation there are many similarities regarding malevolent practices. For both populations it is possible to state that certain healers-physicians, usually called sorcerer-physician, cause harm and kill people by secretly providing poisonous products. In both cultures products are described that could act after a given (and sometimes a long) time. In Pre-hispanic times death penalty was given to those who gave herbs to kill other people, at least if they were caught.

There are several indications that the Aztecs frequently exercised evil practices, and that their succesors still do so. A first indication is that a large number of chroniclers mention that plants and sorcery were used to cause harm, and to kill people who were disliked [Sahagún, 1969: Book 4, Cap. xcix; Del Paso y Troncoso, 1979, *loc. cit.;* Acosta, 1954: 269). The laws of the Aztecs explicitly mention the prohibition of these evil practices [Sahagún, 1969: Book 10, cap. ccxv & Book 12,

Cap. xxvi; Torquemada, 1975: Book 12]. Though each of these observations is only a weak indication for a high incidence of malevolent practices, together they strongly suggest that performing malevolent practices was quite common in pre-Colombian America. As we have seen, contemporary data reinforce this suggestion.

In general, individuals who wanted the death of another went to specialized persons who knew about poisons. This practice still operates today. The chroniclers describe these persons as sorcerer-physicians. It seems likely that they were a type of herbalists because the use of certain poisons required a thorough knowledge of the plants from which the poinson was derived.

Remarkably often the chroniclers stress the ability of the sorcerers to prepare poisonous beverages [Acosta, 1954]. People who wanted help in obtaining someone's affection also went to sorcerers [*Florentine Codex,* 1950-1969, Book 13, Cap. xxxvi]. This type of sorcerer not only knew about products of natural origin, but magic procedures as well. In addition, aphrodisiacs and desaphrodisiacs are repeatedly mentioned as agents to cause death or impotency [Sahagún, 1969: Book 6, Cap. xxii; Monardes, 1580: 88].

Though many chroniclers describe the use of plants for malevolent practices only a few mention these plants by name. The same situation occurs with abortion: plants that were used to procure abortion are often mentioned but rarely the name of the plant is given. However, usually the name of the plant is given when plants are described against diseases. It is likely that the chroniclers knew that the practices mentioned above existed, but that details were not provided by the indigenous physicians. This is not surprising since both he Aztecs and the Spaniards punished those who used these practices. Those who had knowledge about these plants probably saw little reason to give information about them or about their practices.

Remarkably often hallucinogenic plants are mentioned for their application in malevolent practices. In Mexico the *ololiuhqui* [Rivea corymbosa] (today's Guerrero Nahuatl *sesektsin*) and the *tochtetepo* are mentioned Sahagún [1969, Book 11, Cap.vii]. The descriptions of other plants, such as *mixitl,* the *tlapatl* [Datura stramonium y D. inoxia] [López Austin, 1971, Sahagún, 1969] suggest that it is likely that these plants were used for the same purpose. Other sources indicate only generally that several hallucinogenic plants were used for sorcery (Cárdenas, 1980). The use of this type of plants for malevolent practices persists in present times: deliberate intoxications with Datura sp.

(today's Guerrero Nahuatl *toloatzin;* Spanish *toloache;* Datura stramonium y D. inoxia amongst other species) have been reported for Mexico [Furst, 1980; Díaz, 1979: 84].

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