South American Shamans and Tobacco

South America was settled at least 13,000 years ago (central Chile and later into Brazil). This time and place coincide with the center of wild tobacco from which all tobacco plants are derived (*nicotina rustina* and *tabacum*). Tobacco is used in more modern times (since European contact at least) for religious purposes.

**The role of the Shaman.** Shamans are depicted in French caves dated 17,000 BC. They mediate the communication between their societies and the spirit world. In this role as mystical specialist they are said to live with one foot in both worlds. Many of the rituals of shamanism involves trances where they derive their spiritual knowledge. As such Shamans are endowed with special powers such as a shamanic voice and vision. Shamans are oracles, healers, they bless crops and babies, they have knowledge of the favors and disfavors of the gods. They communicate with ancestors and they belong to both the living and the dead. There is a price to pay for this knowledge. Shamans must periodically “die” and be reborn. They live on the edge and undergo extreme pain and discomfort to earn their prestige. Being a Shaman is not for everybody!

**Tobacco and Shaman use.** Shamans use a variety of physcoactive compounds to assist in venturing into the spirit world. Peyote, ololiuqui, ayahuasca are just a few. Tobacco, however is one of the most interesting in terms of the role of shamans, and their rituals, and it’s biological effects. Tobacco shamans use tobacco in all its forms. They smoke copious amounts, perhaps 6 large cigars a day. They will eat tobacco leaves, powders and juice, sometimes drinking several cups of tobacco pulp. Even tobacco enemas and poultices are common. Sometimes other compounds are included such as virola powder, (Yato, contains dimethyltryptamine). This massive dosing induces extreme intoxication often enough to kill a person was has not been inured to the effects by many years of exposure. In a ritualistic use this is where the shaman will undergo death (convulsions and fits, unconsciousness) and rebirth.

The Shamans breath is endowed with curative and magical properties. with tobacco it is the breath visualized. The shaman will breathe (shaman blowing) is part of any cure. Also the shaman will breathe and spit on wounds and into the face. They will apply poultices to wounds and bites.

As tobacco is the ‘food’ for shamans they are expected to eat very little normal food.

When shamans visit the spirit world they return with some of their organs replaced, most particularly they have a spirit voice (guttural and dark) and spirit eyes, the later allowing them to live in the dark easier than the light. Shamans are also noted as fierce fighters and defenders of their charges. They resist heat and fire and take on the vestiges of the jaguar.

Now lets explore the physiological effects of tobacco and how they relate to Shamanism.
Physiological effects of nicotine and shamanism

Nicotine in excess can arouse convulsions and delirium and death. One does get inured with prolonged use. During a session a shaman might take up to 200 doses of tobacco. Nicotine gives a biphasic response where there is nausea, vomiting, tremors and paralysis followed by recovery as the nicotine is processed. Death then life.

Nicotine is an insecticide

Nicotine applied locally is an anesthetic by being a cholinergic blocker. Spit and poultices provide a time-release mechanism. Nicotine also promotes release of norepinephrine which aids in wound treatment. Vasoconstriction reduces blood flow to local area. Note that nicotine is effectively absorbed through wet (perspiration) skin and can lower temperature by 10°C.

Nicotine gives relief from hunger by inhibition of hunger contractions of the stomach. Also dulls taste buds. Nicotine is the food of the gods and not available in the spirit world.

Tobacco inhaled or drunk causes ‘smokers throat’. Shamans will include other compounds (carana) which coat the vocal cords and cause a husky, low registered, voice.

Excessive use of tobacco by eye polices or ingestion can cause tobacco amblyopia. This results in better eyesight at night than by day. Leads to color blindness. In daylight the shamans eyesight is inhibited by a glittering haze which disappears at night. 2 weeks to 2 months of abstaining will restore vision.

Tobacco causes increased perspiration, analgesia and lowered temperature to allow withstanding heat.

Tobacco causes changes which resemble the jaguar; night vision, voice, body odor, furred tongue and will stimulate adrenal glands which result in adopting a fighting posture. The shaman is constantly battling opponents in both worlds and is considered a fearless fighter.