



Enter the Jaguar



Psychedelics in Ancient Peru

By *Mike Jay*

The monumental ruins of Chavín de Huantar, ten thousand feet up in the Cordillera Blanca of the Peruvian Andes, are, officially, a mystery. The vast, ruined granite and sandstone structures – cyclopean walls, huge sunken plazas and step pyramids – date from around 1000 BC but, although they were refashioned and augmented for close to a thousand years, the evidence for the material culture associated with them is fragmentary at best. Chavín seems to have been neither a city nor a military structure, but a temple complex constructed for unknown ritual purposes by a culture which had vanished long before written sources appeared. Its most striking feature is that its pyramids are hollow, a labyrinth of tunnels connecting hundreds of cramped stone chambers. These

might be tombs, but there are no bodies; habitations, but they're arranged in a disorienting layout in pitch blackness; grain stores, but their arrangement is equally impractical. Instead, there are irrigation ducts honeycombed through the carved rock, elaborately channeling a nearby spring through the subterranean maze, and in the centre a megalith set in a vaulted chamber and carved with a swirling, baroque representation of a huge-eyed and jaguar-fanged entity.

The archaeological consensus is that Chavín was some kind of ceremonial focus; some have tentatively located it within a lost tradition of oracles and dream incubation. But the mystery remains profound, and is considerably heightened by the bigger picture that it represents. By most reckonings, and depending on how the term is defined, 'civilization' emerged spontaneously in only a handful of locations around the globe: Mesopotamia, the Indus Valley, China, Mexico, perhaps the Nile. To this short list, especially if civilization is defined in terms of monumental architecture, must now be added Peru. It was only proposed in the 1930s that Chavín is three thousand years old, and it's only recently been recognized that huge ceremonial structures of plazas and pyramids were being constructed in Peru at least a thousand years earlier. The coastal site of Caral, only now being excavated, turns out to contain the oldest stone pyramid thus far discovered, predating those of Old Kingdom Egypt. So the mystery of Chavín is not an isolated one: it was the flowering of a pristine and unique culture, and one which still awaits interpretation.

But there's a salient and largely unexamined feature of the Chavín culture which offers a lead into the heart of the mystery: the presence of a complex of powerful plant hallucinogens in its ritual world. The San Pedro cactus (*Trichocereus/Echinopsis spp.*) is explicitly featured in its iconography; like the Mexican peyote cactus, San Pedro contains mescaline, and is still widely used as a visionary intoxicant in Peru today. Objects excavated from the site also include snuff trays and bone tubes similar to those still used in the Peruvian Amazon for

inhaling seeds and barks containing the powerful hallucinogen DMT. The leading Western scholar of the culture, Yale University's Richard Burger – whose *Chavín and the Origins of Andean Civilisation* (Thames & Hudson 1992) is the most authoritative survey of the territory – states plainly enough that “the central role of psychotropic substances at Chavín is amply documented.”

It's not special pleading for a drug-centric view of ancient cultures (at least, not necessarily) to observe that the presence of mind-altering plants offers a bridge between remains and ritual, by indicating the state of consciousness in which the latter would have taken place. It also opens up collateral evidence from the deep-rooted traditions of mind-altering plant use which still exist in the region, and from modern understandings of the drugs in question. The combination of mescaline- and DMT-containing plants has been surprisingly little-explored, even in the dedicated fringes of contemporary drug culture, but the preparations in question remain legally obtainable, relatively simple to prepare in high potency doses, and powerfully effective. Such observations may have limited explanatory power, since a state of consciousness is not a belief system and offers little evidence for the content of the ceremonies in which drugs are used. Nevertheless, the effects of these particular drugs set logistical parameters for their use, to which the design of the Chavín complex may have been a practical response.

FISHY BEGINNINGS

For many thousands of years the Pacific coast of Peru has been as it is today: a barren, moonscape desert. Rain never falls except in *El Niño* years; fresh water is only to be found in the few river valleys which punctuate it; for the best part of a thousand miles, rocky shores meet cold ocean in a misty haze. But the harsh terrain has its riches: the Humboldt current, sweeping up from the freezing

depths of the southern ocean, is loaded with krill and alive with fish, its biomass a hundred times greater than the balmy Atlantic at the same latitude off Brazil. For ten thousand years a substantial human population has been sustained by this current: rancid industrial fish-meal factories today, but in the Stone Age groups of itinerant hunter-gatherers whose presence is attested by massive shell middens. Some of these hills of organic detritus – oyster shells, cotton twine, dried chillis, crushed bones – are a hundred feet high, and remained in continuous use for five thousand years or more.

It was out of this seasonally nomadic coastal culture, shuttling between the arid coasts and the fertile mountain valleys, that the first monumental sites emerged. Dates are still being revised, but are now firmly set some time before 2000BC. The sites may have been used much earlier as huacas, natural sacred spots, around which ceremonial stone and adobe structures gradually accreted and expanded. Caral, a massive site a hundred miles north of Lima where substantial excavation is finally under way, is perhaps an example of this process. Its sprawling complex of dusty mounds centers on a megalith, perhaps originally upended into the valley by an earthquake; from the vantage point of this stone, the most ancient pyramid precisely mirrors the peak of the mountain which towers over it, suggesting that the megalith may have been the original focus for this alignment. The pyramids, at Caral as elsewhere, seem to have begun as raised platforms for fire-pits, which were subsequently extended upward in layers as the site grew to accommodate increasing human traffic. Below Caral's pyramids is another feature which would endure for millennia and spread from the coast to the high mountains: a sunken circular plaza, large enough for a gathering of several hundred participants, with steps leading up to the platform of the pyramid above.

This plaza-and-pyramid layout, reproduced in dozens of sites spanning hundreds of miles and thousands of years, seems to have evolved for a ceremonial purpose, but there's still little consensus

about what this might have entailed. Beyond the general problem of reconstructing systems of meaning and belief from stone, these early sites are sparse in cultural materials. Graves are few, and simple; the early monumental building predates the firing of pottery (hence the archaeological term for the era, 'Preceramic'). There's little general evidence of human habitation, although there are some chambers in the Caral pyramids which may have housed those who attended the site. Some scholars have sought to cast these as a 'priestly elite', the ruling caste of a stratified society, but they may equally have been no more than a class of specialist functionaries without particularly exalted status in the community. Certainly a site like Caral would have been no prize residence: it's not a palace at the centre of a subjugated settlement, so much as a monastic perch on its desolate fringes. Its barren, windswept desert setting overlooks a fertile valley, taking up none of the precious irrigated terrain.

The size of the complex suggests that the fertile valley attracted visitors, and that Caral was a site of pilgrimage for more than its local community. The earliest agriculture on the coast emerged in such valleys, especially cotton and gourds, which were used for making fishing nets and floats: it may be, therefore, that the ceremonial site grew in size as the use of these cultivated commodities spread ever more widely through the loose network of fishing communities up and down the coast. This would suggest a very different picture from the one presented by better-known pristine civilizations, such as Mesopotamia or the Indus Valley, where archaeologists have tended to associate the origins of monumental architecture with the control of complex power relations – a centralized state, coercive labour, irrigation systems, a powerful priestcraft or military might. Peru seems to tell a rather different story: one of structures emerging largely unplanned, piecemeal and over generations, within a shifting, stateless network of hunter-gatherers.

A further clue to the culture of these Preceramic coastal sites is provided by Sechin, a complex a few centuries later than Caral

(around 1700 BC) and couple of river valleys to the north. Here, for the first time, the temple is adorned with figurative carvings. But if these are a clue, they're an oblique one: graphic but inscrutable representations carved in relief on stone blocks. Most are of human forms, some of them dismembered, but their most distinctive motif is wavy trail lines, often ending in finger-like tips, emanating from various parts of the bodies. Some of these seem to be intestines, and some emerge from the mouths of the carvings, but others coil from heads, hands and ears, suggesting they aren't literal representations of blood, guts or bodily fluids. Their significance remains disputed. Early interpretations of them tended to claim that they were savage warrior figures commemorating tribal battles, victories and annihilated populations, but many of the figures are hard to fit into such a scheme. Recent interpretations, by contrast, have tended to focus on visionary, perhaps shamanic states, just as the Palaeolithic cave art of Europe is now increasingly interpreted not as realistic representations of 'hunting scenes' but of an imaginal dreamtime previously visited in a heightened state of consciousness – see, for example, David Lewis-Williams' *The Mind in the Cave* (Thames & Hudson 2002). Within this reading, the numinous swirls and haloes would commemorate not military victories but the mysteries which the ceremony at Sechin engendered.

There's circumstantial evidence for interpolating the use of plant drugs into this ceremonial world. Part of this comes from Chavín, where the same structures would emerge later with images of these plants explicitly represented. Part of it comes from nearby archaeological finds of chewed coca leaf quids and rolls of plant material which may be cored, skinned and dried San Pedro cactus. The coca, along with other plant remains, implies a trade network which connected the coast and the mountains – a symbiosis which would later characterize the Chavín culture. Coca doesn't grow on the coast, but at an altitude of 1000-2000m up the mountain valleys; San Pedro begins to colonize the steep mountain cliffs at the upper



San Pedro Cactus (© Mike Jay)

end of this belt, continuing up to 3000m. Given that more bulky mountain plant foodstuffs were being supplied to the barren desert coast two or three days' journey away, and dried and salted fish traded in return, fresh or dried San Pedro could have been brought down in quantity, as it still is today.

Chavín culture, when it emerged, would testify to the existence of such cross-cultural contact, and more besides. Yet Chavín wasn't the first ceremonial centre in the mountains. The Preceramic site of Kotosh, a hundred miles away across the inland ranges, dates from a similar period to Sechin, and its remains show similar structures: altar-like platforms around stone-enclosed fire pits, stacked on top of each other through several layers of occupation. One gnomic Preceramic symbol also survives: a moulded mud-brick relief of a pair of crossed hands, now housed in the national museum in Lima. Centuries before Chavín, perhaps as early as 2000BC, Kotosh demonstrates that trade links between the mountains and the coast had also generated some commonality of worship.

THE LABYRINTH AND THE LANZON

The emergence of Chavín as a ceremonial centre, probably around 900BC, adds much to this earlier picture: it's more complex in construction than its predecessors, and far richer in symbolic art. It's set not on a peak or commanding ridge, but in the narrow valley of the Mosna river, at the junction of a tributary, with mountains rising up steeply to enclose it on all sides. Similarly, the temple structure itself isn't designed to be spectacular or visible from a distance, but is concealed from all sides behind high walls. The approach to the site would have been through a narrow ramped entrance in these walls, whose distinctive feature was that they were studded with gargoyle-like, life-size heads: some human, some distinctly feline with exaggerated jaws and sprouting canine teeth, and some – often covered in swirling patterns – in the process of transforming from one state to the other. This process of transformation is clearly a physical ordeal: the shapeshifting heads grimace, teeth exposed in rictus grins. In a specific and recurrent detail, mucus emanates in streams from their noses.

Inside these walls – now mostly crumbled, and with the majority of the heads housed in the on-site museum – there are still substantial remains of a ceremonial complex which was reworked and expanded for nearly a thousand years, its last and largest elements dating to around 200BC. The basic arrangement is the traditional one of plaza and step pyramid, but these are adorned with far more complexity than their predecessors. Many lintels, columns and stelae are covered with relief carvings, swirling motifs featuring feline jaws, eyes and wings. The initial impression is amorphous and chaotic, but on closer inspection these motifs unfurl into composite images, their interleaved elements in different scales and dimensions, the whole often representing some chimerical entity composed of smaller-scale entities roiling inside it. As the architecture develops through the centuries it becomes larger in scale, reflecting the increased scale of

the site; at the same time, the reliefs gradually become less figurative and more abstract, discrete entities melting into a mosaic of stylized patterns and flourishes.

It was only in 1972 that the most striking of these reliefs were uncovered, on faced slabs which line the oldest of the sunken plazas, running like a frieze around its circle at knee height. These figures are presumably from the site's formative period; the most remarkable is a human figure in a state of feline transformation, bristling with jaws, claws and snakes, and clutching an unmistakable San Pedro cactus like a staff or spear. Beneath this figure – the 'Chaman', as he's become informally known – runs a procession of jaguars carved in swirling lines, with other creatures, birds of prey and snakes, sometimes incorporated into the whorls of their tails.

These reliefs are all carved in profile, and all face towards the steps which lead up from the circular plaza to the old pyramid, at the top of which is the familiar altar-like platform. But at the back of this platform is something entirely unfamiliar: a pair of stone doorways disappearing into the darkness inside the pyramid itself. These lead via steps down into tunnels around six foot high and constructed, rather like Bronze Age long barrows, from huge granite slabs and lintels. The tunnels take sharp, maze-like, usually right-angled turns, apparently designed to disorient and cut out the daylight, zig-zagging into pitch blackness. Opening out from these subterranean corridors are dozens of rock-hewn side chambers, some large enough for half a dozen people, others seemingly for solitary confinement. There are niches hacked in some of the chamber walls which might have housed oil lamps, and lintels which extrude like hammock pegs. Running through the bewildering network of tunnels and chambers are smaller shafts, some of them air vents, others water ducts which allowed the nearby spring to gush and echo through this elaborately constructed underworld.

Right in the heart of the labyrinth is a stela carved in the early Chavín style, a clawed, fanged and rolling-eyed humanoid form,

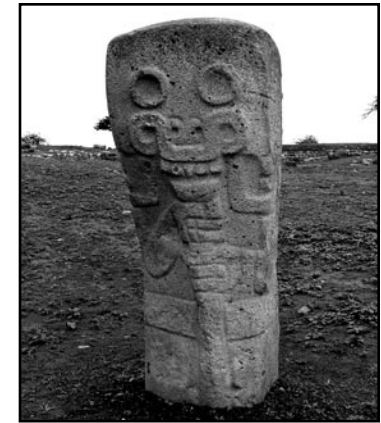
boxed inside a cramped cruciform chamber which rises to the top of the pyramid. The loose arrangement of stones in the roof above, which form a plug at the crown of the pyramid, have led to speculation that they might have been removable, allowing the Lanzon, as the carved stela is known, to point up like a needle to a gap of exposed sky. Other fragments of evidence from the site, such as a large boulder with seven sunken pits in the configuration of the Pleiades, suggest that an element of the Chavín ritual – perhaps, given the narrow confines around the Lanzon, a priestly rather than a public one – might have involved aligning the stela with astronomical events.

This plaza and pyramid complex was Chavín's original structure, but over the centuries more and grander variants were added. There are several shafts, some still unexcavated, which lead down into larger underground complexes, their stonework more regular than the old pyramid and their side-chambers typically more spacious. There is a far larger sunken plaza, too, square rather than circular and leading up to a new pyramid and surrounding walls on a more massive scale. Whatever happened at Chavín, the architecture suggests that it carried on happening for centuries, and for an increasing volume of participants.

TECHNOLOGIES OF TRANSFORMATION

The term most commonly applied to what went on at Chavín is 'cult', although elements of meaning might perhaps be imported from other terms like pilgrimage destination, sacred site, oracle or, in its classical sense, temple of mysteries. This is a conclusion partly drawn from the lack of evidence that it represented an empire, or a state power: there are no military structures associated with it, nor centralized labour for major public works like irrigation or housing. During the several centuries of its existence, tribal networks would have risen and fallen around it, changes in the balance of power apparently leaving

its source of authority untouched. Its cultic – or cultural – influence, though, spread far and wide. Throughout the first millennium BC, 'Chavínoid' sites spread across large swathes of northern Peru, and pre-existing natural *huacas* began to develop Chavín-style flourishes: rock surfaces carved with snaky fangs and jaws, standing stones decorated with bug-eyed, fierce-toothed humanoid forms. People were clearly coming to Chavín from considerable distances, and carrying its influence back to far-flung valleys, mountains and coasts.



Chavínoid Stela (© Mike Jay)

Was Chavín, then, a religion? There's been some speculation that the carvings on the site represent a 'Chavín cosmology', with eagle, snake and jaguar corresponding to earth and sky and so forth, and the humanoid shapeshifter, as represented on the Lanzon, a 'supreme deity'. But Chavín was not a power base which could coerce its subjects to replace their religion with its own: the spread of its influence indicates that it drew its devotees from a wide range of tribal belief systems with which it existed in parallel. It's perhaps better understood as a site which offered an experience rather than a cosmology or creed, with its architecture conceived and designed as the locus for a particular ritual journey. In this sense, the Chavín figures would not have been deities competing with those of the participants, but graphic representations of the process which took place inside its walls.

The central motif of this process is signalled clearly enough by the shapeshifting feline heads which studded its portals: transformation from the human state into something else. It's here that Chavín displays the influence of a new cultural element not conspicuous in the sites which preceded it. The prominence of the jaguar and

shapeshifting motifs suggest the intertwining of traditions not just from the coast and the mountains, but also from the jungle on the far side of the Andes. While the monumental style of Chavín's architecture builds on earlier coastal models, its symbolism points towards the feline transformations which still characterize many Amazon shamanisms. The trading networks on the Pacific coast had long ago joined with those in the mountains; at Chavín, where the river Mosna runs east into the Rio Marañon and thence into the Amazon, it seems that these networks had also reached down the humid eastern Andean slopes into the jungle, and had transmitted the influence of another hunter-gatherer culture: one characterized by powerful shamanic technologies of transformation, in many cases with the use of plant hallucinogens.

These twin influences – the coastal mountains and the jungle – are mirrored by the presence at Chavín not of one hallucinogenic plant but two. The San Pedro cactus, as depicted on the wall of Chavín's old plaza, may have been an element of the earlier coastal tradition, but is in any case native to Chavín's high valley: a magnificent specimen, which must be at least 200 years old, towers over the site today. Local villages still plant hedges with it, and traders to the *curandero* markets down in the coastal cities still source it from the area. But the mucus pouring from the noses of the carved heads, combined with material finds of bone sniffing tubes and snuff trays, all point with equal clarity to the use at Chavín of plants containing a second drug, DMT, and a tradition with a different source: the Amazon jungle.

Today, the best-known ethnographic use of DMT-containing snuffs is among the Yanomami people of the Amazon, who traditionally blow powdered *Virola* tree bark resin up each others' noses with six-foot blowpipes, a practice which produces a short and intense hallucinatory burst accompanied by spectacular streams of mucus. But there are various other DMT-containing snuffs used in the region, including the powdered seeds of the tree *Anadenanthera*

colubrina, whose distribution – and its artistic depiction in later Andean cultures – makes it the most likely ingredient in the Chavín brew. *Anadenanthera*-snuffing has been largely replaced in many areas of the Amazon by *ayahuasca*-drinking, a more manageable technique of DMT ingestion, but this displacement is a recent one, and *Anadenanthera* is still used by some tribal groups in the remote forest around the borders of Peru, Colombia and Brazil. Even today, the tree grows up the Amazonian slopes of the eastern Andes and as far west as the highlands around Kotosh. The transformation offered at Chavín was, it seems, mediated by the combination of these two extremely potent psychedelics.

The presence of these two plants at Chavín, without necessarily illuminating the purpose or content of the rituals, has certain implications. The effects and duration of San Pedro and *Anadenanthera* are very distinct from one another, and characterized by quite different ritual uses. San Pedro, boiled, stewed and drunk, can take an hour or more before the effects are felt; once they appear, they last for at least ten. The physical sensation is euphoric, languid, expansive, often with some accompanying nausea; in many Indian traditions, such effects are dealt with by setting the participants to slow, shuffling three-step dances and chants. The effect on consciousness is similarly fluid and oceanic, including visual trails and a heightened sense of presence: the swirling lines which surround the figures at Sechin could perhaps be read as visual representations of this sense of energy projecting itself from the body – particularly from the swirling, psychedelized intestines – into an immanent spirit world.

Anadenanthera, by contrast, is a short sharp shock, and one that's powerfully potentiated by a prior dose of San Pedro. About a gramme of powdered seed needs to be snuffed, enough to pack both nostrils. This process rapidly elicits a burning sensation, extreme nausea and often convulsive vomiting, the production of gouts of nasal mucus and perhaps half an hour of exquisite visions, often accompanied by physical contortions, growls and grimaces which are typically

understood in Amazon cultures as feline transformations. Unlike San Pedro, which can be taken communally, the physical ordeal of *Anadenanthera* tends to make it a solitary one, the subject hunched in a ball, eyes closed, absorbed in an interior world. This interior world is perhaps recognizable in the new decorative elements which emerge at Chavín. Images like the spectacular glyph that covers the Raimundi stela – a human figure which seems to be flowering into other dimensions and sprouting an elaborate headdress of multiple eyes and fangs – are reminiscent not just of *ayahuasca* art in the Amazon today but also of the fractal, computer-generated visual work associated with DMT in modern Western subcultures.

The distinct effects of these two drugs suggests a functional division between two elements or phases of the ritual which is mirrored in Chavín's contrasting architectural elements. Like the *kiva* in Southwestern Native American architecture which it so closely resembles, the circular plaza is readily interpreted as a communal space, used for gathering and mingling, and thus perhaps for dancing and chanting through a long ritual accompanied by group intoxication with San Pedro: it may be that the cactus was already a traditional element of the coastal ceremonies where the form of the plaza originated. The innovative addition of chambers inside the pyramid, by contrast, seems designed for the absorption in an interior world engendered by *Anadenanthera*, an incubation where the subject is transformed and reborn in the womb of darkness.

ARCHITECTURAL ENHANCEMENT

Chavín's architecture, in this sense, can be understood as a visionary technology, designed to externalize and intensify these intoxications and to focus them into a particular inner journey. This in turn offers an explanation for why so many might have made such long and arduous pilgrimages to its ceremonies. It wasn't necessary

to visit Chavín simply to obtain San Pedro or *Anadenanthera*. Both grow wild in abundance in the Andes; there could hardly have been, as in some cultures ancient and modern, a priestly monopoly on their use. Those who came to Chavín weren't coerced into doing so; it drew participants from a wide area over which it exercised no political or military control. The Chavín ceremony, rather, would have offered a ritual on a spectacular scale, where the effects of the plants could be experienced *en masse* within an architecture designed to enhance and direct them.

Within this environment, participants could congregate to enter a shared otherworld, and also submit themselves to a highly charged individual vision quest. The sunken plaza might, as the reliefs suggest, have harnessed the heightened consciousness of San Pedro to a mass ritual of dancing and chanting; the participants might subsequently have ascended the temple steps individually to receive a further sacrament of powdered *Anadenanthera* seeds administered to them by the priests via bone snuffing tubes. As this was taking hold, they would be led into the chambers within the pyramid where they could experience their DMT-enhanced visions in solitary darkness. Here, the amplified rushing of water and the growls and roars of the unseen participants around them would enclose them in a supernatural world, one where ordinary consciousness could be abandoned, the body itself metamorphosed and the world seen from an enhanced, superhuman perspective – analogous, perhaps, to the uncanny night vision of the feline predator. The development of the subterranean chambers over centuries would reflect the logistical demands of ever greater numbers of participants willing to enter the jaguar portal and submit themselves to a life-changing ordeal that offered a glimpse of the eternal world beyond the human.

So Chavín remains a mystery, but perhaps in a more specific sense. If we want an analogy for its function drawn from Western culture, it might be the Eleusinian Mysteries, originating as they did in subterranean chambers near Athens a little later than Chavín,

around 700BC. Like Chavín, Eleusis persisted for nearly a thousand years, under different empires, in its case Greek and Roman; like Chavín – and like the Hajj at Mecca today – it was a pilgrimage site which drew its participants from a diverse network of cultures spanning virtually the known world. Classical written sources attest to some of the exterior details of the Eleusinian mysteries: its seasonal calendar, its processions, the ritual fasting and the breaking of the fast with a sacred plant potion, the *kykeon*. But over the thousand years that these mysteries endured, the deepest secrets of Eleusis – the visions that were revealed by the priestesses in the chambers in the bowels of the earth – were never revealed, protected under penalty of death. At Chavín the only surviving records are the stones of the site itself, but the mystery is perhaps of the same order.

Mike Jay is the author of *Emperors of Dreams: Drugs in the Nineteenth Century*. His most recent book is *The Air Loom Gang: The Strange and True Story of James Tilly Matthews and his Visionary Madness* (Bantam Press, 2003).