The Cambridge Prehistory

Ecuador, Colombia and Venezuela

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1. The geographic setting

Ecuador, Colombia and Venezuela together cover all of north-western South America; a region broadly comprising over two million, three hundred thousand square kilometres. The whole territory is located in the torrid tropical zone, most of it north of the Equator. The ample morphological and ecological diversity determines the existence of many different natural regions, being the main ones:

1) The Pacific coast, a dry, hilly stretch of lowland in south and central Ecuador and, further north, a mountainous humid tropical forest along Colombia up to the Panama isthmus.

2) The Andes, a complex region formed by several *cordilleras* cut by longitudinal and traverse river valleys that form climatic micro-niches. The Andes, roughly running in the south–north direction, divide in Colombia into three different *cordilleras*, one of which extends into Venezuela forming the Sierra de Merida.

3) The Caribbean coast; starting from the west, a dense tropical forest that gradually turns into savannah up to the foothills of the Sierra Nevada maritime massif, and then a long stretch of dry plains forming several peninsulas and encircling the Maracaibo lake. Further east into Venezuela there is the Central Cordillera that gradually dies to give way to the large delta of the Orinoco River.

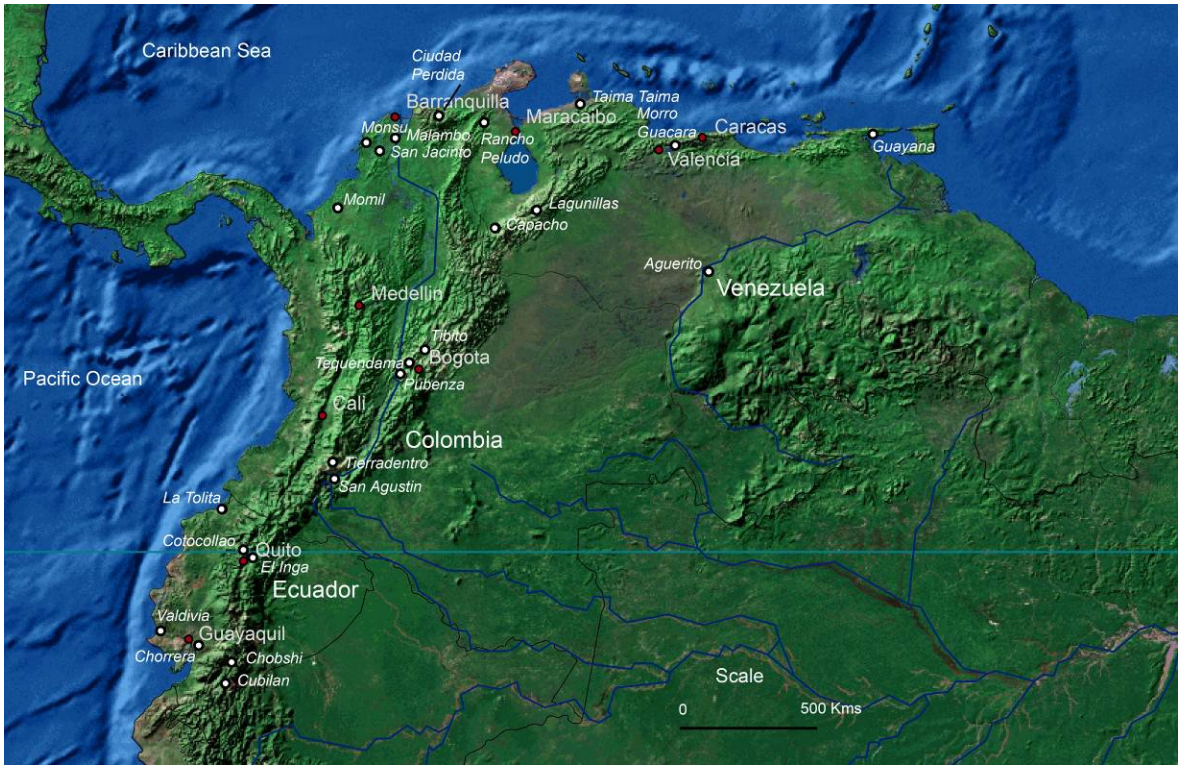
4) The Llanos, a large system of lowland savannahs intersected by large rivers running into the Orinoco basin.

5) The Amazon and Guyana tropical forests, occupying eastern Ecuador, southeast Colombia and south Venezuela.

Within each of these main regions there are several different zones; canyons, plateaux, deltas, marshlands, deserts and valleys, each with its specific type of vegetation and fauna. Altitudes range from sea level to over 6,200 metres above sea level (m.a.s.l.). Five different altitudinal zones can be differentiated:

1) The warm belt, between sea level and 1,000 m.a.s.l.
2) The temperate belt, between 1,000 and 2,000 m.a.s.l.
3) The cold belt, between 2,000 and 3,000 m.a.s.l.
4) The *paramos*, at over 3,000 m.a.s.l.
5) Glaciers and snowfields start at 4,800 m.a.s.l.

Early peoples found an enormous variety of climates, vegetation and animals. Within short walking distances it was also possible to gain access to different micro-niches and, thus, to alternate animal and vegetable food resources.



2. Early hunters and gatherers (17,000 to 1,000 B.C.E.)

During the past two decades there has been an increasing interest in the possible routes for the peopling of America; many interesting ideas and data concerning alternate land routes and transoceanic migrations have been proposed. However the Beringia route is the most accepted hypothesis and it serves as a conceptual framework for the studies of early settlers in South America. If hunters and gatherers arrived in South America, coming from North and Central America via the Panama isthmus, then the first land they found was our region. This, in turn, should determine that the earliest dates for human habitation in South America should be found in Ecuador, Colombia and Venezuela. So far this plausible idea has not been proved by archaeological evidence; a fact that introduces certain confusion.

Climatic changes had a huge impact on the life of early settlers; even though there is no general agreement as to the date of arrival of humans in South America, researchers generally stress the fact that their initial history was marked by the variable climate of the Late Pleistocene. During the period between 20,000 and 8,500 years B.C.E. there was an alternation of extremely cold and relatively warm periods. For the cold periods temperature averages might have descended as much as 6 to 8°Celsius below present day levels (Correal y Van der Hammen, 1977).

This caused huge shifts in the vegetation belts; glaciers and snowfields would have started at about 3,000 m.a.s.l. and the other belts below them (*paramos*, cold and temperate zones) moved down also. Tropical forests in the lowlands disappeared to give way to open grasslands and savannahs. Changes were not limited to temperature; rainfall and general humidity also varied; as a general rule cold periods were drier and, thus desert and semi-desert zones expanded greatly (Correal y Van der Hammen, 1977). Vegetation zones, as we know them today, did not exist in the same places and altitudes; nor did animal species. Hunters and

gatherers had different challenges before them and those challenges tended to change over time, as the climate kept on changing.

In Ecuador most sites corresponding to this period have been found in the highlands of the Andes. The earliest accepted dates for the presence of settlers in Ecuador fluctuate between 12,000 and 8,000 years B.C.E. (Villalba 2005). There are many projectile points and other lithic tools, both from surface collections and excavations, corresponding approximately to those dates. Also, fossil remains corresponding to Pleistocene paleospecies such as *Mylodon* (giant sloth), *Eqqus andium* (Andean horse), *Paleollama* (ancestor of llama), mastodon, giant armadillo, deer and sabre-tooth tiger, from about that period, have been found at various sites, both at the Sierra and at the Pacific lowlands (Idem).

However, with the probable exception of one site in the Santa Elena Peninsula (Ficcarelli et al, 2003), there are still no proved associations between mega-species and artefacts. Most researchers agree that the climatic stabilisation that came along with the Holocene Period brought about the extinction of those animal species (Villalba 2005). This does not imply that early settlers did not prey on big fauna, since several large projectile points were presumably carved to hunt large game, but possibly early settlers did not hunt intensively large animals. There are two distinct adaptive patterns in the Ecuadorian Sierra:

1) The Central-northern pattern has been defined on the basis of the excavations at the El Inga, a complex of over 140 sites, near Quito where many basalt and obsidian artefacts have been found. El Inga might have been one of several campsites of hunters and gatherers that moved seasonally in search of food resources along the inter-Andean valleys and into the neighbouring coast and Amazon regions (Bate, 1999). Obsidian came from the flows of Mullumica, the largest source of this volcanic glass in South America. El Inga is dated between 7,000 and 4,000 B.C.E. but it is believed to have been occupied at least 3,000 years earlier. (Salazar, 1996)

2) The Central-southern pattern is represented by two main sites. Chobshi is a cave located in the Azuay province, dated between 8,000 and 5,600 B.C.E. approximately (Lynch y Pollock, 1981). People at Chobshi carved various types of projectile points and other artefacts using, among other materials, obsidian brought from Mullumica, hundreds of kilometres to the north. Settlers had a diversified economy that included hunting small game such as opossum (*Didelphys albiventris*), rabbit (*Sylvilagus brasillensis*), porcupine (*Coeundu bicolor*), etc. and large animals like deer (*Odocoileus virginianus*) and bear (*Tremarctos ornatus*).

The second site, Cubilan, includes a workshop and a campsite located above 3,100 m.a.s.l. at the extreme south of the Ecuadorian Sierra and dated between 8,500 and 7,200 B.C.E. approximately (Temme, 1982). Projectile points are unusually abundant at the site and they, together with other artefacts, seemed to have undergone a sophisticated process involving certain areas where sequential stages of carving were carried out. Cubilan seems to be one of several sites chosen by bands of hunters and gatherers due to the local absence of volcanic activity, where they developed an adaptive pattern peculiar to the Sierra that included the intensive exploitation of chert quarries and frequent trips along the altitudinal belts in search of specific resources (Villalba 2005).

In the lowlands of the Pacific coast the complex of sites of Las Vegas has yielded several dates between 8,000 and 4,000 B.C.E. The hunters, gatherers and fishers in this region established a remarkably diversified pattern of subsistence that made use of every resource in different neighbouring micro-niches. Other sites, located both in the Ecuadorian Sierra (like CHM-1) and Costa have not been sufficiently investigated or are not dated, so that it is not possible to take them into account in this discussion. The same can be said of isolated finds like the projectile points from Carchi, Imbabura and Cotopaxi.

In Colombia, there are also many finds of projectile points and other lithic objects with no context and accidental discoveries of fossils of paleospecies. There are,

however, two sites where archaeological associations between artefacts and mega-fauna have been established. Tibito, located in the Bogotá *Sabana* (plateau) was probably a slaughtering station. Correal (1981) found here a deposit of burnt bones belonging to paleospecies such as mastodons (*Cuvieronius hyodon, Haplomastodon*) and horses (*Equus A*.) closely associated to lithic artefacts, the stratigraphic unit was dated at 9,800 B.C.E. The other site, Pubenza, was excavated by Van der Hammen and Correal (2001) in the lowlands of the inter-Andean Magdalena valley and dated at between 14,000 and 17,000 B.C.E. In Pubenza an obsidian artefact was unmistakably associated to bones of Mastodon.

Tibito and Pubenza are part of a complex of early sites located in or near the Bogotá plateau. Other important site is Tequendama, where pollen evidence allowed the reconstruction of over 20,000 years of climatic and vegetation changes. In this site there is the oldest human burial in Colombia, dated at between 7,000 and 6,000 B.C.E. (Correal y Van der Hammen 1977). Tequendama allowed the definition of four occupation zones (a concept that involves chronological and climatic periods together with cultural adaptive patterns) that provide a framework for the understanding of the history of early settlers in central Colombia (Idem):

- Zone 1 – 9,000 to 8,000 B.C.E., began as a very cold period but marked the end of the glacial stage and the beginning of a relatively mild climate and the expansion of Andean forests. Presumably mega-fauna finally disappeared from the area and hunters focused on small game.
- Zone 2 – 7,500 to 6,000 B.C.E. Forests colonised the highlands and the climate was much more humid, marshes were larger. Gathering of fruits, roots, fishing and small game hunting formed the basis of subsistence.
- Zone 3 – 5,000 to 4,000 B.C.E. Temperature averages were well above present day levels and climatic belts moved upwards. Deer were scarce due to the contraction of grasslands, small game such as rabbits were in good supply.
- Zone 4 – 500 B.C.E. to 1,500 C.E. Drier climate brought about the disappearance of small lakes and marshes and caused the expansion of grasslands. By this time agriculture was well established in the region.

El Abra, a complex of rock shelters, dated at 10,400 B.C.E. was occupied seasonally by hunters who carved a particular type of chert artefacts, including many choppers and chopping tools that constitute the *Abriense Tradition*. At El Abra the most striking features are sets of bones of guinea pigs (*cavia porcellus*) belonging to different periods that attest the local domestication of this species (Ardila y Politis, 1989).

Several other sites, in the *Sabana* de Bogotá area, (Nemocon, Sueva, Checua, Neusa, Chia and Zipacon) and in other regions (Yondo, Carare, Chucuri, Chaparral, Boulder, El Pital, Sauzalito, La Elvira) confirm the same pattern of small game hunting combined with fishing and gathering on different environments. Big game hunting is occasional and limited to certain sites. This pattern seems to have conducted settlers to the domestication of animal and vegetable species sometime around the end of the third millennium B.C.E. The site of Aguazuque (3,000 to 700 B.C.E.), also in the Sabana de Bogotá, represents an evolved pattern of

subsistence focused on fresh water resources and with ceremonial burials that include selective cutting, carving and painting of human bones (Correal 1990).

The Caribbean coast of Venezuela has yielded important finds. In the region of the valley of the Pedregal River, known as El Jobo, there is Taima –Taima, probably the best known site in this area. Extensive excavations have revealed abundant bones of several paleospecies, including mastodons and giant armadillos. Two mastodons had fragments of projectile points, with which they were presumably hunted, inside their bodies. Instruments found at this slaughtering site, made from stone or bone, were hastily worked and not very elaborate (Cruxent 1979).

This is not the case with the finely carved projectile points that form a very distinct type known as the El Jobo series, found not only at Taima – Taima but also on other sites of northern Venezuela. Dates for this complex range between 11,400 and 10,600 B.C.E. (Ardila y Politis, 1989). Another important site in the same region is Muaco, where a projectile point, dated at 14,400 B.C.E. was found associated with *Glyptodon* (giant armadillo). Other sites explored are Santa Ana, Montecano, Tres Cruces, Cucuruchú and Barbacoas in the Falcon and Lara states. Altogether the archaeological data suggests that after 10,500 B.C.E. there was a gradual shift towards small game hunting, fishing and collection of vegetable and animal resources (Arvelo y Oliver 1999). A completely different pattern is suggested for the high Orinoco basin and the Caroni river valley that were populated, around 7,000 B.C.E., by big game hunters, probably linked to similar groups of Guyana and central Brazil (Sanoja and Vargas 1999).

In the Tachira state of the Venezuelan Andes, the site of Capacho (5,000 to 1,000 B.C.E.) seems to represent a subsistence pattern based on deer hunting, fishing and shell collection (Wagner 1999). To the east, in the vicinity of Valencia, the study of the sediments of the Valencia Lake has suggested the presence of bands of hunters and gatherers; surface finds of lithic artefacts are common here and in the neighbouring states of Aragua and Miranda, however so far no dates have been obtained (Antczak y Antczak 1999).

So far the evidence available for early settlers in northwest South America must be regarded as incomplete and fragmentary. Excavations have focused on certain areas (i.e. *Sabana* de Bogotá) while many regions have not been considered. The quantity and quality of information from excavated sites is heterogeneous. Nevertheless, the conclusions obtained tend to agree with respect to the general trends of subsistence and the adaptive strategies. It has been possible to determine that these settlers were not specialised big game hunters and that projectile point traditions, like the North American Clovis and Folsom, are not so important in the region. Instead, flexibility with respect to resources and the

capability to move seasonally between different altitudinal belts and niches guaranteed a constant level of supplies.

During this period people were organised in relatively small groups (40 to 60 individuals each), probably lineages that maintained a semi – mobile pattern, moving seasonally within a few square kilometres in order to make the best possible use of available resources. The sites excavated are either temporary campsites where activities such as tool making, eating and sleeping were carried out for some days or months every year (Nemocón, Cubilan), or slaughter sites were big game was taken down and butchered (Taima - Taima, Tibito). With respect to the geomorphology of the sites it is clear that river and lake terraces were preferred (Aguazuque, Muaco). In second place we find rock shelters and caves (Tequendama, Chobshi). Occasionally burials are found also in these sites (El Abra). The material culture is represented mainly by stone artefacts such as projectile points (El Inga, El Jobo), knifes, scrapers, drills, etc. Bone was also an important material for tools as well as deer antlers. Probably there were many wood tools and instruments, but none has survived.

3. The beginnings of agriculture (5,000 to 1,000 B.C.E.)

It is usually difficult to understand how the invention of agriculture and its counterpart, animal domestication were achieved; the archaeological evidence for the intermediate stages between wild and domesticated species is rarely visible. In northwest South America few animal species were domesticated, as is the case of the whole of America. In contrast many plants, both in the lowlands and in the highlands, were transformed into cultigens. These processes were slow and gradual and many started at the time when hunting and gathering were the main activities, probably around 7,000 B.C.E. At a certain point a mutual interdependence between humans and vegetable species was attained and cultivation acquired a greater social importance. However, this did not imply an

immediate increase in food supply or radical social changes; many years more were needed for this to happen.

The earliest evidences for the domestication of plants in Ecuador come from the coastal site of Las Vegas. Cultivated maize (*Zea mays*) has been associated to dates of 5,200 and 3,800 B.C.E. There is ample evidence for the domestication of this plant and others like gourd (*Cucúrbita ecuadoriensis*), pumpkin (*Lagenaria siceraria*), leren (*Clathea allouia*), yucca (*Manihot esculenta*) and otoy *(Xanthasoma)*. It is possible that in the Santa Elena peninsula there had been some experimentation with the domestication of gourd as early as 7,800 B.C.E. (Villalba 2005a). By the end of the Las Vegas occupation, agriculture was strongly established and it expanded along the Ecuadorian coast where it was assimilated by other cultures.

The Valdivia culture (4,000 to 1,800 B.C.E. approximately) seems to have grown on the basis of agricultural production. At the sites of Real Alto and Loma Alta in the Ecuadorian coast there was intensive cultivation of plants like bean (*Canavalia*), achira (*Canna edulis*), arrowroot (*Maranta aundinacea*), cotton (*Gossypium barbadense*), zapote (*Sapotaceae),* maize, gourd and pumpkin (Idem). One of the earliest evidences for the manufacture of pottery in America was found at Real Alto; early Valdivia ceramic has been dated 3,500 B.C.E. and at that time it appears considerably developed, no previous experimental stages have so far been found. Valdivia pottery is mainly represented by decorated wide pots and bowls; in later stages nude feminine figurines were made. The presence of large quantities of pottery is consistent with permanent life in villages and intensive agriculture; these two characteristics became increasingly frequent in northwest South America from 2,000 B.C.E. onwards.

In the Ecuadorian Sierra the Cotocollao culture has yielded evidence for the adaptation to high altitudes of bean (*Phaseolus vulgaris*), oca (*Oxalis tuberosa*), potato (*Solanum tuberosum*), chocho (*Lupinus sp.*) and maize at around 500 B.C.E. (Villalba 2005a). Pollen information from San Pablo Lake in the Imbabura

province indicates that maize was cultivated in the Sierra in 2,200 B.C.E. This information is confirmed by the sediments of lakes Chorreras and Pallcacocha where pollen grains of maize were dated between 5,000 and 2,000 B.C.E. After 2,000 B.C.E. forest clearance and agriculture are evident (Idem).

In the Colombian Andes a few sites, mainly connected with early hunters and gatherers, have yielded evidence for animal and plant domestication. This is the case, as discussed above, for El Abra. Other sites such as Chía have yielded indirect evidence in the form of tools related to the processing of cultivated vegetables (Ardila 1984), while others like Zipacón, dated at 1,300 B.C.E, have produced direct evidence represented by pollen and seeds; in this last case settlers coming from the lowlands of the Magdalena valley were practicing agriculture in the limits of the Sub-Andean forest and bringing with them cultigens previously unknown in the cold belt of the Cordillera. (Correal y Pinto, 1983).

Most of the evidence related with early agriculture comes from shell middens and related sites in the Caribbean lowlands. Perhaps as early as 5,000 B.C.E. a particular type of subsistence pattern developed in the circum-Caribbean area, including most of the north coast of Colombia. Most sites were located near the seashore where abundant crustacean, oysters, and mussels could be collected on a daily basis. The accumulation of food debris on the habitation areas caused the formation of shell mounds that were used to build houses on top (Reichel-Dolmatoff 1997). This abundant supply of maritime proteins could be supplemented with resources from adjacent forests and grasslands. Sites located inland made intensive use of rivers and lakes for fishing and emphasised the collection of edible roots and fruits.

Archaeological research has allowed the construction of a sequence of periods and sites raging from 4,000 B.C.E. until the time of the Spanish conquest in 1500 C.E. confirming the persistence and success of the shell midden settlement. The earliest site in the sequence is San Jacinto, a village located in the low hills of Montes de María, to the south of Cartagena (Oyuela and Bonzani, 2005). The ceramic levels of

this site have been dated at 3,750 B.C.E.; pottery is characterised by the use of vegetable fibres as temper. There is certain degree of complexity at San Jacinto, since the interior of the habitation space is clearly divided according to the type of use and there are structures built to accommodate permanent bonfires. Subsistence strategies at San Jacinto included intensive collection of vegetables that may have led to incipient forms of cultivation (Idem).

At Monsu, another inland site south of the Cartagena Bay, sand tempered pottery was dated at 3,350 B.C.E. (Reichel-Dolmatoff 1997). What is more striking about the archaeological record of Monsu is that there is abundant indirect evidence of agricultural practices in the form of hand hoes made from large shells that were used to plough the soil. Monsu is followed by Puerto Hormiga, a shell midden dated between 3,100 and 2,500 B.C.E. with abundant fibre and sand tempered pottery. Other sites in the sequence are Puerto Chacho, Canapote, Barlovento, Turbana and Crespo (Idem). There are, apart from the sites mentioned, a few isolated finds and scattered data for pollen of presumably cultivated species, some associated to C14 dates.

People belonging to the early Saladoide and Cedeñoide series of the Middle Orinoco basin (2,000 B.C.E. to 1,000 C.E.) who practiced hunting and gathering may have been involved in some form of incipient agriculture (Vargas in Navarrete 1999). In the northeast coast of Venezuela the sites of Guayana and La Aduana (2,600 to 2,200 B.C.E.) exhibit a pattern of subsistence based on gathering, fishing and agriculture attested by abundant stone axes and hoes (Sanoja and Vargas 1999). Possibly plants such as mapuey (*Dioscorea trifida*), capacho / achira, yucca, leren and pumpkin were being domesticated in here. Around 1,500 B.C.E. charcoal tempered pottery was being made and used in this region. The Michelena complex of northeast Venezuela is characterised by abundant grinding stones and axes, thus suggesting that intensive collection of vegetables and incipient agriculture were practised (Antczak y Antczak 1999).

A preliminary conclusion of this review is that the invention of agriculture was a necessary consequence of a subsistence pattern based on intensive gathering of vegetable resources. The knowledge gained through seasonal practices of collection almost inevitably led to the beginnings of cultivation and to human intervention in species differentiation and change. The other important conclusion is that this process seems to have started independently and, to a certain degree, simultaneously in different places and regions. Around 1,000 B.C.E. many groups in diverse regions had acquired agricultural capabilities that gave them a socio-technological platform for territorial expansion and social complexity.

We have emphasised the fact that agriculture did not immediately change the way of life of hunters and gatherers, but that it took a long time for the its effects to become visible. This does not mean, however, that the early agriculturalists lived in the same form as their ancestors. A fact that the archaeological record clearly points out is that settlements were becoming more permanent; the old mobile pattern was gradually giving way to long stays in the same site. Refuse accumulated and people built their houses on the top of rapidly growing artificial mounds (San Jacinto, Puerto Hormiga,

and Monsu). This pattern was repeated for thousands of years thus creating deep sites where multiple strata tell a story of climatic and cultural changes.

Another indication of this change is the presence of large amounts of pottery, a material not used by mobile groups that need to keep light travel equipment. In these mounds villages got larger and eventually public buildings and spaces appeared (Real Alto). Ritual aspects tended to be more prominent and their expression was now more frequent in burials. Most probably the bond of society continued to be kinship but there must have appeared a different type of family. None of these early villages has been excavated completely so that it is impossible to calculate their size and the number of inhabitants that they held. Even so, there are good reasons to believe that the population was steadily growing.

4. Agricultural chiefdoms and large scale migrations (1,000 B.C.E. to 1500 C.E.)

The archaeological data available for the period after 1,000 B.C.E. is largely focused on ceramic types, styles and complexes and there are countless discussions around decorative and formal traits and tendencies. This is, however, just one of the material expressions of a series of deep changes that were taking place inside these societies and that affected their way of life and the form in which they related to each other. In the first place there was an important population growth; no real numeric data is available, but the density of settlements and the impact on the environment are quite eloquent. As a consequence food production increased and new areas were transformed into cultivation fields. This, in turn, resulted in the need for centralised structures of control and direction. In time, local and regional markets and trade networks began to develop and the interaction between neighbours, and even distant groups, became more intense.

The early agricultural chiefdoms of the Ecuadorian coast are closely linked to the Las Vegas culture. The Machalilla culture (1,500 to 800 B.C.E.) occupied a large part of the central and southern coast of Ecuador. Its single best known aspect is

pottery; with respect to the preceding traditions there is a great deal of innovation in forms and decoration. In large cemeteries bodies were buried under a ceramic reproduction of a tortoise shell. Cranial deformation was widely practiced; this usage was extended to almost all the coastal cultures that followed Machalilla (Meggers 1966). The Machalilla people depended on agriculture but still fished and gathered sea species in large quantities.

After the decline of Machalilla emerged the most influential early agricultural culture of the Ecuadorian coast: Chorrera (1,800 to 300 B.C.E.). The archaeological remains of this culture are distributed in most of the Ecuadorian coast and it extended to some Sierra regions where it marked clear stylistic patterns. From pottery representations it has been deducted that Chorrera was a strongly stratified society and that there was a marked specialisation with regard to work and trades. The pottery itself is regarded as exceptional due to the fine manufacture and the variety of forms; many animals and people of both genres, of different ages, occupations and social status were represented in polychrome bottles and jars, some of them with musical properties. Maize cultivation was very important and this increased their capability to colonise inland territories and build villages in riverside environments (Ontaneda 1995).

Not much is known about what determined the decline of the Chorrera culture, but it is clear that its impulse was not lost. In several regions of the Ecuadorian coast other focuses emerged that kept on developing new and more complex subsistence strategies and handicraft traditions. Among those cultures we can mention Guangala (100 B.C.E. to 800 C.E.), located in south Manabí and Santa Elena, a semi-arid land that they irrigated by means of water reservoirs (Idem).

An early culture that particularly stands out for its social organisation and for its achievements in material culture is La Tolita – Tumaco (500 B.C.E. to 300 C.E.); it occupied a large territory of the humid Pacific lowlands of northern Ecuador and southern Colombia (Patiño 1997). Fishing was very important in the sea and in the estuaries and mangrove swamps, while inland agriculture was practised probably

combining intensive maize and yucca cultivation wherever possible with restricted forest clearance (*chagras*) near villages. Marked social hierarchy is attested by large cemeteries, such as the one in the island of La Tolita, where extensive artificial mounds *(tolas)* hold rich elaborate burials, while many simple tombs are scattered in the surroundings (Mendoza 2001).

There is in La Tolita – Tumaco a display of skill in the representation of people, animals and mythic beasts in pottery. The jaguar plays an important role in iconography and it tends to appear combined to men, exhibiting an aggressive gesture that has been interpreted as a shamanic feature (Idem). The area is rich in gold and platinum alluvial deposits and this allowed a very early (ca. 1,000 B.C.E.) pre – La Tolita development of metallurgy (Lleras 2006). Metal smiths learned many techniques like plating, lost wax casting and welding to work gold and gold – copper alloys. A technical development unique in ancient America is platinum sintering, a complex combination of hammering and heating used to produce a gold – platinum mixture that looks like solid platinum.

Metallurgy was also important for another two coastal cultures that coexisted with the last phases of La Tolita – Tumaco and survived until the second millennium of the Common Era. Jama – Coaque (400 B.C.E. to 1500 C.E.) is known for its very large and profusely decorated polychrome human figures and for elaborate plated gold ornaments (Ontaneda 1995). The Bahía (600 B.C.E. to 600 C.E.) metal smiths introduced silver, abundant in river placers but previously unused in the region (Lleras 2006). Their villages were located on top of mounds and platforms near the shoreline; they had a special sanctuary on the island of La Plata where multiple offerings of pottery and Spondylus shell have been found (Ontaneda 1995).

The early agricultural groups in the Ecuadorian Sierra developed adaptive strategies that were mainly based on interchange and short distance displacements covering different altitudinal belts *(microverticality).* These mechanisms encouraged the conformation of a specialised group of merchants that were, in later times, to be known as the *mindalaes* (Villalba 2005a). It has been argued that this economic pattern had an important symbolic role and that it further enhanced the power of the ruling elites (Idem).

Cerro Narrio culture in the southern Sierra has been divided into two periods: Early (2,400 to 500 B.C.E.) and Late (500 B.C.E. to 500 C.E.). Maize cultivation was extremely important. During the Early Period hunting was frequent but around the end of it the hunting of llamas was abandoned in favour of their domestication, as from that time llamas represented 95% of the animals consumed. The importance of llama herding resulted in symbolic sacrifices and burials. Pottery, stone, bone and metal sustained important industries based partly on imported materials. Narrio maintained frequent contacts with northern Peruvian cultures (Vicus) as well as with the coastal and the Amazon areas (Idem).

Also in the southern Sierra, the Catamayo Formative culture (1,900 B.C.E. to 1500 C.E.) reveals a gradual evolution from simple small houses to large complex stone structures (Guffroy 2004). At the Putushio region (1,500 B.C.E. to 1500 C.E.) there are evidences of large agricultural structures such as cultivation fields, channels

and reservoirs for irrigation. The most prominent features of this site are structures related to gold processing dated at 1,500 B.C.E. one of the earliest in South America (Rehren and Temme 1994).

In the northern Sierra the Cotocollao site (1,500 to 500 B.C.E.) has been extensively explored; the prehistoric village covered over 26 hectares in an area irrigated by many creeks. Near the rectangular houses there are also burials with pottery and stone offerings. The Cotocollao people extracted and exported obsidian to the coastal region. Other sites sharing this early agricultural tradition in the northern Sierra are Loma Tello, La Chimba and Tababuela (Villalba 2005a).

In southern Colombia the San Agustín culture (1,500 B.C.E. to 1500 C.E.) exemplifies the typical path leading from small groups with a subsistence pattern based on gathering to complex societies with intensive agriculture and an elaborate ceremonial - funerary component. In the early phases people lived in small circular houses near the cultivation fields (Reichel-Dolmatoff 1972), gradually habitation sites became denser and towards the first millennium C.E. there appeared large organised villages with interconnecting roads and a hierarchically divided space (Llanos 1991). What is most conspicuous in San Agustín is the construction of large earthworks (artificial levelling, mounds, platforms) and the sculpting of hundreds of stone statues, sarcophagi and dolmen type tombs. The iconography of the statuary is extremely complex and depictions include felines, alligators, monkeys, eagles and other animals. There seems to be a spatial distribution of themes that marks dual spaces and sacred axis in the local geography (Sotomayor y Uribe 1987).

To the north of San Agustín, the Valle de la Plata (1000 B.C.E. to 1500 C.E.) exhibits a chronological sequence of periods within which the growth of the local population led to higher agricultural production and to an increase in social complexity and the emergence of chiefdoms (Drennan et al 1991). Another important region closely linked to the last two is Tierradentro (1,000 B.C.E. to 1500 C.E.) where, together with stone sculpture, there are huge tombs carved in the

volcanic rock; their architectural layout includes spiral staircases, columns, recesses and painted decoration (Chaves and Puerta 1986).

San Agustín, Valle de la Plata and Tierradentro form part of an early tradition that extended throughout south-western Colombia between 1,000 B.C.E. and 500 C.E. Probably elites belonging to different groups shared common ideologies (Gnecco 1996).

The successive periods of the Calima region in the Western Cordillera and Cauca valley pose a somewhat more complicated problem. Following a phase of hunters and gatherers, there is an early ceramic period known as Ilama (700 to 100 B.C.E.) during which agricultural colonisers partially cleared the forests, began the construction of roads, planted maize, bean, pumpkin, arrurruz (Maranta arundinacea) and achiote *(Bixa orellana)* and started a network of exchange with the adjacent lowlands of the Pacific coast (Cardale 1992). Afterwards there was a cultural change that led to a second ceramic period: Yotoco (200 B.C.E. to 1200 C.E.). During Yotoco and its related phase (Malagana) forest clearance, field drainage and road construction were intensified, and there are signs of a much stronger political – religious elite with certain privileges like the use of large and elaborate gold ornaments and other exotic items (Bray 1992). After the decline of Yotoco cultural patterns change so drastically that it probably reflects the arrival in the area of new ethnic groups.

Along the Cauca valley and the Central Cordillera, the Quimbaya region was inhabited between 500 B.C.E. and 800 C.E. While the material in museum collections is abundant, there is little archaeological evidence. At certain sites salt was produced in large quantities by boiling natural salty water, thus giving rise to a regional exchange network that included also cotton and alluvial gold. There are in the hillsides many house platforms and connecting roads. Social hierarchy is attested by exceptional gold and gold – copper objects that accompanied elite burials. Most of these pieces are anthropomorphic containers related to the ritual

consumption of coca leaves; the manufacturing technique employed to make these containers, lost wax hollow casting, was mastered at an impressive level (Plazas y Falchetti 1983).

On the other side of the Central Cordillera, towards the Magdalena valley in the Tolima region, early agricultural ceramic occupations started at around 600 B.C.E. In a dry tropical forest environment maize cultivation was progressively extended. By 200 C.E. there was a second ceramic occupation and there are indications of a more dense population together with elite tombs and gold objects characterised by a high degree of schematisation (Salgado et al 2009).

Near the mouth of the Magdalena River in the Caribbean coast of Colombia the site of Malambo (1,100 B.C.E. to 100 C.E.) has yielded very elaborate early pottery. The Malambo people were yucca agriculturalists; they lived on riverside environments and had supplementary fishing and gathering activities. The importance of Malambo lies mainly on the fact that it had close connections with pottery traditions of north-eastern Colombia and northern Venezuela (Angulo 1981). Momil is a site located in the Sinú river valley, near a lake; its deep stratified record of pottery evolution has been interpreted as the evidence of an important cultural change that led agriculturalists from the cultivation of yucca to that of maize, around the beginning of the Common Era (Reichel – Dolmatoff 1997). This change may not have been merely local, but rather the reflection of a general trend that took place around the same time in lowland areas around the Caribbean (Idem).

The depression of the San Jorge and Cauca rivers in the lowlands of the Caribbean coast in northern Colombia was occupied by yucca and maize cultivators that started adapting the lands devastated by seasonal flooding for permanent agriculture before 1,000 B.C.E. Around 1000 C.E., when the system was abandoned, over 500,000 hectares had been transformed into ridge and channel fields (Plazas y Falchetti 1990). Near the main rivers there were house

platforms and funerary mounds. Surplus water in the rainy season was conducted by canals to natural reservoirs *(cienagas);* during the dry periods the water flowed out of the *cienagas* and allowed the irrigation of the ridges. The system was so efficient that it supported a dense population and a hierarchical society heavily dependent on women and feminine symbolism (Idem).

The Sierra Nevada de Santa Marta in the Caribbean coast attracted migrants from the east and west that alternatively occupied the massif. The dynamics of the processes that affected this area had an extensive impact on the whole of northern Colombia and Venezuela and part of the eastern Andes including the Sierra de Merida. Two main large scale migrations have so far been identified; the first involved the Arawak speaking groups; their expansion probably started in the central Amazon basin between 3000 and 1500 B.C.E. The Arawak linguistic family divided into six branches and expanded towards the Orinoco, the south Caribbean and the Antilles (Oliver 1990). Several polychrome ceramic traditions in this area may correspond to this people (Idem).

In the Sierra Nevada, the pottery of the Nahuange occupation (200 B.C.E. to 900 C.E.) reveals close similarities to that used in the Guajira peninsula and northern Venezuela since the fifth century B.C.E. (Saenz 2001). The Nahuange people were organised agriculturalists who undertook the construction of a large system of stone paved roads, villages with stone foundations and several other engineering works that allowed them an efficient use of the mountainous terrain (Idem).

The other large scale migration involved the Chibcha linguistic family. Chibcha groups of northern Costa Rica and southern Nicaragua must have started migrating and their original languages divided around 500 to 300 B.C.E. (Constenla 1992). Part of the Chibcha migrants were established in the Uraba Gulf near the present day Colombia – Panama border while others went east occupying the whole Sierra Nevada de Santa Marta and south directly into the Eastern Cordillera

(Idem). In this last region they came in contact with early agriculturalists of the Herrera and related traditions (1500 B.C.E. to 800 C.E.).

The linguistic evidences of this two massive population movements (Arawak and Chibcha) can still be traced today and the implications in the culture and history of a large territory is enormous. For a long time in the tradition of the anthropological studies the issue of the Caribbean family was very popular and many historic societies were classified as such; modern linguistic studies have reduced the Caribbean linguistic family to a handful of ethnic groups, thus establishing that its influence in northern South America was not as extensive and important as previously considered.

The Guajira peninsula and the Maracaibo lake basin share many ceramic traditions. The first occupation of the peninsula is known as the First Painted Horizon or alternatively as the Hornoide Tradition (500 B.C.E. to 700 C.E.). There seem to be important relations with the Tocuyano and La Pitia regions in Venezuela (Ardila 1990). The Hornoide people inhabited mainly riverside environments, only in later times they started to exploit maritime resources (Idem). In the Maracaibo basin that ceramic tradition and the people who made it may have interacted with other groups migrating from northern Colombia, the Andean foothills and the Orinoco – Amazon basin (Arvelo 1999); subsistence in this area was based mainly on agriculture, though depending on the group there was an emphasis either on yucca or maize (Idem).

Around 800 C.E. in the peninsula there is a cultural change and the Second Painted Horizon or Ranchoide Tradition appears. A related ceramic complex in Venezuela is the Dabajuroide series (Ardila 1990). Maize cultivation was very important but they also gathered maritime resources; villages seemed to be small and only occupied seasonally, even though occupation seemed to be more permanent in areas with good soils and water availability. In most of the Maracaibo

Lake basin the second period is dominated by people carrying the pottery known as the Berlin tradition, cultivators of yucca and maize (Arvelo 1999).

Towards the east, in the Falcon and Lara states, the first agricultural occupations are associated with the Tocuyanoide and the Malamboide series (300 B.C.E. to 300 C.E.). Those were egalitarian societies subsisting on agriculture and living in large communal houses (Arvelo y Oliver 1999). From 600 C.E. onwards new ceramic complexes, Dabajuroide and Tierroide, appear in the region and there are some changes in life patterns; groups located at the eastern extreme of the Andes, in the valley of Quibor, attained a certain level of social complexity based on the exploitation of salt; this is the only sub-region where true chiefdoms seemed to have emerged. Commercial, political and social relations with the Antilles (Aruba, Curacao) were important in this second period (Idem).

The region surrounding the Valencia Lake was the scenario of multiple and complex relations and occupations. Initially it was populated, around the beginning of the Common Era, by people carrying the Tocuyanoide pottery, strongly oriented towards maritime resources. By about the same epoch there was another influx of people coming from the lower Orinoco and carriers of a tradition known as the Barrancoide series, whose subsistence was based on a combination of fishing and agriculture (Antczak y Antczak 1999). Later on, yet another two influxes of ceramic groups, the Ocumaroides and the Saladoides, occupied the area and established commercial, kinship and economic relations with the original inhabitants (Idem).

By around 1000 C.E. a new local tradition, the Valencioide series emerged in the region; at first these people lived on palaphites and, as the level of the water descended they moved to artificial mounds constructed with stone walls on the shores of the lake, where they built also their cemeteries (Idem). A distinctive trait of the Valencioide series is the abundance of pottery figurines. In two nearby islands of the Caribbean there were huge workshops, operating from 1200 C.E. onwards, where large quantities of shells of *Strombus gigas* were exploited, worked and exported to the valley of Quibor and the Andes (Idem).

In the lower Orinoco, between 4600 and 4200 B.C.E. two subsistence patterns coexisted, one of which was based on gathering, fishing, hunting and agricultural practices without pottery. Around 1500 B.C.E. coarse pottery was already being manufactured and some 500 years later there was a consolidated tradition, the Barrancoide series (Sanoja y Vargas 1999). During the next two millenniums the Barrancoide people expanded along the Orinoco building many villages on the riversides; eventually they came in contact with Andean and Caribbean people and, from the resulting mixture, there emerged a new culture that was capable of colonising the eastern Caribbean islands (Idem).

Further up along the Orinoco River, there was an initial occupation, starting around 600 B.C.E., by groups who lived during part of the year in communal houses near the rivers hunting, fishing and cultivating (Navarrete 1999). These tropical forest inhabitants had a coarse pottery tempered with ashes. The arrival of new groups marked the start of the Corozal phase, the construction of new villages on top of natural mounds and the extension of maize and cotton agriculture (Idem). It has been possible to determine the approximate population during the two phases, thus demonstrating that the introduction of intensive maize agriculture encouraged a considerable increase in density (Roosevelt 1978). Alternatively, it has been proposed that the sequence of the Agüerito site shows the coexistence of two different groups that used the resources simultaneously; later on a third group, cultivators of maize, bean and pumpkin, came into the region with a new pottery style (Navarrete 1999).

In the savannahs of the Llanos of eastern Colombia and western Venezuela at least three major ceramic complexes have been identified, being the earliest one Caño del Oso (1,000 B.C.E.). The subsistence patterns of the inhabitants were heavily influenced by the changes in rainfall; during rainy periods people lived on agriculture while in the dry season subsistence was based on hunting, gathering and fishing (Zucchi 1999). Two ceramic periods have been identified; during the first one (300 to 600 C.E.) there are no modifications of the landscape while in the

second one (600 to 1100 C.E.) the sites are hierarchically organised and in the principal ones there are artificial mounds, plazas, roads and house platforms (Idem). There are two lower levels of sites, probably satellites of the main ones. In several sites (e.g. Caño Ventosidad, San Martin) there are evidences of raised fields used for permanent cultivation. This evidence suggests the existence in the Llanos of stratified chiefdoms with strong interchange and war activities. Ritual war practices included cannibalism and the exhibition of trophy heads.

The Sierra de Merida region was probably subject to the influence of Arawak and Chibcha migrations in different periods of its history (Clarac 1996). The Chama river valley located between 600 and 4,000 m.a.s.l. is crossed by ancient roads that communicated the upper and lower portions of the Cordillera and the adjacent regions of the Llanos and the Maracaibo basin (Puig 1996). The pottery found has similarities to the Tocuyanoide tradition, but there are several traits peculiar to the region and significant intraregional differences (Idem). C14 dates for the region roughly locate this occupation between 700 and 1600 C.E.

The main village was located in the site of Lagunillas and its importance was connected with the control of a mineral used with tobacco (*urao salt),* that was extracted from a lake and exchanged throughout the region. Agricultural production supported a dense population; in order to enhance the productivity of the hillsides stone lined terraces were built. Usually shaft and chamber tombs are associated to these structures. In dry zones there were systems of reservoirs and channels for irrigation (Idem).

At the extreme south of the Venezuelan Andes in the Tachira state, huge stone paved platforms, staircases, walls and roads have been uncovered; the associated pottery shows some similarities with types of the Eastern Cordillera in Colombia and the valley of Quibor to the west (Duran 1998). In the Sierra Nevada de Merida there are workshops where serpentine was used extensively to produce winged plaques, an ornament that is basically a schematisation of the bat. Those types of

plaques were manufactured also in the Sierra Nevada de Santa Marta and in the Sierra Nevada del Cocuy; the three snow peaks of the Sierras were sacred sites that formed a triangular configuration, a trait that was recognised by Indian priests (Osborn 1995).

The archaeological evidence for this period clearly points out that the processes leading to the establishment of permanent settlements, the consolidation of agricultural production and the emergence of social complexity were extremely heterogeneous. There are examples of groups that developed rapidly new subsistence patterns based on cultivation (Nahuange) while others lingered for centuries in mixed forms of gathering, hunting and seasonal cultivation (Caño del Oso).

Moreover, the transit to a hierarchical society, of the chiefdom type with its *caciques* and priests, was not an unavoidable step. In some places this transit was the indirect result of population growth and the expansion of production. But the evidence shows that particular situations more often led to this result than the simple demographic growth. Among these situations we can mention the control of commercial networks (Cerro Narrio), the monopoly of strategic products (Lagunillas), the construction of large scale agricultural systems (Zenú) or symbolic and ideological control (La Tolita – Tumaco). The issue of the large scale migrations of the linguistic families (Arawak, Chibcha), introduces another element of cultural change that further complicates the local panoramas.

5. The last centuries before the Conquest (1200 to 1500 C.E.)

The unequal growth of agricultural societies during the first and second millennium of the Common Era resulted in the emergence of regional or local developments. What these new societies had in common was that every one changed in a way that dissolved old patterns of life; apart from that they took diverging paths. Some became proper states or state – like structures, a few became regional

confederations with kinship as the main bond among their members and in some others rival local villages were strengthened. In the south, a few decades before the European conquest the Incas invaded the Sierra region and imposed a political regime hitherto unknown in our region.

In the southern Sierra of Ecuador the Puruhá (400 to 1500 C.E.) and Cañari (300 to 1500 C.E.) nations consolidated a strong political supremacy since 1200 C.E. The Puruhá had an intensive production of maize and potato and large herds of llamas in the highlands that provided abundant meat and wool; this seemed to have supported a strong hierarchy. Most Puruhá chiefdoms seemed to have pursued an active territorial expansion based on war. The habitation sites were scattered on the hillsides and valleys; excavations have revealed rectangular rooms with walls of mud and stone bricks grouped in a beehive pattern (Echeverría 2005). Metallurgy was extremely important as a marker of status; in several looted Puruhá tombs there have been found abundant metallic items. Puruhá metallurgists used gold, silver and copper, by means of hammering and cutting, techniques that they mastered. With gold and silver and, to a lesser extent copper, they made bimetallic objects using methods that involved welding and hammering. Puruhá objects include large body ornaments like helmets, breastplates, “giant” *tupus* (pins used by women on their chests to hold their garments), staffs, weapons and tools (Lleras 2006).

The Cañari elites seemed to have employed both alliances and war to expand their power; the resulting political entities have been described as interrelated chiefdoms in transition towards state like structures (Echeverría 2005). Chiefs, or *curacas*, were lords of war and peace who controlled important commercial networks that expanded as far as the Pacific coast, the Amazon and northern Peru. One of the most important items traded was the *Spondylus* shell. Economic strength was derived also from the control of diverse altitudinal belts through the pattern of *microverticality* (Idem). In certain areas agricultural terraces were constructed to enhance productivity. Cañari metallurgy, found in looted tombs of the provinces of

Azuay and Cañar, made use of a sophisticated technology that enabled them to produce bimetallic objects of gold and silver, like ear pendants, breastplates, vases, diadems and crowns. Arsenic copper was used to make *tupus*, axes, maces, projectile points and chisels (Lleras 2006).

In the Pacific coast of Ecuador another two related cultures developed side by side during most of the Common Era: Milagro-Quevedo (200 to 1500 C.E.) and Manteño-Huancavilca (500 to 1500 C.E.). One of the most remarkable features of Milagro-Quevedo is the construction of a large agricultural drainage system in the basin of the Guayas River (Stemper 1993). Their territory was literally covered with high platforms (*tolas*) on top of which they built their houses and buried their dead. The territory was probably divided into several independent chiefdoms (Idem). The efficient agricultural production and the dense population sustained a large scale metallurgical production based mainly on imported copper. Thousands of axe-monies, axes, staffs and other very large copper objects were made in large workshops and sometimes even in rural houses (Lleras 2006).

The Manteño-Huancavilca nation shared this industrial vocation. Their location on the central and northern coast of Ecuador allowed them to export this particular knowledge along the Pacific coast of America. When the first Spanish Conquistadors arrived they met a large Manteño raft sailing with loads of merchandise; this vessel was just one of the many that regularly travelled as far as the coast of Mexico. Stylistic and technological studies suggest that the copper metallurgical tradition of western Mexico originated in these contacts (Hosler 1998). Hierarchy and chiefs were extremely important in the Manteño society and their status was reinforced by the use of exclusive items like the elaborate ceremonial seats, carefully carved out of large blocks of stone.

The valley of Quito and the plateaux and valleys to the north were the territory of several chiefdoms known in the sixteenth century as *Señorios.* Quitus, Cayambes, Caranquis and other nations were famous, mainly because of their resistance

against the Incas (Landazuri 2005). The historic evidence shows that the three nations established a confederation against the invaders and that this type of alliance was probably based on a long common cultural development. Apparently the environmental stress caused by heavy rains or very dry periods, frequent volcanic eruptions, excessive population increase and constant attacks by neighbour nations led to an interethnic cooperation. Simultaneously they developed other strategies such as extensive construction of agricultural ridges, terraces and irrigation channels, exchange of goods, monopolistic control of key resources such as salt, microvertical exploitation and the consolidation of multiethnic enclaves for the cultivation of specific crops (Idem). The many ceremonial *tolas* and platforms with long access ramps have been interpreted as part of a symbolic structure created in order to strengthen the society against external menaces. The social structure was quite complex and included several levels of chiefs that had power over regions, villages or parts of villages (*ayllus*).

The century prior to the Spanish conquest was marked in most of the Ecuadorian Sierra by the presence of the Incas (Meyers 1998). The initial invasion was

commanded by Inca Tupac Yupanqui in 1450 C.E. and completed years later by Inca Huayna Capac. The Incas applied in Ecuador the same geopolitics that they had employed in other regions previously conquered: at first they sought to establish domination by means of political alliances, if they succeeded the ethnic elites were incorporated into the bureaucratic structure of the Empire and marriages were arranged so as to strengthen the local loyalties. If they met resistance war would follow and, once victory was obtained, local populations were transferred to another region of the empire and foreign groups brought in (*mitimaes*). In Ecuador resistance was fiercer in the north among Cayambes and Caranquis. The coastal area was not really conquered but even so, the Inca cultural influence was strongly felt (Idem).

Even though the Inca domination of the Ecuadorian Sierra lasted less than a hundred years, they left many durable traces of their presence. Several villages previously constructed by local groups were rebuilt following the Inca architectural patterns: Tomebamba, Valle de Jubones (Azuay province), Cojitambo, Cashaloma, Ingapirca (Cañar province) and Quito itself had large stone constructions, temples and other ceremonial buildings (Idem). There can still be seen all along the Sierra sections of stone-paved roads, forts (*pucaras*) and administrative buildings, some used as resting places along the roads (*tambos*). Life under the Incas changed dramatically, especially because the local cultural environments were constrained in favour of the state demands. Ethnic languages were displaced by Quichua and material culture, such as pottery and metallurgy, changed in order to accommodate the new stylistic and manufacturing patterns (Lleras 2006). Effective Inca territorial control reached the south bank of the Chota – Mira River.

To the north of the Chota – Mira River there had been agricultural occupations since 100 C.E. (Lleras et al 2007). In the sixteenth century the Pasto nation occupied most of the Andes of northern Ecuador and southern Colombia. The Pastos were known for the existence of elites that controlled vast exchange networks that reached the Amazon and the Pacific coast and for maintaining an

exploitation pattern based on microverticality (Idem). Most probably the historic ethnic group and its subsistence pattern had evolved locally for many centuries producing several distinctive styles of pottery and metallic artefacts. In general terms the material culture reveals close connections to earlier sites in the Ecuadorian Sierra, such as La Florida in Quito. Pasto villages were composed of circular huts grouped on the hillsides. A few scattered agricultural terraces are found along the deep river valleys (Uribe 1977-78). The elite tombs of the Pastos are among the deepest in the world; a shaft and chamber tomb near Ipiales was measured to a depth of 40 metres (Idem). Even though the Pastos were not conquered by the Incas they were strongly influenced by them.

The plateaux and valleys of the Eastern Cordillera were occupied by various Chibcha linguistically related nations around 600 C.E. Among them, the Muiscas were the most numerous and politically complex ethnic group. The Muiscas combined many simple but effective strategies in order to increase their agricultural supplies; in marshy flatlands they had ridge and channel fields, terraces in the

hillsides, crops at different altitudes (microverticality), periodic markets where goods produced in specialised local sites were exchanged and a system of tributes given to the *caciques* that were accumulated and eventually redistributed whenever necessary (Langebaek 1987). The dense population was organised in kinship groups (*Sybins, Utas*) commanded by captains, two or three of those groups formed villages under the rule of *caciques* who, in turn, obeyed regional Lords (*Uzaques*). At the time of the Spanish conquest four large federations controlled most of the territory (Idem). Textile and pottery production were carried out at specialised workshops. The exploitation of salt and emeralds played a key role in their economy and allowed them to import gold for the production of metallic ornaments and offerings. The system of offerings and sacrifices was extremely complex; gold, copper and *tumbaga* (gold – copper alloy) figures of people, animals, scenes and objects were placed in ceramic containers and thrown in sacred lakes, caves, crossroads, terraced fields, tombs and other important places in order to promote the equilibrium of the universe (Lleras 1999).

To the north of the Muiscas there were other Chibcha groups that shared a strong cultural nucleus among them. Guanes, Uwas, Chitareros and Duits, together with the Muiscas, produced similar pottery, textiles and stone objects, had analogous mythological and symbolic systems, went to regional markets and shared specific micro niches where they kept coca plantations (Langebaek 1987).

In the Sierra Nevada de Santa Marta, at least other four Chibcha groups established themselves around 300 C.E. Their archaeological vestiges are known as the Tairona culture, a name given around 1500 C.E. by the Spaniards to one of the chiefdoms they found in the Sierra. It is commonly accepted that settlements were at first located near the shoreline and that, afterwards, they colonised the middle and upper valleys of the rivers. By the sixteenth century there were in excess of three hundred villages of different sizes connected by long stone roads that went from the seaside up to 3,000 m.a.s.l. and from valley to valley, crossing steep hillsides. Containment walls, house foundations, roads, staircases,

aqueducts, drainages, agricultural terraces and water reservoirs were made of stone (Cadavid y Herrera 1985). Pueblito, a site near the Caribbean coast and Ciudad Perdida, located at 1,200 m.a.s.l. are among the largest Tairona settlements unearthed up to date.

Unlike the Muiscas, the people of the Sierra Nevada were not organised in confederations; each small region had a large village that constituted the nucleus of a political unit involving small satellite villages (Bischoff 1971). Even though political rivalry and unrest seemed to dominate, there was an unmistakable cultural unity and the material culture was quite homogeneous throughout the Sierra (Cadavid y Herrera 1985). Metallurgy was abundant and its iconography is exceptionally rich, symbols and mythological motifs dominate the *tumbaga* cast ornaments.

The arrival of the Europeans, at the beginning of the sixteenth century C.E. marked a dramatic change of unimaginable proportions. Although demographic information is fragmentary, it is widely accepted that by 1650 C.E. around 90% of the

indigenous population had succumbed. War, massive killings, hunger, forced labour and disease took their toll. The migration of Europeans and the forced importation of African slaves changed the ethnic composition of whole regions. Finally a phenomenon that had not been common was definitely established; the foundation of urban centres and the consequent opposition between cities, populated by white and *mestizo* people that dominated and rural areas, populated by Indians, that were dominated. The story of the colonial and republican societies of the last 500 years developed these contradictions and obliterated the previous 19,000 years that led hunters and gatherers of north-western South America through a fascinating saga towards the construction of new societies and cultures.

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