2 Archaeological research in Colombia

2.1 General trends: historical review of archaeological research in Colombia

It is difficult to determine what exactly marks the start of systematic scientific research into a country’s prehistoric past, for Colombia as for any other area of the world. Was it the first European colonist or priest who realized that the natives were human and had a past, or rather the first excavation, the founding of research institutions, the publication of extensive excavation reports? The following overview is an attempt to structure several centuries of events, developments and trends that ultimately led to the mature state of the art as we know it today.

In their account of the history of archaeology in the America’s, Willey and Sabloff (1974) differentiate four periods between 1492, the year of the first historical western contact, and the 1970’s. Considering the discipline of archaeology as a western European development, they link these four periods to events in Europe, thus giving American archaeology its place in a “world historical perspective”. Scientific research in Colombia has in many ways been inspired by trends and currents in North America, and the practice of archaeology is no exception to that rule. Especially for the first centuries of development, I think it is possible to follow their sequence when trying to reconstruct the history of Colombian archaeology. Alternative, specific Colombian perspectives will be considered as well, like Jaramillo and Oyuela-Cuycedo’s periodization based on a quantification of the archaeological literary production in Colombia (1994).

The excellent summary of Colombian archaeology edited by Londoño Vélez for the 50th anniversary of the Gold Museum is also amply consulted as a reference, though not for a general periodization (Londoño Vélez 1990). Other informative overviews are the chapter on this subject by L. Duque-Gómez in the encyclopedic work on the history of Colombia (1965-1967) and the introductory chapter of Reichel-Dolmatoff’s revised manual on the archaeology of Colombia (1997). Though I am aware of the fact that there is ample choice of perspectives when trying to impose a division into periods on centuries of developments that should never be considered as isolated processes, I chose to use the periodization of Willey and Sabloff as a point of departure, as for a general overview linked with worldwide developments and theory this appeared to be one of the best sources of information.

2.1.1 Period I

The first period Willey and Sabloff describe, starts with Columbus’ discovery in 1492 and lasts until ca. 1840. The accounts from these centuries can be characterised as speculative writings and discussions over the nature and meaning of the New World and its inhabitants, which were based on the experiences and thoughts of European soldiers, explorers, priests, settlers and savants: the “Speculative Period”. During these centuries, different phases can be distinguished, mostly linked with political developments. I will divide this period into two phases, the first one being the colonial period until independence in the beginning of the 18th century, the second one lasting until 1840.

Phase I

In the first decades attention was mainly focussed on Central and South-America. When the first Spanish conquistador set foot on these grounds, he did so with at least in the back of his head an image of uncovered treasures. In the earliest chronicles of the conquest and the search for El Dorado, we can find the oldest written accounts of material culture and archaeological remains, but in most cases there was not yet a strong awareness of, or interest in any historical significance or related context. There are early ethnographic descriptions of the Mesoamerican and Peruvian native civilizations that do display an interest in their history, like the works of Fray Bernadino de Sahagún, Fray Diego Durán and Garcilazo de la Vega. In these works, the authors included discussions on pre-Conquest history, which for archaeologists that work in those areas are of great value. For Colombia there is ample choice of colonial sources with detailed descriptions of the Indians and their habits at the time of the conquest (a resumé of relevant works for Colombia in Reichel-Dolmatoff 1997:9, nt.1; see further Chapter 4), but although there is certain historical depth in the description of their myths on the creation of the world and their place in the Universe, these chronicles are basically non-historical. Of course there was the sense of history among Indians themselves, but only in Mesoamerica this was recorded and preserved in the codices.
Many of the first Europeans who wrote about the New World, did not consider the inhabitants of these lands as true human beings: if they were, they would be descendants of Noah and therefore Christians, which they obviously were not. The speculations on their physiognomy and subsistence in the first decades after discovery were extremely far fetched, like the following description from the early colonial period, of the “Jamocohuicha”, cited by Simón (pp 109-110):

‘…who do not possess a natural way to expel the excrements of their body and therefore feed themselves with the smell of flowers, fruits and herbs which they stew especially for this purpose.’

These visions were partly a product of fear, ignorance or a strong appetite for sensation, but they also served economical and political purposes: the more evil found among the natives of America, the stronger the grounds to justify colonisation.

Among the more politically inspired descriptions are the accounts on cannibalism, human sacrifice and other atrocities, with which the Spaniards could present themselves as liberators of the oppressed, and of sodomy and bestiality. Especially from the clergy, following the tradition of medieval European theories on devils and witches, we find detailed descriptions of deviations from Catholicism like polytheism, idolatry and animism, and of the all-over presence of Satan himself: a legitimisation for the role of the Spanish missionaries as saviours of the soul. This urge would soon lead to the destruction of sacred places and objects, either by the missionaries or by the Indians themselves. Dominicans, Franciscans, Augustins, Jesuits, all played their part in this first phase of spiritual and material exorcism. As long as the discussion on the true aims of the conquest was not yet over, the borderline between what was done for the good of the natives and what was in fact one of the bypasses to annex their fortunes, was not always clear. Whatever the motives were, and although the loss of material culture is slightly compensated by the huge amount of meticulously written reports that were made in order to achieve the Spanish goals, it goes without saying that not only the demographic composition, but also the archaeological patrimony of these areas would have looked different today if it weren’t for the indomitable zeal of the discoverers.

More objective descriptions appeared from 1537 onwards. In that year, the Papal Bull of Pope Paul III officially declared the inhabitants of the “Orbe Novo” to be human beings by God created. Historical interest then gradually shifted towards the issue of the antiquity and origin of American Man, and most research concentrated on North America. This did not completely extinguish the flame of speculation: whether the Indians were descendants of one of the Ten Lost Tribes of Israel, lost after the conquest by the Assyrians in 721 B.C., whether they came from the lost world of Atlantis or were more related to Phoenicians, Tyrians, Tartarians or Mongolians, became an item of a highly hypothetic debate (Ref.in Willey & Sabloff 1974:23-25).

Among these theories were some remarkably advanced visions. Already in 1590 Fray José de Acosta suggested in his “Historia Natural y Moral de las Indias” that the Americas were peopled from Asia by small groups of hunters some 2000 years before the conquest. The theory on the Bering-Strait land bridge started to be seriously considered from 1637 onwards (ibid: 25-26).

As in other areas, in Colombia the gold-obsessed conquistadores were followed by friars, historians and travellers in the eighteenth and nineteenth century that gradually developed a different approach and a sense of history. The earliest chronicles of Nueva Granada (now Colombia) mention stone buildings of the Tairona, burial mounds of the Sinú and irrigation channels in that area (Dolmatoff 1965:19 a.f.), but these are still only brief reports. The oldest descriptions from the San Agustín complex near the head-waters of the Magdalena river date to 1757 (Juan de Santa Gertrudis).

Phase II

For most Latin-American countries it is impossible to separate scientific trends and developments from the struggle for independence. What characterizes this early post-colonial phase could be termed a “rediscovery” of the Americas, by both the Europeans and the inhabitants of these countries themselves. An essential component of the process leading to independence is knowledge of their own geography, resources, peoples, and (cultural) history: this gave rise to the organisation of large expeditions in order to explore the biological diversity and, along the way, document the cultural heritage of the different areas.

This phase in the general history of Colombia starts between the end of the eighteenth century and the declaration of independence in 1819 of “La República de Colombia” (then a union of the territories of Venezuela, Colombia and Ecuador). In 1830 this union disintegrated with the death of Simon Bolivar and the geographical and political borders of what is now Colombia were embedded in a new Constitution.

Starting with the expeditions of the naturalist Alexander von Humboldt in the early 19th century, the material remains of prehistoric cultures of Colombia became part of the explorers’ interest. In an extensive work he published on the Andes and its inhabitants he includes images of Indian monuments, among others the Lake of Guatavita, cradle of the El Dorado legend.
In 1808, Francisco José de Caldas, a Colombian geographer who visited the San Agustin complex in 1797, published an account on these monuments which is the first one to be characterised by a different approach: apart from mere descriptions it contains suggestions for preservation of the monuments.

Still, the main focus in the early references is on the Chibchas that lived on the Bogotá plain, where the Spaniards had settled soon after their arrival and had concentrated their political activities in Bogotá, the capital founded by Gonzalo Jiménez de Quesada in 1538. The Chibcha culture was then well known and the area was easily accessible, in contrast to large parts of the rest of the country.

An important step for the preservation of cultural heritage in Colombia was the foundation of the National Museum in 1824, an initiative of general Francisco de Paula Santander, from 1821 vice-president under the first president, Bolivar. Besides being founded for collecting and preserving material culture, the museum was meant to be a centre for teaching and the enhancement of knowledge on humanities, which it still is. Some years later the National Academy was founded (1826) to supervise and stimulate studies, like investigations into the national history, that would help to construct the foundations of the cultural identity of the young nation.

In the period, the first description that could deserve the label “scientific”, may be a drawing of a stone artefact with engravings published by friar José Domingo Duquesne from Bogotá. Although his interpretation was wrong (he interprets this object as being a “Muisca Calendar”, but it was most probably used as a gold-manufacturing mold), his effort may be seen as a first step away from plain aesthetic valuation (Llanos, pers. comm; see also Reichel-Dolmatoff 1997:9).

2.1.2 PERIOD II

The second period differentiated by Willey and Sabloff is what they describe as the “Classificatory and Descriptive” trend, running from 1840 to the beginning of World War I. The year 1840 was probably chosen because in that decade a number of publications appear that characterize the change in emphasis. As they say, by this time detailed description outweighed speculation. During these decades, researchers focussed on “systematic descriptions of archaeological remains and monuments and on the classification of these data in accordance with formal typologies” (Willey and Sabloff 1974:18). The racial inferiority or superiority of the native inhabitants of the Americas continued to be an issue of debate, influenced by Darwin’s evolutionism, and in the archaeological record scholars tried to find scientific proof of either one side or the other (a.o. Trigger 1989:104-129). This was especially so in North America and in the areas of the Aztecs, Mayas and Incas.

Dolmatoff (1965) traces the pioneers of “real” archaeological research in Colombia back to the middle of the last century (p. 20/21): names like Joaquin Acosta, Ezequiel Urícoechea, Rivero, Tschudi, William Bolaert, followed by others like Manuel Uribe Angel, Carlos Cuervo Márquez, Vicente Restrepo and many more who published works with detailed site-descriptions and illustrations of artefacts. Still these works do not fit completely into the characterization of this period by Willey and Sabloff: not one of these authors is to be differentiated as an “archaeologist”. They were basically historians, collectors and linguists who based their descriptions on looted finds, private collections and reports from chroniclers. One exception is Carlos Cuervo Márquez. He personally visited the sites (though he had not yet excavated), interpreted finds and theorized on the origin of the ancestors. He developed an early form of diffusionism proposing that the earliest Colombians originated from Mexico and Peru (Llanos, pers. comm.) and published some of his observations in 1893: “Prehistoria y Viajes” (ref. in Londoño Vélez 1990:38) in Bogotá. Logically, the foreign investigators like Rivero and Tschudi followed a European intellectual tradition and were not so much concerned with the search for a national Colombian identity.

In 1850 the “Chorographical Commission” (la Comisión Corográfica) was founded by the Italian geographer Agustin Codazzi. This commission was to be dedicated to make geographical descriptions of the country, but would also make descriptions of archaeological sites including drawings and aquarelles. Codazzi made the first altitude map of San Agustin and a theoretical reconstruction of the burial mounds.

Jaramillo and Oyuela Caycedo (1994) distinguish four periods of development of Colombian archaeology based on a quantitative analysis of archaeological literary production. They correlate the pattern of production with economic and political events. In their study, the first period in the development of Colombian archaeology runs between 1800 and 1920, which they label “Times of Amateur Archaeology”. In fact, within this period they register that only from around 1850 onwards, literary production started to grow to an amount large enough to be measured. Whatever was written before 1850 is considered to be too sporadic to be of much significance for the development of archaeology. What they view as a distinctive feature in this first period, is the shift from antiquarianism to “the systemic laying out of a principle of national identity” (ibid: 52). The fact that over 46% of the publications are studies on the former Chibcha territory (Cundinamarca/Boyacá/Santander) might have been inspired by the need to build a proud past: “The Incas, Mayas and Aztecs had an equal in Colombia” which was then searched for in this area (ibid: 54). Expressed in archaeological remains this “equal” was never found there. Only in the
originally introduced (Europe, North America) and applied to a geographically and chronologically very different context. The "direct historical approach" is one of the products of these decades of research. However, this is not so much reflected in the practice of archaeology in Colombia, more so in North America and Mexico.

The first systematic excavations in Colombia were carried out from 1913 to 1914 by Konrad Theodor Preuss of the Museum für Völkerkunde in Berlin. He excavated in San Agustín and published the results in 1929 in "Monumentale vorgeschichtliche Kunst". Other foreign archaeologists, like James Alden Mason, Sigvald Linne and José Pérez de Barbadass (see also Oyuela-Caycedo 1994 and Reichel-Dolmatoff 1997) excavated in different areas of the country, and brought their theories with them. They tried to distinguish archaeological areas, and their work differed considerably from that of the descriptive collectors, but they still did not work on chronological problems. The "stratigraphic revolution", as Reichel-Dolmatoff calls it (1997:14) had not taken place yet.

A Colombian law of 1931 declared the cultural remains at San Agustín and the surrounding area to be national monuments. Shortly after, in 1935, the government founded the "San Agustín Archaeological Park" and subsequently the Ministry of National Education sponsored a research project in that area. Following the successful results of this expedition, in 1938 this ministry established the "Servicio Arqueológico", an institution with the task to organize exhibits, to carry out research and to protect the prehistoric monuments (see also Llanos 1995:24/25). One year later the Banco de la República, then headed by Julio Caro, began to buy objects from private collections and guaqueros9 in order to stop the illegal looting, melting down and exporting of pre columbian gold, a practice which had its roots in the colonial period.

This measure would eventually not stop the looting but it saved, and still saves, huge amounts of gold objects from disappearing. With the first acquisition in 1939, a golden Quimbaya Poporo (lime flask), the now famous collection of the Gold Museum was initiated.10

The ground for archaeological research in the country was definitely laid three years later, when Paul Rivet, the director of the "Musée de l’Homme" in Paris, in exile during the Second World War, founded an official centre for training and research in Bogotá: the "Instituto Etnológico Nacional" and the "Museo Arqueológico y Etnográfico Nacional” in 1941. Under his direction students underwent training in archaeology, ethnology, linguistics and anthropology. The "Servicio Arqueológico" soon became part of this Institute and in 1952 the name was changed to “Instituto Colombiano de Antropología”, which still exists and in part has the same responsibilities. From this Institute, archaeologists like Julio Cesar Cubillos, Luis Duque-Gomez11 and Eliécer Silva Célis emerged.

Whereas the first investigators seem to have been foreigners that came to Colombia for various reasons, be it in search of gold or fleeing from war in Europe, the number of local...
archaeologists gradually grew with the support of official institutions and a Colombian school of archaeology was established.

Jaramillo and Oyuela Caycedo (1994) differentiate three periods within this timespan (1921-1962), again measurable by a quantitative analysis of publications (ibid: 55/56). These periods are labeled the “Transitional Period” (1921-1940), the period of the “Birth of a Nationalist Archaeology” (1941-1952), and the “Critical years” (1953-1962). The first period is transitional because in these two decades the foundation for the formation of a national archaeology and the institutionalization of the discipline occurs, mainly by reforms in the educational system and the separation of primary school, secondary school and professional education. Financial resources that support archaeological research increase significantly. For Jaramillo and Oyuela-Caycedo the first Colombian archaeologist emerges in this period: Gregorio Hernandez de Alba, who worked on the Bogotá Plain and in San Agustin with Pérez de Barradas and published in 1937 and 1940 (ibid: 56). In 1937 he had founded the “Sociedad Colombiana de estudios Arqueológicos y Etnográficos”, and in 1938 he had organized a national archaeological exhibition, which was the start of the creation of the Gold Museum (Londoño Vélez 1990:56). After 1940, linked to all the developments and the foundation of institutions as described above, Jaramillo and Oyuela-Caycedo see an indication for nationalization of Colombian Archaeology in the decline of publications by foreigners. One explanation for this decline is seen in the end of the Second World War, that made it possible for foreign scholars to return to their home-countries. There is also a shift in interest to the study of prehistoric state societies of Mexico, Guatemala and Peru. During the “critical years”, archaeology finally reaches an academic status, not only measurable in quantity of publications, but also in quality (Jaramillo & Oyuela Caycedo 1994:59).

A factor of influence on the practice of archaeology is the long period of civil war that starts around 1950 and would become known as “La Violencia”. During this period, that lasts until the early sixties, it was too dangerous to do extensive fieldwork, as the violence concentrated in the rural areas. Investigation turned its attention to the urban areas, and archaeologists concentrated on teaching, academic research and museum-activities. In part this violence may also have caused the withdrawal of foreign scholars after 1945.

2.1.4 PERIOD IV

The fourth and last period differentiated by Willey and Sabloff runs between 1960 and the year in which their work is published (1974) and is referred to as “Explanatory”: attempts are made to understand culture process and to explain the human cultural and social behavior in the past. The emphasis in archaeological studies shifted from culture historical to processual. In North America, anthropology became a main source for theoretical explanations. In his analysis of the relation between Theory and Practice in South-American archaeology, Wolford (1994) detects that in South-America, only parts of the new currents were implemented: settlement pattern studies, interdisciplinary projects and ecological approaches, among others, but not the whole assemblage of New Archaeology. Certainly in the Northern part of South-America, scholars seem to select elements rather than whole theoretical constructs. An essential conclusion in Wolford’s analysis is that theory never got the status of directing research objectives:

“Theory becomes narrative, filling in the gaps between sites, rather than a program for choosing and interrogating archaeological regions” (ibid: 159).

Still, important changes were marked by the formation of the anthropological departments at the universities. With this, a space was created for experimenting with foreign anthropological and archaeological theories. The initiative was taken by Reichel-Dolmatoff at the private University of The Andes. There, the attention for archaeological research was strong and very much based on the New Archaeology, the department followed a North American model. At the public, National University, the archaeologist Duque Gomez founded the anthropological institute, which became more oriented towards the French anthropological currents led by Lévy Strauss and his Structuralism and towards Marxism. In contrast to the Andes, at the National University there was not much room for archaeology in the beginning, as this discipline was not seen as leading to any revolution. This only changed in the seventies. For scholars who wanted to be trained in archaeology the ICAN (Instituto Colombiano de Antropología) created this possibility starting two-year post-graduate courses, accessible for all disciplines. People like Chaves (architect) and Correal Urrego (lawyer) were formed at this Institute. The foundation of the FIAM (Fundación de Investigaciones Arqueológicas Nacionales) in 1970 by Duque Gomez was another initiative that encouraged archaeological research projects.

In spite of the difficult start and the diffuse impact of theory, there were a number of extremely valuable research-projects, without which there would be no ground for theory at all. A pioneer for Colombia in this “Explanatory” period is the already cited Reichel-Dolmatoff. He wrote one of the first general books of Colombian prehistory. This work, “Colombia”, was published in 1965 and became a bible for many scholars who followed in his footsteps. The data then available enabled him to propose a chronological framework that for the greatest part still holds thirty years
later. With a minimum of datable evidence he carefully sketches possible processes of land exploitation, adaptation to different ecological settings and settlement (see also section 1.1.2.).

In this period, too, Correal Urrego started with an interdisciplinary research project: “Pleistocene Environment and Prehistoric Man in Colombia” from the early seventies and not yet officially ended) in collaboration with the Dutch palynologist Van der Hammen. They set the trend to incorporate environmental studies within archaeological research projects.

By the end of this period, the archaeological map of the whole country was relatively well known, though still some areas were more intensively researched than others. Like everywhere else, once an area proves to be of archaeological importance, research tends to become restricted to that specific zone until the last artefact is believed to be found. Examples of such areas are the High Plain of Bogotá, the upper Magdalena (San Agustín) region, and the Atlantic coast. As long as new methods of research and technological innovations are implemented in these areas, such a focus is useful and justified, but this is not always the case. Often the accessibility of a certain area, be it either for ecological, political, or strategical reasons (near larger cities), strongly influences the attention it receives.

Jaramillo and Oyuela Caycedo (1994) state that the practice of archaeology in Colombia grew to be an “historical cultural particularistic tradition”, aimed towards the writing of a national history and not towards the finding of models for general human behaviour. Though they stop quantifying the publications after 1960, to my surprise they conclude that this tradition is maintained up to the present day (1994). In their vision, archaeology is directly linked to national politics which are aimed at the consolidation of a national identity. According to them, currents like processual archaeology did not find fertile ground in Colombia because they did not no fit the Colombian model of historical particularism (ibid: 62). I believe, however, that in the forty years since 1960, modern movements have had some impact, especially in the last decades.

2.1.5 MODERN TIMES

In the past thirty years South-American archaeology came of age. Scholars are being trained abroad, in Europe and in the United States, and the imported knowledge is gradually implemented and adjusted to local conditions.

In Colombia, sites are identified and excavated not only in the coastal areas and on the high plains, but also in the river valleys, though not yet on a large scale. Less accessible areas, like the Amazon forest, have been “disclosed” and are under investigation. On a regional scale, scholars are working on long term research projects (e.g. in the San Agustín area under direction of H. Llanos; in the Carribean lowlands by C. Plazas and A.M. Falchetty and many more). Gaps in the prehistoric chronology have been and are being filled in, and now that the puzzle of sites is showing some patterns, the impulse to search for theoretical frameworks and models is stronger. Contrary to what Jaramillo and Oyuela Caycedo state, many scholars are searching for patterns that go beyond the national frontiers and they appear to find proof of parallel developments in different ecological areas. The search for patterns takes place on a far larger scale than a strictly “historical particularistic approach” would permit. This is certainly so where lithic studies are concerned. The discussions on the first occupation of the northern part of South-America necessarily links the different countries in that area. Also the discussion on the possibility of a pre-Clovis occupation in South-America is still much alive among scholars concerned with this period both in North — and South-America (see further section 1.1.2).

With the “boom” of rescue archaeology in Colombia from 1990 onwards, one could now speak of a period of “Quick & Commercial Archaeology”. In some respects this is an unfortunate development. Archaeologists on all levels are now massively engaged in writing project-proposals and forced to shift their attention from long-term research aimed towards strictly archaeological questions, to short-term problems of collection and preservation. Where possible, interdisciplinary projects are being proposed, including soil surveys, palynological studies, determinations of faunal and botanical macro-remains and even Micro wear analyses of lithic artefacts, but often the budget does not allow for extensive laboratory work.

2.2 Lithic studies and the “Lithic period”: nomenclature

Unlike in the rest of the world where metals were gradually introduced, on the American continent stone remained the basic raw material for tool production, up to the Colonial period. Bone, shell and probably a large variety of perishable material like wood, bamboo, etc was used on a large scale as well, but only with the arrival of the Spaniards were metal tools introduced on a large scale. This means that the largest part of the tools available to Pre-Columbian archaeologists for studies of tool use in any period, are lithic tools.

Still, the development of lithic studies is recent and relatively poor, compared to the attention that has generally been given to pottery and golden objects (a metal that was only sporadically used for tool manufacture, like chisels and piercing instruments which are mostly associated with gold production). Lithics being the main raw material for tool production throughout the whole South-American prehistory, uncertainties are likely to arise when a period is referred to as “Lithic
In general, this term is only applied to the millennia of human occupation before the appearance of the first pottery and before the development of agriculture, which led to a more sedentary settlement system. Also based on one single material category and therefore just as complicated, is the term “Preclassic”, which like “Lithic” refers to a far too long time span to be practical as a chronological indication: the first reliable data for human occupation date from 13 000 BP, and the first pottery appears around 5000 BP. The only subdivision within these 8000 years is found in another term often used, “Palaeo-Indian”, based on a more cultural evolutionist principle and introduced in a period in which the need to link the South-American (and North-American) with the European terminology was felt very strongly (see a.o. Schobinger 1988). In most cases this label is only used for the occupation during the last millennia of the Pleistocene, a period associated with extinct megafauna. In Venezuela, where the term “Palaeo-Indian” was first introduced (Rouse & Cruxent 1963), the logical following phase would be “Meso-Indian”, which would cover the second part of the Lithic or Preclassic period.\(^\text{17}\) In Colombia however, this separate term has never been used for the pre-pottery millennia of the Holocene. The notion of an “Archaic” phase is now and then found in the literature, but never explicitly defined (Nieuwenhuis 1991).

In an overview of the archaeological research projects that were carried out with official funding between 1972 and 1984 in Colombia\(^\text{18}\), it appears that at that time, information on the “lithic period” was only found on the Atlantic Plains and on the High Plain of Bogotá. In all the other areas of the country the oldest recognized phases of human occupation registered in this overview are from what is referred to as the “Formative” and the “Late period” (from ca. 3000 BP to the centuries of the discovery). The data registered under the chapter “Atlantic Plains” include information from terraces along the Magdalena river valley, which then consisted of undatable surface finds. Only on the High Plain material from the oldest period was found in a dated context. In the first handbook on Colombian archaeology, Reichel-Dolmatoff included one chapter on the oldest period: “The early Hunters and Gatherers” (1965:40-50). This chapter was written before the first preceramic sites were excavated, and his theory was based on lithic surface finds from the northeast and along the lower Magdalena and Sini rivers, where he had surveyed in the late 1950’s. Despite the lack of datable evidence, he carefully hypothesised on the possibility of early dates for these artefacts by means of technological analysis and correlations with finds from surrounding countries. He proposed a theory in which the earliest occupants would have entered on the North-coast and gradually moved into the country, following the valleys of the large rivers.

The artefacts he found can be divided into two main groups: lithic projectile points and “large assemblages of other lithic artefacts” (ibid: 46). The variation in retouched projectile-point types is remarkable, technologically as well as typologically. They range from elongated lanceolates to short blunt points, with either short fish-tail stems or long, bifurcated stems, or no stems at all.

The assemblages of “other lithic artefacts” consist of unifacial scrapers and knives, a few chopping tools, boring or engraving tools, and some incidental “turtleback” scrapers. There was not yet ground for making a clear typology. Dolmatoff remarks that all these sites had in common that they were located on eroded ridges or hill-tops, on old river terraces or in gravel beds and that they lacked pottery associations, food-grinding implements or any ground polished stone artefacts. They all seem to have lacked stone projectile points as well, which led to the interpretation of these assemblages as belonging to gatherers and fishermen, and not so much to hunters. Due to the low technological level, it was suggested that they might belong to a pre-projectile point stage which preceded the Palaeo-lithic stage of the retouched projectile-points (ibid: 50).

Though in the following decades the chronological interpretation was necessarily inverted when the first datable sites were excavated, the distinction of two groups of early inhabitants with separate industries would become a point of reference for further studies, and until the late 1980’s this division between “finely retouched” versus “unifacially retouched and unretouched” artefacts would persist in the minds of most scholars who studied and study the preceramic period (see further Ch.2).

Shortly after the publication of Dolmatoff’s handbook, the first systematic excavations of early preceramic sites were carried out on the High Plain of Bogotá. In the early seventies, G. Correal and Th. van der Hammen started with an interdisciplinary project titled “Medioambiente Pleistocénico y Hombre Prehistórico en Colombia”, which led to the excavation of the rock shelters El Abra and Tequendama. Later followed by other sites under shelters like Tibilitó, Zipacón, Nemocón and Sueba, these yielded lithic material in a dated context, in some cases associated with megafauna (Tibilitó), which made it possible to establish chronologies for the early occupation of this area of Colombia. Besides archaeological research, the project included large scale palynological studies, which ultimately led to an almost complete climatological reconstruction of the Quaternary on the High Plain of Bogotá and in the surrounding areas.

In these same years, following Dolmatoff’s hypotheses on the penetration into the Colombian territory by the first occupants through the large river valleys, Correal surveyed the upper, middle and lower Magdalena river terraces in search for traces of early occupation. He identified more
than twenty non-ceramic surface scatters with simple flake industries, which he attributed to early hunter/gatherers and fishermen (Correal 1977).

With the new data, the need for a structured classification system for the huge amount of lithic material that was found grew stronger, and the first typological attempt was made with the material from El Abra and Tequendama. The two technologically different groups of artefacts initially distinguished by Dolmatoff now became formalised and were named after the type sites: the “Abrian” and “Tequendamian” industries. The first group concerned percussion flaked artefacts with little or no retouch of the edges, also referred to as belonging to the “Edge trimmed tool tradition” (Hurt 1977). This characterisation is not entirely correct, as most of the actually used tools do not have any retouch on (or “trimming of”) the edges at all. In the course of time this industry was no longer associated with specific “traditions” or cultural complexes, as it appeared that the same class of artefacts was found at sites from the earliest occupations up to colonial times (see further Ch.2).

The second group referred to a small number of pressure-retouched artefacts, some bifacially, initially found in the lowest level of the Tequendama rock shelter, but later became the industry-label for all finely retouched implements found on surface scatters or at any excavated pre-ceramic site in the country.

By the 1960’s in North America the making of typologies was no longer the final aim of research, and attention had gradually shifted to cultural process, systems and transitions (in Willey & Sabloff’s terminology a shift from the “Classificatory-Historical” to the “Explanatory” period; ibid 1974). Though in many areas of research Colombian scientific practice was and is influenced by North American currents, the ground for this kind of study was yet to be established: as far as lithic studies were concerned, all work still had to be done, starting with the first attempts to classify the bulk of stone artefacts that were being excavated. For the pioneers of Colombian lithic typology, Correal, Van der Hammen and Hurt, one of the impulses that led to a strong focus on typological classification may have been the need to prove, in the first place, that the “Abrian” lithic artefacts were indeed artefacts, and secondly, that in spite of the simple techno-morphological characteristics of the artefacts, it was possible to hypothesise on their functions (Correal & Van der Hammen 1977; Correal, Van der Hammen & Hurt 1972; Correal, Van der Hammen & Lerman 1969; Hurt, Van der Hammen & Correal 1977). With this attempt at functional inferences, they differed from European trends, where typologies were principally used as chronological markers.

In the two decades that followed, the making of typologies seemed to become an aim in itself, or at least the main goal of lithic material analysis. Many of the scholars that worked with lithics often seem to have been tempted to adopt the traditional classification systems, but failed to further investigate the analytical possibilities. Inferences on site function were mostly not based on careful analysis of the lithic artefacts. Besides, lithics as a material category was never favoured for research: apart from a handful of scholars, archaeologists and their sponsors rather focussed on later periods with material that was visually more attractive and displayed more variation.

It is only in the past ten years that this has changed. Parallel to developments in other Latin American countries, where sites are being found with far earlier dates than 11.000 BP — by some still believed to be the oldest possible dates — (sites like Pedra Furada in Brazil and Monte Verde in Chili), in Colombia the interest in preceramic sites and in lithic studies was renewed. This is partly fuelled by a slightly competitive urge to find older sites and extend the chronological depth. But this new interest is also generated by new technological developments in material studies. These are being introduced and applied by a new generation of archaeologists who are partly trained abroad and are trying to change traditional patterns of analysis.

Preceramic, dated sites are being found in different areas of the country. On typomorphological grounds, the variety of lithic industries appears to be much larger than was originally thought, and the distinction of two artefact industries is by some scholars, including myself, now believed to be too simplistic. Also first attempts were made to make a new classification of the Abrian industry on technological grounds (Pinto, 1996; see further section 2.1). The study, presented here, can be seen as one example of this new trend: it will be the first extensive Micro wear analysis carried out on Colombian lithic material.

2.3 The Abrian artefacts
2.3.1 Typology

One of the goals of this project is to evaluate the usefulness of the traditional typological classification system of the Abrian artefacts for functional inferences. A short description of the principles of this system is therefore included here.

The system was first applied on the artefacts found at the sites El Abra and Tequendama. In the decades that followed excavation of the named sites, the system was adopted for the classification of all Abrian lithic material found at preceramic and ceramic sites, now and then slightly adapted to specific circumstances.

In their report of the excavations at Tequendama, Correal and Van der Hammen (1977) explain the process of classification and give some definitions. They use three criteria for classification. In the first place they distinguish the “industry”,
which refers to a group of artefacts of the same material (e.g. stone versus bone). Secondly, they use the term “class” to indicate a group of implements that are made by one single technology (“Abrian” versus “Tequendamian”). In the third place, they group artefacts according to their “category”, to indicate the specific function for which the implement was designed (e.g. “scraper”). In this way, they could denominate different “types”, which they define as “the group of elements of the same material, manufactured by the same technology and having the same function and the same general and specific morphology” (ibid: 28). In many ways this system appears to be self-evident and therefore easy to apply for a relatively quick classification of huge amounts of mostly unretouched artefacts. Guided by the shape of the (possible working) edges it is possible to fit most of the flakes into some category. The fact that it was used like this for almost three decades could be seen as proof of its usefulness, at least for the mere purpose of classification.

However, when the resulting “types” are now studied, it appears that this system combines technical aspects (like “flakes”, “modified”, “unmodified”) with morphological (like “triangular”, “prismatic”, “concoidal”) and presumed functional aspects (like “multifunctional artefact”, “scrapers”, “perforators”, “piercers”). This easily leads to inconsistencies, one of the points that can be criticized when this system is used. Fig. 2.1 is an example of a traditional classification scheme. As can be seen, in some cases the shape is taken as basis for the typological denomination, but in other cases the supposed used edge forms the basis. Some types have no further specification at all (comments a.o. in Pinto, 1996:158).

One of the problems with the system is that it strongly rests on the morphological aspects of the total artefact. This can be considered a weakness, as the “class” (= technology) is assumed to be extremely simple and the artefacts do not seem to be morphologically “designed”. The main point of departure for the classification system is an aspect of the artefact which seems to be accidental and which may appear to be functional irrelevant: its shape. This point will be further discussed in chapter 7.

A serious attempt to adjust the classification system to more modern standards was done by Pinto (1996). She excavated the site Galindo. An important aspect of her work is that she designed a new classification system which aims at more than merely classifying or assuming functions. The new system enabled her to reconstruct the “chaine operatoire” and consequently to draw conclusions on technological organisation. For the classification of the artefacts she took technology instead of morphology as main point of departure. She further adapted the scheme on the basis of the Micro wear study of the material from Galindo presented in this thesis (Ch. 5). Morphological aspects were still included, though not of the whole artefact but only of the possibly used edge. This led to a different scheme, though still extremely elaborate for an expedient, not predetermined class of artefacts. Both the traditional typology and the newly elaborated criteria of Pinto were taken as a point of departure to test the usefulness of the system for functional inferences on the artefacts.

2.3.2 RAW MATERIAL

The raw material of most artefacts in Colombia is usually referred to as “chert”, with sometimes further specifications like “lydite” or “plaeners”. There is a large variety of colours. At Tequendama and Galindo most artefacts are of grey, yellowish or reddish chert. Chert from the valley generally runs from orange to yellow. According to Hesse (1988), lydite is used for a dark-grey to black variety of argillaceous chert or siliceous argillite. It contains between 10% and 25% of clayish material. If their description is followed, the chert found at most sites, especially in the Magdalena Valley might also be referred to as “jasper”, being a red, brown or yellow variety of chert.

In the course of this project it was noticed that among archaeologists the term “chert” would lead to confusion. As stone tool studies in Europe used to be almost exclusively dedicated to flint, a main question was how chert relates to flint. As far as I knew, “chert” refers to highly silicified sedimentary rocks in general, and “flint” is seen as a variety of chert. This appears to be in accordance with the North American usage of the term, while British archaeologists and geologists consider chert and flint to be two different materials (Luedtke 1992). Luedkte defines chert as “a sedimentary rock made up primarily of microcrystalline quartz” (ibid p. 6).

Archaeological reports from Colombian sites often include a mineralogical analysis in which the exact composition of the stone is described. What is relevant for the present study is the fact that the flaking properties of the various types of chert vary significantly. The tabular blocks found near Galindo are coarse-grained and totally unsuited for the production of predetermined shapes. The cobbles of finer-grained chert found along the rivers are flaked more predictably, although the chert here is extremely hard. When the artefacts for the experiments were manufactured it was sometimes necessary to use a modern steel hammer to break the cobbles.

The chert used for artefacts at Galindo comes from a primary chert source, which means that it is found in situ where it formed in the bedrock. The river cobbles used as raw material at the Magdalena sites are a secondary source, as they have been transported.
WORKED STONE ARTEFACTS

MODIFIED
- Choppers
- Chopping tools
- Scrapers
- Multifunctional artefacts

UNMODIFIED
- Percutors
- Pestle
- Anvil

FLAKING WASTE
- Splinters

CORETOOLS
- Scrapers
- Multiple tools

BLOCK OF RAW MATERIAL
- Oblique edge
  - prismatic
  - triangular
  - conchoideal
  - atypical

Cores
- Abrupt edge scrapers
  - side
  - round
  - end
  - concave
  - multiple
  - keeled

FLAKES
- Pointed edge
  - piercer
  - perforator

BIFACIALS
- Predetermined standardized artefacts

UNIFACIALS
- Projectile Points
- Preforms of Points
- Bifaces
- Planoconvex Scrapers
- Knives

Fig. 2.1 Classification system used for the artefacts found in the Magdalena Valley (Taken from Boliva 1994: 110)