



## Pre-hispanic goldwork technology. The Quimbaya Treasure, Colombia

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### ABSTRACT

One of the most important pre-Columbian gold assemblages made up of more than one hundred objects from two tombs in the Cauca river valley, Colombia, was studied to obtain archaeometric information. Although several attempts have been made to arrange gold production in time and space from the stylistic point of view, no firm conclusions were possible due to the lack of archaeological contexts. This paper presents first results of a new, fully instrumental approach, in which different analytical techniques, including OM, SEM-EDS, XRF, PIXE, RBS, AMS and X-ray imaging, were applied in order to determine a technological, metallurgical and chronological frame of the so-called Quimbaya Treasure.

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The Quimbaya Treasure is the most important pre-Columbian gold assemblage kept since 1941 at the Museo de América in Madrid. We have accomplished an interdisciplinary study of these 135 (museum inventory numbers) gold objects with a twofold purpose, firstly the technological and metallurgical characterization of the assemblage, and furthermore an attempt for dating it. Due to the restricted extension of this paper we present an overview. A detailed archaeometric study will be published in the near future.

This well-known treasure has embodied sensitive social concerns, appropriating ideological meanings that were never at its origin. For this reason we prefer to introduce our work within the frame of current Colombian archaeology.

### 1. Background

We can distinguish three main issues that have conditioned Colombian archaeology, the first one stems from the construction of the Colombian state after the independence from Spanish rule in 1819, and it is related to the search for a national identity. The need to integrate the different social groups that made up the new

society was soon made evident. These groups, created by Spanish colonial segregation, included the indigenous people. The identitarian discourse arose from anthropology with the aim of solving a dichotomy: on the one hand to redeem native communities and convert them to civilization, and on the other hand to rationalize pre-hispanic society as the cornerstone of national identity. As Gnecco (2008) states archaeology was built upon anthropological premises and contributed only to perpetuate internal colonialism.

The second issue concerning research in past societies refers to the theoretical premises at its base. During the first half of the XX century foreign researchers undertook major archaeological and anthropological enterprises, not only in Colombia but all over Latin America. Meanwhile, Colombian archaeologists went abroad to be prepared as scientists. For example the National Ethnological Institute was founded by the French anthropologist Paul Rivet in 1941; the Spaniard José Pérez de Barradas and the Austrian Gerardo Reichel-Dolmatoff laid out the bases for pre-Columbian goldworking chronology and interpretation. In this case, while anthropology overcame the old fashioned nationalistic discourse, vindicating the indigenous legacy, archaeology “kept strengthening nationalism by incorporating native societies into a common history” (Gnecco, 2008: 1108). In the opinion of G. G. Politis (2003) the culture-historical paradigm for the reconstruction of the past remains

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strong in Colombia. Present-day researchers have adopted modern scientific techniques and discourse, but in general, ethnographic analogy and current extrapolation are long standing traditions used to explain the archaeological record. One of the reasons of this state of affairs is the primary concern for accumulating descriptive data of the archaeological record due to lack of excavations and the existence of poorly known vast regions (Politis, 2003: 130).

The systematic looting of archaeological sites in search for valuable objects is a common activity known as *guaquerismo* (or *huaquerismo*) and widespread throughout Latin America. Guaquerism is not only a normal activity, but a way of earning a living (Gamboa Hinestrosa, 2002). The result is large archaeological collections, mainly of gold but also pottery and textiles, without a context and even without a place of origin. This practice already occurred during the 16th century, when Royal documents attest that the Spanish conquistadors plundered many sites searching for gold in the Cauca river valley. The second large plundering wave in this same region occurred during the second half of the 19th century when this activity became one of the factors for capital accumulation (Valencia Llano, 1989). Since 1826 the mining activity of the Colombian Mining Society was another factor behind the indirect spoiling of archaeological sites. The Museo del Oro in Bogotá, founded in 1939, has played an important role in recovering pre-Columbian gold objects from the Antiquaries market, collecting some 34,000 gold items at present.

The absence of archaeological contexts has prevented the construction of a safe chronological frame where to place the archaeological record. As a result archaeology turned firstly to stylistic analysis, and secondly to ethnology in search for symbolic and functional explanations.

As far as analytical data is concerned, there is only a small amount of studies about pre-Columbian gold-work except for some generalities regarding the Cu–Au–Ag alloy known as *tumbaga* (Ruvalcaba Sil and Demortier, 1997).

In the last decade field archaeology programmes have been developed, building up regional chronologies with an emphasis on social change and organization. For example the *Valle de la Plata* project (Drennan, 2000, 2008) or more recently the *Proyecto Arqueológico Tierradentro*, funded by the Instituto Colombiano de Antropología e Historia ICANH (Langebaeck and Dever, 2009). Still, the wheels of field-archaeology/pottery based chronologies and stylistic/gold periodizations are not definitely assembled.

## 2. Materials & methods

### 2.1. The Quimbaya Treasure

The so-called Quimbaya Treasure was looted in 1890 from two tombs in the site of La Soledad, near the Municipality of Filandia (Quindío Department, Colombia), amidst the Central Cauca Valley. They say it was made up of more than 200 gold objects, but only 123 objects were acquired in 1891 by the President of the Republic, Carlos Holguín, with three purposes in mind. Firstly, to present the treasure at the 1892 exhibition in Madrid commemorating the 4th Centennial of the discovery of America. Secondly, to display the treasure at the International Exhibition of Chicago dedicated to Columbus. And finally to give it as a present to the Regent Queen of Spain, Doña María Cristina de Absburgo Lorena, in appreciation for her mediation in a frontier conflict with Venezuela. The treasure was kept at the National Archaeological Museum in Madrid, until the opening of the Museo de América in 1965 where it continues to be in permanent exhibition (Plazas, 1978; Cuesta Domingo and Rovira Llorens, 1982; Rovira Llorens, 1992; Gamboa Hinestrosa, 2002).

Ernesto Restrepo (1892a, 1892b, 1929) was the first to publish this assemblage associating it with the Quimbaya ethnic group that the

Spanish chronicles mentioned when describing the region in the 16th century. From then on all the gold findings in the area were attributed to the historic Quimbaya group. Not until the middle of the 20th century was a more elaborate classification for pre-Columbian gold production. José Pérez de Barradas (de Carrera Hontana and Martín Flores, 2008), had worked in Colombia between 1936 and 1938 in the archaeological area of San Agustín and Tierradentro. In 1946 he was charged by Luis Ángel Arango, manager of the Banco de la República, with the classification of the gold collection at the Museo del Oro which had 7000 gold objects at the moment. His method was based on the concept of style as defined by Meyer Schapiro who put an emphasis in its communicative function. Without archaeological contexts he warned about the real implications of this classification, stating its use only as a spatial manifestation of recurrent iconographic features. He was very conscious of the feeble connection between the names of the historical people described in the Spanish chronicles and the archaeological people who really produced that goldwork. With all these drawbacks in mind he defined eight stylistic groups: Calima, Quimbaya, Darién, Sinú, Tairona, Muisca, Tolima and Invasionist (Aceituno, 2008). His classification lacked chronological references and archaeological connections, resulting in long periods which spanned for over a millennium.

The groups stated by Pérez de Barradas are still in use, although their importance and meaning have slightly changed in favour of a more general division for metal production in two metallurgical provinces (Plazas and Falchetti, 1986), the North province and the Southwest.

In the meantime Gerardo Reichel-Dolmatoff carried out his research with the aim of establishing an evolutionary sequence of the human occupation in the country. In his book *Colombia* (Reichel-Dolmatoff, 1965) description was left out in favour of social change processes from a diffusionist point of view, developing important concepts like the Intermediate Area that covers from Centroamérica to the central Andean region or the idea of “tradition” or “horizon”. He played an important role in the academic life of the country, and he was the first professor in charge of a Department of Anthropology at the Universidad de los Andes in 1963. He began to be more interested in ideology and ethnography due to his reading of Lévy-Strauss with an idea in his mind: the past could be explained through contemporary native communities (Langebaeck, 2005). One of his most influential works refers to the interpretation of pre-hispanic goldwork in terms of shamanism (Reichel-Dolmatoff, 1988).

Research in pre-Columbian gold at the inception of the 21st century entails a double task. On the one hand one must accomplish the enormous classification of the archaeological record, filling gaps in connection with the ever increasing data from scientific field archaeology (McEwan, 2000). On the other, it is necessary to pose questions that call for new methods under an autochthonous and independent discourse, negotiating the relation between research, the academy and the active social and political movements (Rodríguez, 2002).

### 2.2. Experimental

Today the Quimbaya gold production includes the old Quimbaya and Invasionist groups from Pérez de Barradas. According to M.A. Uribe (1991, 2004) there are two periods, Classic/Early Quimbaya between 500 BC and 600 AD, associated to the so called *marrón inciso* pottery, and Late Quimbaya that extends until the Spanish conquest and should be better named *Sonsoide* considering its association to this particular archaeological group. The connections between both periods are not at all explained, but from the typological and technological points of view both productions are very different (Rodríguez, 2002). The Quimbaya Treasure belongs to the first of these periods, which it helped to define. After Pérez de Barradas

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