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Location of gold placers in Oaxaca during the late pre-Hispanic period and early Colonial times: 1250 to 1550 AD

Localisation de placers aurifères à Oaxaca pendant la période préhispanique tardive et la période coloniale récente : 1250 à 1550 apr. J.-C.

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Abstract: During the late post-Classic period (1250-1521 AD), the Mesoamerican region of Oaxaca was well known for the pre-Hispanic gold metallurgy developed by the Mixtecs and Zapotecs. In this epoch, the most important burials were adorned with exceptional jewels, such as the well know items of Tomb 7 from the archaeological site of Monte Alban, and from other sites, like Zaachila. In addition to the Central Valley of Oaxaca and the Mixtec area, there are other zones in Oaxaca where the ancient goldsmiths manufactured exquisite gold objects, like the Northern Sierra of Oaxaca, or the Isthmus of Tehuantepec. Nevertheless, there is a huge lack of information regarding the location of the principal gold placers of Oaxaca. The objective of this paper is to situate the most important gold placers of Oaxaca during the late post-classic period and the first decades of the Colonial times.

Résumé : La région mésoaméricaine d'Oaxaca est reconnue par la métallurgie préhispanique de l'or, développée par les Mixtèques et les Zapotèques pendant la période postclassique récente (1250-1521 AD). À cette époque, les sépultures les plus importantes étaient remplies de pièces d'orfèvrerie exceptionnelles telles les fameux objets de la Tombe 7 du site archéologique de monte Alban ou encore des objets d'autres sites comme Zaachila. En plus de la vallée centrale d'Oaxaca et de la zone d'influence des Mixtèques, d'autres régions à Oaxaca, comme le nord de la Sierra d'Oaxaca ou l'isthme de Tehuantepec, ont dévoilé des objets en or exceptionnels, manufacturés par les anciens orfèvres. Néanmoins, les informations sur la localisation des principaux placers d'Oaxaca sont quasi inexistantes. Pour répondre à cette question, ce travail se propose de situer les principaux placers d'Oaxaca exploités pendant la période postclassique tardive et les premières décades de la période coloniale.

Keywords: colonial, locate, Mexico, Oaxaca, gold placers, pre-Columbian.

Mots-clés : colonial, localisation, Mexique, Oaxaca, placers, précolombien.

1. INTRODUCTION

Techniques of gold and silver smithing, introduced in Mesoamerica from South America since the 8th century AD, were admirably assimilated and even improved by

the Mixtec and Zapotec artisans of Oaxaca. However, the Mixtec and Zapotec goldsmiths of the Mixtec area and the Central Valley of Oaxaca were not the only artisans in this region. Documentary evidence indicates that the Chinantecs (Díaz del Castillo, 1979) and the highland Zapotecs of the

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Northern Sierra of Oaxaca were creating gold jewels (Ortiz and Ruvalcaba, 2007) by the end of the pre-Hispanic period (1250-1524 AD), and also that the Zapotecs of the Isthmus of Tehuantepec were fine artisans (Saville, 1920). Based on this information, we can establish at least three centres of gold manufacture in Oaxaca before the Spanish conquest. In consequence, in no other part of Mexico have so many objects of gold been found as in Oaxaca. Nevertheless, to date we do not have any information about the gold production process, or about who controlled the access to the gold placers. Even if these questions are critical for understanding the complexity of past societies, archaeological and historical research have left aside such inquiries until now, as well as the issue of what happened with the ancient gold placers after the Conquest. It is clear that we cannot answer all these questions in the present work. As a result, in this paper we are going to focus our attention on locating the ancient gold placers of the Mixtec area, Central Valley of Oaxaca, and the Northern Sierra (Highlands and Lowlands) (Fig. 1).

2. METHODS

The alluvial placers of Oaxaca have been exploited since approximately the 10th century AD. Even if this activity became very important for Mixtecs and Zapotecs, we do not have too much archaeological evidence regarding it. The main reason for this is that most of the ancient artefacts that were employed to extract gold from the rivers have not been found until today in the archaeological record. This is

partly because some of these ancient tools used to extract gold from the rivers were crafted from organic materials, like wood vessels. We also have to consider the possibility that the Spanish exploitation of the ancient native gold placers could have altered the pre-Columbian evidence pertaining to gold working. Yet another inconvenience in terms of situating the placers is that the rivers could have moved and flood stages have changed since ancient times. Thus, in order to achieve our objective, we will examine early historical records from Oaxaca and central Mexico. In addition, we will incorporate in this study a brief review of the geological information pertaining to each area under consideration, in order to determine the gold potential that actually exists in selected zones.

3. RESULTS

Gold placers in the Mixtec area

The valley of Nochixtlan-Yanhuitlan is part of the Mixtec area. According to the Codex Yanhuitlan, which was painted after the Spanish conquest, we can clearly identify two place signs, or toponyms, on the eleventh plateau (Fig. 2). Some scholars have proposed a location for each place sign. First, on the left side of the bottom of the plateau there is a place sign that can be translated as *tlachtepec* or *tepetlachco*, which means “ballgame on the hill”. Nineteen kilometres to the south of the modern town of Yanhuitlan, there is a settlement whose name is “Tlachitongo”. Based on the ethno-historical records, it is

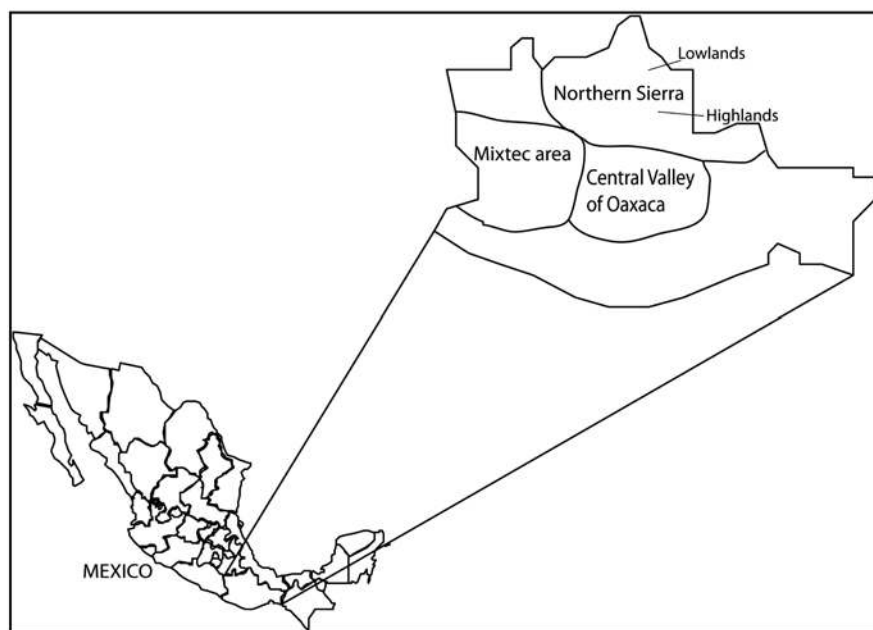


Figure 1: The studied area.
Figure 1 : La région étudiée.

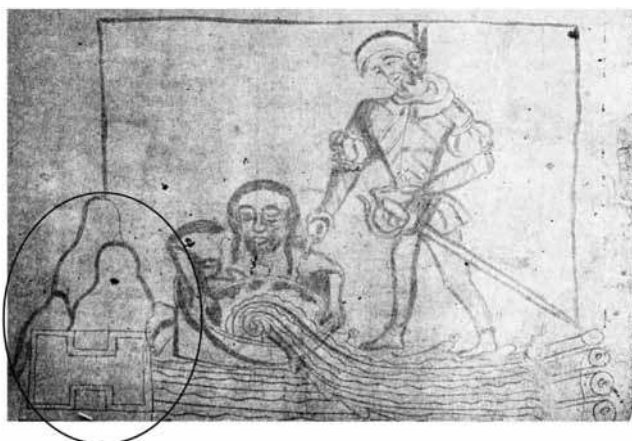


Figure 2 : Codex Yanhuitlan, Eleventh Plate indicating the toponymic of the river.

Figure 2 : Codex Yanhuitlan, onzième planche indiquant la toponymie du fleuve.

possible to think that this town could be the old Tlachtepec or Tepetlachco (Jiménez Moreno and Mateos Higuera, 1940). The second place sign which appears on another scene of the codex has been identified as “house” or “place site” (Smith, 1973). Smith (1973) argues that this toponym is not necessarily attached to a specific place, but could also indicate a boundary. This ancient gold placer was probably situated on the border of the old polity of Yanhuitlan.

After the Spanish conquest, Europeans exploited the gold placers that the Mixtec Indians had in use in Yanhuitlan, but placers were abandoned by the second half of the 16th century. Perhaps the reason was that those gold placers were not as rich as they might seem. In a recent survey, the Mexican Geological Service (SGM) did not report this Mixtec area as part of an active gold mineral region (Servicio Geológico Mexicano, 2005).

Gold placers in the Central Valley of Oaxaca

The Central Valley of Oaxaca was occupied by Mixtec and Zapotec populations by the end of the 14th century. In 1486 the Aztecs conquered the Central Valley and forced the Mixtecs and Zapotecs to pay tribute to the Aztec Empire (Marcus, 1983). A list of the tributes paid by the towns of the Valley of Oaxaca is shown on Folio 43v. of the Codex Mendoza (Berdan and Anawalt, 1992). Saville (1920) indicated that one of the most significant things of this Folio is that the place named in nahuatl *Teocutlan* or *Teocuitlan* can be translated as “the place where gold is found” (Fig. 3). Even if we were not able to locate this town with certainty in present day Mexico, the settlement could have been located in the south of the Valley of Oaxaca.

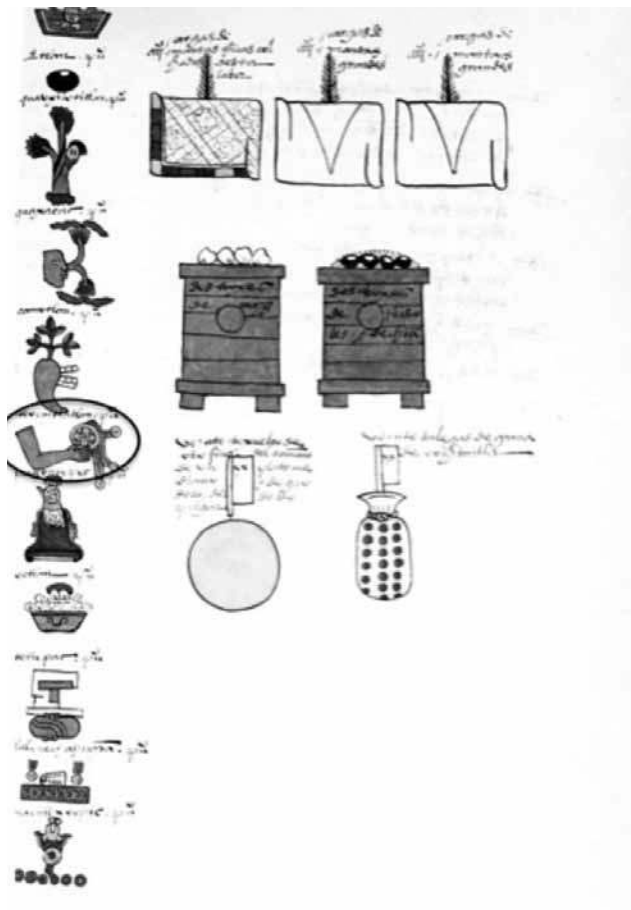


Figure 3. (See colour plate) Codex Mendoza, Folio 43v. The town of Teocuitlai.

Figure 3 : (Voir planche couleur) Codex Mendoza, Folio 43v. La ville de Teocuitlai.

As it happened in the Mixtec area, as soon as the Spanish conquered this Valley, they began to wash the gold rivers, trying to get as much gold as they could, but they found that this activity was far from being productive because gold was rare (Chance, 1982). However, the Mexican Geological Service actually indicates that the Central Valley is one of the two principal mineral regions of the State. According to the SGM, the main mineral district of this region yields between 2.2 and 13 g/t of Au and between 82 and 146 g/t of Ag (Servicio Geológico Mexicano, 2005).

Gold placers in the Northern Sierra

In order to study the Northern Sierra gold placers, we are going to divide the mountain range in two different areas: the highlands, including the mountains that are higher than 1000 m.a.s.l., and the lowlands, including the mountains that are below 1000 m.a.s.l. and the coastal plain.

Highlands: The Northern Sierra was inhabited by three different ethnic groups: Highland Zapotecs, Highland Chinantecs, and Mixes. In the beginning of the 16th century, Moctezuma II informed Cortes that there was gold in this area, but that this region was not subjected to the Aztec Empire. Some of the main watercourses of Mexico have their origin in the Northern Sierra, and the rivers were well known in the 16th century for representing sources of precious metal. Based on early historical records, we know that the Zapotecs and their neighbours, the Chinantecs, used to pay gold as tribute to the Spanish Crown after the conquest. The native populations obtained the gold from various rivers. Nevertheless, colonial authorities complained about the amount of gold they obtained from the rivers and about the quality of gold artefacts that they received from the native populations because they were very thin (Chance, 1998). Between 1520 and 1530, the conquerors tried to establish gold and silver mines in the Mixe and Highland Zapotec areas, but they did not prosper at all (Chance, 1998).

Lowlands: As mentioned above, the Aztecs conquered the Mixtec area and the Central Valley of Oaxaca, but they also conquered the northern part of the actual state of Oaxaca and the south of Veracruz. According to the Codex Mendoza, the towns in this area, named the province of Tuxtepec, used to pay their tribute to the Aztecs in fine gold objects, among other items. Díaz del Castillo (1979) emphasized the skill of the Chinantecs in working metal. The author does not provide a specific name for the rivers in this area, but we can identify two possibilities: the Tuxtepec and the Malinaltepec rivers. Both streams were part of the Papaloapan causeways that have their origin in the Highlands of the Northern Sierra. After 1524 AD, the Spanish tried to exploit the gold placers, but by the end of the first half of the 16th century the Tuxtepec area was practically uninhabited by native populations, because of epidemic diseases. This lack of a native workforce radically affected the exploitation of gold in the lowlands (Acuña, 1984). According to the Mexican Geological Service, four different mineral districts currently exist in the Northern Sierra (highlands and lowlands). The values for precious metals are in the range of 0.5 to 6.4 g/t of Au, and of 200 to 280 g/t of Ag.

4. DISCUSSION AND CONCLUSION

As we have seen in this paper, the native populations of Oaxaca obtained gold from placer mining. Those placers were formed in watercourses, creeks, rivers, flood plains and

deltas. Even if in some areas it is not possible to determine where these gold placers were exactly located, we begin to have a clearer idea of their position.

According to the actual percentage of gold reported by the Mexican Geological Service, the Central Valley of Oaxaca area is the richest in gold. The Northern Sierra occupies the second place, and the Mixtec area is in the third place. In pre-Columbian times, the Mixtec region paid a tribute to the Aztecs of twenty vessels of gold dust. Mixtecs and Zapotecs from the Valley of Oaxaca also sent to Moctezuma twenty large gold plaques. The plaques had the size of an average plate and the thickness of a thumb (Saville, 1920). According to the Codex Mendoza, the towns that were settled in the lowlands of the Northern Sierra or the province of Tuxtepec used to pay tribute to the Aztecs in finished objects, even if the Central Valley of Oaxaca was the richest in gold resources. Nevertheless, during the last century, archaeologists have recovered more gold objects from the Central Valley of Oaxaca. The cause of this could be the lack of archaeological exploration in the Northern Sierra. In contrast, archaeologists have focused their attention to the Central Valley of Oaxaca and the Mixtec area.

On the other hand, the Spanish conquest made it evident that the gold sources of Oaxaca were not as plentiful as they had thought. The gold and silver was not sufficient to support an intensive exploitation, and it was only adequate for the creation of a small number of luxury gold objects for the pre-Columbian societies.

Finally, the importance of establishing the location of gold placers in pre-Columbian times is related to the reconstruction of the entire gold work process, from placer mining to the ancient gold workshops. In order to achieve this goal, an interdisciplinary combination of archaeology, history, gold objects characterization, geomorphology, geology, and geochemical information pertaining to each area must be employed.

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