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Foot engravings at the south of the middle Santa Cruz River and the information about human circulation in Southern Patagonia

The role of the Santa Cruz River in human circulation has long been discussed (e.g. Orquera 1987, Belardi et al. 1992). Here we present new information related to this topic generated in rescue works related to the construction of dams, which we analyze in conjunction with the one obtained in research projects.

General background

During the Late Holocene, technological, raw material, burial and genetic information suggests the existence of different human cultural groups North and South of the Santa Cruz River, with the entry of new human groups South of it after the Medieval Climatic Anomaly, which took place by ca. 1000 yr B.P. (Franco et al. 2011, 2017a, b) (figure 1).

There are not dates for rock art in the basin. However, clear differences are present North and South of the

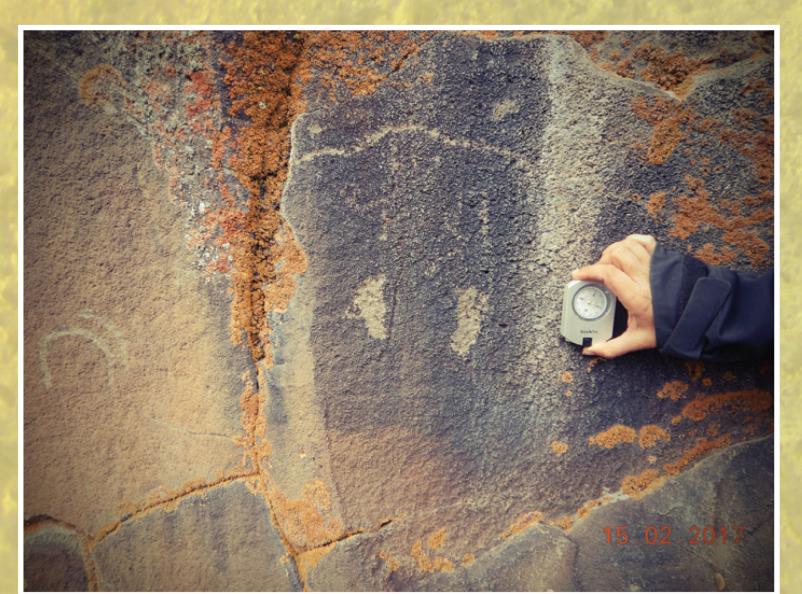
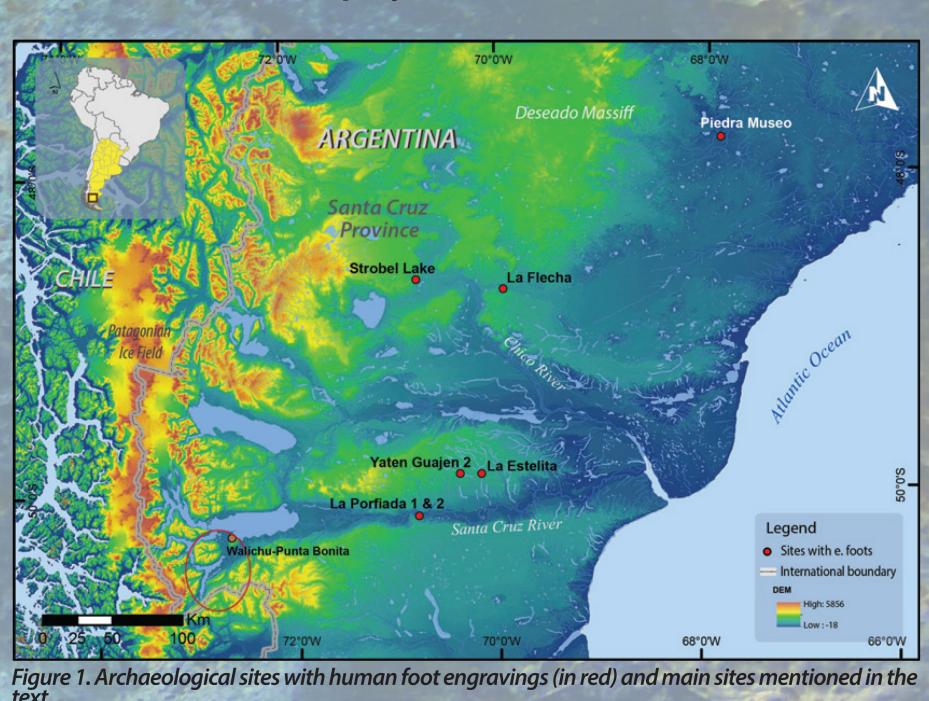


Figure 2. Human foot engravings (La Estelita).

River. Engravings are frequent in basaltic canyons located to its North, and less frequent to the South (Charlin & Borrero 2012, Gradin 1987, Menghin 1957). We agree with Charlin & Borrero (2012) about the relevance of this difference, especially considering the better preservation potential of engravings in relationship to paintings.

Engravings identified at the basaltic canyons located North of the river include, among others, threedigits, puma and human footprints, guanaco, puma and geometric images (e.g. Acevedo et al. 2013, Franco 2005, Franco et al. 2014). Human engraved footprints are not frequent in the archaeological record. In the

basaltic canyons just mentioned, they are present only in Yaten Guajen 2 (Franco 2005, Fiore & Ocampo 2009, Franco et al. 2014) and La Estelita (pers. obs.) (figure 2). Guanaco engravings are also present in these canyons and in archaeological sites located to the Northwest, in the Strobel area



(i.e. Belardi & Goñi 2006, Re 2010). North of the Chico River, foot engravings are present in La Flecha (Gradin 2003) and, in the Deseado Massif, only in Piedra Museo (Carden 2008). It should be mentioned, however, that in the Deseado Massif paintings -including negative hand stencils- are more frequent than engravings (i.e. Acevedo et al. 2013, Carden 2008). It is worth mentioning that, according to Gradin (2003), most of the engravings correspond to the Late Holocene (see also Re 2010).



Figure 3. La Porπaaa i

Results

During rescue works, the presence of engravings and paintings was identified at La Porfiada, a basaltic outcroup located South of the River, in its middle Basin (figure 1). Information obtained at rockshelters La Porfiada 1 and 2 indicates the presence of negative hand stencils and engravings, including in the last case human foot, threedigits, a guanaco image and geometric motifs (figures 4, 5 and 6). It is worth mentioning that, although there are guanaco engravings to the North of the river, there are differences in the technique used between the one identified at La Porfiada 1 and the ones recorded in the basaltic canyons to the North (e.g. Franco 2005 and pers.obs., Fiore 2017, Fiore & Ocampo 2009). The presence of guanaco engravings have been mentioned to the South, although there are not still detailed descriptions published

(Manzi et al. 2017). In none of the sites located South of the river, the presence human foot engravings have been identified, being the case of La Porfiada 1 an exception.

Bonita-Walichu archaeological locality (figure 1).

In addition, engravings have not been identified in the Upper Santa Cruz Basin, an area where motifs and techniques show similtarities with the ones present to the South, both in Argentine and Chilean Patagonia (Charlin & Borrero 2012). In the Upper Santa Cruz River Basin, hand negative stencils were only identified at Punta

Lithic technology recovered in surface contexts at La Porfiada 1 and 2 shows similarities with the one recorded between ca. 6,100 and 3,800 yr BP at the Upper Santa Cruz river (i.e. Franco et al. 2011, 2016, 2017a).



Figure 4. Human foot engravings from La Porfiada archaeological locality.





Figure 6. Guanaco engraving at La Porfiada 1.

Synthesis and perspectives

Although surface lithic material shows technological similarities with the one identified at the Upper Santa Cruz River, rock motifs and techniques show some differences. Negative hand stencils have just been identified at La Porfiada and Cueva Walichu-Punta Bonita archaeological localities (figure 1). Engravings are only present at La Porfiada, in the middle Santa Cruz River and absent in its upper Basin. They are also not frequent to the South. Human foot engravings, until the moment, have only been located at La Porfiada 1 and are not present in other sites to the South of the Santa Cruz River. On the contrary, they show similarities to the ones present to the North, where they are also not frequent. The similarity between these motifs and the ones identified to the North, in addition to the lack of human foot engravings to the South provides additional evidence of human circulation between both sides of the river (see also Franco et al. 2011). Probably, changes in human circulation occurred through time, a hypothesis which can explain similarities and differences between the Middle and Upper Santa Cruz River and which remains to be tested.

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