
Hunting on the coast: An image gallery of *Rompecráneos*

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Abstract:

The *Rompecráneo* is a special kind of lithic artifact which was, presumably, involved in the capture of pinnipeds carried out along the Patagonian coast of Argentina during prehistoric times. Recent papers had offered some information about their morphology but up to now they are poorly studied. In order to offset this situation in a previous work we addressed their role in hunting technics developed at the archaeological locality of Punta Entrada (Santa Cruz, Argentina). This allowed us to propose that *rompecráneos* were used in combination with spears when hunting on the coast. With the aim of expanding this information, here we present an image gallery of some *rompecráneos* recovered there. Two of these pieces share a similar morphology but were made of different lithic raw materials. The other one has the appearance of a bola stone but its weight is higher than other bola stones in Patagonia. That is why it is considered a different kind of artifact. The importance of studying these kinds of artifacts is that they have the potential of providing information about the way people interacted with the different resources (biotic and abiotic) in the past so that a better understanding of human behavior can be developed.

Keywords: *rompecráneos*; lithic technology; Pinnipeds; Patagonia; ground stone

Little is known about *rompecráneos* which are a kind of lithic artifact allegedly linked to the onshore capture of pinnipeds during prehistoric times. These artifacts have been recovered mainly along the Patagonian coast of Argentina and only a small quantity of them was found inland, highlighting its connection to the coast and the resources found there (Moreno 2008) and also between these two environments. According to previous investigations, it can be said that *rompecráneos* are a kind of *bola* stone with different finish. Also, they were used in a different way (Moreno 2008; Moreno *et al.* 2000). *Rompecráneos* have a rough finish, a pronounced groove in the middle of the piece and a prepared base where a wooden handle could be placed. If this is correct, these artifacts would have been used by hitting in a similar way sealer employed seal clubs in historical times (Mayorga 2017). Here we present images of these artifacts and share them with colleagues researching in similar contexts. The pieces shown in this image gallery were recovered in the archaeological locality of Punta Entrada (Santa Cruz river mouth, Santa Cruz province, Argentina) (Figure 1). This locality is characterized by high amounts of open air archaeological material concentrations in which pinnipeds (*Arctocephalus australis* and *Otaria flavescens*) are the main prey among the



zoarchaeological remains. These are gregarious sea mammals that spend time in the sea but also on the shore, particularly in the reproductive season. During that time, pinnipeds can become very aggressive (Cappozzo 1995; Pérez-Álvarez *et al.* 2013; Vaz-Ferreira *et al.* 1984). Since hunter-gatherers did not develop boat technology in this area, hunting must have taken place on the land with particular hunting strategies, as it has been proposed by Cañete Mastrángelo (2019).

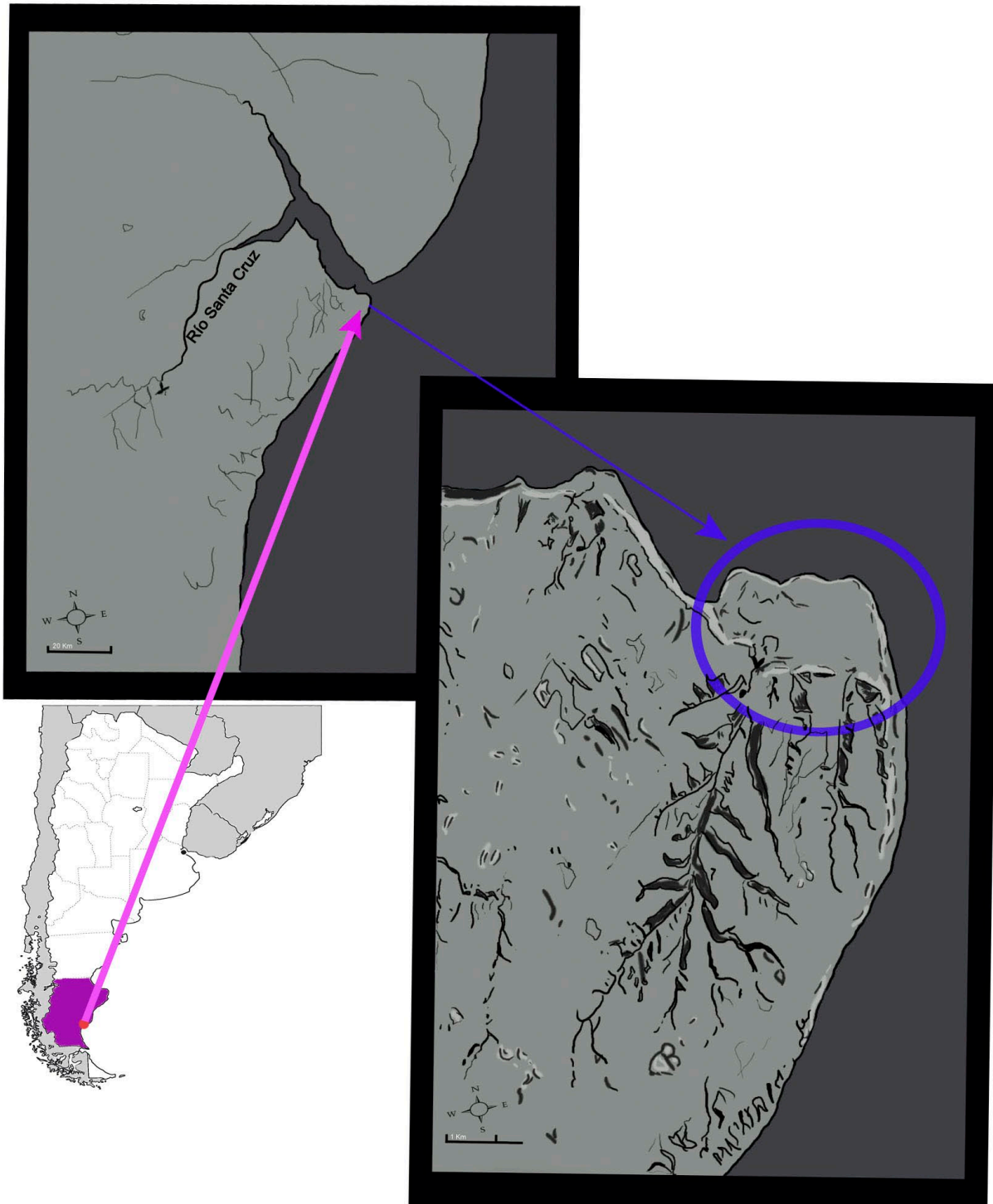


Figure 1. Geographic location of Punta Entrada. [Download a high resolution version of this image here.]

It is worth noting that *Arctocephalus australis* females can reach 50 kg of weight while males can weight 160 kg and *Otaria flavescens* are bigger animals which can reach 170 kg (females) and 400 kg of weight (males) (Cappozzo 1995). This would have required the development of appropriate strategies and weapons that would allow hunter-gatherers to capture and kill that kind of animals. Thus, studying the weaponry involved in this activity is important to have a better knowledge of the way people interacted with animals and environment in the past.

The archaeological record of Punta Entrada is dated back to late Holocene (Muñoz *et al.* 2009) and so can be assumed with *rompecráneos*. In this image gallery three pieces are presented (Figures 2, 4, and 6). Two of them have the characteristic aspect described above (Figures 2, 3, 4 and 5). The other one looks like a bola stone (it is a spheroid without a prepared base) but its size and weight (Figures 6, 7 and 8) is higher suggesting it was used in a different weaponry system from *boleadoras* and closer to the way *rompecráneos* did. Considering it weighs more than 1 kg, it is unlikely that this piece was used as a throwing weapon. As it has been said, the study of *rompecráneos* is important to coastal archaeology as they can give information about the way people captured pinnipeds, the hunting strategies involved and the space organization. This information can also contribute to the understanding of human behavior in coastal environments.



Figure 2. *Rompecráneo* made of andesite. The base can be seen in the lower part of the image. Weight: 593 g. [Download a high resolution version of this image here.]



Figure 3. Different view of the *rompecráneo* shown in Figure 2. [Download a high resolution version of this image here.]



Figure 4. *Rompecráneo* made of *coquina*. The base can be seen in the lower part of the image. Weight: 421 g. [Download a high resolution version of this image here.]



Figure 5. Different view of the *rompecráneo* shown in Figure 3. [Download a high resolution version of this image here.]



Figure 6. *Bola* stone made of andesite. Weight:1.476 kg. [Download a high resolution version of this image here.]



Figure 7. Detail of the groove of the *bola* stone shown in Figure 6. [Download a high resolution version of this image here.]



Figure 8. Context of recovery of *bola* stone presented in Figure 6. [Download a high resolution version of this image here.]

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Cazando en la costa: Una galería de imágenes de los rompecráneos

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Resumen:

Los rompecráneos son un tipo de artefacto lítico presuntamente vinculado a la captura de pinnípedos llevada a cabo a lo largo de la costa patagónica argentina durante tiempos prehistóricos. Investigaciones recientes han ofrecido información sobre su morfología pero hasta el momento siguen siendo poco estudiados. Para contrarrestar esta situación, en un trabajo anterior se abordó su rol en las técnicas de caza llevadas a cabo en la localidad arqueológica de Punta Entrada (Santa Cruz, Argentina). Con el objetivo de ampliar esta información, aquí se presenta una galería de imágenes de algunos rompecráneos recuperados en dicha localidad. Dos de estas piezas comparten características morfológicas pero fueron manufacturadas a partir de rocas diferentes. La tercera es más parecida a las bolas de boleadora pero su peso es superior al registrado para otros artefactos de su tipo en el resto de la Patagonia. Por tal motivo aquí no se la considera como tal. La importancia de estudiar estas piezas radica en que tienen el potencial de ofrecer información sobre el modo en que los humanos interactuaban con los diferentes recursos (bióticos y abióticos) en el pasado. De esta forma es posible desarrollar un mejor entendimiento sobre las conductas humanas.

Palabras clave: rompecráneos; tecnología lítica; Pinnípedos; Patagonia; herramientas de piedra pulida