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Abstract

In this paper, we present a study about cultural astronomy among European colonists and their Argentinean descendants, in the context of a complex interaction between *criollos*, aboriginals and European colonists from different origins and religions, who settled in the northern area of the Argentinean province of Santa Fe, which is part of the southern Gran Chaco. These colonists arrived among waves of immigration occurring in Argentina in the second half of the nineteenth century and the first half of the twentieth century. Through ethnographic field research among these immigrants and their descendants, we carried out a survey of their astronomical representations and practices, and the connections of these with their social life and farming tasks. Through this we gained an insight as to how the astronomical ideas of immigrants, *criollos* and aboriginal groups influenced each other, generating a variety of new relations with the celestial realm.

1 Ethnoastronomy in the Multicultural 2 Context of the Agricultural Colonies in 3 Northern Santa Fe Province, Argentina

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4 Armando Mudrik

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13 Abstract

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27 Introduction

28 This paper represents a small part of a wider study about cultural astronomy
29 among *criollos* and the various European immigrant groups who settled in the
30 Argentinean Chaco. This study is within the larger framework of an enterprise
31 being carried out by many researchers to thoroughly investigate cultural astronomy
32 in the Chaco region, to build a more complete context for understanding how the
33 astronomy of specific *chaqueños* aboriginal groups relates to the astronomical ideas
34 of immigrants and *criollos* settled in this region (see ► Chap. 85, “Chaqueña
35 Astronomy”).

36 Our investigation involved ethnographic field research in the rural area of
37 Santurce, an agricultural colony founded in 1887, now a village with about 120
38 inhabitants; and in the town of Moisés Ville, the first Jewish agricultural colony in
39 Argentina established in 1889, now with 2,500 inhabitants (Guelbert de Rosenthal
40 2008). Both are in the north of the Argentinean province of Santa Fe, in the
41 department of San Cristóbal. This region belongs to what is called the Chaco
42 Santafesino, in the south of Gran Chaco.

43 Indigenous groups already lived in these areas when the immigrants arrived.
44 They were the *Guaycuru* groups, that included the *Abipones*, *Mocovíes* and *Tobas*,
45 who have inhabited the northern region of Santa Fe at least since the end of the
46 seventeenth century and continued to subsist by hunting and gathering, even after
47 the arrival of the immigrants (Giménez Benítez et al. 2002). These groups often
48 lived amongst the colonists, influencing them.

49 Between 1868 and 1872, the “línea de fortines” – a line of forts or national
50 security establishments extending along the national frontier (Ceruti and Cocco
51 1998) – was erected in order to consolidate the occupation of this region, which was
52 part of the aboriginal territory, later repopulating it with European immigrants
53 settled in agricultural colonies (Ruggeroni 2006). In this context, the term “coloni-
54 zation” refers to a social process devised by the State in order to occupy the low-
55 population areas by bringing in European immigrants to undertake agriculture and
56 cattle raising. Waves of immigration took place from the mid-nineteenth century
57 until the mid-twentieth century (Gori 1988). The State hoped that the European
58 immigrants would act as a “civilizing force” (Juliano 1987).

59 There were many kinds of immigrants. In the case of our study, some of the
60 Italian non-Jewish colonists were farmers and others were craftsmen back in
61 Europe. Not all of them were spontaneous, independent emigrants, some were
62 selected in Europe by colonizing companies and entrepreneurs, to be relocated
63 in specific agricultural colonies (Gori 1958). The Jewish immigrants were
64 Ashkenazim from East and Central Europe (Romania, Ukraine, Russia, Lithuania,
65 Belarus, Poland and Germany), some were Hasidim and others were Mitnadim; in
66 Europe they were not farmers but professionals, merchants, or in some cases, rabbis
67 and scribes of the Torah (“soifers”). These Jewish families were selected in Europe
68 by the Jewish Colonization Association and relocated in its agricultural colonies in
69 Argentina (Cociovitch 2005). By examining the conditions of life for the colonists
70 both before and after their immigration, we can better comprehend their



Fig. 86.1 Nestor A. Cuaglini, informant of the rural area of Santurce, burning wood in his firewood stove, for cooking bread. April 2012. (Source: author's archive)

71 understanding of the sky and the relationship between this and their farming
72 practices at both stages.

73 The different European immigrant groups and their Argentinean descendants,
74 who were present in the colonies comprehended in this paper, interacted among
75 themselves and also with *criollos* from the region, who were often hired as farm
76 workers by the “colonized” families (Gori 1947). To these complex interactions, we
77 must add up the relationship with the *Guaycuru* groups, who were displaced by the
78 advance of the agricultural frontier, becoming sedentary and seasonal farmhands
79 (Dalla-Corte Caballero 2012). This variety of identities and socio-cultural relation-
80 ships characterize the multicultural context of the agricultural colonies in this
81 region of the South American Gran Chaco.

82 The Ethnographic Work

83 We gathered information about many astronomical representations and practices
84 through ethnographic field research. Part of this fieldwork was done among children
85 and grandchildren of Italian immigrants “colonized” in Santurce Colony in the
86 beginning of the twentieth century, who are still living and working in the rural area
87 of this village (Fig. 86.1); and another part was done in Moisés Ville among Jewish

88 immigrants from East and Central Europe and their kin, and descendants of Italians
89 from Piemonte, all of them settled in the beginning and mid twentieth
90 century in Virginia, Moisés Ville, Monigotes and Capivara Colonies. Although
91 they all live in Moisés Ville, some of them still work in the rural area. Those
92 interviewed in both of these localities form a representative sample of the settled
93 communities.

94 We visited informants' homes and carried out open-ended interviews with one or
95 more informants together. Our methods included surveying life histories in an effort
96 to link astronomical knowledge to the socialization processes of the colonists
97 and their descendants, encouraging informants to draw astronomical representa-
98 tions, participating in local activities with the informants, taking photos, and
99 recording audio and video conversations. Along with the ethnographical work,
100 we have tracked previous documentary sources, which we have analyzed from
101 comparative and ethnohistorical perspectives (Hammersley and Atkinson 1994;
102 see ► Chap. 30, "Cultural Interpretation of Ethnographic Evidence Relating to
103 Astronomy").

104 **The Celestial Rhea: *el ñandú***

105 Among the astronomical representations registered in Santurce, we found two
106 particular asterisms located in the Milky Way, both denominated *el ñandú*, which
107 represent a *Greater Rhea* (*Rhea americana*), a flightless bird found in this region.

108 For some informants *el ñandú* is represented "with stars in the Milky Way", "a
109 little bit away from *la cruz del sur* (southern cross)"; while for other informants
110 *el ñandú* is a stretched asterism formed by the union of the Milky Way's dark
111 clouds, whose "head" is close to *la cruz del sur* (Fig. 86.2), and has a "little eye"
112 represented by a "red star". According to these informants, the observation
113 of this *ñandú* formed by "dark spots along the Milky Way", in a certain moment
114 of the year, is associated with rain periods. It is important to mention that all
115 the informants assured us that *el ñandú* was pointed out to them in their
116 childhood by their parents or by *los antiguos*, referring to the first relatives settled
117 in the area.

118 It is interesting to recognize firstly that among *chaqueños* aboriginal groups,
119 like *Mocovíes* and *Tobas*, we also found a celestial representation of a rhea
120 called *Mañic*, the master of the *Greater Rheas* (*mañic*); secondly that it is
121 also identified by two different asterisms: the stellar *Mañic*, symbolized by the
122 southern cross, and the milky *Mañic*, corresponding to an extended region of the
123 sky formed by Milky Way's dark clouds (Fig. 86.2). In this case, the *Mañic*'s head
124 is identified by the Coalsack, and its body is stretched up to dark zones in
125 the Scorpius constellation (Lehmann-Nitsche 1924, 1927). Thirdly, it is relevant
126 to note that among our informants and also among *Guaycuru* groups,
127 there are accounts that relate the celestial rhea to the rain (Giménez Benítez
128 et al. 2002).

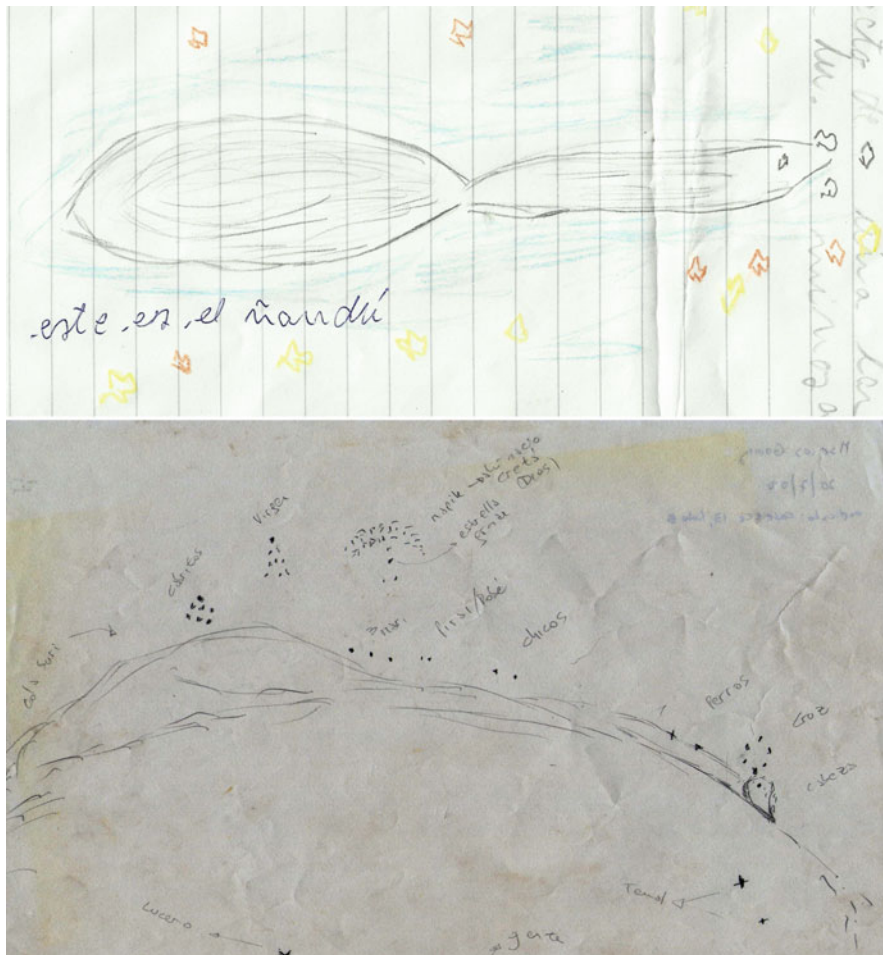


Fig. 86.2 *Up:* Drawing of *el ñandú* formed by milk way’s dark clouds, done by Hilda N. Matter de Cuagliani. Gathered by the author in March 2012, in Santurce. *Down:* drawing of the milky *Mañic*, done by Marcos Gómez, a *mocoví* from Colonia Cacique Catán, in southwest of Chaco province. Gathered by Sixto Giménez Benítez and Alejandro López in July 2002

129 Based on life histories we have recovered in our fieldwork, we have developed
130 the hypothesis that the celestial representations of *el ñandú* were incorporated by
131 the European colonists and their descendants in Santurce, through relationships
132 established in the work sphere and in daily life with *criollos* from the area, who
133 were descendants of the *chaqueños* aboriginal groups. It is possible that these
134 asterisms were incorporated due to the need for a time marker in this new environ-
135 ment that could alert the new inhabitants to the natural cycles, such as the rain
136 periods, very important for agricultural activities.

137 **The Moon: Agrarian Calendar and Identity**

138 Among the information about the astronomical practices gathered in Moisés Ville,
139 we found many practices that related the observation of the lunar cycle to the
140 execution of certain agricultural activities (Mudrik 2011). In these practices, the
141 role of the moon in the agricultural cycle conceived by some colonists becomes
142 evident. Most of these practices have also been noted among farmers in Europe
143 (Iwaniszewski 2006).

144 According to informants who are descendants of Piemontese colonists, different
145 agricultural activities are coordinated with different Moon phases. For example,
146 the waxing phase is considered the best time to plant vegetables “that develops
147 upwards” (such as lettuce, corn, cabbage and parsley). However, Alfalfa (*Medicago*
148 *sativa*) cultivation is only carried out during the waning phase. This is due to
149 the observance that animals who fed on Alfalfa planted during the waxing
150 phase “got flatulence”. Trees are felled for firewood during the waning phase so
151 that the wood “will not spoil”; also animals are castrated and slaughtered at this time,
152 so they “have less blood” and “the meat will not spoil as fast”, respectively.
153 Therefore, the moon’s phase changes are a time marker that determines an agrarian
154 calendar.

155 We also found among Piemontese descendants the term *luna buena*
156 (good moon), which is used to refer to the moon phase that is good to carry out
157 a certain activity, thus giving the moon, in this case, a qualitative characteristic in
158 marking certain time periods. According to these informants, all these ideas were
159 transmitted orally and through practice.

160 On the other hand, among Jewish immigrant colonists and their descendants, we
161 have not found the use of the moon in choosing the proper time to carry out
162 agricultural activities. However, many of these informants recognize that they
163 have incorporated only the practice of Alfalfa cultivation during the waning
164 phase, as advised by neighbors who were Piemontese colonists, or by Piemontese
165 farmhands hired by the Jewish colonists (Fig. 86.3). This kind of relationship
166 between Jewish and Piemontese colonists was very common in the Jewish colonies
167 studied (Bizberg 1941), and moreover, the Alfalfa cultivation was the most impor-
168 tant economic activity in this colonies, during the first half of the twentieth century
169 (Cociovitch 2005).

170 It is interesting to note that all the Jewish informants see the use of the moon as a
171 time marker for carrying out agricultural activities as an exclusive practice of
172 Piemontese colonists and *criollos*. This construction becomes evident if we
173 consider firstly the previous relationship that the Jewish immigrants had between
174 the sky and agriculture, and secondly, the different role of the moon in the
175 Jewish tradition, precisely in sacred matters regarding the Jewish calendar (see
176 ► Chap. 195, “Ancient and Medieval Jewish Calendars”).

177 Therefore, in this case, we see how astronomical practices become part of
178 the identity of the groups involved. The uses of the moon represent a system
179 of values, with which a group classifies itself and the others (Cardoso de
180 Oliveira 1976).



Fig. 86.3 Jewish colonists and Italian and *criollo* farmhands, next to a haystack of Alfalfa (*Medicago sativa*) at the end of its harvest, in Virginia Colony, 1949. (Source: historic and Communal Museum of Jewish colonization “Rabino Aarón Halevi Goldman”, Moisés Ville, Santa Fe – Argentina)

181 Conclusion

182 The presence of immigrants with different kinds of previous contact with the sky,
183 and with different agricultural practices, generated a variety of new relations with
184 the celestial realm after they arrived in South America. The astronomical knowl-
185 edge has been interchanged between different groups in the agricultural colonies of
186 this region in Argentinean Chaco. Astronomical practices and representations were
187 incorporated by some groups, according to the needs generated in this new envi-
188 ronment. This research intends to add to the understanding of how the processes of
189 cultural interaction affect the social production of astronomical knowledge in the
190 context of Chaco region, and also the interpretation of how the European colonists
191 and their kin interacted with their new environments: natural and socio-cultural. All
192 the points investigated in this paper create interesting routes to access not only the
193 cultural astronomy of these different groups and matters regarding identity deter-
194 mination but also other issues to be developed in future research works, such as
195 those related to authority conflicts, leadership construction, and the processes of
196 constructing and interpreting traditions in a multicultural context.

197 Cross-References

- 198 ▶ [Ancient and Medieval Jewish Calendars](#)
- 199 ▶ [Chaqueña Astronomy](#)
- 200 ▶ [Cultural Interpretation of Ethnographic Evidence Relating to Astronomy](#)

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