Megalithism in Ceresio Valley (N.-W. Lombardy, Italy)  
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Summary
The Authors describe the megalithic findings and petroglyphs, their orientation with the possible correlations that may indicate an archaeologic and archaeoastronomic attendance pre-and/or protohistoric of described places. Following an analysis of possible future research.

Introduction
The described findings are located in Porto Ceresio (Varese District, North-Western Lombardy, Italy), belonging to the current "Regio Insubrica" (a Cross-Border Community: Euroregion established in 1995), on the border with Canton Ticino (TI), belonging to the Swiss Confederation (CH), on the South-Western slopes of Monte San Giorgio (i.e. Mount St. George), UNESCO World Heritage.
The resort is located on Southern coast of Lugano Lake (or Ceresio), a pre-Alpine lake formed between 18,000 and 15,000 years ago, at the end of the last ice age.
The name “Ceresio” has unclear origins. Some derives from the Latin “cerasus” (i.e. Cherry), but from deeper linguistic analysis, lemmas “keres”, “krres”, “kar”, “ker”, the roots *krs and, above all, *kr are related to the concepts of altitude and elevation. Hence the Celtic - Insubric “kar”, meaning: rock, prominence, horn.
By further linguistic analysis (4), "Ceresio" is not a toponym, but a hydronym, derived from the root *shr, related to "current" (s) of "water" (hr).
Since prehistory, Porto Ceresio was a harbour for lake trades between Po Valley, North and Central Europe.
The flat area, currently occupied by relatively recent buildings, was, until the Late Middle Ages, a swamp known as "Palude Ceresia".
Originally, the village consisted of two nuclei, separated from the axis of the current Garibaldi Road. The northern core was called "Del Pozzo" for the presence water tanks remains visible in the vicinity of the entry arch of the homonymous Court. The southern core, was instead called "Del Torchio", for the possible presence of wine press, attached to water mills.
The human presence in the Valley dates back to Neolithic, for remains of stilt houses in Cattafame locality of Arcisate.
During these prehistoric times (in North-Western Italy, grew from 5,800 to 3,600 BC), man, nomadic, hunter and gatherer, became breeder and farmer. The greater control of natural resources, made the man settled, involved an increase in population with the simultaneous change of the social organization and the introduction of the concept of "property". In less than 2,000 years, man's life changed more significantly than during the 2 million years earlier: a radical change known as the "Neolithic Revolution" (3), (29).
Since the end of fifth millennium, at the end of the third millennium BC (period covering the Neolithic and Bronze Age), were erected simple and aligned Menhirs, Dolmens, and Cromlechs (i.e. megalithic enclosures). These structures, often close to engraved rocks, were considered contemporaneous to the nearby megaliths. The significance of this proximity could be explained as a sign of the presence of "the sacred".
The representations of animals, hunting scenes, and, above all, of "prayers", confirm this hypothesis. Cupels and channels may, instead, have been used as containers and liquid collectors (organic and/or meteoric) for ritual purposes (6), (7), (8), (9), (10). The "cruciforms" engraved on these stones would be, instead, signs of Christianization and, therefore, could be considered of less
remote periods (11). This confirms an attendance of these sites in the Roman, Medieval, and perhaps more recently, also for other different (e.g. hunting, animal husbandry).

The dating of these artifacts is a difficult problem, as the petroglyphs are located in "open" places, easily editable by meteorological and human factors (30).

Other similar structures in Europe, however, well known. We recall, in fact, many studies that refer to the “sanctuary” of Panoias, Northern Portugal. Here, next to a large rock with tanks, canals and cups, steps carved into the rock, there is the following Latin inscription dating from the third century A.D. (12):

"HUIUS HOSTIAE QUAE CADUNT HIC IMM(ol)ANTUR EXTRA INTRA QUADRATA CONTRA CREMANTUR - SAN(gu)IS LAC(i)CULIS (iuxta) SUPERFU(ndi)TUR"

(Translated as follows: "Here the slaughtered victims are consecrated to the Gods: their entrails are burnt in the square ponds and their blood is diffused along the surrounding small ponds").

The large rocky outcrops of Alpine arch, with similar characteristics, could, at least for a time, have had analogue functions.

The fact, moreover, that the "altar-stones" are built on high places indicates, probably, the desire to choose an appropriate site for visual inspection of the land below, also in relation to the sacredness of the hill stations and mountain tops typical of Celtic and/or proto-Celtic peoples (22), (23), (24), (25), (26).

Dolmens and Menhirs are not, therefore, foreign to the cultural sub-alpine regions, as was thought until a few decades ago.

It was believed, in fact, that the megalithic culture had been arrested at Alps. Only exception was the area of Puglia (in Southern-East Italy), whose Dolmens, Menhirs and “Specchie” (i.e.: mound of stones) however, were attributed to the influence of people from the Balkan Peninsula, across the Adriatic, because in the rest of Mediterranean basin, megalithism is well represented. The work of Puglisi "La Civiltà Appenninica. Origine delle Comunità Pastorali in Italia" (27), published in 1959 and the discovery, in 1969, of the Neolithic necropolis of Saint-Martin-de-Corléans in Aosta, demonstrated the groundlessness of this thesis (1), (28).

Was thus proved the penetration of Megalithism in North-Western Italy, presumably through the nearby Alpine passes of Simplon, Gotthard and San Bernardino and from Provence, with regard to megaliths of Liguria and Maritime Alps.

As a result, other artifacts attributed to the recent peasant civilization, took on a different meaning and the lack of megaliths in Italy, differently from transalpine regions (especially North-Western Europe and islands), could be explained by the higher turnover of civilization during the time, that would radically transformed the appearance of the area, resulting in the loss of many of these artifacts (7), (8), (9), (10).

Starting from the 4th millennium BC, the man increased knowledge concerning the processing of ores. Following the development of metallurgy, the communities were organized into more complex structures. Hillforts, known, in Italy, by the name of Castellieri or Castellari, were built.

With Neolithic climate changes and the transition to more complex forms of social structures, separated ethnic identities born, linked to geographical areas. In North Western Italy, from Middle Bronze Age (1,600 BC) and the beginning of Iron Age (9th - 4th century BC), grew the so-called Golasecca Culture. It was one of the major civilizations of pre-Roman Italy: extended to an area between the Alpine watershed to North, the rivers Po to South, Sesia to West and Serio to East.

This age takes its name from the village of Golasecca (Varese District, on the banks of Ticino river), where, in the early nineteenth century, abbot Giovanni Battista Giani carried out the first discovery, believing that findings were evidence of the battle that took place, during the second Punic War, between Hannibal and Scipio, thesis already previously supported by Carlo Amoretti, a learned traveller of the eighteenth century.

In 1865, Gabriel De Mortillet, finally, attributed these findings to an independent pre-Roman civilization (16).
The Celts, probably at the origin of this culture, were peoples of Indo-European origin. Arrived in Europe in several waves from Central Asia, between 3,500 and 1,500 BC, through the Caucasus and the Middle East. The first signs of the Celtic culture development were, in fact, the area of Golasecca in 12th-10th century BC, the mining area of Hallstatt (Upper Austria), where they created a particular culture that grew around 8th century BC, and the site of La Tène (Canton of Neuchâtel, Switzerland), where reached the highest artistic, social and spiritual expressions in the sixth and fifth centuries BC (20).

They spread also in the entire Austria and Switzerland in the South-Eastern Germany, France, Belgium, Northern Italy, Central and Eastern Europe, Northern Spain, the Balkans, the British Isles, Ireland and Central Anatolian peninsula.

With regard to the Golasecca area, it can be assumed that the adopted social structure was hierarchically structured and that the population was divided into villages near found necropolises. Agriculture, weaving and farming that allowed to produce meat and cheese, were practiced. The wide circulation of Golasecca artifacts to North of Alps is closely related to the growth and trade increase of Padan Etruria. Golasecca settlements were of great strategic importance, as they were along routes that allow to reach the Alpine crossings of San Bernardino, Gotthard and Simplon. Since the discovery of various ornaments can be deduced that the Golasecca traded with the Etruscans, Greeks, Central-Southern Italy and Mediterranean islands, also acting as intermediaries with the Northern Celtic settlements: Hallstatt and La Tène. The trade network included Cornwall, Brittany and Galicia, regions from which came the Tin, necessary together with Copper, for the Bronze production. The Amber came from Baltic regions (20).

Trade with Greece, Central-Southern Italy and islands in departure, in all probability, from the Greek colony of Massalia (now Marseille), crossing Finalese (5) and easier passes of the Ligurian Alps and the Apennines, is confirmed by the discovery of pottery vessels with black-figures, in Attical style, of the more recent Golasecchian graves (29).

The local clay artifacts were obtained through the use of the "primitive" lathe or shaped by hand (7), (15). Metal objects were instead made by casting or rolling from raw materials mined locally and/or imported (2), (13), (14).

The decorations testify a clear Etruscan influence (18).

The most important centers of Golasecchian Val Ceresio were certainly Arcisate and Induno Olona, points of arrival of communication routes from Verbano Lake and Porto Ceresio, along which passed the copper mined in Baveno and Maccagno, the Silver of nearby Mount Martica, Tin, Iron, Amber and Gold from Central and Northern Europe (19).

From the 5th-4th century BC, the territory in question, was settled by a population, probably of Celtic origin also, of Insubres (18), (20). They maintained active the existing network trades, between Northern and Southern Europe.

The subsequent expansion of Rome, who acquired the Val Ceresio to the Cisalpino Gaul Province, focused, above all, over the Bevera Valley: Induno Olona, Arcisate, Cantello and Ligornetto. The Celtic peoples who inhabited it became Roman citizens under Julius Caesar, in exchange for a period of military service, after which they were assigned to the Oufentine tribe, owners of their land.

In the Middle Ages, Val Ceresio, inserted in the Parish of Arcisate, part of “Contado del Seprio”, dressed, as always, an important strategic role as a communication to Northern Europe.

Description

The Authors, starting from the place called “Poncia”, located in proximity to the State Border, were able to observe - above 3 terraces, supported by partially preserved stone walls, built with large juxtaposed stones, with spaces between them filled with smaller stones (photo 1) - a horizontal table (photo 2), resting on smaller stones, a oriented North-South Menhir (photo 3) and, in the immediate vicinity, on another terrace, about 3 meters upstream from the earlier findings, a dolmen-like artifact, whose chamber is facing to West (photo 4).
The GPS coordinates are: Altitude: 297 m asl; Lat.: 45.912231° N, Long.: 8.911815° E. Going up the slope, 350 m asl, Lat.: 45.911997° N, Long.: 8.913948° E, after covering a stretch of flat trail, you will reach a natural terrace, consisting of porphyroid rocks, where you can enjoy a splendid view of the Swiss side of the lake, with Morcote and the Medieval Church of Santa Maria del Sasso, dating from the thirteenth century, remodelled in the Renaissance Era, overlooked by the Visconti Castle, built around 1450, on the site of an earlier Middle Age fortification.
Along steep path the Authors reached a massive erratic boulder (Altitude: 380 m asl; Lat.: 45.911462° N; Long.: 8.914205° E), possible shelter, perhaps acting as altar-stone, whose major axis is on East - West direction, with opening facing to North (photo 6).

The surface of the rock formation is quite regular and rudimentary ducts are designed to convey fluids downstream (Photo 7).

A little further upstream, on another plateau (Altitude: 395 m asl; Lat.: 45.911104° N, Long.: 8.914183° E), there is a huge outcrop of porphyroid rocks (photo 8), with large cracks and falls of boulders, due to cryoclastic phenomena (21), (31) and anthropic use, as evidenced by the non-random arrangement of three large oriented East-West stones (9) and by the presence of petroglyphs (easily recognizable a quadruped) on a horizontal table nearby, pointing to West (photo 10). Continuing along the plateau towards to South -West, can be reached in a short time an old muletrack that allows to reach the village of Cà del Monte (above Porto Ceresio) from the place of Posporto.
The trail is paved and, at times, bordered by stone walls layer (photo 11). This method invokes the "Megalithic Roads" also present in the Alps and in Liguria (on Mount Beigua, near Varazze and in proximity to Giogo di Rialto, in Finalese Area) (11), (26).

Discussion
The described zone are little known by the archaeological point of view, although part of Golasecca Cultural Area.
The artifacts, in fact, are in a densely wooded environment (mainly chestnut trees and oaks), reached along ancient pathways, known by the Middle Age and used as ways of communication and exchange between the settlements adjacent to Porto Ceresio, but disused for a long time.
The meteoric leaching and the landslides phenomena, as well as recent works of deforestation and maintenance of the land, have brought to light a number of stone walls of containment with large terraces.
The dating of these artifacts is not unique, but can be traced back to the Neolithic and the Bronze Age, presumably by pre - and/or protoceltic peoples.
Further explorations may show other unknown artifacts to date.
The evaluation of the described sites with recent techniques such as GPR (acronym for Ground Penetrating Radar, also called GPR), which uses radio waves to outline the structures and the layers of soil below the surface of the ground, which is even able to construct three-dimensional images, ERS (Electrical Resistance Survey, or Geoelectric Detection), which measures the resistance of the different layers of the soil to the electric current (the archaeological remains may, in fact, have resistance less than or greater than the soil around them and be thus highlighted), the Differential Magnetometer (or Gradiometer), which uses magnetic sensors (magnetometers) for detecting magnetic properties significantly different from those of the surrounding ground (can be identified with greater ease archaeological formations such as wells, tombs, deposits of materials, roads, ditches, walls), may identify additional artifacts buried with the opportunity to study them in greater depth, even before excavation.
A further technique used is represented by Metal Detector: a tool that uses electromagnetic induction to detect the presence of metals.
Very promising results were also obtained with LiDAR (Light Detection and Ranging or Laser Imaging Detection and Ranging), which can provide data with the laser scanning of forested areas, from which you can remove, in digital vegetation. Recent studies, based on new methods of ICP/OES or AAS (Acronyms for Induced Coupled Plasma/Optical Emission Spectroscopy and Atomic Absorption Spectroscopy) have shown that metallurgy was practiced already in the Middle Bronze Age (1600 - 1350 BC) and the local mining was also well-known in adjacent sites of the Valley itself (13), (14), (15), (19), (20).

Val Ceresio would, therefore, since the Bronze Age, the streets of exchange of metals between the Mediterranean, the Po Valley and Europe Transalpine (19).

Conclusions
From these partial and preliminary data, it is possible that findings are part of megalithic constructions complex, even archeoastronomically oriented, interesting the slopes of Monte San Giorgio, already known for its Palaeontological significance. This mountain, whose peak is located in Swiss territory at 1097 m asl, could represent a sort of "sacred mountain” for prehistoric peoples (probably proto-golaseccchians), which left evidences related to Neolithic and Bronze Ages: periods of megalithism appearance.

This hypothesis could be further supported by desirable archaeometric and archaeometallurgical researches on found materials in the place, with the help of new little-invasive (or microinvasive) techniques of archaeological investigation now available.

Bibliography

6) Biagi P., Nisbet R., Popolazione e territorio in Liguria tra il XII e il IV millennio b.c., in AA.VV., Scritti in ricordo di Graziella Massari Gaballo e di Umberto Tocchetti Pollini, Milano 1986; 19-272


16) De Mortillet, G. Sépultures anciennes du Plateau de Somma (Lombardie), in Revue archéologique, 1865, pp. 453-468; 1866, pp. 50-58.


24) Pirondini A. Site near Finale Ligure. The Megalithic Portal. Andy Burnham Editor. 2010; http://www.megalithic.co.uk/article.php?sid=26588


30) Tizzoni M. Incisioni all’aperto nel Finalese, Liguria. Bollettino del Centro Camuno Studi Preistorici.1975; 12, Capodiponte (Brescia).


(*) To our dear father and grandfather Giorgio Pirondini who made us experienced the beauty of Ceresio.

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