

Culture, Politics, and Economics: Alcohol and the Dynamic Social Environment of Celtic Europe

The emergence of Celtic culture during the European Iron Age substantially contributed to the development of modern cultures and histories. Archaeological evidence indicates that alcohol and other feasting practices had a significant foothold in the Celtic culture. While certainly not being the only significant driver of cultural development, alcoholic beverages shaped the cultural geography of Celtic Europe through trends of trade, diplomacy, and environmental dependence.

The European Iron Age occurred from approximately 800 BCE to 1 BCE. This designation had been attributed to a shortage of tin due to various trade disruptions in the Mediterranean that forced many metalworkers to find alternative materials to bronze, which was chiefly iron.¹ When tin was again readily available in Northern Europe, and there was an increased bronze reserves from recycled implements, iron became cheaper, stronger, and lighter in comparison. The beginning of the Celtic Age is marked by the emergence of Celtic cultural groups in 600 BCE and generally ends with the conclusion of the Gallic Wars in 58-50 BCE, in which the Roman Julius Caesar conquered the whole of Gaul.

Like all groups and cultures in human history, the Celts were bound to their physical environments. While this culture was spread throughout the European peninsula, various tribes emerged with diverse styles and social organizations. They continuously acted upon their landscapes through settlement and travel, creation and destruction. As such, identifying one component of the Celtic culture highlights the larger human-environmental relationship of Europe at this time and strives to link the various groups present within the Celtic territories.

This paper will explore how alcohol influenced the Celtic, and by extension, the modern European cultures found in these regions.

A Brief History of Celtic Cultures

The ancient Celts were a collective group of tribes bound by common—though not exact—languages, cultural practices, and religions. When the distinctively Celtic culture emerged is still largely debated across various disciplines. Traditionally, it was believed that the Celts originated in the first millennium BCE in West Central Europe, while their characteristic language emerged later. Oxford archaeologist Barry Cunliffe (2018) offers an alternative hypothesis, which suggests that the Celtic language originated in the Atlantic zone as a *lingua franca*, spreading Eastward towards the middle of the third millennium BCE. Due to this critical language, the modern classification of Celt refers to the populations who most habitually spoke Celtic in the European Iron Age until the Gallic wars of 58-50 BCE.² In Central Europe, the Iron Age is divided into two periods: the Hallstatt period (c. 1200-450 BCE) and the La Tène period (c. 450-1 BCE).

The Hallstatt culture is named after the lakeside village of Hallstatt in the Austria Salzkammergut region and largely encompassed the territories of modern Austria, Southern Germany, the Czech Republic, and Slovakia. This period takes place within the transition between the Late Bronze Age and Early Iron Age of Europe. The early Hallstatt period is associated with the shift in material culture and burial practices.³ In particular, the rising popularity of inhumations generally overshadowed the earlier practices of cremation found in earlier Bronze Age sites. The latter half of the Hallstatt period more distinctly adopts themes in Celtic art, increased inhumation rates, and the beginnings of iron weaponry. The main community at Hallstatt, Austria exploited a number of salt mines in the region, which has aided

in the exceptional preservation of many organic materials ranging from shoes, cloths, and tools of many forms.

The La Tène period saw a significant territorial expansion which corresponded to modern France and Belgium, Netherlands, much of Germany and Poland, and Northern Italy. Centered in the Gallic region in France, Belgium, and Switzerland, this culture was largely distinguished by the use of curving decorated lines in art and metalworking.⁴ The name comes from the La Tène archaeological site north of Lake Neuchâtel in Switzerland. Extensive regional trade has been traced to burial sites of this period where stylistic influences can also be traced to largely Mediterranean cultures. Metalwork stylistically diverges from the earlier Hallstatt culture through intricate spirals and curvilinear animal forms on fine bronze vessels, armor pieces, and jewelry.

The first known recorded use of the word “Celt” (Greek *Keltoi*, Latin *Celtae*) is in the writings of the Greek Geographer Hecataeus, dating back to the sixth century BCE.⁵ This single word has generated various meanings for separate political powers at this time, most significantly from the Etruscans, Greeks, and Romans. For these cultures, the leading perception of the Celtic peoples were dominated by warlike, barbaric fantasies. While these Mediterranean cultures largely referenced the Gallic tribes to their north, they would later encounter many more groups through trade and conquest. The most commonly referenced tribes in this paper include the Gauls and the Britons.

The Gauls emerged North of the Alps around the fifth century BCE in the La Tène culture and are distinguished by their use of the Gallic Celtic language form. By the fourth century, they had already spread as far west as modern France, Belgium, and Switzerland, while also occupying the central territories of Southern Germany, Austria, and the Czech Republic.

The Gauls were made up of many tribes or many governing bodies, though they were known to unify entire armies in large military operations.

Briton culture emerged in the modern British Isles from the La Tène culture until the settlement of Anglo-Saxons during the fifth century CE. The culture is distinguished through their use of the Brittonic language and a generally slow adoption of the established La Tène metalwork style.⁶ Following the Gallic wars, the Briton culture persisted in the northern territories at the edge of Hadrian's wall, a Roman fortification spanning seventy-three miles in northern Britain.

Artifacts of Environmental Dependence

Archaeological evidence of alcohol production in Celtic Europe indicates a high prevalence of beer, ale, and mead production. Evidence of pottery sherds, bowls, and fruit pip impressions were excavated from numerous sites dating to the Celtic age, including burial mounds and granaries.⁷ Modern archaeologists commonly analyze stable isotopes obtained from skeletal material. These isotopes identify prominent food resources consumed during an individual's life based on specific isotopic signatures. In a study of La Tène period inhumations in the Czech Republic and Austria, a prominent distribution of C3 (carbon-3 isotopes, indicating grain subsistence) were identified. This was interpreted as a byproduct of habitual millet consumption, which could include both bread and beer. Notable artifacts recovered from this region include a ninth-century bronze luxury bucket from the modern-day city of Kladina (Kladno), Czech Republic. This bucket was analyzed through modern gas chromatography/mass spectrometry, which separates and detects the chemical components of a physical sample that researchers use to reconstruct the type and quantity of organic substances from artifact objects. Palynological techniques (study of pollen grains and spores) were also used, including the

sampling and concentration measurements of specific pollen grains and spores in an artifact. These tests positively identified the compound miliacin, a chemical signature of millet, and assorted pollen grains of various herbs.⁸ These compounds indicate intentional fermentation in this bronze vessel, with added herbs including mugwort (*Artemisia vulgaris*), ribwort (*Plantago lanceolata*), horse mint (*Monarda punctata*), allium (*Allium sativum*), and others, for taste. These herbs were most likely harvested from the local landscape, giving *terroir* to the beer produced. The final product would be a luxury form of millet beer produced between the end of the Late Bronze Age and the Hallstatt Period. Unlike modern beers, this product would also not reach carbonation (understandably, many readers may be disappointed in this fact) though its composition likely would have resembled a typical lager or ale which can be enjoyed today.

An excavation of the Celtic settlement of Hochdorf, Germany, dated to the fifth/fourth century BCE, uncovered a large array of wheat and barley samples.⁹ These grain samples appeared to undergo malting, a process that converts grains into malt through steeping, germinating, and drying. As the grain samples were morphologically similar to modern grains, indicating intentional domestication, the malting process could be studied on modern samples.¹⁰ Based on artifacts from this site, the malting process most likely involved soaking with local water sources, drying on a plate of woven reeds, and storage in an artificial ditch. The Celtic beer produced in this region was most likely a dark, smoky, and slightly sour beverage, with lightly caramelized grains and floating yeast which produces a light lemony taste. Additional evidence of mugwort and carrot seeds suggests that other local vegetation was added to improve the overall taste. Similar malting practices have been identified in southern France, Austria, Switzerland, and Czechia, indicating a uniquely regional process that produced an equally unique beverage. Further ceramic evidence from the modern-day city of Heuneberg also shows that

Mediterranean wines were introduced to Southern Germany by the late seventh century.¹¹

Organic Residue Analysis (ORA), which chemically investigates micro-remains adhered to artifacts, demonstrates the addition of wild herbs, animal fats, honeycombs, fruits, and harvested millets to these wines.

These artifacts demonstrate how one region appears to have habitually consumed two strikingly different beverage types at the same time, one a precursor to ale and the other a rich dry wine. Evidence from these regions also indicates a complex production process which, likely, originated from tests which greatly exceeded the total of one's life. This, then, becomes a question of ethnohistory, how had this fermentation process originated, where was it most practiced, and how many iterations had it undergone before being perfected?

In Mediterranean France, bridging into southern Spain, a collection of Etruscan amphorae (c. 500-475 BCE) was analyzed for organic compounds.¹² Although not strictly Celtic in origin, this evidence further suggests international trade and intentional modification of wine recipes for separate uses. Based on existing studies of Etruscan wines, two different ingredients were unique to these amphorae samples.¹³ These ingredients included pine resins and herbs native to Mediterranean Europe. These additives suggest that Celtic traders adapted the Etruscan wine to better suit their familiar diets, acting as a process of cultural diffusion. Additionally, adding tree resin to wines was a popular medicinal practice throughout the ancient world. This trade network of Etruscan wine may also be the earliest example of the multinational alcohol trade in Central Europe.

These regional case studies indicate two critical themes. First, the variation of fermentation and ingredients in Celtic Europe seems to be extraordinarily dependent on local environments. Herbs harvested from the Czech Republic are unlike those produced in Spain due

to their differing climates and topographies. This is significant because the availability of local ingredients can alter the desired tastes of groups in those regions, where one may prefer tastes associated with the Atlantic coast and the other prefers tastes from the Eastern region. Second, the case studies from Heuneberg and France indicate that beverages were intentionally modified to better suit these local taste preferences. The addition of local ingredients from internationally traded goods transforms the beverage into one with two distinct *terroirs*. The base is purely Mediterranean, while the addition of herbs and spices is likened to Central Europe.

Cultural and Regional Variation in Drinking Practices

Cultural drinking practices are reflected in the archaeological record through artifacts, ceremonial or ordinary, as well as in physical sites. Drinking vessels, in particular, come in all shapes and sizes as determined by regional styles. Greco-Roman vessels are most famously formed as stout containers, amphorae, or bowls and are typically made of ceramics or glass. The Skyphos (Fig. 1) in particular demonstrates a stout bowl shape with two handles. The iconography also shows human and



anthropomorphic figures engaged in activities related to Greek myths.¹⁴ Celtic vessels, on the other hand, are most notably tall and thin, and made from metals, wood, or animal parts. Some modern drinking vessels, including the Scottish quaich, trace their origins to the regional variations of Celtic vessels.

One of the most famous examples of Iron Age drinking vessels is the Basse Yutz Flagons, a pair of nearly identical copper vessels.¹⁵ These vessels, held by the British Museum, reflect motifs of various fauna, including a dog handle and various aquatic birds (Fig. 2). Unlike Greek vessels, these flagons do not share anthropomorphic icons and instead rely on animal designs. These vessels were each cast from a single copper sheet, with the handle, lid, and stout attached using copper pins and cast resin, decorated with bits of red coral, resin, and glass. These vessels were found with an Etruscan-inspired stamnoi, a wide wine-mixing pot, likely belonging together as a set.¹⁶ The inclusion of faunal decoration is believed to have religious motivations as well as cultural significance. In some early Celtic artwork, the duck has iconographic ties to the sun, occasionally found in some artifacts to visually “carry” the sun across the sky.¹⁷ Dogs, or wolves, have previously been linked to interpretations of the underworld in ancient history as well as early Celtic artwork. The inclusion of other



environmental resources/icons (including red coral and various bird motifs) also indicates an animistic belief system, where all natural life has a soul and nature itself is the product of an organized material universe. These beliefs are central to ancient Druidism, members of whom represented the ruling classes in Celtic culture. These vessels were most likely for ceremonial purposes, as a symbol of nobility, or as an accompaniment to large political feasts.

The Celtic feast acted as a ritual practice in social interaction between the tribe leader and other members of the group, organized largely by status, as well as a practice in social drinking. Historical evidence suggests that alcohol was consumed liberally during the feast in addition to meats and botanicals. The feast also served as a cultural gathering to elevate one's status, with gifting and entertainment being a demonstration of one's wealth. Gifts could refer to any valued commodity, but many historical accounts indicate that food and drinks were the most successful in competing with status.¹⁸ Hospitality served as a recurring component of Celtic culture, and it was customary to serve guests before addressing general business, a practice still in effect throughout Europe. The Southern Gaul region had been the most exposed to the Mediterranean since the rule of the Ancient Greeks. This has allowed for the transfer of rituals and cultures up until their defeat by the Romans, including the famous Greek symposium.¹⁹ The Greek symposia represented the gathering of intellectuals, elites, and artists to feast and converse. A commonly linked factor of these gatherings is the consumption of alcohol in high quantities. The Celtic imitation of symposiums most likely began in the Late Hallstatt period due to the influx of Greek trade and Attican imports. The Celtic symposium would have likely reflected the feasting practices already established in the region with the addition of Greek games or entertainment. This gathering would have likely been motivated by social interaction between the elite Celts, coupled with the sharing of ideas and creativity. It can be assumed that the Celtic symposia took inspiration from Greek culture, but fully mirrored practices can not yet be determined through historical or archaeological evidence.

Variation of Celtic drinking practices is most strikingly seen in differences between the Northern and Southern tribes, a trend potentially practiced in the modern day. In a research model developed by Dr. Ruth C. Engs (1991), modern drinking practices in Northern Europe are

distinctly different from Southern regions in terms of moderation and abstinence periods, and these variations may be traced back to Roman times. Classical historians recorded that Northern populations would commonly drink excessive amounts of mead during religious events and feasts. However, there is little to no indication of excessive consumption in non-ceremonial events.²⁰ In the South, wine has been an integral part of daily life since the Ancient Greeks, however public intoxication and “excessive drunkenness” had not been recorded until the mid-1st century BCE. Increased public drunkenness was believed to be the product of the rapid urban expansion during the Late Republic. This model suggests two important factors. First, the expansion of Roman influence in Northern/Central Europe was impactful in modifying Celtic practices but was still limited by their pre-existing ritual practices. The culture that was there for longer ultimately “won out” in aspects of daily life, including the dietary planning of when drinking would be most acceptable. Second, this implies that the primary mode of Celtic drinking, as detailed by classical sources, would be in periods of excessive consumption followed by prolonged periods of abstinence. Sporadic drinking in Northern Europe has previously been hypothesized as a product of climate-induced famine and limited resources which prolonged shelf life. If it was culturally practiced to “consume while the product is still fresh,” then ordinary environmental hazards could have forced abstinence on local populations, from which cultural practices would need to adapt.

Regional drinking traits appear to be significantly dependent on Celtic cultural practices, including feasting and trade, as well as mythology and international relations. These traits are visible in the ornamentation of drinking vessels, imitation of Greek social practices, and the regional divergence in drinking excessiveness.

Romanization: Trade and Cultural Diffusion

Trade routes have often been the sites of cultural diffusion in the ancient world. The Silk Road, for example, led to the importation of regional goods including animals and medicine. With the trade of regionally-derived goods comes a further trade of ideas, techniques, and technologies.

Roman trade in central Europe was prominent long before the Gallic Wars (58-50 BCE), a period of intense conflicts waged by Julius Caesar against the northern tribes. This trade was centered particularly around the Greek city of Marseilles, the oldest still surviving city in France, where raw resources were frequently exchanged between national and tribal borders.²¹ In war, the Roman legions encountered the many unified armies of the Gauls for much of the war before ultimately conquering the territory. Trade flourished significantly during this period. The distribution of Italic artifacts was much higher during and immediately following the war than in any older time. Among several products, including metals and furs, Italian wine was the most valued by the Celtic tribes of Gaul. Greek historian Diodorus Siculus (c. 1st century BC) wrote of this trade in *Library of History*:

[...] The Gauls are exceedingly addicted to the use of wine and fill themselves with the wine which is brought into their country by merchants, drinking it unmixed, and since they partake of this drink without moderation by reason of their craving for it, when they are drunken they fall into a stupor or a state of madness. Consequently, many of the Italian traders, induced by the love of money which characterizes them, believe that the love of wine of these Gauls is their own godsend. For these transport the wine on the navigable rivers by means of boats and through the level plain on wagons, and receive for it an incredible price; for in exchange for a jar of wine they receive a slave, getting a servant in return for the drink²².

If this account is to be considered legitimate, this would imply that the value of Italian wine in Gallic society was equal to one slave. This exchange rate more or less confirms the value of Italian wine, while a slave provides labor for the bulk of their life, a single amphora of wine lasts for very little. Additionally, this quote also highlights the critical presence of Roman trade items in Gaul. Driven by the increased demand for Italian wine, Siculus suggests that Roman

merchants would navigate through rivers and across open plains. This tradeoff implicates Roman wine as a significant agent of cultural interaction between these two groups.

Archaeological evidence indicates a steady increase in Italic amphorae in southern Gaul following 200 BCE and peaking during the Gallic Wars of 50 BCE. As detailed by Dr. Barry Cunliffe (2018), the distribution of Italic-designed amphorae, referred to as Dressel 1A, indicates that trade along the seaways of Western Europe was heavily influenced by Roman products. As it cannot be assumed that Roman merchant ships were heading the seaway routes up to southern Britain, it is implied that Italic products later became a valued commodity in Gaul.²³ Wine, like most agricultural products, has a distinctive tie to its originating environment. The chemical makeup of the soil, the climate, and the regional topography all impact the taste of the wine itself. This *terroir* produces a critical regional significance for every amphora of Roman wine.

Roman wine, according to classical historians, was significant to both Italic and Celtic cultures. To trade this with the Celts would be comparable to trading a piece of the Italian landscape, along with its rich cultural practice of wine production. This prospect requires the giving of resources deemed valuable to the Celtic tribes, equal to one healthy servant, to match the value of wine goods to Roman culture. This demonstrates not only how important alcohol was to both nations, but also highlights the impact this product would have had on the culture of these groups.

Discussion

These case studies demonstrate the importance of alcohol in the social geography of Celtic Europe because alcohol served as far more than just a drink to these cultures. Fermented beverages served as an agent of international trade, regional relations, and religious practice. Geography examines the relationship between humans and their environments, a trend no better

examined than through the harvesting and application of natural goods. Producing alcohol represented the manipulation of the surrounding environment, through the cultivation and foraging of wild grains, while consumption represented the merging of cultures through feasting and incentivized trade. As demonstrated in Hochdorf, the intentional production of malted beverages indicates a long-practiced cultural history to perfect the fermentation process. This illustrates complex social organization within the region, as well as the powerful applications of ethnohistorical traditions. Trade, as shown with the intentional modification of Roman wines, introduced the Celtic tribes to Roman cultural feasting and dietary practices. This interaction appears to, according to Dr. Eng's hypothesis, have acted in cultural diffusion between these two nations in the form of imitation symposia and drinking practices that transformed in the modern day. Social processes of the Celtic culture can be successfully interpreted through the study of their resource applications and alcohol practices.

Findings from these case studies, as well as various geographical and historical studies of the topic, can prove to be an instrumental part of geography education. A central theme of geography education, as discussed earlier, is the relationship between the natural environment and sociocultural systems. While younger students may not have a connection to alcohol as prominently as college students, these case studies may still provide a tangible real-world step towards understanding nature-society relations. When coupled with other examples, such as agriculture and water resources, students will then understand the broad scale of how humans utilize natural resources for subsistence and culture.

Another theme beneficial for social sciences education comes from Dr. Eng's hypothesis, which highlights the connection between past events and contemporary systems with a single cause-and-effect scenario. Much like how the spatial relations between Roman and Celtic

territories can be traced through modern drinking culture, the interconnectedness of historical and modern events can be better taught to a wider audience when exposed to easily digestible concepts such as this. For example, students interested in economic affairs can take this singular hypothesis and apply it to ancient civilizations and modern urbanism, or students interested in biology can apply this to events in environmental history and contemporary conservation methods.

A third theme in geography education which can be taught through this research is the power of cultural diffusion. With simply using this as an example, a student can be challenged to explore other diffusions of culture in other topics like food, mannerism, beliefs, values, etc. In a globalized world such as our own, such knowledge is becoming increasingly more critical as people everywhere are constantly adapting to international relationships. By exposing students to this concept, that culture itself is intertwined with other cultures, we can teach our future generations just how expansive our world really is.

Conclusion

Alcohol in Celtic Europe had a substantial impact on cultural development, including cultural diffusion through international trade, environmental dependence, and regional drinking customs. Archaeological, historical, and geographical evidence demonstrates the dependence on environmental resources for producing regional varieties of fermented beverages. The cultural values of the ancient Celts can be successfully extracted from their recorded drinking practices as well as from physical artifacts.

Further research that may benefit from this study includes other topics in environmental relations and the historical geography of Europe. Continued study of alcohol and other cultural resources of this period would draft a greater understanding of environmental history,

humanities, and archaeology for the ancient Celts and other cultures. Additionally, this study has highlighted the degree to which alcohol geography as a subject benefits from interdisciplinary themes in archaeology and ancient history.

ENDNOTES

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