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ROMANIZATION AND DRINKING NORMS: A MODEL TO EXPLAIN DIFFERENCES IN WESTERN SOCIETY*

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THE HYPOTHESIS

As a social science researcher over the years I have noticed a striking difference in drinking\(^1\) practices and attitudes between various western cultures and nations, particularly in western Europe between the north and south. These differences do not appear to be just a modern phenomenon. Why have such differences persisted? The purpose of this paper is to propose a model which explains the origins of these divergent cultural norm\(^2\) in modern western European society.

From antiquity, distinctly different practices and attitudes concerning alcohol consumption developed in the northern and in the Mediterranean areas of western Europe. During the expansion of the Roman Empire, rural areas of west central Europe became Romanized.\(^3\) As a part of this process, indigenous inhabitants adopted some customs from urban Roman culture, including wine drinking with meals. When Rome's influence declined in the west, former provinces which retained Roman culture also retained drinking patterns characterized by moderation. The

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1 Drink and drinking are used in this paper to denote alcoholic beverages and their consumption and not consuming any liquid.

2 Culture is defined by Heath "as a convenient short hand label that subsumes broad patterns of thinking and behaving that are manifested in daily life by individuals". In regards to alcohol these norms include consumption patterns and attitudes towards alcohol and its use (Heath 90:251)

3 Rome, Roman and Romanization designate the cultural, legal, political, religious, social and other influences and changes instigated by various aspects of the Roman Empire.

Germanic cultures beyond the Rhine, untouched by direct Roman influence, continued their traditional heavy, feast drinking patterns. Ale and mead, not wine, were the preferred alcoholic beverages. Britain lost its veneer of Romanization and returned to pre Roman Celtic practices, while Gaul integrated some aspects of northern drinking into its predominantly southern patterns. These patterns solidified during the early Middle Ages and became the underlying norms for the cultures overlaying these areas into modern times.

Current Western European drinking Norms

Two major drinking norms are dominant in Western Europe\textsuperscript{4} (Davies 1984: 26; Heath and Cooper 1988) and to some extent a blending of the two norms in west-central Europe. The Southern European ("Mediterranean", "wine drinking" or "wet") patterns are found in Italy, Spain, Portugal, southern France and Greece. The Northern European ("Nordic", "beer/spirits" or "dry") patterns tend to be found in Scandinavia, the Netherlands, Britain, and north and eastern Germany. A blend of the two norms (blended pattern), are found primarily in northern France, southwestern Germany, Belgium, Austria and Switzerland.

The southern drinking norm accepts wine, which is the most commonly consumed alcohol beverage, as a normal part of the daily diet. Wine is generally consumed with meals, drunkenness is not accepted even at celebrations, and children are given diluted wine with meals. Though there is high per capita consumption there are few perceived psycho-social problems related to its use. There is little social pressure to drink. Italic based languages are spoken, viticulture is a major industry and all of these countries were provinces of the Roman Empire (Jellinek 1962:388; Heath and Cooper 1988; FAO 1983; Davies 1984:26; Ullman 1958:51).

In contrast to these Mediterranean norms, the northern attitude about alcohol consumption is one of ambivalence (extremes of heavy drinking vs. abstinence). Heavy episodic drinking occurs on special occasions, some people drink for the purposes of getting drunk, public drunkenness is more or less accepted. There is often social pressure to drink and drinking often occurs without food. Age limitations are often established for legal alcohol consumption and alcohol is generally prohibited for children even at family functions. Though per capita consumption is lower

\textsuperscript{4} Secondary cultures spawned by European colonialism since the sixteenth century in other geographic areas of the world have tended to follow the patterns of the mother country. For example, Heath (1984:158) suggests that Argentina and Chili are culturally Romanized wine-drinking nations with little evidence of major alcohol-related social problems. In contrast North America and Australia/New Zealand are primarily beer drinking countries with many perceived alcohol related problems.
compared to the southern cultures, there are many perceived psycho-social problems related to drinking. With the exception of Britain these northern cultures were not Roman provinces. They speak a Germanic based language, it is too cold for viticulture and beer/ale or spirits are the most commonly consumed and manufactured alcoholic beverages (Davies 1984:45,55; FAO 1983; Jellinek 1962:384,387).

The blended pattern is characterized by daily drinking of wine or beer with meals; spirits are consumed at other times without food. Per capita alcohol consumption is high but public intoxication is frowned upon. Both Germanic and Latin based languages are spoken, suitable climatic areas produce wine and all were Roman provinces (FAO 1983; Jellinek 1962:385,388).

Correlation between being a Roman province, wine drinking, viticulture and speaking a Latin based language

Differences in cultural characteristics of western European cultures including being a Roman Province, the presence or absence of viticulture, speaking a Romance or Germanic based language, high or low per capita consumption, and wine or ale/beer as the most commonly consumed alcoholic beverages (FAO 1984) were used to calculate Pearson-rho correlations. Results (see Table 1) indicate a significant positive (p < .001) association between being a former Roman province, Romance language, viticulture, wine drinking and a high per capita consumption. These high correlations form the premises upon which this model is based.

EVIDENCE OF NORTHERN DRINKING NORMS FROM ANTIQUITY

Both archaeological and historical sources suggest that the indigenous northern beverages were mead and ale and that heavy feast drinking to intoxications was common. However, when examining the historical sources it must be kept in mind that early classical writers may have been biased in their reporting for political or military reasons when describing the "Barbarian" outsiders, "noble savages" or enemies. Some of the first accounts from the Mediterranean world of the northern inhabitants mention their heavy drinking to intoxication.

Many classical authors\(^5\) including Polybius (II.9) in the mid 2nd Century B.C., Diodorus Siculus (V.26.3), in the early 1St. Century B.C., Plutarch (Cam.XL.1-6) in the late 1St. Century A.D., and Amianus Marcellinus (XV.12.4-5) in the 4th Century A.D., describe the Gauls as drinking to excess at religious feasts, before and after battle, and during negotiations often with negative

\(^5\) All classical references are from *Loeb Classical Library.*
consequences. However, by the early 2nd Century A.D. some northern Celts were described as having adopted Roman customs and manners and to have become Romanized (Tacitus Agric. 21). At the end of the empire there are few descriptions of drunken Gauls but there are references to intoxication among various Germanic groups (Gregory of Tours, Bede).

The Germanic groups north and east of the Rhine were described from the late Republic until the end of the empire, and even into the Middle Ages, as heavy feast drinkers commonly consuming alcohol to intoxication and not adopting Roman ways (Tacitus Germ. 22-23; Ann. 1.50-51; Sidonius Apollinarius VII.3.2; Braudel 1984:223-234; Thompson 1982:245).

When wine was imported into the north central area of Europe, the indigenous people did not mix it with water which was considered the proper civilized way to consume wine. Cicero, during the early 1st century B.C. cited by Ammianus Marcellinus (XV.12.4-5), suggests that the stiff tax on wine exported to Gaul may have been levied by the Romans to encourage them to mix it with water, and thus force the Gauls to drink with more moderation. Tchernia (1983:93) concurs with this ancient interpretation.

The indigenous alcoholic beverages of north-central Celtic and Germanic groups were ale and mead. Alcohol and drinking was considered important. Mead and ale may have been a vehicle of kingship in the inauguration ceremony, a symbol of sovereignty to accompany chiefs into the Otherworld and/or a socio-political mechanism of maintaining position and power(Arnold 1986). During feasts the whole population took part (Davidson 1988:40-45). Many classical authors beginning with Pytheas (French 1884:3-4), in the 3rd century B.C., Diodorus Siculus (V.26.3), at beginning of the 1st Century B.C., Caeser (BG.V.12,22), in the mid 1st century B.C., Strabo (Geog. IV.5.4-5) and Pliny the Elder (HN XIV.29.149) during the 1st Century A.D. describe ale or mead as the common beverages of the northern world.

Archaeological evidence supports the classical authors in their descriptions of ale and mead drinking among the Celtic and Germanic groups. Moreover, some archaeological finds suggest that ale and mead may have been drunk at least from the time of the so called Bell Beaker people (ca. 2000 B.C.) (Sherratt 1986; Piggott 1964:102). The central European Urnfield culture (ca. 1200-900 B.C.) produced hammered bronze buckets (situla), handled cups and strainers which could have been used for drinking ale or even imported wines (Piggott 1964:155).

The importation of wine and drinking gear, along with indigenous ale and mead remains, have been found in chief's graves of the Hallstatt culture (ca. 550 B.C.) in west central Europe (Biel 1981:16-18; Ross 1986:15-18). In the La Tène culture (ca. 500-100 B.C.) bronze flagons, drinking
bowels which may have been used for both imported wine and native drink have been found in graves (Megaw 1970:74; Ross 1988:20). In areas north and east of the Rhine imported Roman vessels and drinking horns have been found with traces of malted beverages in other Iron Age sites in the 2nd Century A.D. (Stjernquist 1977:18-19). Dietler (1990:382) suggests that the importance of drinking and feasting in western European Late Bronze Age and Early Iron ages societies is clearly attested by the patterns of inclusion of various types of drinking gear in elite graves.

EVIDENCE OF SOUTHERN DRINKING NORMS FROM ANTIQUITY

Southern Mediterranean drinking patterns have been based upon classical writings and archaeological evidence. As with the description of the northern cultures, it is difficult to determine if authors were describing actual events, presenting morality homilies or interpreting how people in or out of political favor were expected to act. Other than descriptions of extreme behavior little has been written about daily drinking practices from classical sources.

Modern interpretations suggest that for most of Mediterranean, including Roman and Italian, history, the drinking norm has been one of moderation (Hyams 1965; Jellinek 1976; Purcell 1985; Tchernia 1986; Younger 1966: Chapt 4). Wine was generally mixed with water to avoid intoxication and was generally consumed with meals (Athenaeus X.426-427). Ale and the other northern beverages were scorned by the rich and were considered the drink of poor barbarians (Amianus Marcellinus XXVI.8.2, XIV.6.26). Wine, and in particular mature vintage wine, was considered an integral part of civilized life. Vineyards were also considered essential to the economics and the culture from the early Republic through the end of the Empire and into the early Middle Ages (Cato I, XXXIX; Varro I; Pliny HN XIV.XVII; Columella III, XI, XII; Younger 1966; Jones 1986:766).

The Romans adapted many aspects of classical Greek civilization including the symposium or banquet. Banquets were found throughout Roman history and were first described by Plautus (Per. V.773-774). These elegant dinners included mature vintage wine, elaborate food, and beautiful tableware. For entertainment, toasting, singing and discussion were common. The banquet guests generally reclined on a couch to partake in the feast (Athenaeus Deip. X, XI). Archaeological finds of both simple and elaborate drinking gear used for elegant banquets and more simpler meals have been found in areas occupied by the Romans.

From the foundation of Rome (753 B.C.) wine was probably available although it may have been scarce. Archaeological evidence suggests Etruscan wine trading interests began approximately
100 years after this traditional date (Dietler 1990:353-354). Imported drinking gear and amphorae were also found in the Rhône-Soane basin of southern France. When Etruscan trade diminished, it was augmented by Massaliot products (Garnsey, Hopkins and Whittaker 1983). In the mid 6th century B.C., development of southern Italian and Sicilian vineyards began. They expanded rapidly after the 5th century B.C. Between 250 and 150 B.C. the Roman Republic gained control of the entire Mediterranean basin and trade and viticulture spread (Younger 1966:134).

By the late 3rd century B.C. the thermopolium where hot wine drinks and snacks were served were mentioned in the literature (Plautus Rud. II.529). These establishments along with wine shops were found in urban areas and along the country roads from this period until the end of the Empire (Younger 1966:166-167). Archaeological remains, particularly in Pompeii and Herculaneum, have been found to substantiate the classical literature. By 100 B.C. wine in some form was thought to have become the daily drink of all Romans both rich and poor (Younger 1966:169; Hyams 1965: 130-131; Pliny HN XIV.14.91; Cato XXIII, XXV). Much of southern Iberia and France was Romanized during the 2nd and 1st century B.C. respectively. Viticulture and wine drinking also became common in these areas which became culturally similar to Italy (Strabo III.2.6; Younger 1966:154; Sutherland 1939:v).

Drunkenness was rarely mentioned by early authors. However, in the 3rd Century B.C., Plautus (Mostel) mentions inebriation in a play. During this same era the cult of Dionysus diffused out of Greece into Italy. However, it was banned in 185 B.C. due to purported ritual murder associated with heavy wine drinking (Cicero II.37-38). During this century, Polybius (XXXII.11) implied that young Roman contemporaries wasted much time at banquets. In the mid-1st century B.C. increased descriptions of drunkenness are described by classic authors. The ability to consume large amounts of alcohol and drinking games began to be common. One author (Lucretius III.1050-1068) described apparent restlessness and boredom among the rich which may have been a factor in this heavy drinking. However, intoxication was frowned upon by most classical authors of this and later time periods including Pliny (HN XIV.27.140-145), Seneca XVIII.1-7), and Marital (X.47) among others.

The peak of public intoxication occurred during the mid-1st Century A.D. according to Jellinek's (1976:1735) interpretations of classical authors. Not only the upper class (Pliny HN XIV.28), but the new rich (Petronious Sat. I), the imperial family (Seutonious IV, V, VI) and even the poor (Ovid, Fasti) were described as engaging in drunkenness and debaucheries. In the late 1st Century A.D. both Plutarch and Seutonius praised prominent men of affairs for their moderate drinking whereas this behavior among public figures had not previously been singled out for praise. This may have reflected either a change in attitude or behavior. At the beginning of the 2nd century, upper class

moderate drinking began to be described again by classical authors. Tacitus (Ann. III.55) credits this change in behavior to the Emperor Vespasian. By the 4th century drunkenness was no longer seen as a problem of public figures (Ami. Marc. XVI.5.1, XXI.16.5-8). Although wine was provided to Romans at a cheap price and used as payment, there was little evidence of drunkenness during this era (Jones 1986:705).

The reasons for this period of increased drinking and drunkenness between the time of Sulla (ca. 80 B.C.) and Hadrian (ca. 120 A.D.) is addressed by Purcell (1985:14-15). He suggests that the pattern was associated with rapid urban growth leading to much social stress and anxiety. When urbanization slowed this pattern also ceased. Purcell bases this explanation on other historical eras where rapid urbanization has been correlated with increased in drinking and drunkenness. However, Younger (1966:215) argue that even during this time period, writings concerning heavy drinking and debaucheries could have been the exception rather than the rule. Of course, this same argument could be used for the heavy drinking "barbarians" discussed previously. However, descriptions of drunkenness among northerners is continuous from antiquity, throughout the Middle Ages, and into modern times. In contrast, reports concerning drunken Italians have been relatively rare, other than from the late Republic through the early Empire.

**FACTORS FROM ANTIQUITY CONTRIBUTING TO THE ORIGINS OF THE DIFFERENT DRINKING PATTERNS AND NORMS**

**Climate conducive to Viticulture**

A primary factor for the development of different patterns and beverages choices may have been climate; if it was favorable to viticulture wine was available for daily consumption. The vine grew naturally in the southern Mediterranean but not in the more northern areas of Europe. The northern limit for modern viticulture is between 30 and 50° and 20° isotherms (de Blij 1983:13-15). Today the major areas of viticulture overlay those of the former Roman provinces with suitable climate.

As Romans began to occupy various territories, they brought viticulture with them into northern Spain, and up the Rhône into Gaul. After Caesar's conquest in 57 B.C. wine consumption increased

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6 Support for Younger's argument is reflected in modern American society. Most current literature, concerning alcohol and drinking, focuses upon serious or sensational problems caused by alcohol and alcoholism. Few discuss normal drinking patterns. Also, though there were increased social concern about alcohol abuse beginning in the early decade of the 1980s, there has been no evidence of increased abuse (Engs and Hanson 1989; Engs 1991). Furthermore, only a small proportion of people who drink have alcohol related problems while the vast majority of drinkers consume alcohol in moderation without problems.
among all social classes in Western Gaul as evidence by the many finds within a variety of social class distributions (Galliou 1984:29). In Britain though there is some evidence of the vine, viticulture did not readily thrive and wine was probably only used by rich villa owners or urban dwellers (Williams 1977:337; Frere 1987:285; Younger 1966:164).

**Lack of consistent alcohol supply in the north due to weather**

Cunliffe (1986) suggests that sporadic heavy drinking among Iron Age Celts and Germanic tribes may have developed because alcoholic beverages were not always available due to variations in the weather. If alcohol production was limited due to the amount of honey or grain grown a "feast or famine" situation may have occurred leading to sporadic bouts of heavy drinking to intoxication when any alcohol was available. When wine was first introduced to the northerners, it was also consumed rapidly at drunken feasts. Also ale, without preservatives such as hops, tends to spoil quickly thus inducing people to consume it while it was still fresh. Finally cold, dark, nasty weather may have been a contributing factor.

**Social/economic system**

Dietler (1990:358-359) suggests that differences between the north and south may have its origins in different social/economic systems. In the northern Hallstatt (6th century B.C.) area of west central Europe, there is evidence of elaborate imported drinking gear in a few rich graves but a lack of amphorae. Wine and drinking gear may have been a status symbol limited to a rich few in a hierarchical system. In contrast the contemporaneous region of the Rhône basin in southern France has imports of numerous wine amphorae in a wide variety of settlements and graves. There are few elaborate vessels suggesting that many people consumed wine on a regular basis in a probable hieratic system.

**FACTORS OF ROMANIZATION AND CONTINUITY OF PATTERNS THROUGH THE EARLY MIDDLE AGES**

Up to this point this paper has described probable indigenous drinking norms in the northern and southern regions of Europe from antiquity. It has also discussed possible reasons for the differences based upon classical writings and archaeological evidence. The proposed model postulates that it was the Romanization of the western central areas of Europe which brought in its wake the Mediterranean custom of wine drinking in moderation and that there is a continuity in this pattern from antiquity through the early Middle Ages into the modern era.
The process of Romanization has been discussed by numerous authors therefore they will not be belabored in this article. Only factors which may have contributed to culture transmission and continuity between the ancient and modern world will be briefly mentioned. One of the major factors for the transmission of Roman culture was the military. In general the regions under the occupation of the military the longest periods of time were the ones most likely to retain Roman based languages and wine drinking habits into modern times. Around military establishments developed Canabae—wine shops for entertainment of the soldiers (MacMullen 1963; Jones 1986). Many of these later developed into towns.

Prior to, and on the heels of the military came trade, and especially wine trade. When the old trade route up the Rhône was opened to the Romans in the late 2nd century B.C., a dramatic increase in availability of Italian wine into Gaul occurred. During the 1st century B.C. increased wine trade from the newly developed Spanish and southern French vineyards into western Gaul and Britain occurred. During the 2nd Century the developing Romano-Gallic and Rhineland provincial vineyards began to supplant the Italian in trans-frontier trade (Tchernia 1983, 1986; Cunliffe 1988; Dietler 1989; 1990; Peacock 1984; Goudineau 1983; Galliou 1984).

Both the military and trade influenced urbanization which was also an important factor in the transmission of Roman culture. Urban Mediterranean civilization was brought into the rural northern areas. Besides cities and towns, rich agricultural villas were established to support the newly developing areas (MacMullen 1963 1988; Johnson 1987; Todd 1981; Jones 1986 Brown 1989; Bloch 1961).

When Roman power disappeared in the west during the 5th Century, Roman culture was preserved in most provincial areas with the exception of Britain. The church also brought Roman attitudes concerning moderate drinking. On the whole, the areas which were Christianized the earliest, and which retained the Roman Catholic religion into the Middle Ages, were also the nations which tended to retain Latin based language and culture. In more northern areas, the church encouraged the continuation of festival drinking on Christian holidays in order to gain converts. Wine also was an important part of Christian ritual.

If this model is correct, wine-drinking primarily with meals, the relative lack of public intoxication, and a Latin based language would be an end product of Romanization and should continue into modern times in former provinces. These patterns today are found in Italy, and to some extent in Spain and Portugal and southern France.

However, the norm of consuming wine with meals is not necessarily found in the more northern
areas of France, southern Germany, parts of Switzerland, Austria nor in Britain. Neither is a Latin-based language found in some of these areas. Yet all of these countries were Roman provinces. Therefore, a further factor needs to be addressed. This factor is the Germanic migrations and settlements of the late empire and early Middle Ages (Wolfram 1988; Jones 1986).

In continental Western Europe, these countries have a blended or mixed pattern of drinking. Some of their patterns reflect Mediterranean while others appear to reflect Germanic customs. This may have been due to an integration of Germanic customs into their Romanized norms or a re-emergence of Celtic customs (Wolfram 1988; Jones 1986; Starr 1971; Anderson 1974). As discussed in the first section, individuals living in areas such as France or south-west Germany today, often drink wine with meals. Beer is also consumed with meals. However, they also drink alcoholic beverages at other times without food.

Changes also occurred in Britain. The veneer of Romanization was lost as the region reverted to Celtic traditions blending with the similar culture of the Germanic Saxon invaders and settlers. Mead and ale were the primary alcoholic beverages of both these groups and heavy feast drinking has been described. Although the very rich did import wine (Johnson 1987; Frere 1987; Todd 1981; Morris 1977; French 1884).

CONCLUSIONS

Based upon the literature of western-European antiquity, along with archaeological and historical interpretations, it is concluded that in antiquity different drinking norms developed in the northern and in the southern areas of western Europe. Romanization brought the moderate Mediterranean patterns of wine consumption with meals into the western provinces. Areas which retained Roman urban culture after the decline of the western Empire, also, retained Mediterranean drinking norms. The northern areas of Europe, untouched by Roman influence, continued feast-drinking to drunkenness patterns. Britain lost its veneer of Romanization and returned to previous patterns. Gaul integrated some aspects of northern drinking into their Romanized patterns. These practices became the underlying norms for cultures overlaying these areas into modern times.
Table 1: Ranking of Western European countries from lowest to highest according to total per-capita alcohol consumption. Also indicated are Per-capita consumption of wine and beer, spoken language, presence of viticulture and status as a Roman province.

<table>
<thead>
<tr>
<th>Country</th>
<th>Per-capita consumption alcohol in liters/year&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Per-capita Consumption of beer, wine in KG/year&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Language group&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Vine growth&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Province&lt;sup&gt;d&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td>Norway</td>
<td>5.7</td>
<td>4 46</td>
<td>Germanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sweden</td>
<td>7.1</td>
<td>9 46</td>
<td>Germanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>UK (Southern)</td>
<td>9.8</td>
<td>43 121</td>
<td>Germanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ireland</td>
<td>10.0</td>
<td>3 81</td>
<td>Germanic/ Celtic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Denmark</td>
<td>12.0</td>
<td>14 132</td>
<td>Germanic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Netherlands</td>
<td>12.1</td>
<td>13 87</td>
<td>Germanic</td>
<td>No</td>
<td>Germania/ Inferior</td>
</tr>
<tr>
<td>Germany</td>
<td>12.7</td>
<td>25 146</td>
<td>Germanic</td>
<td>Yes</td>
<td>Germania Superior</td>
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<tr>
<td>East of Rhine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>13.3</td>
<td>43 69</td>
<td>Both</td>
<td>Yes</td>
<td>Raetia</td>
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<tr>
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<td>20 130</td>
<td>Both</td>
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<tr>
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<td>14.4</td>
<td>36 105</td>
<td>Germanic</td>
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<td>Raetia Noricum</td>
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<tr>
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<td>89 18</td>
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<tr>
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<td>61 48</td>
<td>Romance</td>
<td>Yes</td>
<td>Terra Baetica</td>
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<tr>
<td>Portugal</td>
<td>20.0</td>
<td>85 28</td>
<td>Romance</td>
<td>South central</td>
<td>Lusitania</td>
</tr>
<tr>
<td>France</td>
<td>20.0</td>
<td>94 44</td>
<td>Romance</td>
<td>South central</td>
<td>Lugdunensis/ Belgica/ Aquitania/ Narbonensis</td>
</tr>
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</table>

<sup>d</sup> Garnsey, Peter and Saller, Richard. The Roman Empire: Economy, Society and Culture University of California Press: Berkeley, 1987
+ Until recently considered a wine drinking country according to Smith and Hanham(1982) and Sulkunen(1976)
* Estimated
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*Not referenced in the original paper presented at conference


