A Medieval Homo Economicus?

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Many historians trace the origins of capitalism to late medieval Europe. Some emphasize the rise of urban markets in Italy and Flanders. Others point to developments in the agricultural sector.\(^1\) Homo economicus stands at the core of the capitalist system as its creator and product.\(^2\) Where and when was homo economicus born? In this article, I take a fresh look at historical documents and offer a new perspective that suggests that beliefs that support Western capitalism can be traced to the fourth century CE.\(^3\) The presence of beliefs consistent with homo economicus makes it useful to apply that concept and economic analysis to the early Middle Ages.

The term homo economicus emerged in the late nineteenth century.\(^4\) It is believed that John Stuart Mill was the first to describe the characteristics associated with this concept; the actual expression first appeared in Italy. Joseph Persky claims that Vilfredo Pareto first used it in his 1906 *Manual of...

Note: I am indebted to Professor Ora Limor for exposing me to a modern concept of the Middle Ages and to my thesis advisor, the late Professor Carlo Cipolla, for encouraging me to study the economic history of the Middle Ages.

\(^1\) The traditional views are found in Marx and Weber. The Eurocentric approach is championed by Wallerstein in *The Capitalist World-Economy* and *The Modern World-System I*. See a dissenting view by Plys, “Eurocentrism.” For recent contributions on the peasant origins of capitalism, see Comin, “English Feudalism”; Squatriti, “Of Seeds, Seasons, and Seas”; Wood, “Peasants and the Market.” For the commercial revolution, see Cohen, “Rational Capitalism”; De Roover, “The Commercial Revolution”; Lopez, *The Commercial Revolution of the Middle Ages, 950–1350*; Fusaro, “The Burden of Risk”; Greif, *Institutions and the Path to the Modern Economy*; Holton, “Max Weber”; Trivellato, “Renaissance Florence.”

\(^2\) Bowles and Gintis, “The Revenge of Homo Economicus”; Wallerstein, *The Modern World-System I*.

\(^3\) For a similar exercise in trying to infer mentalities and beliefs from ancient Rome, see García Morcillo’s analysis of Cicero’s letters in “Mentality, Motivation.”

\(^4\) Since the main purpose of this article is not to write a history of economic thought, I only provide a short and incomplete reading of the literature on the issue.
Political Economy. More recently, Edward O’Boyle claimed that as early as 1889, Maffeo Pantaleoni used the term in his book Principii di Economia Pura. Homo economicus was christened to mark the birth of the discipline of economics, as distinct from political economy. Paul Samuelson also named the individual at the core of economic analysis homo economicus.

Homo economicus was, for most economists, an abstract theoretical construct. However, its impact on research in economic history was significant. The cliometrics revolution of the late 1950s applied economic theory and quantitative analysis to historical research. With homo economicus as its main protagonist, applying economic theory caused a rift between historians and cliometricians. By that point, homo economicus had already invaded other disciplines. In the late 1940s, homo economicus entered political science with the founding of public choice, whose originator is considered to be Duncan Black. However, most of the initial developments came from the University of Chicago—Kenneth Arrow, James Buchanan, and Gordon Tullock. At about the same time, homo economicus also entered the field of law. The subfield of law and economics began with Aaron Director and included Roland Coase, Guido Calabresi, Richard Posner, and Gary Becker.

Becker applied homo economicus to all aspects of social life. Together with George Stigler, he argued for the dominance of homo economicus over agents roaming other social science disciplines. This development legitimized research by economists into societal phenomena that are not necessarily economic and, in doing so, widened the gap between economists on one hand and historians and sociologists on the other. Perhaps the strongest reaction came from sociologists, since placing individual rational decision-makers at the center of analysis contradicts the discipline’s main tenants. Therefore,

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5 Persky, “The Ethology of Homo Economicus.”
6 O’Boyle, “Requiem for Homo Economicus.”
7 Persky, “The Ethology of Homo Economicus.”
8 Samuelson, “A Note on Measurement of Utility.”
9 Goldin, “Cliometrics and the Nobel”; North, “Cliometrics–40 Years Later.”
10 Boldizzoni, The Poverty of Clio. See Biltoft, “Against Scholarly Enclosures,” for a call to allow the study of history to function more as a bazaar of ideas than a feud between disciplines.
11 Tullock, “Duncan Black.”
12 Mirowski and Plehwe, The Road from Mont Pèlerin.
13 Stigler and Becker, “De Gustibus.”
14 See Cioni, Federico, and Vasta, “The Two Revolutions in Economic History,” for an analysis of this literature.
homo economicus sparked a lengthy debate about whether humans are individualistic or social beings.\textsuperscript{15}

What began as a modeling tool in microeconomics took on a life of its own and became a central tool for analyzing complex macro-realities. The first challenge to homo economicus’s usefulness was behavioral. Beginning with Herbert Simon in the mid-1940s, behavioral economics questioned assumptions about the cognitive prowess of the agent that operates within economic models.\textsuperscript{16} Nobel laureate Richard Thaler predicted six changes that homo economicus would go through in the future to become the \textit{Homo sapiens} it is and always was.\textsuperscript{17}

A more important challenge to the usefulness of homo economicus, especially in history, came from Karl Polanyi.\textsuperscript{18} In \textit{The Great Transformation}, Polanyi argued that society and mentality changed from reciprocity to individualism with the advent of the market economy. In the absence of developed markets, human beings operated differently from the economists’ homo economicus. According to this view, homo economicus is not a universal phenomenon but is dependent on historical context. In other words, the macrocosm dictated the microcosm and not vice versa, as cliometricians would argue. For economic history, Polanyi’s thesis implies that economic analyses of pre-market historical periods may be anachronistic and erroneous.

One response to the problem of legitimizing the use of economic theory in pre-modern economic history is to document that developed markets existed in the distant past. Over the past two decades, Peter Temin has documented and analyzed the Roman economy, culminating in his book \textit{The Roman Market Economy}.\textsuperscript{19} Alain Bresson pushed the market economy back in time to ancient Greece in his \textit{La cité marchande}.\textsuperscript{20} More recently, Gojko Barjamovic

\textsuperscript{15} Anderson, “Beyond Homo Economicus”; Lindenberg, “Homo Socio-Oeconomicus.”
\textsuperscript{16} Simon, \textit{Administrative Behavior}.
\textsuperscript{17} Thaler, “From Homo Economicus to Homo Sapiens.” See also Doucouliagos, “Evolution of Homo Economicus.” For an earlier treatment of bounded rationality, see Levitt and List, “Homo Economicus Evolves.”
\textsuperscript{18} Polanyi, \textit{The Great Transformation}.
\textsuperscript{19} Temin, \textit{The Roman Market Economy}. See also Scheidel, \textit{The Cambridge Companion to the Roman Economy}. In a recent contribution, “When Kuznets Went to Rome,” Kim Bowes suggests that Roman economic history should not be limited to guestimates of inequality and GDP per capita, and should employ archeological evidence to arrive at a more complex analysis of the Roman economy. For a recent application of behavioral economics to Cicero, see García Morcillo, “Mentality, Motivation.”
\textsuperscript{20} Bresson, \textit{La cité marchande}. Earlier, he devoted substantial space to defending the use of growth economics for ancient Greece; see Bresson, \textit{The Making of the Ancient Greek Economy}. 
and colleagues used a gravity trade model to uncover long-distance trade in the nineteenth century BCE in Asia Minor.\(^{21}\)

There is no doubt, however, that early medieval Europe did not have a developed market economy. However, if cultural beliefs support homo economicus, we could still apply economic theory in analyzing this period. On the one hand, merchants and long-distance trade do not necessarily breed market institutions based on individualism, as a comparison between the Maghribi and Genoese traders shows.\(^{22}\) On the other hand, cultural beliefs could breed institutions consistent with individualism and capital accumulation.\(^{23}\) This argument does not negate Polanyi’s reasoning; it refines it by suggesting that a correlation between mentality and the economic environment is unnecessary. Historical cultural beliefs can also affect mentality.

The role of cultural beliefs and, in particular, the role of individualism in history has deep roots; a well-known early example is Alexis de Tocqueville’s Democracy in America. Max Weber, a historian and sociologist, had an enormous impact on the study of cultural beliefs associated with capitalism in the social sciences.\(^{24}\) In The Division of Labor in Society, Emile Durkheim offered a theory of how collective beliefs, norms, and values regulate the self-centered individual. Durkheim and Weber’s sociological theories were formulated simultaneously with the emergence, in economics, of homo economicus. They arose in the context of the second industrial revolution and the globalization of trade and finance in the late nineteenth century. A widely used application of these social theories is Hofstede’s work on values, organizations, and measurements of culture across countries.\(^{25}\)

A growing literature in economics builds on anthropological scholarship about cultural evolution. Joseph Henrich and Richard McElreath write: “The behavioral adaptations that explain the immense success of our species are cultural in the sense that they are transmitted among individuals by social learning and have accumulated over generations.”\(^{26}\) Economists tested, econometrically, for the causal role of historical cultural beliefs on

\(^{21}\) Barjamovic et al., “Trade, Merchants.”

\(^{22}\) Greif, “Cultural Beliefs.” More recently, De la Croix et al., in “Clans, Guilds, and Markets,” argue that technological progress through the apprenticeship system differed by family structure. Western European individualistic societies replaced the clan with the guild, which, albeit inferior to competitive markets, resulted in European technological supremacy in the long run.

\(^{23}\) Greif and Laitin, “A Theory of Endogenous Institutional Change.”

\(^{24}\) Weber, The Protestant Ethic and the Spirit of Capitalism; Weber, Economy and Society.

\(^{25}\) Hofstede, Culture’s Consequences; Hofstede, Hofstede, and Minkov, Cultures and Organizations. See Hofstede’s database: https://hi.hofstede-insights.com/national-culture.

\(^{26}\) Henrich and McElreath, “The Evolution of Cultural Evolution.”
contemporary economic outcomes and showed that they are very persistent. According to this view, homo economicus is potentially present everywhere. However, the degree of its impact on observed behavior in a particular society is dependent on that society’s cultural beliefs.

I argue that cultural beliefs that emerged in ancient market-based societies were transmitted over generations. I offer a transmission channel, albeit speculative, from ancient Indo-European civilizations to Frankish society. I use medieval texts to demonstrate that Gaul’s conquest by the Franks sustained and possibly cultivated these beliefs, rather than set them back, even in the absence of developed markets. The cultural presence of homo economicus allows us to apply economic analysis in studying the early Middle Ages. It also suggests that the emergence of capitalism during the commercial revolution, the Enlightenment, and the rise of classical economics as a science in Western Europe is a product of these cultural beliefs.

First, I explore the concept of homo economicus, and the uses and critiques that scholars have made of it, in greater depth. I then try to locate the partly culturally determined existence of homo economicus in the Frankish Salic law code from around 500 CE. From there, I move to feudal contracts in medieval France and a document on the election of Hugh Capet in 987 CE. Finally, I claim that a historical analysis of medieval contracts and monetary policy provides insights into the transhistorical nature of economic reasoning that are still relevant to the neoliberal world order.

Methodology

Defining Homo Economicus

My definition of homo economicus follows that formulated by Samuelson and has become part of the standard course in microeconomics. The economic agent has preferences that are assumed to have four essential properties: (1) completeness, such that all possible (bundles of) goods can be compared and ranked; (2) monotonicity—other things equal, more is preferred to less; (3) transitivity—that is, if good A is preferred over good B

27 For example, see Michalopoulos et al., “The Influence of Ancestral Lifeways.” For surveys, see Spolaore and Wacziarg, “How Deep?” and Alesina and Giuliano, “Culture and Institutions.”
28 Samuelson, “Note on the Pure Theory of Consumer’s Behaviour” and “Note on Measurement of Utility.” The development of the revealed preferences theory and definitions of preferences is the subject of ongoing research in the history of economic thought; see Hands, “Paul Samuelson”; Moscati, “History of Utility Theory”; Moscati, Measuring Utility.
and B is preferred over C, then A is preferred over C; and (4) convexity, that is, people prefer mixtures of goods rather than extremes (diminishing returns). Since resources are scarce, the homo economicus endowed with these preferences chooses his actions in a rational and calculative way. An individual’s choice is limited by her resources and is constrained by norms, regulations, laws, and sometimes force. Therefore, severe historical constraints on individuals’ opportunities, as opposed to their cognitive abilities, do not necessarily imply the absence of homo economicus. It is important to stress that being calculative is a necessary but not a sufficient condition for individual or individualistic rationality.

Amartya Sen pointed out that preferences can mean many things: desires, value judgments, choices, welfare, or satisfaction. While some of the strong assumptions on preferences, particularly the preference for completeness, can be questioned, rational agents make choices that maximize their subjective wellbeing under the circumstances. More importantly, in *Rationality and Freedom*, Sen focuses on procedural freedom—the right to select—and opportunity freedom—the choice set’s dimension. However, the necessary, albeit not sufficient, condition for homo economicus’s viability is the former. Most historians would agree that opportunity freedom was severely limited for most individuals in the early medieval context. However, I claim that what kept the spirit of homo economicus alive was the existence of and emphasis on procedural freedom.

The belief that individuals make free rational choices that benefit them, allowing for the constraints they face, is subject to their cognitive abilities and the absence of manipulation. As mentioned earlier, Thaler argues that cognitive failures render homo economicus an abstract entity. Mistrust in the ability to exercise rational choice leads to paternalism, whereby authorities restrict individuals’ choice sets. Though often with similar consequences, paternalism should not be confused with restrictions made to benefit those in power. For example, sending a child to bed because we believe that she does not understand that she will be tired the next day does not follow from the same behavioral assumptions as sending her to bed to allow a quiet evening to ourselves. Finally, Thaler and Sunstein offer what they call “nudge” as a form of paternalism consistent with libertarian ideals and human cognitive failings.

One of the claims of economic history—as opposed to history or economics proper—is that the past offers a terrain where scholars can observe

[29] Sen, *Rationality and Freedom*.

[30] Thaler, “From Homo Economicus to Homo Sapiens”; Thaler and Sunstein, “Libertarian Paternalism.”
the importance of specific and variable circumstances, such as institutions, natural resources, technological development, population levels, and literacy. However, these circumstances can be analyzed using economic reasoning. It is precisely with an economic historian’s eye and working assumptions that I turn now to a discrete set of medieval texts.

Medieval Texts and Homo Economicus

While economics is usually quantitative in its orientation, economic history, especially when concerned with earlier periods, must also rely on other tools in the historian’s toolbox. The approach taken in this paper is that of historical reasoning based on the reading and analysis of texts. In this way, I attempt to infer the cultural beliefs and ideology that the documents reflect rather than to assess whether they describe an historical reality. I particularly examine whether these documents are consistent with the assumptions about human behavior manifested in the definition of homo economicus provided above. Put differently, I ask whether the authorities who produced these documents shared cultural beliefs based on free rational choice and the preference structure that supports it. Of course, to ask questions about the authorities behind the production of texts leads us back to the tension between changing historical circumstances and abstract economic reasoning. One place that we see this tension most fully is in legal documents, which is why I investigate medieval homo economicus primarily through legal documents.

Here, however, we need to pause momentarily before moving to the documents themselves to consider the existing literature on law and economics. As with economic history, the main assumption behind the law and economics analysis is rooted in the idea that individuals make decisions based on incentives. The goal of economists concerned with the law is to demonstrate that legal institutions must seriously consider incentives in order to achieve any social mandate. The application of economics to the law is thus straightforward in private law and particularly for torts. This branch of the law is concerned with compensating individuals for damages caused by others. In particular, it allows the injurer to internalize the cost of his actions. The basic presumption behind tort law is that individuals are rational,

31 I study several documents, mainly legal, that have passed substantial source criticism by generations of historians who concluded that they are authentic.

32 For a review of law and economics, see Polinsky and Shavell, Handbook of Law and Economics; Parisi, The Oxford Handbook of Law and Economics. For a review of the behavioral law and economics, see Zamir and Teichman, The Oxford Handbook of Behavioral Economics and the Law.
and while some modifications are necessary to account for bounded rationality, the main tenants of tort law are preserved.

The application of economics to criminal law is not as straightforward. Crime involves social costs, and the question is, should we use economic reasoning to minimize these social costs, or do we use more moralistic arguments based on retribution? The principle of retribution argues for a punishment proportional to the crime (an eye for an eye). Moreover, the plaintiff in criminal law is the state, and the assumption is that the harm done by the offender is public and private. Criminal law also assesses a punishment, whereas tort law assesses compensation. Cooter and Ulen summarize that punishment is necessary when the main aim is deterrence, when perfect compensation is impossible, and when society cares not only about (economic) interests but also about rights and values. In a seminal paper, “Crime and Punishment,” Gary Becker posits that criminals are rational agents who weigh the benefits of their criminal activity against the costs—the expected probability of punishment (the probability of being caught times the size of the punishment). To deter crimes, their punishments should outweigh their benefits. Again, assuming away perfect rationality and full information does not change Becker’s main conclusions.

However, some nuances pointed out by scholars in behavioral law and economics suggest that individuals are deterred more by the certainty of the punishment than by the probability of detection. Research in this subfield critiques models that assume perfect rationality, but do not discuss the behavioral assumptions of judges, juries, and society. Experiments found that judges, law students, and potential jurors do not fully understand the consequentialist purpose of the law. Finally, Eyal Zamir points out that economists should integrate tastes or preferences and moral values into their models. By doing so, legal norms can also enrich economic analysis.

This clarification was necessary because it helps me set up some of the unique circumstances of the medieval texts with which this article is concerned. In particular, the legal documents and the institutional contexts to which I anchor my analysis of homo economicus are often radically different from those of the modern period. As such, discerning the presence of the so-called incentives embedded in medieval texts requires a sensitivity to

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33 Cooter and Ulen, Law & Economics, 463.
34 Harel and Segal, “Criminal Law.”
35 Jolls, Sunstein, and Thaler, “A Behavioral Approach.”
36 Baron and Ritov, “Intuitions about Penalties.”
37 Zamir, “Tastes, Values.”
a range of historically specific cultural beliefs, tastes, and preferences. Even as I turn to these questions, I admit two methodological limitations. First is the sin of Eurocentrism. My study of medieval documents shows that homo economicus is deeply rooted in the European mentality, at least since the first centuries CE. However, I cannot rule out that this mentality existed at the same time or even earlier in other world regions. Therefore, it can only help us understand the emergence of European capitalism.

The second is the sin of anachronism. While the documents are authentic to the best of my knowledge, I could have attributed an anachronistic mindset to the people who wrote them. Donald McCloskey and John Nash invoked homo economicus to study grain storage and open fields in medieval villages. Their analysis was criticized as anachronistic—and wrong—by John Komlos and Richard Landes. Fortunately, the texts I study here do not require interpretation of scientific categories or economic terms. In that sense, analyzing them is no different than attempting to infer economic reasoning from modern texts that do not suffer from issues of anachronism. However, I refrain from the anachronism of ignoring differences between medieval and modern opportunity and freedom of choice. Unfortunately, firm believers in anachronism’s problematics will not be convinced by my reading of the texts. However, by offering institutional and historical context, I believe that I have adhered to Jardine’s advice on the “sensitive application” of anachronism.

The Salic Law and Homo Economicus

The Salic law, the Salian Franks’ law, was first codified by Clovis, the Merovingian king (481–511 CE), who conquered Gaul and laid the foundations for the French kingdom. The Salic laws were one of several legal codes of the tribes that invaded the Roman empire. They achieved notoriety because, several centuries later, French lawyers invoked them to dismiss English claims to the French throne in the dynastic struggle known as the Hundred Years’ War (1337–1453 CE). Their interpretation of the law was that the

38 Plys, “Eurocentrism.”
39 McCloskey and Nash, “Corn at Interest.”
40 Komlos and Landes, “Anachronistic Economics.”
41 Sen, Rationality and Freedom.
42 Jardine, “Uses and Abuses of Anachronism.”
43 The origin of the Salic law is debated. Some argue that it emerged in the fourth century CE; see Poly, “Le premier roi des Francs.” Others claim it was as late as 530 CE; see Ubl, “L’origine contestée de la loi salique.”
crown of France could only pass through the male line. Shakespeare immortalized the Salic law in his play *Henry V*.44

The Salic law’s earliest versions are a pure civil law code. This is somewhat surprising given that the Franks were familiar with Roman law, which included civil and criminal law. However, the Salic laws have some similarities with the archaic Roman Twelve Tables of the fifth century BCE. Following Shakespeare, historians studied the Salic laws with respect to the dynastic disputes between England and France.45 More recent scholarship studies the institutional details and what they can teach us about Germanic societies. Katherine Fisher Drew, an historian who studied Germanic laws, published modern translations of the Salic laws and was one of the first to offer an institutional interpretation.46

In what follows, I too turn to a textual interpretation of these laws, but with a different end in mind.47 Namely, I want to analyze the documents’ content to demonstrate the economic reasoning at work on the part of those who wrote the codes—in other words, to show that the code-makers were homines economici. Nonetheless, a “sensitive anachronism” requires acknowledging that the laws were not produced in a context-free vacuum. It matters that the codes did not pertain to a developed market economy. However, I think it is reasonable to assume that Frankish culture could hold norms and values nonetheless consistent with those of market-based societies.

Re-reading the Salic Laws

The selected codes demonstrate that the Salic law is essentially a civil law (see Appendix). All codes are causative and lack any prohibitions, and all crimes, including homicide, are compensated for by fines. Drew concluded:

> Violent crime was an offense against an individual, not against society, and the role of the state in offering a court before which offenders could be brought was for the purpose of maintaining peace in the community—not for punishing offenders. So the punishment aspect of early-medieval crime was largely lacking. Revenge had been replaced by compensation. Even when the compensation was so much that it could not be paid and thus es-

44 See the speech by the Archbishop of Canterbury in Act 1, scene 2, of *Henry V*.
45 Potter, “The Development and Significance of the Salic Law.”
46 Drew, *The Laws of the Salian Franks*, “Public vs. Private Enforcement,” and “Origins of the Middle Ages.”
47 The examples are copied from Drew, *The Laws of the Salian Franks*. 
tablished a debt that could not be paid, the debt servitude that followed was not for punishment, but the labor of the slave was a substitute for the compensation that had been lost.\textsuperscript{48}

Without any intention to discuss fairness or morality, the basis for a legal model of compensation via fines is individual rationality.\textsuperscript{49} Therefore, historians who studied these codes, such as Drew and Lisi Oliver, implicitly assumed the concept of revealed preferences.\textsuperscript{50} This concept rests on economists’ assumptions about preferences.\textsuperscript{51} For example, historians’ claims that the fine on homicide varies with that life’s value to Frankish society cannot be made without invoking revealed preferences. The codes make a distinction between male Franks (the conquerors) and Gallo-Roman males (the conquered; see section XI of the Salic laws in the Appendix). The value of Roman lives increases with their degree of importance to the Franks, from the simple taxpayer to a companion of the king. The codes also suggest that the value of a Frankish man was double that of a Gallo-Roman man.

What is even more striking to the modern reader of these laws is the value that Frankish society placed on women.\textsuperscript{52} The value of a free woman (Frank or Gallo-Roman) who was either of childbearing age or pregnant was equivalent to that of the highest-ranking male—a king’s companion. The value of a free woman who could not have children was equal to that of a Frankish male. The fine for killing a woman of childbearing age was three times higher than that for killing any other female or male and reflected civil law’s compensation principle.\textsuperscript{53} The fine was not only compensation for the life of the woman but also for her potential offspring. Pushing this a little further, hopefully not too far, this is consistent with the fact that the Frankish population was scarce at the time.\textsuperscript{54}

The compensations for wounds and injuries are less controversial to the modern reader. I include a few of them in the Appendix to demonstrate that

\textsuperscript{48} Drew, “Origins of the Middle Ages,” 811–12.
\textsuperscript{49} See discussion above about the assumptions used in the law and economics literature.
\textsuperscript{50} Drew, “Public vs. Private Enforcement”; Oliver, The Body Legal in Barbarian Law.
\textsuperscript{51} Stigler and Becker, “De Gustibus Non Est Disputandum.”
\textsuperscript{52} This does not come a surprise to some medieval historians who regard the Middle Ages as a golden age for women; see Gravdal, Ravishing Maidens; Herlihy, Women, Family and Society in Medieval Europe.
\textsuperscript{53} Becker, “Crime and Punishment.”
\textsuperscript{54} Halsall, Barbarian Migrations and the Roman West, 376–568. Halsall analyzed Merovingian burials (for artifacts) and found them to support the value system embodied in the Salic laws; see Halsall, Early Medieval Cemeteries.
the codes are consistent with axioms that underlie the preference ordering that defines homo economicus according to Samuelson. Before we proceed, it should be stressed that consistency with the axioms of preference ordering is a necessary rather than a sufficient condition for cultural beliefs of homo economicus. These preferences could be present in cultures that do not hold a utility maximizing individual as the main actor in society.\(^{55}\)

A preference for completeness requires that all goods can be ranked and compared. We saw above that the legal code addresses the value of all lives in society.\(^ {56}\) As sections XV and XVI show, the Salic laws also rank and compare bodily organs (see Appendix).\(^ {57}\) Monotonicity is also evident in that more significant damage receives higher compensation. There are no discontinuities, such as a switch from fines to prison terms or death penalties. Transitivity is also present in these examples: the law values a wound that causes bleeding more than a “dry” wound. The instrument causing the injury does not play a significant role; instead, it is the type of injury that counts. Thus, as opposed to a sword, a club usually inflicts a dry wound and its wielder is liable for a smaller compensation. However, if blood does flow, it is equivalent to the use of a sword. The codes price fists that inflict dry wounds accordingly. Perhaps more contentious, convexity, or diminishing returns, is found, for example, in the codes on injuries to fingers, where we can see that each additional finger injured receives lower marginal compensation. Alternatively, in the case of blows, the law provides compensation to the victim for up to three blows.

Oliver analyzed all body parts’ compensation values in thirteen Germanic codes from 500 CE (Salic laws) to 900 CE (Wessex legal code).\(^ {58}\) Oliver compared the relative “prices” of body parts over space and time and what they reflected. She also compared the transmission of these laws and spheres of influence. More recently, in a Ph.D. dissertation, Miriam Tveit compared homicide and inheritance rules in forty medieval Germanic, English, and Scandinavian laws.\(^ {59}\) She concluded that only the Salic laws considered pure compensation, rather than vengeance, as the fine’s purpose.

\(^{55}\) This, of course, does not preclude that other societies shared the same cultural beliefs manifested in the Frankish Salic Laws. Most economists would tend to think so. But lack of evidence at my disposal leaves this for future research.

\(^{56}\) The codes also include compensation for unfree males and females as well as boys and girls.

\(^{57}\) See Oliver, *The Body Legal in Barbarian Law*, for a complete list of organs in Germanic legal codes.

\(^{58}\) Oliver, *The Body Legal in Barbarian Law*.

\(^{59}\) Tveit, “In Search of Legal Transmission.”
For the economic historian, however, the prices applied to bodies and wounds to compensate for killing or inflicting a wound are of interest beyond the peculiarities of an ancient legal system. There is transhistorical continuity despite radical differences in how social values (cultural beliefs) and monetary value (prices, fines) were assigned and applied. We can observe the presence of clear economic logic and reasoning in how the codes were designed. However, there is still room to look more closely at the value systems that produced these price-based legal punishments.

The Purpose of the Salic Laws

The absence of prohibitions and moral statements in the Salic laws might seem barbaric—and to the Romans, indeed it did. However, this does not imply that Frankish society did not have moral and behavioral norms. All that we can infer from the Salic laws is that the Frankish state refrained from explicitly promoting moral norms, codifying them into law, or enforcing them. An alternative interpretation that pushes the economic understanding of these laws even further is that the Franks used the price system to transmit moral values.

The Salic laws seem to have been written by and for homo economicus. It is unnecessary to assume that these laws were rational in order to infer that their legislators assumed that individuals would react to them rationally—in other words, that they would respond to the negative incentives outlined in the laws. These legislators believed that individuals possess the cognitive abilities to rank, compare, and evaluate the consequences of their actions for their victims and their externalities for society. Moreover, the laws also assume that all the individuals concerned would be able to understand the consequences of their actions. All fines are expressed in the same monetary scale to allow for a simple yardstick with which to compare the relative compensations. They focus on compensation (efficiency) as opposed to many customary laws that include an eye-for-an-eye clause. The eye-for-an-eye legal codes address behavioral aspects outside the realm of homo economicus, such as revenge, fear, and fairness.

60 On pricing the value of life and position in society, see Flandreau, “Pricing Moses Montefiore.”
61 Children under the age of twelve were not punishable by law; see Drew, The Laws of the Salian Franks, 165.
62 Becker, “Crime and Punishment.”
63 Thaler, “From Homo Economicus to Homo Sapiens.”
The absence of criminal law still leaves open the question of whether the Salic law’s purpose was limited to providing compensation for deaths and injuries in order to prevent revenge, or whether it also aimed to deter. The contemporary legal scholarship also debates whether tort law is about deterrence or compensation.\(^{64}\) If the Salic laws assumed individual rationality, then Becker’s seminal article “Crime and Punishment” could be useful. According to Becker, punishment deters rational agents if the probability of detection is very high and the fine is greater than the benefit of the crime to the offender or the harm to the victim. Compensation-based law, therefore, only achieves partial deterrence. According to Becker, this is optimal given the cost of law enforcement and punishment.\(^{65}\) A protection-for-fidelity contract we study in the following section suggests that we cannot rule out the objective of deterrence (see the Marculfi formulae in the Appendix).

The fines listed in the Salic law are stated in a monetary unit account. The actual value of the fines, as opposed to the relative “cost” of each offense, is unknown. Alice Rio argues that many of the fines were beyond the economic means of individuals.\(^{66}\) Payment of fines, Rio argues, was likely supported by family members and sometimes by the community. Therefore, individual actions had costly collective outcomes that individuals had to consider as well. This argument may also reinforce the interpretation that deterrence was a consideration in setting the level of the fines.

According to Becker, in the optimum, criminal law is basically a social tort law in cases where there is harm to society beyond the harm to affected individuals. However, what is considered harmful to society may change over time. For example, Drew’s analysis and conclusions show that the Salic law dealt with debt default—the inability to pay a debt arising from legal compensation—as a private matter of civil law, enforced by the state courts. The history of the treatment of debt default is not linear. Under the Justinian code, codified at the same time as the Salic laws, debtors could be imprisoned in state prison. Around the thirteenth century, debtor prisons also emerged in Western Europe and existed in many countries until the late nineteenth century. Default was considered a crime and carried with it a

\(^{64}\) Schwartz, “Mixed Theories of Tort Law”; Geistfeld, “The Coherence of Compensation-Deterrence.”

\(^{65}\) The potential for deterrence is further reduced if we take into account behavioral economic considerations; see Baron and Ritov, “Intuitions about Penalties and Compensation”; Sunstein, Schkade, and Kahneman, “Do People Want Optimal Deterrence?”

\(^{66}\) Rio, “Penal Enslavement.”
stigma. Only in the twentieth century did the legal system in some countries start treating default as a civil law matter.

Finally, we should not confound the purpose of compensation with broader or universal values in criminal legal codes. For example, US criminal law imposes harsher penalties for murder than most European criminal codes. This does not necessarily imply that human lives are more valued in the United States than, say, in Sweden. However, in the Salic law, a civil code, fines only reflected the victim’s prevailing compensatory value in Frankish society.

Economic Perspectives on the Historiographical Debate

Historians might raise (at least) two historically based objections to my interpretation. The first is that an added assumption of literacy is required to implement my analysis. The second is about the use of monetary fines in an economically underdeveloped society. The oral transmission of information was common in illiterate societies, and the code must have been transmitted orally before it was put into writing around 500 CE. The code was not very long—originally only sixty articles or sentences—and, therefore, not too difficult to transmit orally. Certainly, it required much less legal literacy than modern legal codes. Individuals also participated as jurors in legal procedures and had first-hand knowledge of the law.

Monetization of the fines has a long history dating back to ancient Near Eastern laws and the Bible. A monetary unit of account was used centuries before the first introduction of coinage, probably in Lydia, in the seventh century BCE. Moreover, as David Metcalf showed, mints operated and coins circulated in Merovingian Gaul. Therefore, while the economy experienced a slowdown in commercial activity, money had not disappeared. Finally, Eyal Zamir has recently pointed out that monetization of the legal system is not necessarily based on commodification, and commodification need not be monetized. Even if the Salic laws’ monetary units were not means of payment, they served as a unit of account for making cost-benefit calculations.

What is also missing from the Salic laws is the state’s role. There is no criminal code. The state is present as a regulator but not as a party to disputes. It acts

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67 Ford, “Imprisonment for Debt.”
68 See Rio, “Merovingian Legal Cultures,” for a dissenting view that argues that survival of personal documents is the tip of an iceberg of more widespread literacy than previously assumed.
69 Kagan, “The Dates of the Earliest Coins.”
70 Metcalf, “Monetary Circulation in Merovingian Gaul, 561–674.”
71 Zamir, “Tastes, Values.”
to coordinate the compensation scheme and sets a uniform value for various crimes. In a later version, written during the reign of King Childebert (595 CE), lawmakers conveniently sorted all crimes not only by type but also by the amount of the fine.\footnote{Drew, The Laws of the Salian Franks, 159.} Judicial procedure was decentralized and handled by the county court (mallus). Ganshof describes the mallus; it consisted of a non-professional judge, either the count or someone appointed by him, who acted as chairman.\footnote{Ganshof, “The Impact of Charlemagne.”} The chairman was assisted by assessors—a jury. A sub-group of the assessors decided on the verdict.

The absence of a criminal code and a decentralized judicial system are consistent with a weak state. It is useful to frame the Salic laws and the Frankish monarchy in the institutional framework offered by Oliver Williamson.\footnote{Williamson, “The Economics of Governance.”} The Frankish state was structured around contracts (see examples below) rather than hierarchy. The contractual form of governance is a hybrid of market and hierarchy and therefore retains market-based incentives. Within the contractual state, a fine-based legal system could support this equilibrium as long as contracting was credible. If this were not achieved, then anarchy would prevail, and a demand for a strong hierarchical state could then emerge.\footnote{Glaeser and Shleifer, “Legal Origins.”}

There is almost no evidence of the workings of the system or its effectiveness. On the one hand, the Salic laws were reissued and extended from the original sixty-five codes to a hundred. They were apparently in use for over three centuries—the last known codes date from the reign of Charlemagne. On the other hand, evidence from the chronicles of Gregory of Tours documents imprisonment, torture, and executions.\footnote{The disparity between the Salic law and the account of Gregory of Tours did not escape historians. Murray, in “The Merovingian State,” argues that Gregory’s focus was on regions of Gaul where the laws might have not prevailed. He also focused on the high elites, whereas the laws pertained to freemen and slaves. From the reductions of the laws, it seems that they gained wider circulation in the eighth century, after Gregory’s time.} In most cases, such punishments concerned disputes with the royal family. However, one case from an unknown date in the early sixth century describes a man sentenced to torture and death for committing multiple homicides and theft.\footnote{Gregory of Tours, History of the Franks, Book VI, 8.} This example is consistent with Alice Rio’s conclusion that it is very likely that multiple legal cultures existed in Merovingian France.\footnote{Rio, “Merovingian Legal Cultures.”} The Carolingians replaced the Merovingian monarchy. Charlemagne overhauled the legal system and

\begin{itemize}
  \item Drew, The Laws of the Salian Franks, 159.
  \item Ganshof, “The Impact of Charlemagne.”
  \item Williamson, “The Economics of Governance.”
  \item Glaeser and Shleifer, “Legal Origins.”
  \item The disparity between the Salic law and the account of Gregory of Tours did not escape historians. Murray, in “The Merovingian State,” argues that Gregory’s focus was on regions of Gaul where the laws might have not prevailed. He also focused on the high elites, whereas the laws pertained to freemen and slaves. From the reductions of the laws, it seems that they gained wider circulation in the eighth century, after Gregory’s time.
  \item Gregory of Tours, History of the Franks, Book VI, 8.
  \item Rio, “Merovingian Legal Cultures.”
\end{itemize}
enacted imperial decrees; compensation was replaced with punishment and death. It is not clear whether he did so to strengthen the monarchy, address the ineffectiveness of a legal system based only on civil law, or both.

It is important to stress that I do not claim that the behavioral assumptions of homo economicus that underlie the Salic laws reflected actual behavior. Similarly, economists who invoke homo economicus do not believe humans do not have emotions, heuristics, and cognitive failures. Vengeance and retaliation were, of course, not fully replaced by economic compensation. However, the Salic laws do reflect cultural beliefs and norms, held at least by the elites, that society should be organized according to the assumption that adults can make rational choices and therefore respond to economic incentives commonly and predictably. There was also an expectation that adults’ rational responses should dominate their emotional ones. Given that the Franks were aware of Roman law, their decision to codify their laws and impose them on the Gallo-Roman population is significant. Their cultural beliefs, transmitted to and shared by other Germanic tribes, affected the institutions they created and the rules of the game for Western European society.

I claim that such a perspective leads to an alternative understanding of the Salic laws’ historical origins. To those ends, the next section offers a novel and somewhat speculative interpretation of the possible cultural and legal origins of the Salic laws. I argue that they probably originated in Asia Minor in market-based societies.

The Market-Based Origins of the Salic Laws

My conclusion that the Frankish elite imposed a legal system that assumes homo economicus as an agent could be challenged as anachronistic. Following Polanyi or Komlos and Landes, critics might find it is hard to conceive that Gary Becker could find himself advising the Frankish monarchy of the fifth century CE. After all, the Franks were an economically backward

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79 See citation of Charlemagne’s *Capitularia* in Rio, “Penal Enslavement,” n65.
80 Ganshof, “The Impact of Charlemagne.”
81 Rio, “Penal Enslavement.”
82 Oliver, *The Body Legal in Barbarian Law*; Tveit, “In Search of Legal Transmission—Inheritance and Compensation for Homicide in Medieval Secular Law.”
83 After completing the paper, I found that Édouard Cuq, a French legal historian, mentions in passing parallels between Hittite and Salic law but does not attempt to link them; see Cuq, “Les lois hittites” and “Études sur le droit babylonien.” Martha Roth, in *Law Collections from Mesopotamia and Asia Minor*, was probably not aware of this early work.
84 Komlos and Landes, “Anachronistic Economics.”
society. They participated in the waves of invasions that destroyed the economic life of the Roman empire. Subsequently, they subjected Western Europe to a high degree of autarky for centuries.

And yet, it is precisely this framework that has led me to situate the origins of the Salic laws in Asia Minor in market-based societies. As discussed above, recent empirical research by economists on cultural persistence dates them to the Bronze Age and even to the Neolithic. Legal historians also search for historical legal precedents. For example, Alan Watson researched the ancient origins of Roman law. I show that compensation-based legal codes were used in ancient Mesopotamian and Near Eastern societies. These societies were characterized by relatively advanced goods and financial markets and a relatively high degree of decentralization. Therefore, while the Salic laws were used in early medieval Europe, their origin in an advanced market-based society could alleviate concerns of anachronism.

To understand the cultural beliefs of the Franks, one has to trace their origins. The Salian Franks resided on the Roman empire’s frontier between the Scheldt and Meuse rivers. They were in close contact with the Romans and, at times, served in their armies either directly or as federated troops. However, Merovingian (Frankish) myths claim, like Roman myths before them, that the Franks were descendants of Troy. While such myths could have been an attempt at legitimacy, putting the Franks on a par with the Roman empire they eventually displaced, I would like to consider these myths at face value.

Claiming an historical ancestry is not only a political strategy; it is mainly a cultural one. Influential recent research in economics suggests a persistent causal relationship among ancestral origins, culture, and gender roles thousands of years after their adoption. The primary significance of

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85 Alesina and Giuliano, “Culture and Institutions”; Ashraf and Galor, “Genetic Diversity.”
86 The Twelve Tables were instituted as a constitutional solution to tensions between lower (plebeian) and higher (patrician) classes during the establishment of the Roman republic (Watson, The State, Law, and Religion). The Twelve tables were likely influenced, via Phoenician intermediation, by Near Eastern traditions dating back to the twenty-first century BCE, Mesopotamia, the Bible (Westbrook, “The Nature and Origins”), and ancient Greece (Moore, “Rome’s Decemviral Commission”).
87 Barjamovic et al., “Trade, Merchants”; Benvenisti, The Economy at the Dawn of History; Mayshar et al., “Geography, Transparency, and Institutions.”
88 Bijsterveld and Toorians, “Texandria Revisited.”
89 Wood, “Frankish Origins”; Wood, The Merovingian Kingdoms 450–751; Yavuz, “From Caesar to Charlemagne.”
90 Alesina, Giuliano, and Nunn, “On the Origins of Gender Roles”; Fernandez, “Women, Work, and Culture.” It might not be necessary to have ethnic ancestry—cultural ancestry can suffice; see Jiménez, “Affiliative Ethnic Identity.”
claiming Trojan ancestry is affiliation with ancient Greece. For the Romans, it meant affiliation with Greek culture but not with Athens, which was a direct competitor.\textsuperscript{91} Cultural affiliation with ancient Greece suggests ties to a civilization that produced basic science, philosophy, decentralized political units, and competition. Therefore, it is not unthinkable that the Franks could have cultural beliefs consistent with homo economicus even though they no longer resided in a developed market economy.

Recent comparative legal historical studies of the Salic laws insist that these laws were not transmitted from the Roman empire.\textsuperscript{92} They do note some resemblance to the ancient Roman code of the Twelve Tables, but look no further. As noted above, ancient Romans, claiming Trojan ancestry, were likely influenced by Near Eastern traditions dating back to the twenty-first century BCE, Mesopotamia, and the Bible.\textsuperscript{93} Unfortunately, no record of a Trojan legal code survived.

The Twelve Tables are similar to the Salic codes but also contain offenses against the state and impose capital punishment.\textsuperscript{94} Westbrook’s suggestions for the Twelve Tables’ origins—the Bible or Hammurabi’s code—seem like a good fit. Could the biblical legal codes have been an inspiration for the Salic laws? The Bible issues prohibitive laws—“Thou shalt not kill,” and so on (Exodus 20: 11–13)—that do not specify fines. Moreover, the following chapter, Exodus 21, contains several crimes that result in capital punishment and also approves of an eye for an eye. This is certainly not the legal system portrayed by the Salic law.

Turning to Mesopotamia, Martha Roth provides the text of legal codes from Mesopotamia and Asia Minor from 2100 BCE to 1000 BCE.\textsuperscript{95} Could

\textsuperscript{91} Yavuz, “From Caesar to Charlemagne.”

\textsuperscript{92} Drew, \textit{The Laws of the Salian Franks}; Oliver, \textit{The Body Legal in Barbarian Law}; Tveit, “In Search of Legal Transmission–Inheritance and Compensation for Homicide in Medieval Secular Law.” This does not suggest that Rome did not have developed markets. Similarly, modern criminal law in advanced market economies does not suggest that they are not market-based.

\textsuperscript{93} Westbrook, “The Nature and Origins.” The claim it could have originated in ancient Greece (Moore, “Rome’s Decemviral Commission”) is also possible, though inspection of Athenian Law (Draco or Solon) shows much more state intervention than the simple compensation schemes of the Salic Laws.

\textsuperscript{94} For example, code section VIII.9 (Torts) reads: “If anyone pastures on or cuts by night another’s crops obtained by cultivation the penalty for an adult shall be capital punishment and, after having been hung up, death as a sacrifice to Ceres.” Text from Yale Law School, “The Avalon Project: Documents in Law, History, and Diplomacy,” https://avalon.law.yale.edu/ancient/twelve_tables.asp.

\textsuperscript{95} Roth, \textit{Law Collections from Mesopotamia and Asia Minor}. 
these legal codes have inspired the Salic laws? One of the earlier ones, from Ur-Namma (southern Iraq) around 2100 BCE, contains a selection of crimes punishable by death, as does the Sumerian legal code from Lipit-Ishtar in 1930 BCE. Babylonian legal codes dating from 1770 BCE also include crimes, such as theft, that are punishable by death. The famous laws of Hammurabi (1750 BCE) are the most complete of Mesopotamian legal codes. They also include many crimes punishable by death and provisions that prescribe an eye-for-an-eye punishment. Assyrian laws of 1076 BCE also include crimes punishable by death or maiming and eye-for-an-eye provisions. Mesopotamian and Assyrian legal codes bear a strong resemblance to the biblical codes and the Roman Twelve Tables. It is not likely that the Franks received their legal tradition that all offenses are to be resolved by compensation from these sources.

The Hittites, unlike their neighbors and trading partners, the Assyrians, were of Indo-European origin and inhabited Asia Minor. Their legal codes from 1650 to 1500 BCE are available. The Hittite code is different from the Assyrian code. Like the Salic laws, it mainly seeks compensation:

3 [If] anyone strikes a free [man] or woman so that he dies, but it is an accident, he shall bring him for burial and shall give 2 persons. He shall look to his house for it.

Roth remarks, “No laws in the Hittite collection are expressed in the second person, that is, you shall (not) do such-and-such” (Roth, 1995, 216). Moreover, it seems that some crimes punishable by death were subsequently commuted to compensation:

121 If some free man steals a plow, and its owner finds it, he shall put [(the offender’s) neck] upon the . . . , and [he shall be put to death] by the oxen. So they proceeded formerly. However, now he shall pay 6 shekels of silver. He shall look to his house for it. If it is a slave, [he shall pay] 3 shekels of silver.99

96 Roth, Law Collections from Mesopotamia and Asia Minor.
97 Roth, Law Collections from Mesopotamia and Asia Minor, 217.
98 Roth, Law Collections from Mesopotamia and Asia Minor, 216.
99 Roth, Law Collections from Mesopotamia and Asia Minor, 231. My emphasis.
The only crimes punishable by death by the king were related to sexual offenses defined as “unpermitted pairings.” Nevertheless, the Hittites’ principle of compensation is closely related to that found in the Salic laws.

It seems that of all the ancient trading centers of Mesopotamia and the Near East, the Hittites’ legal code was almost entirely based on the compensation principle—a principle that is consistent with homo economicus. Joram Mayshar and colleagues recently argued that northern Mesopotamian empires had a decentralized economy based on private property and its effective protection because of difficulties in verifying agricultural output for taxation purposes. However, what can explain the difference between the Assyrian and Hittites codes? Could different ethnic origins (Semitic versus Indo-European) despite similar economic constraints represent different cultures?

As it turns out, the Hittite empire bordered Troy and possibly, at some point, even controlled it. Troy was a prosperous trading post that was part of the Hittite trading network. Therefore, the Salic law’s principle of compensation, which resembles the Hittite legal code, is consistent with the Franks’ Trojan cultural origins. The Franks were, therefore, likely descendants of a Near Eastern society. Despite their medieval occupational structure as warriors and later on as farmers, homo economicus was part of their cultural beliefs and heritage.

Additional Evidence from Medieval Documents

In the previous section, I argued that the Franks based their legal system on a compensation principle consistent with homo economicus. In this section, I provide additional support for the claim that the cultural beliefs that support homo economicus could be found elsewhere in the economy and politics of early medieval France. I show that these cultural beliefs were not limited to one context but underlie fundamental contractual arrangements that were important building blocks of early medieval French society and economy.

Early Medieval Contracts

The economic system of early medieval Europe was based on serfdom—that is, unfree labor. There is a large body of literature on slaves and serfs in

100 Mayshar et al., “Geography, Transparency, and Institutions.”
101 Alesina, Giuliano, and Nunn, “On the Origins of Gender Roles.”
102 Latacz, Troy and Homer.
103 Eska, in “Celtic and Germanic Light,” found similarities between Hittite and Germanic divorce laws.
Roman and medieval Europe that I do not wish to discuss in this paper.\textsuperscript{104} This section provides evidence from two formularies—that of Angers in the sixth century CE and that of Tours, compiled in the eighth century (see Appendix). I view them as consistent with the spirit of the Salic laws. This interpretation supports my hypothesis that the Franks’ cultural beliefs accorded with homo economicus. The two documents are standard contracts or formulas regarding someone’s voluntary sale of himself to another person.

The Angers formula describes a situation in which a free person convicted of theft, who cannot afford to pay the necessary compensation required by Salic law, sells himself as a slave to the crime’s victim. Note that the text explicitly mentions that the sale is done out of free will for an agreed-upon price. Even if there were no other palatable options for the thief, the fact that free will is explicitly mentioned in this legal document indicates that free choice was a valued norm. The formula from Tours is more general and applies to a generic self-sale. Both documents stress the word "free," repeating it three times, and mention that the price received was agreeable to the seller. A code from the Salic laws (LXVII.3) shows that cheating or enticing a free man to sell himself to a third party, unlike self-sale, was considered an offense that had to be compensated.

The texts manifest a belief in free will, rational choice, and the notion of a fair exchange—the tenants of a market economy inhabited by homo economicus. Just as the legal codes abstained from the issue of morality, so do these contracts. Classical economists, notably John Stuart Mill, discussed the moral limits of the market and argued against voluntary enslavement.\textsuperscript{105} Rio suggests that we should not morally judge a society living on the verge of subsistence, where absolute freedom was a luxury good only the elites could afford.\textsuperscript{106} True. What alternatives did the thief in the first document have? Under most legal codes at the time, he would have lost either his life or his limbs. Today, he would lose his freedom, albeit not permanently, and serve time in prison.

The fact that the elites who produced such contracts valued and enjoyed freedom does not imply that most people at the time did the same. Moreover, when we compare civil law (compensation) to criminal law (prison), crime is more “affordable” for wealthy people in a monetary compensation

\textsuperscript{104} For a recent study that reviews earlier research, see Rio, Slavery after Rome, 500–1100.

\textsuperscript{105} Strasser, “Mill on Voluntary Self-Enslavement.”

\textsuperscript{106} Rio, “Self-Sale and Voluntary Entry into Unfreedom, 300–1100.”
scheme. They retain their freedom and enjoy a broad choice set. Conversely, crime is more “affordable” for poor people under criminal law because time spent in prison is economically less costly for them. Put differently, since poor people face a limited consumption choice set, prison does not restrict their choice set to the same extent as for wealthy people. Therefore, consistent with individualistic market-based institutions, the Salic laws likely contributed to increasing economic inequality.

The Salic laws discussed above reveal that population scarcity made human lives very valuable. In that society, the value of self-sale was, therefore, high. Assuming that those who wrote the law thought like homo economicus, killing, maiming, or imprisoning an offender makes no economic sense. We should not dismiss the difference between corporal punishment and self-sale within poor people’s limited choice set. The latter was seen by those who wrote these contracts and laws as purely economic. The offender’s decision was perceived as a rational “economic” one. It was not based on moral deterrence, like the commandment “Thou shalt not kill,” or on fear of corporal punishment.

The lesson to glean from the contracts is not their welfare ranking vis-à-vis some historical counterfactual. The importance of the documents is that they put a price tag on freedom. Freedom and free choice were scarce goods not to be taken for granted. Unlike slave societies in which the law only protected slave-owners’ property rights, the Frankish laws and institutions also defined and protected the property rights of individuals in their own freedom. In that respect, Mill looked at the somewhat empty glass rather than at the almost full glass of his ancestors’ institutional achievements.

The formulas’ concerns with freedom relate to the issues raised by Sen in *Rationality and Freedom*. The Salic laws and the feudal contracts presented above certainly satisfy Sen’s requirement of procedural freedom. Individuals are free to choose whether to become slaves or not. The question is whether all members of Frankish society enjoyed opportunity freedom. Legally, as long as they were free, yes. However, individuals who chose to sell themselves because of economic hardships did so because they lacked opportunity freedom. Genicot constructs a theoretical model whereby the option of voluntary enslavement can have adverse feedback effects on opportunity freedom. The model shows that the availability of self-sale limits the

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107 Domar, “The Causes of Slavery or Serfdom.”
108 Becker, “Crime and Punishment.”
109 Sen, *Rationality and Freedom.*
110 Genicot, “Bonded Labor and Serfdom.”
supply of credit and undermines financial inclusion. Limited access to credit further limits the choice set of the poor.

One may argue that the self-sale contracts I study are not purely economic transactions but also entail the symbolic meaning of submission or patronage. The self-sale contracts can be juxtaposed with a standard formula of the service-for-protection contract among the free warrior class (see Marculfi formula in Appendix). The formula describes a symbolic gesture in which the warrior places his hands inside the hands of the king. The “will of God” is mentioned instead of “free will,” and while there is an exchange of service in return for protection, there is no sale. Incidentally, the contract mentions the fine stipulated in the Salic code for killing a person who is in the king’s trust. This lends empirical support for the relevance of the Salic laws in Frankish society. The fine mentioned in the contracts is equal to the fine mentioned in the legal code. It also alludes to the possibility that it may have been used for deterrence. By joining the kings’ ranks, a warrior made it very costly for others to harm him.

It must be emphasized that my aim is not to unearth homo economicus in every context. Rather, my claim is that analyzing a past society according to the logic of its incentive structures gives economic historians powerful clues about the institutional configurations underpinning those societies and how these structures helped to determine the specific distribution of wealth and resources. In the next section, I show how this logic helps us make sense of broader legal codes and is also relevant for understanding the nature of political power in certain cases.

The Election of Hugh Capet

Another classic source presented to students of medieval history is an account of Hugh Capet’s election to the French throne in 987 (see Appendix). According to this document, Adalbero, the archbishop of Reims, the highest religious authority in France and the one who anointed the kings, convinced France’s magnates to elect Hugh Capet and bypass the Carolingian heir to the throne. Without getting into the debate about whether Hugh had already usurped the throne, or whether other incentives were offered to the magnates, the document itself is another manifestation of Frankish cultural beliefs about freedom and rational choice. 111 While Adalbero was literate and highly educated, to win his arguments could not have fallen on

111 Bradbury, *The Capetians.*
deaf ears. They had to resonate with the Frankish nobility’s cultural beliefs and norms.

Historians tend to focus on the authenticity of the account or the political interests of those who circulated it rather than on the underlying cultural beliefs of those for whom the document was intended.\textsuperscript{112} Four significant insights into Frankish cultural beliefs manifest themselves in this document. The first is the right to choose a king and the Aristotelian use of elections to justify a dynastic change.\textsuperscript{113} Secondly, Adalbero invokes Plato’s arguments in\textit{The Republic} about the preferability of a wise king—a king with the strength of mind (\textit{sapientia}) capable of making an Aristotelian distinction between good and bad government. The third is Adalbero’s call for a rational decision rather than an emotional one: “hatred shall not destroy reason, that love shall not interfere with truth.” Finally, the fourth is the document’s appeal for a maximization principle based on private interests in the decision. Adalbero anticipates Whiggish rhetoric and instructs the magnates to select the king that maximizes public welfare (\textit{rei publica}) and their own private interests. I conclude that the text, whether fact or fiction, exemplifies how Frankish society valued making a free rational choice to maximize public and private utility. Adalbero, therefore, thought it effective to appeal to the homo economicus in the nobility. In the next section, I provide evidence that the appeal by a senior political advisor of the crown to the French government’s economic values was not a one-time occurrence. I show that successive advisors formulated royal monetary institutions and policies based on economic incentives, demonstrating the continuity of cultural beliefs consistent with homo economicus, at least among the governing elites in medieval France.

\textbf{Medieval Monetary Policy}

My earlier research on the monetary system in medieval France also shows that the government based its policies on assuming that agents respond to economic incentives.\textsuperscript{114} In the medieval commodity money system, minting was private. The government lacked bullion and offered the service of transforming bullion and foreign coins into domestic coins for a fee or seigniorage. Private minting was different from modern and ancient monetary

\textsuperscript{112} Hallam, \textit{Capetian France 987–1328}; Barthélemy, \textit{The Serf, the Knight, and the Historian}.

\textsuperscript{113} While we do not have similar evidence on previous elections, the practice of choosing a king was common in Carolingian France; see Hallam, \textit{Capetian France 987–1328}. This, of course, does not suggest that elections are more rational than dynastic inheritance.

\textsuperscript{114} Sussman, “Debasements, Royal Revenues, and Inflation.”
systems in which the government or central bank created money via public minting.

Private minting requires that mints operate as economic enterprises. Attempts to increase seigniorage revenues rely on offering market-based incentives to holders of bullion or coins to bring them to the mint to be minted. In this monetary system design, the crown’s working assumption was the existence of homo economicus. It addressed issues of efficiency and minimized agency problems using economic incentives. Royal officers in charge of monetary policy introduced quality controls and fines to address these issues.\(^{115}\) Following precedents in the Salic laws, the crown opted for fines rather than imprisonment or death to discipline mint masters or officers suspected of fraud. The crown located mints in economically strategic locations such as border crossings, rivers, and ports. The crown chose to have a profit-maximizing entrepreneur run the mint. The crown, therefore, offered a product that successfully competed with private and foreign currencies. This success allowed the crown to establish a wide circulation of royal currency, creating a near monopoly.

The dominance of royal currency in the economy allowed the crown to successfully fund wars through debasements.\(^{116}\) Debasement, unlike the modern printing of money by the government, is an alteration of the price of precious metals in the economy. Therefore, the success of this policy relied on market response. It was predicated on providing economic incentives for individuals to mint bullion and full-bodied coins into debased coins rather than forcing bullion into the mint by decree.\(^{117}\) While the crown’s efforts to raise taxation and rally taxpayers to defend the realm failed, market-based policy succeeded. The crown must have had a pre-existing belief in homo-economicus and a strong belief in markets to base its survival on such a policy. The success of these policies reinforced these beliefs.

Conclusions

The purpose of my journey to early medieval Europe was to show that economic history is relevant for understanding this distant pre-capitalist society.\(^{118}\) Using primary sources from early medieval France, I showed that

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\(^{115}\) Gandal and Sussman, “Asymmetric Information.”

\(^{116}\) Sussman, “Debasements, Royal Revenues, and Inflation.”

\(^{117}\) Sussman and Zeira, “Commodity Money Inflation.”

\(^{118}\) This echoes Carolyn Biltoft, who in “Against Scholarly Enclosures” in the inaugural issue of this journal, suggested that scholars should not view pre-capitalistic societies in an idealistic way.
Frankish elites’ cultural beliefs were consistent with the neo-classical homo economicus. The elites believed in free rational choice made by individuals who possess cognitive abilities and preferences consistent with modern utility function concepts. While I focused on the evidence from France, most other Germanic legal codes either bore a strong resemblance to that of the Franks or were influenced by it. The Salic laws offered economic compensation as a substitute for blood feuds and vendettas. An expansion of legal contracts between free warriors and between lords and peasants likely contributed to the development of networks of non-clan relationships with potentially substantial impact on future economic growth.

Let me return to the challenges to homo economicus that I raised in the introduction. First, my findings legitimize the application of economic theory and analysis to the study of medieval economic history. We should, nevertheless, consider criticism from behavioral economics when conducting historical analysis. My emphasis on cultural beliefs in Western Europe allows for the possibility that other societies may have operated under different belief systems. Therefore, the so-called economic imperialism of applying microeconomic theory to other social sciences should probably be limited to cases supported by cultural beliefs consistent with homo economicus.

I offer a view that market development during the medieval commercial revolution did not give birth to homo economicus and Western capitalism. The medieval homo economicus was predisposed to create markets with institutions based on individualism and free choice. The medieval paradigm that “the air of the city makes free”—as opposed, for example, to the notion that “the air of the city makes you rich”—can be readily understood as a continuation of beliefs and norms embodied in Germanic law and contracts rather than as a commercial revolution. Lords’ decisions to increase their tax revenues, which were constrained by the size of their landholdings, by developing urban markets and trade and by offering charters to towns and guilds, could succeed only if some residents of medieval villages shared the

119 Oliver, *The Body Legal in Barbarian Law*; Tveit, “In Search of Legal Transmission.” An interesting issue is whether elites who lack coercive power, as was the case with the Merovingian monarchy, promote and sustain beliefs that are based on individualistic rational choice that, at least historically, benefitted them disproportionately because of a lack of opportunity freedom—that is, a lack of equal opportunity.

120 De la Croix, et al., “Clans, Guilds, and Markets.”

121 Greif, “Cultural Beliefs.”

122 Pirenne, *Medieval Cities*, 125.
values of homo economicus. Those residents had to be not just calculating individuals but also individualistic—willing to leave their families and friends to pursue economic gains.

The Carolingian empire transmitted the cultural beliefs and norms of the Frankish homo economicus to most of Western Europe, where people of Germanic origins were likely predisposed towards them. In the 1350s, Nicolas Oresme, bishop and professor at the University of Paris, wrote De Moneta. Oresme formulated original political economy rhetoric against monetary debasements. Echoing Adalbero, he claimed that money—as a medium of exchange—belonged to society and not the king. Perhaps more impressive is that Oresme became the first academic economic advisor to a king. Oresme is credited with ensuring that Charles V would adopt stable monetary policies (prices) and tax reform, which today would be considered neoliberal. A linear development of economic thought from Oresme to Adam Smith is perhaps unjustified. However, like De Moneta before it, The Wealth of Nations resonated well with elites who likely held cultural beliefs that supported homo economicus.

Homo economicus, neoliberal thought, and capitalism in Western civilization have origins that go back at least to the early medieval period. Commodification has come to have negative connotations, and the pricing of norms is seen as creating adverse unintended outcomes. The Salic laws and the contracts I presented show that medieval cultural beliefs and legal norms supported commodification. The Catholic church’s selling of salvation relied on the precedent of the relative “price” of lives in the Salic laws and cultural beliefs held by the medieval and early modern homo economicus. The manifestation of homo economicus cultural beliefs was neither linear nor universal. More powerful monarchies replaced the Salic laws with

123 See, for example, the investment in water mills by landlords in the eleventh century in Van der Beek, “Political Fragmentation.”
124 This was an antecedent to the spread of revolutionary ideas by Napoleon; see Acemoglu et al., “The Consequences of Radical Reform.”
125 Johnston, “The De Moneta of Nicholas Oresme and English Mint Documents.”
126 Woodhouse, “Who Owns the Money?”
127 Older accounts of the history of economic thought, such as De Roover in Business, Banking, and Economic Thought and Schumpeter in History of Economic Analysis, saw the emergence of economics as a discipline in Western Europe as a natural continuation of medieval economic thought.
128 Gneezy and Rustichini, “A Fine Is a Price.”
129 Ekelund et al., Sacred Trust.
criminal law, prisons, public executions, and torture. Superstition, inquisition, and witch-hunts flourished at various places and times.

The neoliberal order, globalization, and rising inequality have intensified criticisms of homo economicus. Polanyi’s analysis offers those opposing the neoliberal world order the possibility that moving away from globalization and commodification can bring us back to a pre-homo-economicus world. The main argument presented in this article is that cultural beliefs can differ from the historical economic environment. Cultural beliefs that form the basis of homo economicus persisted in early medieval Europe, if only within the elite, even in the absence of global markets and extensive commodification. Only a fundamental change in cultural beliefs can provide hope for those wishing to eliminate homo economicus in the twenty-first century. However, since homo economicus is with (in) us, we could also conceivably use the levers that affect its actions to achieve desirable social goals such as reducing inequality and ensuring a more inclusive and sustainable world.

Appendix

Examples of Codes from the Salic Laws

*From Section XV: Concerning wounds*[^131]

3. He who hits another man on the head so that his blood falls to the ground, and it is proved against him (called seolandouefa in the Malberg gloss), shall be liable to pay six hundred denarii (i.e., fifteen solidi).

8. If a freeman strikes another freeman with a stick but the blood does not flow, for up to three blows (called uuadfalt in the Malberg gloss), he shall be liable to pay three hundred sixty denarii (i.e., nine solidi) that is, for each blow he shall always pay one hundred twenty denarii (i.e., three solidi).

9. If the blood flows (called uuadfalt in the Malberg gloss) he shall pay composition as if he had wounded him with an iron weapon, that is, he shall be liable to pay six hundred denarii (i.e., fifteen solidi).

10. He who strikes another three times with a closed fist (called uuadfalt in the Malberg gloss) shall be liable to pay three hundred sixty denarii (i.e., nine solidi)—that is, he renders three solidi for each blow.

[^131]: Drew, *The Law of the Salian Franks*, 82–83. In this excerpt and the others, the phrases in parentheses are Drew’s interjections.
From Section XVI: Concerning disabling injuries132

6. He who cuts off a man’s second finger that is used to release arrows (called alachtamo briorotero in the Malberg gloss) shall be liable to pay fourteen hundred denarii (i.e., thirty-five solidi).

7. He who cuts off the other remaining fingers—all three equally with one blow (called chaminis in the Malberg gloss)—shall be liable to pay eighteen hundred denarii (i.e., forty-five solidi).

8. If he cuts off two of these, he shall be liable to pay thirty-five solidi.

9. If he cuts off one of them, he shall be liable to pay thirty solidi. He who cuts off a following finger [the middle] (called taphemo in the Malberg gloss) shall be liable to pay six hundred denarii (i.e., fifteen solidi). If he strikes off a fourth finger (called mdachano in the Malberg gloss), he shall be liable to pay nine solidi. If he strikes off the little finger (called minedeno in the Malberg gloss) he shall be liable to pay six hundred denarii (i.e., fifteen solidi).

From Section XLI: On killing of freemen133

1. He who kills a free Frank or other barbarian who lives by Salic law, and it is proved against him (called leodi in the Malberg gloss), shall be liable to pay eight thousand denarii (i.e., two hundred solidi).

5. He who kills a man who is in the king’s trust (in truste dominica) or a freewoman and it is proved against him (called leodi in the Malberg gloss) shall be liable to pay twenty-four thousand denarii (i.e., six hundred solidi).

8. He who kills a Roman who is a table companion of the king and it is proved against him (called leudi in the Malberg gloss) shall be liable to pay twelve thousand denarii (i.e., three hundred solidi).

9. If a Roman landholder who is not a table companion of the king is killed, he who is proved to have killed him (called walakodi in the Malberg gloss) shall be liable to pay four thousand denarii (i.e., one hundred solidi).

10. He who kills a Roman who pays tribute and it is proved against him (called walaleodi in the Malberg gloss) shall be liable to pay twenty-five hundred denarii (i.e., sixty-two and one-half solidi).

15. He who kills a free girl before she is able to bear children (called himala in the Malberg gloss) shall be liable to pay eight thousand denarii (i.e., two hundred solidi).

132 Drew, The Laws of the Salian Franks, 93.
133 Drew, The Laws of the Salian Franks, 104–106.
16. He who kills a free woman after she begins to bear children shall be liable to pay twenty-four thousand denarii (i.e., six hundred solidi).
17. He who kills her past middle age and no longer able to bear children shall be liable to pay eight thousand denarii (i.e., two hundred solidi).
19. He who kills a pregnant woman shall be liable to pay six hundred solidi.

Examples from the Feudal Contracts

Formula of Angers (sixth century CE)\textsuperscript{134}

No. 2. This is an act of sale for him, who is selling himself.

To my lord A and also his wife B, from I, C. Because my negligence conspired to cause me to steal your goods, and I am unable to accomplish this in any other way, except the following; in order to appease you I am to give my complete status [of freedom] to your service; so that it is clear, before you I bind my [free] status to your service without injunction, but in fact fully out of my free will, albeit owing to the fact that my falsehood is evident. I am giving myself to you for the price of D solidi, which is agreeable to me, so that whatever from today on you should wish to do with me in all things you may go forth with the power of executor, just as with the rest of your obedient slaves obtained by sale, with God’s favor. If I myself or some of my kin or people from wherever and not of my household should take steps against the enacting of this sale, which I with good will asked to be made, let him commit himself with a solemn pledged the royal purse, and may he be unable to lay claim to what he seeks, and may this sale and my will stay firm.

Formula of Tours (eighth century CE)\textsuperscript{135}

To my permanent lord N., 1, N.: It has pleased me to bind my free status to your service. This I have done, and for this I have received from you payment, which pleases me, to the amount of so many solidi. Therefore, from this day forward you have free and most firm authority to do with me, your slave, in all things, what you may wish to, as with your other slaves. And (which I do not believe will happen) if any persons should attempt to take action against or bring a complaint against this sale, which I have accomplished of my own

\textsuperscript{134} Jacoby, “Selections from the Formularies of Angers and Marculf,” 22. The words in square brackets are my interjections; freedom is inferred from the status used in the documents. This is based on Alice Rios’s The Formularies of Angers and Marculf. My emphasis.

\textsuperscript{135} Herlihy, The History of Feudalism, 85. My emphasis.
free will and asked to be signed, let him not obtain what he seeks, and moreover let him pay to the person against whom he brought the complaint one pound, of gold, and five pounds of silver, and this sale shall remain firm.

*From the Salic Laws, Section XXXIX*\(^{136}\)

3. If anyone entices away a freeman and sells him and afterward he is returned to his own native land (called chalde ficho in the Malberg gloss), he shall be liable to pay one hundred solidi [in addition to return of the man plus a payment for the time the man was held].

**On Royal Protection**

*Marculfi formulae I, no. 18, M.G.LL V*\(^{137}\)

It is right that those who promise to us entire fidelity should be protected with our help. Since by the mercy of God, our faithful man _N_ has come with his arms into our palace and publicly sworn in our hand trust and fidelity. We therefore decree and command through this present order that henceforth the same _N_ should be reckoned among the number of our retainers (antrustscionii). And if perchance anyone should presume to kill him he should know that he will be held guilty for a wergild of 600 solidi.

**The Election of Hugh Capet**

*Adalbero’s speech at Senlis*\(^{138}\)

Here we are assembled. Let us see to it, by our prudence and honor, that hatred shall not destroy reason, that love shall not interfere with truth. We are aware that Charles has his partisans, who claim that the throne belongs to him by right of birth. But if we look into the matter, the throne is not acquired by hereditary right, and no one ought to be placed at the head of the kingdom unless he is distinguished, not only by nobility of body, but also by strength of mind (sapientia)—only such a one as honor and generosity recommend. We read in the annals of rulers of illustrious descent who were deposed on account of their unworthiness and replaced by others of the same, or even lesser, rank. Make a decision, therefore, for the welfare (furtunatam) rather than for the injury of the state. If you wish ill to your country, choose

\(^{136}\) Drew, *The Laws of the Salian Franks*, 101.

\(^{137}\) Herlihy, *The History of Feudalism*, 84.

\(^{138}\) Ogg, *A Source Book of Medieval History*, 177–78.
Charles to be king; if you have regard for its prosperity, choose Hugh, the illustrious duke. . . . Elect, then, the duke, a man who is recommended by his conduct, by his nobility, and by his military following. In him you will find a defender, not only of the state, but also of your private interests (rei publica et privatarum rerum).

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