

LIFE IN THE TIME OF FAMINE: AGEN IN THE 1690S

by

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## **Abstract**

Material scarcity was the norm for all of humanity prior to the advent of industrial production. Famine represented the agricultural manifestation of this norm. This thesis argues that one must explore famine within the context of everyday life in the pre-modern period in order to best understand its causes, effects, and communal responses. Rather than sensationalizing famine, this thesis presents dearth through the example of the southwestern French town of Agen during the famine years of the 1690s. The people of Agen in this decade experienced the most severe famine to strike early modern France as well as the deadliest mass mortality event to strike the country between the Black Death and the present day. By exploring parish registers, alongside climatic and price data, this thesis paints a picture of famine, its mechanisms, and the behavioral responses of the Agenais community.

## **Chapter 1: Introduction**

This study originally carried the title of *A Pale Horse* in reference to the Book of Revelation's description of the four horsemen of the apocalypse. Such a reference is quite common among academic treatments of famine. For example, the North American covers of Cormac Ó Gráda's *Famine* and Walter Scheidel's *The Great Leveller* depict one or more of John of Patmos' horsemen.<sup>1</sup> Andrew Cunningham and Ole Peter Grell go a step further in calling their work on Reformation-era mass death *The Four Horsemen of the Apocalypse*.<sup>2</sup> Yet, this study no longer carries its original title for a reason.

If this study focused entirely on famine and its impact on the southwestern French city of Agen in the 1690s it would reasonably run all of 20 pages long – a far cry from the appropriate length of a master's thesis. The tabulations of burials, marriages, and baptisms would require a handful of graphs and tables. Additionally, the likes of François Lebrun, Jean-Michel Chevet, Jean Meuvret, Emmanuel La Roy Ladurie, Marcel Lachiver, and Jean-Pierre Poussou, have already formulated much of the analytical frameworks needed to understand the impact of subsistence crises in early modern France. If focused on famine alone this study would fall into Phillip Benedict's critique of French historical practice whereby new studies “largely replicate the methods and findings of earlier masters.”<sup>3</sup>

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<sup>1</sup> Cormac Ó Gráda, *Famine: A Short History*, (Princeton: Princeton University Press, 2009); Walter Scheidel, *The Great Leveller: violence and the History of Inequality from the Stone Age to the Twenty-First Century*, (Princeton: Princeton University Press, 2019).

<sup>2</sup> Andrew Cunningham and Ole Peter Grell, *The Four Horsemen of the Apocalypse: Religion, War, Famine and Death in Reformation Europe*, (New York: Cambridge University Press, 2000). Additionally, one can look to the subtitle of Guido Alfani, *Calamities and the Economy in Renaissance Italy: The Grand Tour of the Horsemen of the Apocalypse*, (New York: Palgrave Macmillan, 2013).

<sup>3</sup> Philip Benedict, “Review of *La Bretagne aux 16e et 17e siècles. La vie. La foi. La mort* by Alain Croix,” *Journal of Modern History* 55:4 (1983), 721.



Rather than focusing on famine alone this study explores life. Life in the time of famine. To be sure, famine and its impact on the people of Agen is the motive force behind the behaviors witnessed in this study. Yet, the presence of famine and its effects allows the historian to see the mechanisms of life through the alterations and buckling brought about by dearth. Through the lens of famine, one better sees the workings of climate, city-governance, economics, and demography in early modern France. Weaving these threads together within the pattern of famine creates a tapestry of life far more worth of reflection than just another tabulation of burials, baptisms, and marriages.

At first glance this study's final title would seem to hearken to Gabriel Garcia Márquez's *Love in the Time of Cholera*. The apparent reference is incorrect. Instead, this study's title is an homage to Gregory Hanlon's ground-breaking study *Human Nature in Rural Tuscany*.<sup>4</sup> In *Human Nature* Hanlon explored "the everyday behavior of people in a bygone era and explain[ed] how their individual actions were, in their context, usually well-suited to achieving individual goals of survival and betterment."<sup>5</sup> Through the study of the fief of Montefollonico Hanlon shines light on the mechanisms of human nature. It is the hope of this study that the case of Agen can shine a comparable – even if much less brilliant – light on the mechanisms of survival in early modern France.

The structure of this study is four-fold and based on chronology. The first part begins by introducing Agen and setting demographic baselines. Doing so allows one to understand the town prior to the onset of famine. This period nominally covers the harvest year of 1690. However, to generate a baseline, the underlying statistics draw from the ten preceding years. This section gives

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<sup>4</sup> Gregory Hanlon, *Human Nature in Rural Tuscany: An Early Modern History*, (New York: Palgrave Macmillan, 2007).

<sup>5</sup> *Ibid*, 4.

a great deal of attention to the patterns and rhythms of life amongst the town and its four parishes. It is here that one gains an understanding of the town's geography, social classes, economic life, and demographic characteristics.

The second section looks at the harvest year of 1691. In this year there appeared rumblings that something was afoot. The weather had changed, and the harvest had fallen short. Yet, matters were not dire. Harvests regularly failed in early modern Europe. It took multiple consecutive harvest failures for a famine to occur. It is in this section that the reader will find extensive treatment of grain markets, foodstuffs, the weather, and the initial demographic signs of a lurking famine.

The third section is where most of the action is. Covering the harvest years of 1692-1695 this section presents the demography of catastrophe alongside discussion of human physiology in the wake of dearth and an economic model of food supplies under famine conditions. This section's focus is on both the causes and effects of famine. While it is important to show the human toll that successive failed harvests had on the community one cannot act as though these impacts occurred in a vacuum. Instead, the failures of the townspeople to feed themselves sufficiently in these years reflects underlying systems and structures ranging from hygiene to hysteria.

The final section covers Agen's recovery in the years 1696-1699. Perhaps the most shocking fact of this study is that the demographic impact of the famine quickly disappeared. The famine of 1692-1694 was "les plus graves et les plus généraux" demographic crises in early modern French history yet the population of the kingdom quickly rebounded. France had an estimated population of 22.3 million in 1690, 21.5 million in 1700, and 22.4 in 1710.<sup>6</sup> For the

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<sup>6</sup> Pierre Goubert (from *Histoire économique et sociale de la France*, P.U.F. Tome II p. 38) cited in Jean Fourastié, *En Quercy: essai d'histoire démographique*, Cahors: Quercy-Recherche, 1986, 71; Jacques Dupâquier, *La population française aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles*, 2<sup>nd</sup> ed., Paris: Presses Universitaires de France, 1993 [1979], 36

people of Agen, the population barely changed in a material sense between the 1680s and 1700. In both periods, the population – based on baptisms – likely stood at around 9,500. Despite excess deaths during the famine, the town appears to have recovered its size through both fecundity and post-crisis immigration.

As a final note, there is always the question of ‘so what?’ Why should anyone care about this study outside of perhaps a handful of local historians who occasionally thumb their way through *La Revue de l’Agenais*? This study’s answer to this question is that the work presented here is more than a recounting of demographic facts. Instead, it is a holistic picture of an early modern community during a subsistence crisis. The picture painted sits within the demographic works of the *Annales* tradition, the economics of famine literature championed by the likes of Ó Gráda, Joel Mokyr, and Andrew Appleby, and a broader economic literature associated with the ‘Brenner Debate’ connected to this work by Le Roy Ladurie’s rejection of Brenner’s thesis.<sup>7</sup> All

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<sup>7</sup> This study “relate[s] periodic movements or economic fluctuations – repeat fluctuations – to concomitant demographic changes – repeat changes – over time.” That is, this study holds that demography and economics are interrelated phenomenon whose relationship is primary over – while not neglecting – cultural, political, or social forces. M.M. Postan and John Hatcher, “Population and Class Relations in Feudal Society”, *Past & Present* 78 (1978), 24-37, 25. This position contrasts with the so-called Brenner Position whereby “it is the structure of class relations, of class power, which will determine the manner and degree to which particular demographic and commercial changes will affect long-run trends in the distribution of income and economic growth – and not *vice versa*.” Robert Brenner, “Agrarian Class Structure and Economic Development in Pre-Industrial Europe,” *Past and Present* 70 (1976), 30-75, 31; For Ladurie’s explicit rejection of Brenner’s position see, Emmanuel Le Roy Ladurie, “A Reply to Robert Brenner,” in *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*, reprint ed., edited by T. H. Aston and C. H. E. Philpin, (New York: Cambridge University Press, 1995 [1985]), 101-106. For the standard Neo-Malthusian approach see the words of Habakkuk who said of the English example “for those who care for the overmastering pattern, the elements are evidently there for a heroically simplified version of English history before the nineteenth century in which the long-term movements in prices, in income distribution, in investment, in real wages, and in migration are dominated by changes in the growth of population. Rising population: rising prices, rising agricultural profits, low real incomes for the mass of the population, unfavorable terms of trade for industry – with variations depending on changes in social institutions, this might stand for a description of the thirteenth century, the sixteenth century and the early seventeenth, and the period 1750-1815. Falling or stationary population with depressed agricultural profits but higher mass incomes might be said to be characteristics of the intervening periods.” H. J. Habakkuk, “The Economic History of Modern Britain,” *The Journal of Economic History* 18:4 (1958), 486-501, 487-488; For neo-Malthusian shit in Normandie see Ladurie’s review of Guy Bois, *Crise du féodalisme*, Emmanuel Le Roy Ladurie, “En haute Normandie: Malthus ou Marx?” *Annales. Economies, sociétés, civilisations* 33 (1978), 115-124; Ladurie promoted a neo-Malthusian understanding of society consisting of auto-stabilizing factors involving population, agricultural production, economic development, famine, war, and plague. See, Emmanuel Le Roy Ladurie, “Histoire immobile,” *Annales. Economies, sociétés, civilisations* 29:3 (1974), 673-692, 679-684; Further comments from Ladurie see Emmanuel Le

of which is to say that there is much in this study beyond the counting of burials. There is much life, much debate, and much which one can glean from the picture painted within these pages.

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Roy Ladurie, "Un Concept: L'unification microbienne du monde (XVIe-XVIIe siècles)," *Revue Suisse d'histoire* 23 (1973), 627-694.

## **Chapter 2: Halcyon Days: 1690**

In the years leading up to the famine Agen experienced relative stability. Its people were unencumbered by war, plague, or high food prices. Life had its rhythms and as far as they could tell the times were good. Given that southwestern France had been the site of social disruption and warfare as recently as the 1650s, the 1690s likely felt like a time of deserved normalcy. It is with this background of normality that this study begins.

### *Time and Place*

To know a town is to walk its streets, feel the sun's intensity on a July afternoon, and catch wafts of the local cooking as you go by shops and windows. The historian's dilemma is that while they can travel to a town there is no guarantee that what stands and breathes today is at all akin to what life was like in the past.<sup>8</sup> Modern society's norms around cleanliness are a prime example of the differences which exist between then and now. Whereas today the winding streets are clean and well drained, in the early modern era there would have been feces from both humans and animals in the streets. The smell has certainly changed.<sup>9</sup>

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<sup>8</sup> As Marcel Lachiver states, "Le passé est là pour fournir des points de repère et de comparaison; il n'est jamais bon de s'y réfugier tout entier." Marcel Lachiver, *Les années de misère: La famine au temps du Grand Roi*, (Paris: Fayard, 1991), 456.

<sup>9</sup> A common response to this 'otherness' of the past is to reject the possibility of objectivity within the practice of history. This response – though fathered by many lines of reasoning at different times – typically hearkens back to works by the likes of Nietzsche, Gadamer, and Foucault. Nietzsche took the position that every man "must organize the chaos within himself by recalling in himself his own real needs." As such one should engage in the practice of history only insofar as it provides a use to them. Nietzsche wrote that "...we must seriously despise instruction without vitality, knowledge which enervates activity, and history as an expensive surplus of knowledge and a luxury, because we lack what is still most essential to us and because what is superfluous is hostile to what is essential. To be sure, we need history. But we need it in a manner different from the way in which the spoiled idler in the garden of knowledge uses it, no matter how elegantly he may look down on our coarse and graceless needs and distresses. That is, we need it for life and action, not for a comfortable turning away from life and action or merely for glossing over the egotistical life and the cowardly bad act. We wish to use history only insofar as it serves living. But there is a degree of doing history and a valuing of it through which life atrophies and degenerates. To bring this phenomenon to light as a remarkable symptom of our time is every bit as necessary as it may be painful." The Nietzschean approach to history therefore requires the practice of history to beget action. History in this way becomes a tool. Friedrich Nietzsche, "On the Use and Abuse of History," trans. Ian Johnston, 1873, <https://la.utexas.edu/users/hcleaver/330T/350kPEENietzscheAbuseTableAll.pdf>, 46,1; Gadamer wrote of the role of hermeneutics within historical understanding wherein "there is no understanding or interpretation in which the

Yet, Agen remains. Agen sits on the northern bank of the Garonne River 140 kilometers upstream of Bordeaux and 100 kilometers downstream of Toulouse. It lies roughly equidistant between Villeneuve-sur-Lot and Condom. The town sits on a fertile and densely populated alluvial plain created by the deposition of silts at the foot of the escarpments that shape the river valley. Given its location on a major navigable river, goods and persons moved through the town with relative ease. The town's middle position between the headwaters of the Garonne and its outlet into the Gironde Estuary granted it an enviable position as a natural nexus of trade.

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totality of this existential structure does not function, even if the intention of the knower is simply to read 'what is there' and to discover from his sources 'how it was.'" From a hermeneutical approach the historian would always find themselves 'reading' something 'into' historical sources. Therefore, one would never find a 'real' or 'true' aspect of the source. Instead, there would merely be the source as examined by the historian through a given interpretive lens. Hans-Georg Gadamer, *Truth and Method*, trans. Joel Weinshammer and Donald Marshall (London: Bloomsbury Academic, 2013, [1975]), 232; Lastly, with Foucault one sees an evolution of the Nietzschean form of history with a new emphasis placed on power. As Foucault notes, "The successes of history belong to those who are capable of seizing these rules, to replace those who had used them, to disguise themselves so as to pervert them, invert their meaning, and redirect them against those who had initially imposed them..." By this Foucault refers to the discourse of power that shapes and reshapes the past as viewed from the present. History, then, is again a tool for, as Bevir puts it, "offering a perspective on the past designed to challenge contemporary systems of power/knowledge." Michel Foucault, "Nietzsche, Genealogy, History," in *Language, Counter-Memory, Practice: Selected Essays and Interviews*, edited by Donald Bouchard, (Ithaca: Cornell University Press, 1980 [1977]), 76-120, 86., Mark Bevir, "Objectivity in History," *History and Theory*, 33:3 (1994), 328-344, 328; In contrast to these views, one could look at the work of Marc Bloch, who in the 1940s wrote "No one today, I believe, would dare to say, with the orthodox positivists, that the value of a line of research is to be measured by its ability to promote action." In Bloch's view history is a quest to satiate "the will to understand" rather than the "will to know" thus, the historian's goal is to *understand* the past separate from any utility necessarily gained therefrom. To understand a given event in the past the context must be understood insofar as one can since "historical phenomenon can never be understood apart from its moment in time." In Bloch's paradigm the practice of history is a humanist endeavor as opposed to an individualistic or social 'will to power' of Nietzsche and Foucault. Marc Bloch, *The Historian's Craft*, trans. Peter Putnam, (New York: Random House, 1964 [1949]), 9, 10, 35. As for the interpretive concerns of Gadamer, one can look to the adage Leslie Hartley's line that "the past is a foreign country: they do things differently there." While one can never go to the past, one can recognize familiar features. While one may misinterpret these features there is no reason to suppose a change in human experience so drastic that there are no shared points of reference between one time and another. As an analogy, if an anglophone finds a scrap of paper containing English and French words, the presence of an unknown language does not negate the reader's ability to understand the English. The past may be a foreign country, but it is not a hidden land. As Gordon Wood wrote "When all is said and done, when all the concession to subjectivity, imaginative re-enactment, and the use of 'regulative fictions' have been made, historians still remain necessarily tied to...the view that the past 'out there' really existed and that they can through the collection and ordering of evidence bring us closer to knowing the truth about the past 'as it really was,' even if the full and complete truth about the past will always remain beyond their grasp." Gordon Wood, "Writing History: An Exchange," *The New York Review of Books*, December 16, 1982. For a nuanced discussion of this topic see, David Lowenthal, *The Past is a Foreign Country – Revisited*, (New York: Cambridge University Press, 2015). Yes, this *is* an example of 'Footnote armour.'

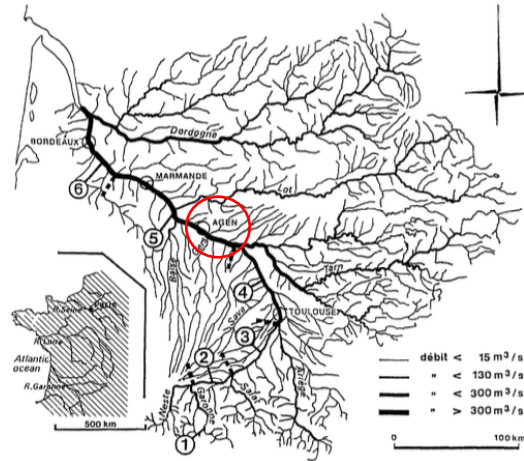


Fig 1. Location of Agen Within the Gironde Watershed.<sup>10</sup>

Humans have lived in the town's location since pre-historical times. Agen was the principal town of the Nitiobroges tribe. Following his conquest of Gaul, Julius Caesar made the town a Roman administrative center second only to Burdigala; present day Bordeaux.<sup>11</sup> Agen appears in the works of both the geographer Ptolemy and Pliny the Elder.<sup>12</sup> Local legends trace the town's name – Aginnon in Roman period – to a trio of possible founders all from the eastern Mediterranean and pulled from Greek sources.<sup>13</sup>

Following the Roman period, the Huns, Vandals, Alains, Sueves, and Burgundians allegedly sacked the town before it fell under the tutelage of the Goths.<sup>14</sup> In time, Agen would make up part of the duchies of Gascony, Auvergne, Poitou, Toulouse, and finally Aquitaine. With

<sup>10</sup> E. Chauvet and H. Décamps, "Lateral interactions in a fluvial landscape: The River Garonne, France," *Journal of the North American Benthological Association*, 8:1 (1989), 9-17.

<sup>11</sup> Bernard Labénazie, *Histoire de la ville d'Agen et pays d'Agenois: tome I*, Lot-et-Garonne: Mlle A Barrès, 1888, 13.

<sup>12</sup> Ibid, 1. For archaeological remains dating from the Augustinian period see, Raymond Monturet and Dominique Tardy, "Programmes d'architecture augustéene à Agen," *Aquitania* 9 (1991), 41-60.

<sup>13</sup> *Histoire de la ville d'Agen et pays d'Agenois*, 3.

<sup>14</sup> Ibid, 23. Note that there is no sense of what the word 'sacked' means here. Additionally, the list of prominent Germanic tribes could merely be the result of a 19<sup>th</sup>-century historian looking to bolster the stature of his city of focus by associating it with well-known peoples.

the annulment of Eleanor of Aquitaine's marriage to Louis VII and subsequent marriage to Henry II Agen became part of the Plantagenet realms.<sup>15</sup>

Plantagenet rule lasted until the Hundred Years War when the town sided with Phillippe of Valois. In exchange for its loyalty the town received several privileges. These included a limit on the number of men that crown could call to serve in the royal army – 200 – along with local prerogatives surrounding the execution of justice, a consul-based legislative system, and freedom from certain taxes.<sup>16</sup> The apparent violation of these privileges served as the basis for several bouts of social unrest including a short-lived republic in the 16<sup>th</sup>-century and Croquant-related revolts in the early-17<sup>th</sup>.<sup>17</sup> However, by the second half of the 17<sup>th</sup>-century the town was relatively docile and stable.

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<sup>15</sup> One notes here that “the Plantagenets and their empire were French” as opposed to English insofar as their beginnings in Normandy, their court language, and cultural affinities were towards what is today considered France. That is to say that the Plantagenets were more closely akin to Poitiers than York. John Le Patourel, “The Plantagenet Domains,” *History*, 50:170 (1965), 289-308, 290

<sup>16</sup> *Histoire de la ville d'Agen et pays d'Agenais*, 155-157.

<sup>17</sup> In 1514, the people of Agen rebelled against the town's governing “Conseil de huit consuls, renouvelé chaque année par cooptation.” This council was predominately manned by nobles, landowners, and rich wine and grain merchants. The primary complaint of the rebels was that the council had become “un circuit fermé” whereby members of the same families were selected year after year. The rebels alleged that this oligarchic structure led to the enrichment of a handful of families through tax abuse. It seems that council members had been misappropriating funds for themselves while violating the privileges of the town. For example, the citizens of Agen had long been able to purchase salt without paying the gabelle but now found themselves subjected to it by the local authorities.<sup>17</sup> The council appears to have begun instituting the salt tax and were alleged to have been using the resulting funds to enrich their daughters, sisters, and nieces. The rebels were not particularly violent. Instead, council members were arrested until a royal judge from outside the town could arrive. The insurrectional program proclaimed a republic in Agen, though a republic subject to the crown. In the end, royal officials arrived, exiled some of the rebels – who were later pardoned and returned – and most of the consular families continued to rule although perhaps with more trepidation. Vladimir I. Raytses, “Le programme de l'insurrection d'Agen en 1514,” *Annales du Midi*, 92:153 (1981), 255-277, 257, 262, 270, 269, 258; For an overview of the so-called republic's proclaimed constitution see Georges Tholin, “Proclamation de la commune à Agen en 1514,” *Annales du Midi*, 13:49 (1901), 5-40; In 1637, taxation on wheat led to an uprising in nearby Périgord. Agen's reaction to this taxation appears in the writings of a leading citizen of the town who wrote that “people are going quite crazy and are openly denouncing these rations and taxes on corn. We are seriously frightened that everyone will follow the example of the men in Périgord.” Agen would experience noteworthy revolts in 1635, 1652, and 1681. Each time food prices and taxations would appear amongst the list of catalysts. In 1635 the revolt led to the burning of houses in Agen alongside murder and looting. However, the existence of violence within the city walls – and not exclusively against a set of politically powerful individuals as occurred in 1514 – leads to a more complicated understanding of revolts in this period. As a rule, “the only reason [people] rebelled was to protect their communities.” It would have been counterproductive to murder and pillage close to home. It is therefore the case that the more violent episodes of rebellion occurred in localities where the rebels were not inhabitants. For example, during the 1635 revolt “it was the watermen at Agen who gave the signal” to rebel. These men were not necessarily



Inside the town's walls were four parishes: Ste Foy, St Étienne, St Hilaire, and St Caprais.<sup>18</sup> St Hilaire and St Foy were standard parishes, St Étienne was the cathedral, and St Caprais was a collegiate church whose canons celebrated mass with more pomp than a standard parish. The four churches were closely situated to one another. For example, Ste Foy and St Caprais stand all of 240 meters apart.

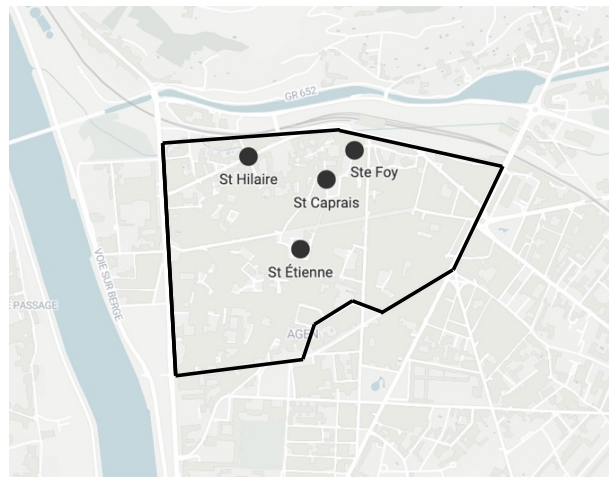


Fig 2. Relative Locations of St Hilaire, St Caprais, Ste Foy, and St Étienne. Source: DataWrapper

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of the town, instead they plied their trade up and down the Garonne, Lot, and Gironde. For them, mobility was their livelihood. One rarely saw the organized units of towns rebel. As Bercé notes, “there is, in fact, no evidence that guilds, corporation or leagues of journeymen were directly involved in any disturbance at any time.” Instead, revolts were the purview of “the same little circle of brewers and market gardeners who hung about in the villages on the outskirts of town.” But one should note that it was not just people who lived in the suburbs who stirred up trouble. During the 17<sup>th</sup>-century there was a great deal of economically driven migration. The “Agenais was one of the worst effected regions” when it came to the emptying of towns and associated migration during the middle of the century. Therefore, many “craftsmen and peasants were drifting across the land” and primed for causing a ruckus in localities where they had enjoyed little in terms of notoriety or property. Despite the role of outsiders in local spats of revolt, reputations were formed based on locations of occurrence as opposed to personal origins. Thus, at the time of this study “certain cities like Bordeaux, Agen, and Bayonne were generally agreed to be bloody-minded, fierce, and seditious.” Despite this reputation, during the famine years of the 1690s there was no sign of rebellion in the town. Marie Bercé, *History of Peasant Revolts: The Social Origins of Rebellion in Early Modern France*, trans. Amanda Whitmore, (Ithaca: Cornell University Press, 1990 [1986]), 111, 58, 288, 37, 26, 58, 65; For other revolts around Agen during the Fronde see, André Mateu, “Fête et révolte à Agen pendant la Fronde,” *Revue de l’Agenais*, CVI:4 (1979), as well as L. Couyba, *Études sur la Fronde en Agenais et ses origines*, (Villeneuve-sur-Lot: Imprimerie Renaud Leygues, 1901).

<sup>18</sup> There were also other non-parish religious communities such as Jesuits, Dominicans, Benedictines, Annonciades, Carmelites, Franciscans, Orphelines, as well as other smaller communities consisting of cloistered females and a few hermits. Philippe Lauzun, *Les Couvents de la ville d’Agen avant 1789*, vols 1-2, (Agen: Michel et Médan, 1893).

Whereas Ste Foy, and St Caprais still stand today ruins of St Hilaire are all that remain. In the 18<sup>th</sup>-century the cathedral of St Étienne fell into disrepair. Following the Revolution, the Bishop's chair moved to St Caprais. A Carrefour mini-supermarket now stands on the cathedral's former site.



Fig. 3 From Left to Right: Ste Foy, St Caprais, and the Ruins of the Former Church of St Hilaire.

### *Population Size and Structure*

Heading into the 1690s the four parishes were neither equal nor identical. Their populations were diverse and disparate. Their differences appear in factors ranging from population and life expectancy to occupations and nuptial networks. Examining these demographic realities and characteristics of the town's parishes paints a picture of the town's equilibrium prior to the exogenous shock of famine. The following table outlines the parish records used in this study.<sup>19</sup>

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<sup>19</sup> Note that for the most part this study does not attempt to interpolate or estimate missing parish register data. While there are methods, such as those presented by Bonneuil, which aim to estimate such data, this study works only with the data as it stands. Noël Bonneuil, "Traitement de données manquantes dans le series issues des registres paroissiaux," *Population* 53:1-2 (1998), 249-270.

Parish	Record Type	Years Covered <sup>1</sup>	# Of Records
Ste Foy	Burials	1679-1688, 1692-1699	2,247
	Baptisms	1679-1683, 1692-1699	1,463
	Marriages	1679-1683, 1692-1699	339
St Caprais	Burials	1680-1699	532
	Baptisms	1679-1699	1,145
	Marriages	1689-1699	312
St Hilaire	Burials	1680-1681, 1685-1688, 1690-1699	745
	Baptisms	1679-1688, 1692-1699	1,463
	Marriages	1680-1681, 1685-1687, 1692-1699	221
St Étienne	Burials	1679-1699	1,942
	Baptisms	1679-1699	2,762
	Marriages	1679-1686, 1688-1699	572

<sup>1</sup> 1679-1688 are calendar years while 1689-1699 are harvest years. Baptisms for 1679-1688 are from Hanlon in *Death Control in the West*.<sup>20</sup>

Table 1: Records Used Per Parish

In terms of population heading into the 1690s, there are two useful metrics for estimating size: burials and baptisms. Early modern France was a land of slow but consistent growth mixed with exogenous shocks such as war, famine, and plague.<sup>21</sup> In a low growth environment an annual increase in population of even 1% - if unaffected by shocks – would double the size of the community in only 72 years. Therefore, one expects that baptism and burials should be roughly equal in number for this period. However, in the parish registers the number of baptisms recorded in the ten years preceding 1689 are nearly double the number of recorded burials. This ratio – with no apparent explanation – cannot be accurate.<sup>22</sup> If it were, the towns would have doubled in size every 18 years.

There are some possible explanations for this disparity, all of which are, at best, weak. It could have been that infant burials were chronically under recorded. This is possible, but the parish

<sup>20</sup> Gregory Hanlon, “Agen, Aquitaine’s complicated second city, 1600-1715,” in Gregory Hanlon et al., *Death Control in the West 1500-1800, Sex Ratios at Birth in Italy, France and England*, 128-144.

<sup>21</sup> Dupâquier estimates an increase in annual baptism rates in the kingdom’s south of 5% from 1605 to 1675. Jacques Dupâquier, *La population française aux XVIIe et XVIIIe siècles, 2<sup>e</sup> édition*, (Paris: Presses Universitaires de France, 1993), 10.

<sup>22</sup> For a typical large sample size burial-baptism dataset see, Jean-Noël Biraben, and Didier Blanchet, “Essai sur le mouvement de la population de Paris et de ses environs depuis le XVIe siècle,” *Population* 53:1-2, 215-248, 232-233.

registers regularly recorded infant burials. Additionally, one could imagine a booming population that faced limited local economic opportunities which led to a large and consistent exodus. There is no immediate evidence of such behavior. Furthermore, such an exodus would hamper the procreative population in the town in ensuing years, something which does not appear in the records.

While this ratio cannot be accurate, the records are what they are. Therefore, one ought to view the resulting population estimates made using both burials and baptisms as indicative rather than as objectively certain. The following table outlines these estimates.

<b>Burials, Baptisms, and Estimated Population Agen, 1679-1688<sup>23</sup></b>				
<b>Parish</b>	<b>Burials</b>	<b>Estimated Population (Burials)</b>	<b>Baptisms</b>	<b>Estimated Population (Baptisms)</b>
Ste Foy	137	3,428	114	2,958
St Hilaire	20	500	66	1,716
St Etienne	56	1,405	142	3,690
St Caprais	17	425	56	1,452
<b>Total</b>		<b>5,758</b>		<b>9,816</b>

Note: Rounding ensures that not all estimated populations are exactly Non-Famine Year Mortality divided by 0.04<sup>24</sup>. Note that these are harvest years.

Table 2: Burials, Baptisms, and Estimated Population Agen, 1679-1688

The relative sizes of the parishes give a sense of their demographic importance. The baptism estimates fall in line with what one would expect. The cathedral accounts for the largest swath of the population while the other three are of respectable size. Nonetheless, there is trepidation in the interpretation insofar as baptism data likely underestimates the size of Ste Foy. Ste Foy was the church of the poor whereas St Hilaire was a community of artisans and professionals. It is therefore

<sup>23</sup> Archives Départementales, Lot-et Garonne, E SUP AGEN GG 6, 11, 36, 69, 90. Baptisms come from Gregory Hanlon et al., *Death Control in the West, 1500-1800: Sex Ratios at Baptism in Italy, France, and England*, (New York: Routledge, 2023), 135-143.

<sup>24</sup> The period of ten non-famine years prior to the period of interest as faithful indicators of the situation in Agen at the start of the period comes from Dupâquier's and Lebrun's respective uses of ten years as sufficient for setting a baseline. For an overview of those two methods see, François Lebrun, "Les crises démographiques en France aux XVIIe et XVIIIe siècles," *Annales: Economies, sociétés, civilisations*, 35:2 (1980), 205-235; This study uses a straightforward method for estimating total population. Estimates were made based on an assumed mortality rate as given for the latter *ancien régime* by Henry and Blayo of the INED. The rate used is 40 deaths per 1,000 persons. One applies this rate to an average of non-famine harvest year deaths in the years 1679-1689. The result is an estimated equilibrium population heading into the period of interest. Louis Henry and Yves Blayo, "La population de la France de 1740-1860," *Population (French Edition)*, 30 (November 1975), 71-122, 108.

unlikely that Ste Foy would have been a third smaller than St Hilaire. At the same time, burial data would have Ste Foy as the primary parish of the town. Given the administrative capacities of the cathedral, this seems unlikely. Furthermore, the burial data likely underestimates the populations of St Hilaire and St Caprais. Furthermore, the boundaries of the parishes may have extended beyond the town walls leading to an additional wrinkle. These notes further emphasize the need for skepticism regarding the estimates.

Moving beyond population size one can explore population structure in terms of class and age. This study divides the town in to three classes: non-notable, notables, and nobles. Non-notables made up the bulk of the population.<sup>25</sup> A non-notable was anyone who was neither a notable nor a noble.<sup>26</sup> Within Agen non-notables were any persons who lacked social recognition. One might refer to them as the working poor. Their professions – if they had one other than menial labourer – lacked the social ranking required to be treated as a person of note. These persons were the great mass of humanity within Agen. With that said, they were not themselves defined as a group. Instead, their social position was defined as neither a notable or noble.

The notable class consisted of persons whose profession afforded them a level of social recognition. This class consisted of what one might refer to as a proto-middle class whereby its

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<sup>25</sup> Approximately 96% of the French population were non-notables at the dawn of the 18<sup>th</sup>-century. Pierre Goubert, *L'Ancien Regime, tome 1*, Paris: Armand Colin, 1969, 3. It is worth noting that as urban dwellers, the people of Agen were, in some sense, all notable in that they relied more or less entirely on the market for their daily bread. As Biraben notes, “en plus des classes privilégiées, présentes à presque toutes les époques, on voit apparaître une population urbaine don’t l’alimentation provenant presque exclusivement d’échanges commerciaux, est plus élaborée (et sensiblement différente en nature) que celle de la masse rurale vivant en économie de subsistance à peine améliorée par un marché local et beaucoup plus sensible aux aléas de la production agricole.” Jean-Noël Biraben, “Alimentation et démographie historique,” *Annales de Démographie Historique* (1976), 23-40, 27

<sup>26</sup> non-notables lived in both urban and rural settings. One must remember that “seventeenth-century France was mainly a country of share-croppers.” Therefore, most non-notables were *paysans* who lived in the countryside and worked for a *seigneur*. With that said, not all non-notables were *paysans* in the sense of rural dwellers. Pierre Goubert, *The French Peasantry in the Seventeenth Century*, trans. Ian Patterson, New York: Cambridge University Press, 1986, 35. For a classic exposition on this difference and the stratified nature of the non-notable class see Marc Bloch, *French Rural History: An Essay on its Basic Characteristics*, trans. Janet Sondheimer, (London: Routledge & Kegan Paul, 1966), 189-198.

members were not peasants yet were not nobles. They existed as an in-between state in which they rubbed elbows with both the nobility and the non-notables.

This study recognizes a person as notable if the parish record refers to them (in the case of marriage or burial) or their parents (in the case of baptism or burial of a child) as *monsieur*, *sieur*, *madame*, as well as if a male appears in the records as a *bourgeois* or *maître* of a profession. The reason for this definition of notability is that both reflect a level of social standing within a given community. The honorifics of *monsieur* etc.... carry with them both the expectation of the person referred to as well as the intention of the referee to differentiate the former from the non-notable masses. For those noted as a *maître* of a profession their notability comes from a recognized status given by their fellow practitioners.

As for the nobles, theirs was a social rank legally acknowledged and bestowed. The nobility, although ever present throughout the royal administration and military, was an exceptionally small component of the population. Estimates place nobility's share of population in Bordeaux around 1703 at 0.65%.<sup>27</sup> Nobility carried with it a higher legal status yet there was no explicit requirement that a noble be rich. What a noble required was legal legitimacy which was often precariously held.<sup>28</sup> In this period, anyone claiming nobility had to demonstrate that their proof of nobility extended backwards to at least 1560 unless otherwise purchased since then.<sup>29</sup>

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<sup>27</sup> Richard Dewever, "On the Changing Size of Nobility under Ancien Régime, 1500-1789," Master's Thesis, (Paris: École Normale Supérieure, 2017), 23.

<sup>28</sup> Beginning in the 1660s, Louis XIV's government sought to tackle the problem of 'false nobility.' The notion of 'false nobility' seems to stem from the notion that a noble cannot – or should not – be poor. Therefore, nobility could be 'lost' due to a decline in material wealth that made the defense of such claims untenable. Romier argued that the 16<sup>th</sup> and early 17<sup>th</sup> century saw a significant decline in the economic status of the French nobility. See, Lucien Romier, *Le royaume de Catherine de Medici: La France à la veille des guerres de religion, tome I*, (Paris: Librairie académique Perrin et Cie, 1922), 171; Against this view is that of James Wood who posited "clear indications of the social stability and economic prosperity" of the nobility in the election of Bayeux in the 16<sup>th</sup> and 17<sup>th</sup>-century. James Wood, "The decline of the Nobility in Sixteenth and Early Seventeenth Century France: Myth or Reality?" *Journal of Modern History*, 48:1 (1976), 1-29, 23;

<sup>29</sup> "On the Changing Size of Nobility under Ancien Régime, 1500-1789," 31-32.

This requirement of Louis XIV's government was a ploy to generate revenue for the state through the sale of offices and associated nobility while also theoretically boosting the taxable population base. At the same time, it served as a vehicle for upward social mobility since "the level of social mobility into the nobility should have somehow been related to the rate at which its old families died out."<sup>30</sup> Nobility is most valuable when it is a scarce commodity. Too many nobles reduced the price that new letters of nobility fetched.

The result of Louis XIV's measures was that for the period under investigation nobles were, broadly speaking, well off. They were certainly wealthier than non-notables. But relatively poor nobles did exist. However, if one were to keep their noble status, they had to possess the monetary capacities to defend their claim. This means that when this study speaks of nobles it refers to a group of relatively well-off persons. A noble could always marry into a wealthy non-noble family to return to the top of the social heap.<sup>31</sup>

This study estimates the non-notable, notable, and noble shares of Agen's population from burial records alone. The reason for this is that socially granted status – that of the notables – is an earnable characteristic. Although born a non-notable, one could rise to the level of a *maître* in a trade over the course of one's life. This method likely overestimates the notable and noble populations. However, a similar analysis using baptism records would underestimate the notable and noble populations for the opposite reason.<sup>32</sup> The following table lays out the estimate based on each parish and for Agen as a whole.

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<sup>30</sup> James Wood, "Demographic Pressure and Social Mobility among the Nobility of Early Modern France," *The Sixteenth Century Journal*, 8:1 (1977), 3-16, 3.

<sup>31</sup> It is important to note that in this period "la séparation totale [of elites from the countryside] qui rassemble définitivement en ville l'ensemble des élites du royaume" occurred. That is to say that towns and cities – to one extent or another – became the purview of the elites. The days of the nobleman living in the country within a fortified chateau had largely passed. The elites became urban, and the urban became elite. Emmanuel Le Roy Ladurie et al., *Histoire de la France Urbaine, tome 3: la ville classique de la Renaissance aux Révolutions*, (Paris: Seule, 1981), 92.

<sup>32</sup> This methodology has a further limitation in that the population size calculation assume a single baptism or burial to population ratio for the community as a whole. However, differing levels of fertility – and childhood survival –

<b>Social Class at Burial Proportions by Parish</b>			
Parish	Non-Notable Population	Notable Population	Noble Population
Ste Foy	99.5%	0.5%	0%
St Hilaire	89.3%	9.5%	1.2%
St Etienne	84.9%	13.6%	1.5%
St Caprais	90.6%	8.9%	0.6%
<b>Total (Agen)</b>	<b>92%</b>	<b>7%</b>	<b>1%</b>

Table 3: Social Class at Burial Proportions by Parish

As for Agen’s age structure, exploring this characteristic allows one to establish comparative baselines for non-famine and famine year behavior. This matter is not entirely straightforward since the records that survive testify to the ages at which persons were buried. Ages recorded at burial testify to the ages to which persons in the community lived to be. The previous statement may appear obvious but there is a non-obvious effect. If one tabulates the frequencies of the ages at death and plots them as a cumulative proportion of deaths, then a picture emerges of the community. Put differently, if one person out of a hundred in the records lives to be eighty-five then it is reasonable to estimate that ninety-nine percent of the population – assuming a representative sample – is below the age of eight-five at any one time. In short, the proportion of deaths that occur before a given age reflects the proportion of people living who are below that age.

One issue with this method is that the burial records are rather subjective when it comes to recording ages. Even amongst the nobility – who one would expect to have better records – ages at burial tend to ‘clump’ around years that end in zeroes and fives reflecting a general tendency to

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across social classes poses a problem in that the wealthier families likely had larger families inclusive of more children who survived into adulthood. No family reconstruction occurred in this study but one can look to the English example explored by Clark and others. For example, see Gregory Clark and Gillian Hamilton, “Survival of the Richest: The Malthusian Mechanism in Pre-Industrial England,” *The Journal of Economic History* 66:3 (2006), 1-30; Gregory Clark, *A Farewell to Alms: A Brief Economic History of the World*, (Princeton: Princeton University Press, 2007); and Nina Boberg-Fazlic, Paul Sharp, and Jacob Weisdork, “Survival of the richest? Social status, fertility and social mobility in England 1541-1824,” *European Review of Economic History* 35, 365-392.



estimate ages.<sup>33</sup> Nonetheless, the matter at hand is one of degrees not magnitude. Few priests would look at a fifteen-year-old and record their age as eighty-three.

The following figure demonstrates the results of this methodology for St Étienne.

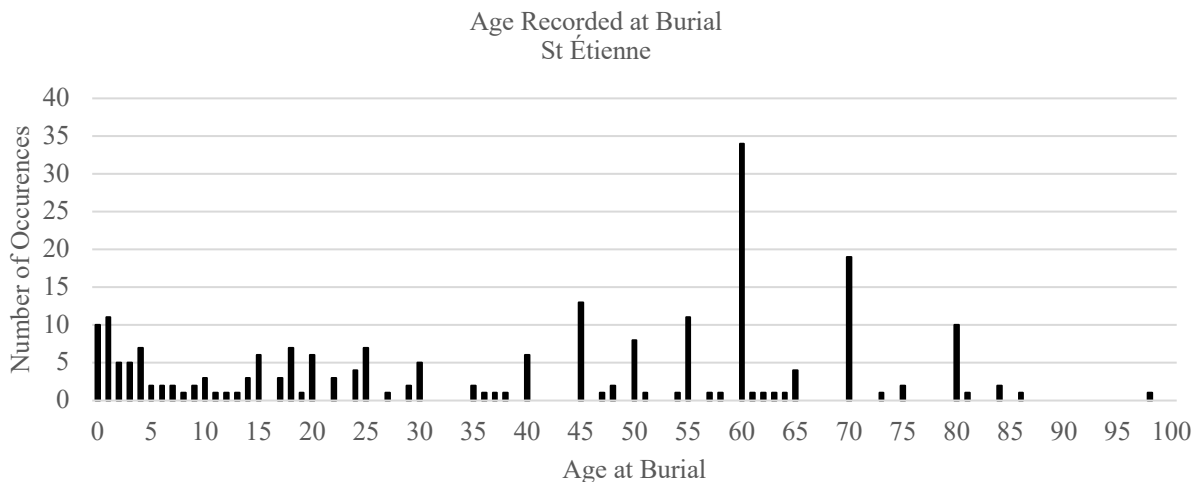


Fig 4. Age Recorded at Burial, St Étienne

Transforming this figure to a cumulative proportion graph results in the following figure.

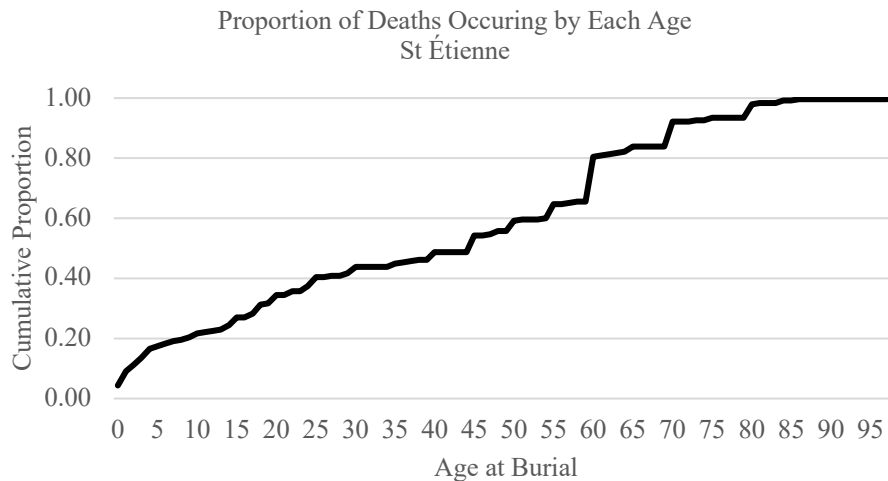


Fig 5. Proportion of Deaths Occuring by Each Age, St Étienne

<sup>33</sup> Neil Cummins, “Lifespans of European Elites, 800-1800,” *Journal of Economic History*, 77:02 (2017), 406-439, 410. Evidence of this lumping occurring in this region during this time appears in author’s previous study of the town of Mézin. Evan Johnson, “Massacre of the Innocents: Routine Infanticide in Mézin, 1649-1743,” Honour’s Essay, Dalhousie University, 2019.

The level of infant mortality in these two figures is surprising low. During the same period in Paris infant mortality rates ranged from 33% to 35% percent.<sup>34</sup> In general, one expects at least 20% of persons to have died before their first birthday in the early modern period.<sup>35</sup> While the records do not afford certainty regarding the reason for this low number of deaths prior to the age of one, one can venture a tentative explanation. The St Étienne records contain 121 burial records with no associated age provided. Almost all these entries contain language that identifies the deceased as a child. For example, the record refers to the deceased as a son or daughter as opposed to a spouse. Now, it is possible that these records could refer to children who reached beyond their first year, but it would seem reasonable to think that given the high level of infant mortality a priest would have often chosen to not list an age given its low number.

However, adding the 121 records to the ones identified as referencing a child under the age of one gives a mortality rate of 52% which is far too high. This study does not add these persons without ages to the youngest group of buried persons because there are many instances of priests at St Étienne recording extremely young ages such as those of Jeanne Bosque who died aged one month, Jean Ferrios aged ten days, and Marie Granie aged thirteen days.<sup>36</sup> For this reason, the figures presented for the other three parishes follow the methodology used for St Étienne (i.e., ignore burials without ages provided).

The following figure shows the ages at burial for St Hilaire.

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<sup>34</sup> Jacques Dupâquier et al., *Histoire de la Population Française, vol.2, De la Renaissance à 1789*, Paris: Presses Universitaires de France, 1988, 223.

<sup>35</sup> As Woods notes, “populations with  $e(0)$ s [life expectancy at birth] of less than 30 years must experience very high rates of early-age mortality; at least 20 per cent of live born infants will die before reaching their first birthday.” Robert Woods, “Ancient and Early Modern Mortality: Experience and Understanding,” *The Economic History Review*, 60:2 (2007), 373-399, 385, 13.

<sup>36</sup> Buried June 1692, July 1692, and August 1692 respectively.



Fig. 6. Age Recorded at Burial, St Hilaire

Again, one sees a clustering around ages that end with zeroes and fives. Infant mortality rates for St Hilaire are also too low given the period under investigation. For this community, only 12% of recorded burials occurred before one's first birthday. Looking at the cumulative proportion of deaths one sees a similar pattern as for St Étienne.

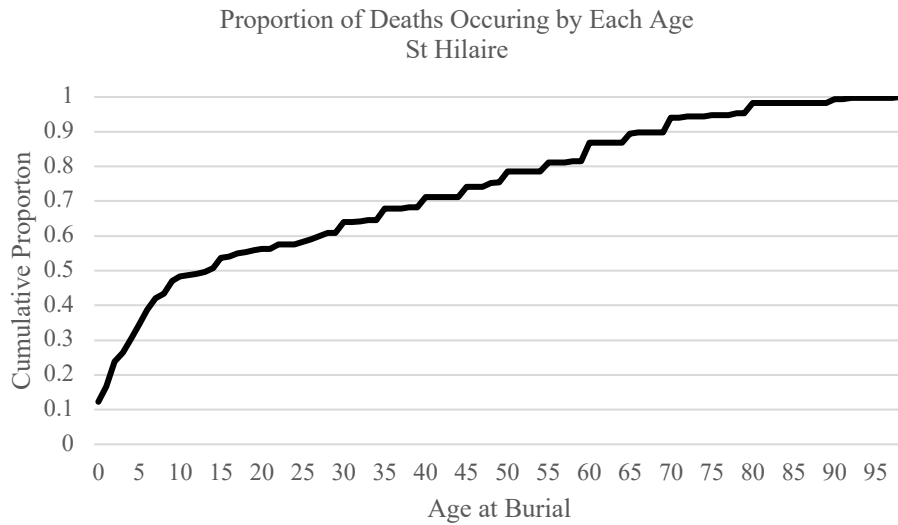


Fig. 7. Proportion of Deaths Occurring by Each Age, St Hilaire

While the calculation and presentation of life expectancies is handled further on in this study, it is useful to note that in the cumulative proportion figures, the age associated with a proportion of 0.5 represents the age by which half the community already died.

The pattern shifts slightly for St Caprais. The community has less data for the period covered and possesses some differentiating attributes that are explored further on in this study.

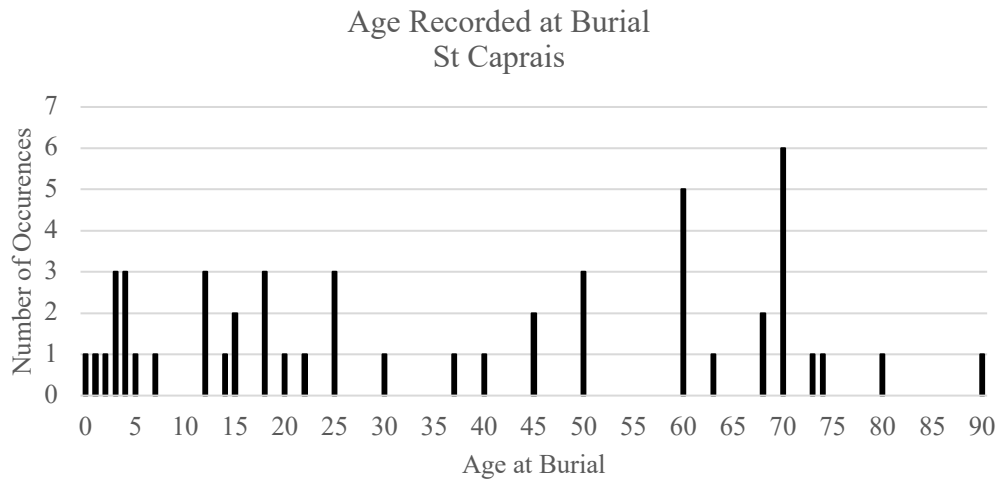


Fig. 8. Age Recorded at Burial, St Caprais

St Caprais has the lowest apparent infant mortality of any of the churches in Agen with only 2% of the population dying before their first birthday. Therefore, the evidence is overwhelming that Agen as a community engaged in mass under-reporting of infant deaths. While one would suspect that the ‘missing’ infants were buried in some fashion, their absence from the burial records leaves one with a clear picture of the little regard given to these little persons.

The cumulative proportion of deaths figure for St Caprais paints a familiar picture.

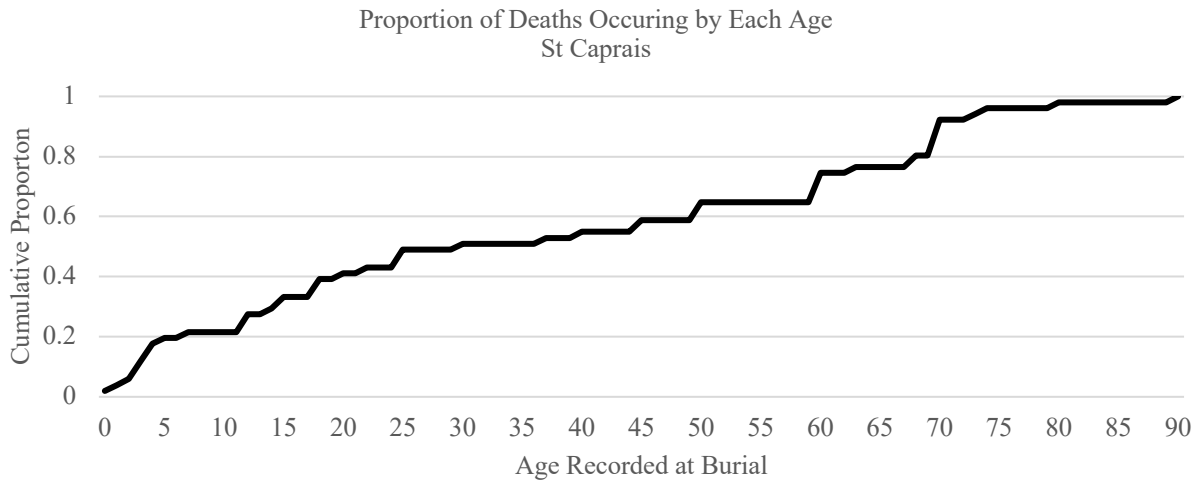


Fig. 9. Proportion of Deaths Occurring by Each Age, St Caprais

Lastly, there is Ste Foy. Its age-based data appears below.



Fig. 10. Age Recorded at Burial, Ste Foy

Once more, there is a shortage of deaths prior to the age of one with only 12% of the recorded deaths occurring at that age. The figure below shows the cumulative age profile.

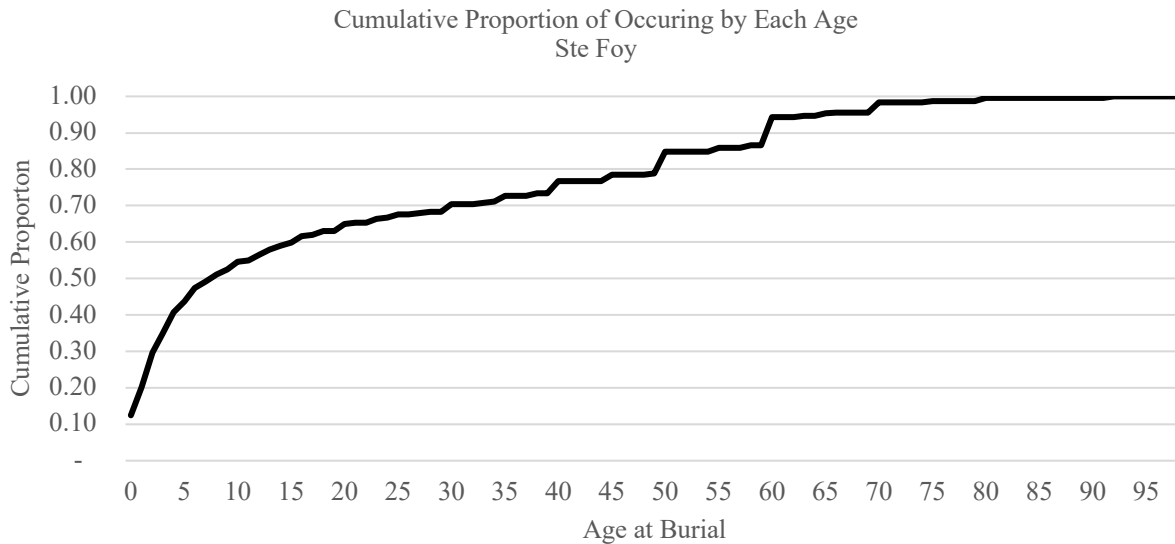


Fig. 11. Proportion of Deaths Occurring by Each Age, Ste Foy

With the preceding data in hand, one can estimate an age pyramid for Agen. However, one must deal with the limited data available for the age cohorts between the ages of ten and sixty. Since burial records only provide data associated with death and because mortality is not consistent throughout one's life, any age pyramid based on burial records alone will undercount age cohorts who possessed lower mortality levels.<sup>37</sup> However, research on early modern European communities indicates an expected share-of-population amongst those aged ten to sixty of around 60%.<sup>38</sup> Therefore, one can account for the lack of information about prime aged individuals by factoring in this expected share of population and adjusting the shares of the very old and very young in accordance with their relative proportions prior to the prime-age adjustment.<sup>39</sup>

<sup>37</sup> For a highly technical and detailed reconstruction of a contemporary population in southern France which estimates the 'missing middle' of the age pyramid see, Jean-Noël Biraben and Noël Bonneuil, "Population et économie en pays de Caux XVIe et XVIIe siècles," *Population* 41:6 (1986), 937-960, 952-957.

<sup>38</sup> Joseph Spengler, "Demographic Factors and Early Modern Economic Development," *Daedalus*, 97:2 (1968), 433-446, 441.

<sup>39</sup> Note that neo-natal infanticide would further further skewed recorded burials of the very young through a complete lack of record keeping.

Additionally, there is the question of sex ratios. For the purposes of this study a male-female sex ratio at birth of 1.05 is used based on scholarly literature.<sup>40</sup> Although this ratio quickly diverged in favor of females as persons age.

Males tend to live shorter lives than their female counterparts for a variety of reasons including a higher risk tolerance and more physically demanding forms of labor.<sup>41</sup> Furthermore, females enjoy a “mortality advantage [vis-à-vis males] during mortality crises caused by famines and epidemics” which could materially increase their innate capacity to survive longer in early modern society.<sup>42</sup> Therefore, the female share of population represented in each age cohort should increase in time, especially in the case of an urban community like Agen.<sup>43</sup> Louis Henry’s theoretical work on 18<sup>th</sup>-century Sweden allows for an approximation of the relative sex ratios at different age cohorts.<sup>44</sup> This approximation aids in understanding the likely female preponderance in the community.<sup>45</sup>

For reference, an unadjusted age period using only the burial records in Agen produces the following age pyramid.

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<sup>40</sup> For an overview of sex ratios at birth see, Pravin Visaria “Sex Ratio at Birth in Territories with a Relatively Complete Registration,” *Eugenics Quarterly*, 14 (1967), 132-142. The prevalence of 1.05 as a population constant was reinforced by Caselli, G., Vallin, J., & Wunsch, G. (eds.), *Démographie. Analyse et synthèse: vol. 1*, Paris: éditions de l’I.N.E.D., 2001, 51. However, research has also indicated a possible range of 1.05-1.10, see Eric Brian, and Marie Jaisson, *The Descent of Human Sex Ratio at Birth: A Dialogue Between Mathematics, Biology, and Sociology*, Dordrecht: Springer, 2007, 153.

<sup>41</sup> For a discussion regarding male-female differences in risk tolerance see, Christine Harris and Michael Jenkins, “Gender Difference in Risk Assessment: Why do Women Take Fewer Risks Than Men,” *Judgement and Decision Making*, 1:1 (2006), 48-63.

<sup>42</sup> Daniel Curtis and Qijun Han, “The Female Mortality Advantage in the Seventeenth-Century Rural Low Countries,” *Gender & History*, 33:1 (2021), 50-74, 67.

<sup>43</sup> For an extended treatment on the predominance of females see Antoinette Fauve-Chamoux, “Le surplus urbain des femmes en France préindustrielle et le rôle de la domesticité,” *Population* 53:1-2 (1998), 359-377.

<sup>44</sup> Louis Henry, “La masculinité par âge dans les recensements,” *Population* 3:1 (1948), 93-114, 96.

<sup>45</sup> This method breaks down Henry’s age curve into five distinct behavioral units. These units cover age cohorts of 0-10, 11-55, 56-70, 71-80, and 81-90 years of age. The number of males per 100 females in the final year of each cohort is assumed to be 100, 90, 80, 70, and 65 respectively. The simplifying assumption is made that the sex ratios shift linearly within these cohorts. Therefore, one can linearly interpolate for sex ratios at each individual age.

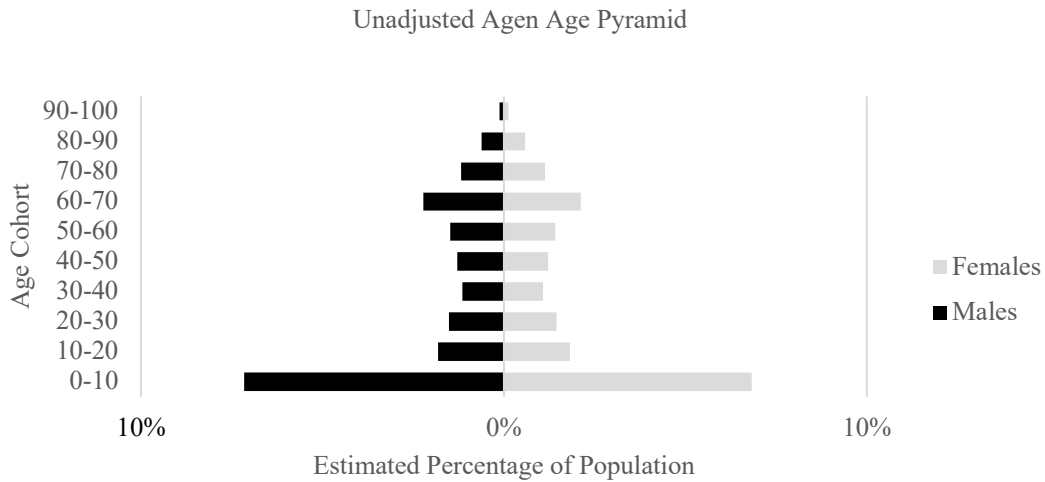


Fig. 12. Unadjusted Ager Age Pyramid

The preponderance for ages associated with high mortalities is apparent in this figure by the relatively low share-of-population enjoyed by those aged ten through sixty. Adjusting for the age bias leads to the following figure.

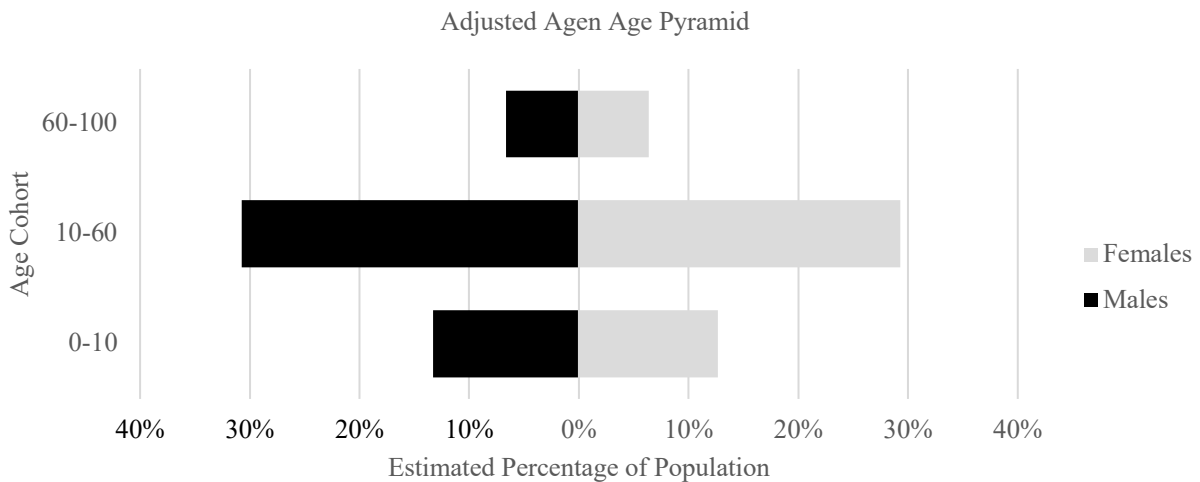


Fig. 13. Adjusted Ager Age Pyramid

One sees in Ager a town dominated by prime-age individuals with some members living well into their seventies and even eighties – the oldest recorded age was 98 – while a large component of the population dwelt in the precarious age range of newly born to ten years of age.



### *Demographic Behaviors*

Early modern life was rhythmic. Within any agricultural society there are periods of intense work (i.e., planting and harvest) along with times of sloth (i.e., winter). Gullickson's study of agricultural practices in early modern Caux notes that in coastal Normandy "small-holders and day-laborers the problem was chronic unemployment. There was not enough work in agriculture to occupy these people year-round."<sup>46</sup> In Gullickson's view, this downtime motivated other economic activities in terms of cottage industries and proto industrialization. Such activities allowed "peasant farmers and semi-proletarianized workers" to generate supplemental income while reducing the need to emigrate during times of agricultural slow-down.<sup>47</sup> For Agen, the town's role as an agricultural market naturally followed the ebbs and flows of the rural economy along with its own artisanal industries. Industry requires inputs, and inputs follow the seasons. At the same time social life had its own rhythm. Courts, guilds, and parishes operated on schedules of their own making.

Demographically, one expects that agricultural and religious precepts ought to have shaped early modern behaviors. The Catholic Church's standard prohibition on celebrating marriages during Advent and Lent is the clearest example. Given the physical strain and time requirements of planting and harvest, one also expects that months of peak activity – especially in the summer – ought to have dampened marriage rates as well. By exploring the seasonality of burials, marriages, and baptisms one gains the ability to compare famine years to non-famine years later on in this study.

Beginning with burials, the following figure shows burial rates for Agen.

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<sup>46</sup> Gay Gullickson, "Agriculture and Cottage Industry: Redefining the Causes of Proto-industrialization," *The Journal of Economic History*, 43:4 (1983), 831-850, 841.

<sup>47</sup> Rab Houston and K. D. M. Snell, "Proto-Industrialization? Cottage Industry, Social Change, and Industrial Revolution," *The Historical Journal*, 27:2 (1984), 473-492, 473. For further discussion on this topic see, Franklin Mendels, "Proto-Industrialization: The First Phase of the Industrialization Process," *The Journal of Economic History*, 32:1 (1972), 241-261, and Jan de Vries, "The Industrial Revolution and the Industrious Revolution," *The Journal of Economic History*, 54:2 (1994), 249-270.

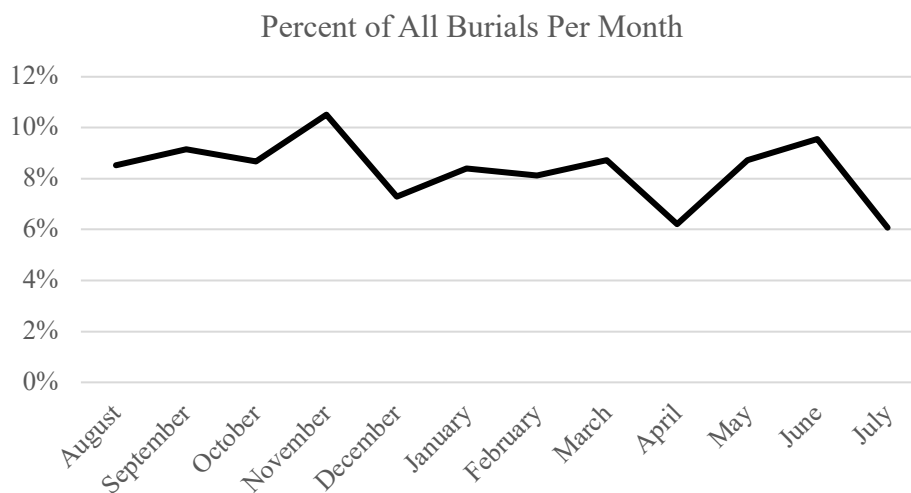


Fig. 14. Percent of All Burials Per Month

Agen’s records depict burial behavior indicating mortality as a constant and consistent occurrence in the town. While there were peaks in burial rates such as in the fall and early summer the monthly rates were relatively similar. Data for England indicates around a 30% decline in mortality between March and July in the early modern period which aligns with the data for Agen although without explaining April’s decline or June’s peak.<sup>48</sup> Additionally, the English data lacks Agen’s autumnal rise. French scholarship indicates that dysentery tended to afflict populations most during September and October due to the consumption of green fruits and the impact of hotter and more humid weather on water supplies.<sup>49</sup> It possible that the relatively higher burial rates in the late summer and early fall stem from such illnesses.

Repeating the methodology for marriages gives the following figure:

<sup>48</sup> E.A Wrigley et al., *English Population History from Family Reconstruction, 1580-1837*, New York: Cambridge University Press, 1997, 324.

<sup>49</sup> François Lebrun, “Le crises démographiques en France aux XVIIe et XVIIIe siècles,” *Annales: Economies, sociétés, civilisations*, 35:2 (1980), 205-234, 206, 210. Additionally, Swiss data indicates a seasonality to plague clustered around the late summer and autumn. The resulting inference is that infectious diseases – and their associated mortality – are most prevalent in the July through November stretch of the year. Edward Eckert, “Seasonality of Plague in Early Modern Europe: Swiss Epidemic of 1628-1630,” *Review of Infectious Diseases*, 2:6 (1980), 952-959.

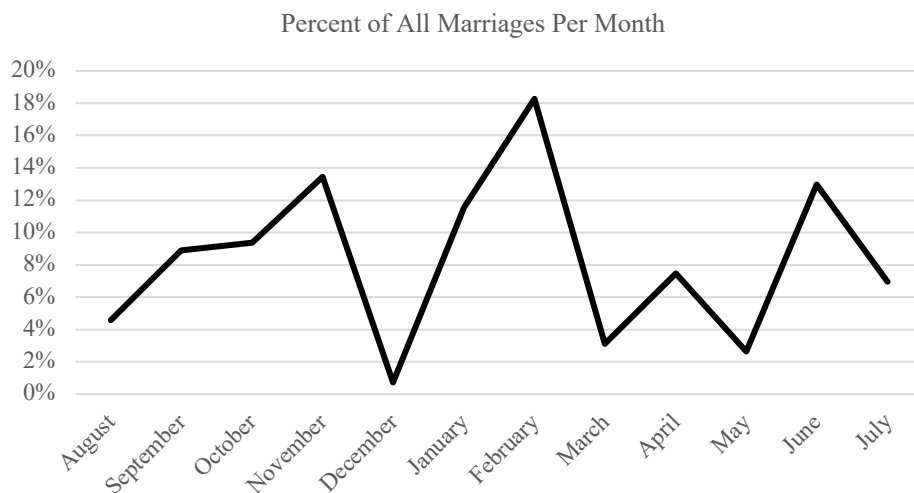


Fig. 14. Percent of All Marriages Per Month

The demonstrated pattern aligns with expectations in that religious and agricultural factors appear to shape the community’s behavior.<sup>50</sup> The sustained level of weddings in January and February reflects a ‘rush’ to have the sacrament bestowed before Lent when – in theory at least – weddings and feasting were not supposed to take place. Similar motivations reflect the rise of marriages in November and near cessation in December during Advent. Additionally, the decline and plateau in activity for July and August corresponds with times of peak agricultural activity. In total Agen’s data aligns with the results of similar exercises undertaken by Bourgeois-Pichat, Dupâquier, Houdaille, and Rébaudo.<sup>51</sup>

<sup>50</sup> Rault et al., note a consistency between modern and early modern communities when they note that rural French populations in the early twentieth century shaped their marital seasonality around certain religious and economic factors such as - “Lent, the months of the Virgin Mary (May and August) and Advent, periods when wedding are, in principle, prohibited, largely shaped the seasonal pattern of marriages at that time [the early 20<sup>th</sup> century in France]. Economic factors also seem to be at play: the corn and grape harvesting months were not favourable for marriage.” Wilfred Rault et al., “Seasonality of marriages, past and present,” *Population*, 74:1 (2016), 675-679, 675-676. For other investigations of marital seasonality in early modern France see: François Lebrun, *La vie conjugale sous L’Ancien Regime*, Paris: Armand Colin, 1975, 28-40; Pierre Deyon, *Amiens, capitale provinciale: étude sur la société urbaine au XVII<sup>e</sup> siècle*, Paris: Mouton & Co., 1967, 10-11; Pierre Valmary, *Famille paysanne aux XVIII<sup>e</sup> siècle en Bas-Quercy: étude démographique*, Paris: Presses Universitaires de France, 1965, 87-91; Jean Ganiage, *Trois villages d’Ile-de-France au XVIII<sup>e</sup> siècle*, Paris: Presses Universitaires de France, 1963, 51-54.

<sup>51</sup> Jean Bourgeois-Pichat, “Le mariage, coutume saisonnière,” *Population* 4 (1946), 623-642; Jacques Dupâquier, “Le mouvement saisonnier des mariages en France (1856-1968),” *Annales de démographie historique* (1977), 131-143; Danièle Rebaudo, “Le mouvement saisonnier des mariages et des remariages,” *Population* 36:2 (1981), 414-417.

Moving on to baptismal seasonality. It is the case that “births are highly seasonal in all human populations.”<sup>52</sup> The cause of this seasonality – which can vary over time, place, and socio-economic group – is not clear. Of interest in the case of Agen is that there is no major pattern of seasonality in the 1680s data. The following image shows both baptism and conception data.

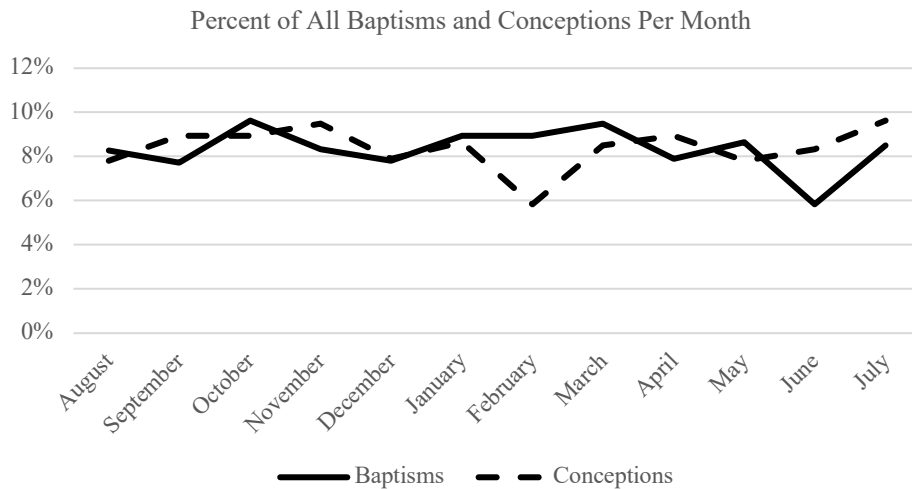


Fig. 16. Percent of All Baptisms and Conceptions Per Month

One takes away from these two images a picture of fecundity in Agen that is rather consistent and constant. While the bulk of baptisms occurred in winter and spring, the low points were only around a third lower than the peaks. The low conception rate in February could correspond to the period of Lent in February and March reflecting religious motivations.<sup>53</sup> At the same time, the influence of the agricultural calendar is seemingly absent with a low conception rate in August coupled with a high one in July.

As a note, there is the possibility that the pattern of conceptions is the result of survivorship bias whereby pregnancies that failed to bring a child to term – and subsequently have the child

<sup>52</sup> David Lam and Jeffrey Miron, “Seasonality of Births in Human Populations,” *Biodemography and Social Biology*, 38:1 (2010), 51-78, 76.

<sup>53</sup> “Conceptions were fewer during the religious festivals and in times of penitence, and likewise in periods of intense farm labour.” “Seasonality of marriages, past and present,” 676.

baptized – are not counted as having occurred. This bias leads to an underreporting of total conceptions. One could imagine that pregnancies conceived in the high mortality periods of August and September could result in higher levels of miscarriages due to biological factors. Therefore, one ought to keep in mind that the conceptions figure reflects the months of conception only for pregnancies that resulted in a baptized child.

Once born, a child in Agen faced different life prospects depending on which parish they found themselves in. In a period of high infant and childhood mortality it is most useful to take a Bayesian approach to life expectancies. Under a Bayesian regime life expectancy is a dynamic phenomenon that changes based on past events.<sup>54</sup> This is to say that one’s life expectancy changes depending on how long they have *already* lived.<sup>55</sup> In mathematical notation the probability is:

$$P(A|B) = \frac{(P(B|A) * P(A))}{P(B)}$$

Where:

P(A|B) = Probability of event A occurring given that event B occurs.

P(B|A) = Probability of event B occurring given that event A occurs.

P(A) = Probability of event A occurring regardless of whether event B occurs.

P(B) = Probability of event B occurring regardless of whether event A occurs.

When dealing with life expectancy, the probability equation becomes somewhat simpler given that one cannot reach the age of 7 without first reaching the age of 6. In practice, one does not necessarily need to use this equation to calculate life expectancy. Instead, one can use a simple average of the data set after a given age. However, the mental model behind that calculation is the Bayesian. Life expectancy becomes the age with the highest probability of attainment assuming

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<sup>54</sup> The overall work is contained in Thomas Bayes, “An Essay Towards Solving the Problem in the Doctrine of Chances,” *Philosophical Transactions of the Royal Society* 53 (1763), 370-418.

<sup>55</sup> Note: Bayes’ theorem is separate and distinct from the so-called ‘Lindy Effect’ whereby the longer an entity exists, the longer it ought to assume it will continue to do so. This effect only applies to non-perishable entities such as a diner, or entities which are inherited finite such as a late-night comedian’s career.

that one is going to be born. This is to say that life expectancy at birth is the maximum  $P(A|B)$  where A is life expectancy and B is the event of being born.

With each moment following birth, life expectancy changes. In fact, it rises throughout the remainder of one's life. In short, the longer you have lived, the longer you can expect your life to be. In the France of this period, the likelihood of dying before one's first, fifth, and tenth birthdays were around 25%, 45%, and 55% respectively.<sup>56</sup> However, once one made it to adulthood one's prospects of living into what today is considered 'middle-age' became quite good. The following table shows life expectancy at birth versus on one's 20<sup>th</sup> birthday.

Mean Life Expectancy at Birth and Age 20		
Parish	Life Expectancy at Birth	Life Expectancy at Age 20
Ste Foy	27	49
St Hilaire	28	51
St Etienne	28	50
St Caprais	31	48

Table 4: Mean Life Expectancy at Birth and Age 20

If one takes the above table at face value, there was not much in the way of difference in terms of life expectancies across parishes. At most, the people of St Caprais could expect to live 10% longer at birth than those of Ste Foy. As one became older the disparity in expectations declined with a twenty-year-old in St Hilaire expected to live only 6.5% longer than a counterpart at St Caprais. However, given the high levels of childhood mortality, the distribution of burials is positively skewed. The impact this has on life expectancy is that most of the ages at burial are – graphically speaking – on the left side of the average. The following figure demonstrates this situation.

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<sup>56</sup> *Histoire de la Population Française, vol.2, De la Renaissance à 1789*, 224.

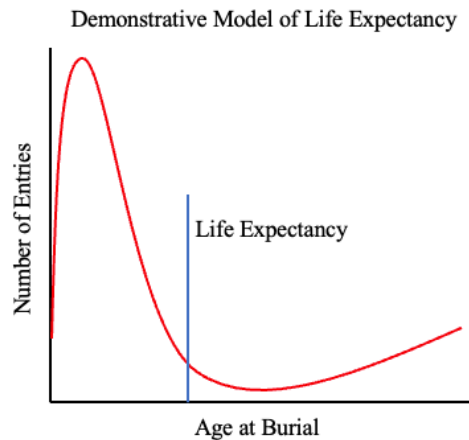


Fig. 17. Demonstrative Model of Life Expectancy

The ‘outliers’ (i.e., the extremely aged individuals) create the skew and an accompanying sense of higher life expectancy. The impact of skewness is not necessarily intuitive. Therefore, it is useful to provide a simple example. To counteract this skewness – and calculate a more representative life expectancy – one can look at median ages at burial. Doing so demonstrates the stark differences in longevity across Agen’s parishes.

Median Age at Burial by Parish	
Parish	Median Age at Burial
Ste Foy	16
St Hilaire	20
St Etienne	20
St Caprais	30

Table 5: Median Age at Burial by Parish, 1689-1699.

As one can see, the median ages are all below the average life expectancies at birth noted above. What this means is that for, say Ste Foy, half of all people who were buried lived to be less than sixteen years of age. That is, nine years younger than what the typical life expectancy calculation would lead one to believe.

With these median figures a different picture begins to emerge of the parishes. Instead of the relative equality of life expectancies shown previously, one sees here a stark divide across unit

lines. The people of Ste Foy had a median age at burial half that of the folks at St Caprais. That is to say that a person born in St Caprais is likely to live twice as long as someone at Ste Foy despite their spatial proximity. The difference must therefore come down to factors other than geography.

A likely explanatory factor for the disparity in median ages at burial is wealth. Cummins notes that the European nobility in the 17<sup>th</sup> and 18<sup>th</sup>-centuries had a life expectancy at birth – mean not median – of between fifty and fifty-five years of age.<sup>57</sup> Additionally, Johnson’s calculations place life expectancy in this period for the ruling class in London at around 50 years of age as well.<sup>58</sup> Given the much higher median age at burial for the people of St Caprais, it is likely that this church community consisted of relatively better off individuals.

### *Qualitative Characteristics*

As a final set of communal information one can look at the qualitative data around occupations and the geographic sourcing of spouses. The former further paints a portrait of the town’s socio-economic structure. The latter situates the town and its parishes within its general region through nuptial networks.

As a “pays essentiellement agricole, la Moyenne Garonne n’est pas favorable au développement urbain.”<sup>59</sup> For that reason, there was not a great deal of either urban or proto-industrial development around Agen in the early modern period.<sup>60</sup> Instead, the town was an

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<sup>57</sup> “Lifespans of European Elites, 800-1800,” 426.

<sup>58</sup> S. Ryan Johnson, “Medics, Monarchs and Mortality, 1600-1800: Origins of the Knowledge Driven Health Transition in Europe,” *Oxford University: Discussion Papers in Economic and Social History*, 85 (2010).

<sup>59</sup> J Périer, “Une ville de la Moyenne Garonne: Agen,” *Revue géographique des Pyrénées et du Sud-Ouest*, 22:1 (1951), 106-112, 106.

<sup>60</sup> Note: Although agriculture “des millénaires durant, la grande <<industrie>> des hommes” and therefore a predominance of agricultural activity reflects industrial action. This is to say that agriculture, as the largest industry, reflects commercial power as opposed to marginal manufacturing efforts in this period which are often favored by historians who see the Industrial Revolution as the apotheosis of industrial development. Fernand Braudel, *Civilisation Matérielle, Economie et Capitalisme, XVe-XVIIIe siècle, tome 1: Les structures du quotidien: Le possible et l’impossible*, Paris: Armand Colin, 2022, 313



agricultural marketplace and administrative center. In this period the town possessed both a presidial appeals court and a district royal court known as the S en echauss ee.<sup>61</sup> Additionally, the town held ecclesiastical institutions relating to the bishop and diocese. Artisanal professions were local fixtures. For example, the town possessed a stonemasons guild whose members marched through the streets every Ascension Day “armed with swords and beating a drum.”<sup>62</sup>

One would expect to find in Agen a collection of merchants, administrators, and craftspeople who catered to the local need for everyday goods and services. For methodological purposes, this study notes professional status as it appears in the burial records. In the case of women and children this study assigns them the profession of their husband or father. The reason for doing this is that the women and children lived in the social realm of their household patriarch.

The Agen records show stark differences in terms of the professional makeup of the respective parishes. To start, the following table shows the five most common professions for Ste Foy.

<b>Most Common Professions Ste Foy</b>	
<b>Profession</b>	<b>Occurrence</b>
Clerk <sup>63</sup>	13
Merchant	4
Master Tailor	4
Butcher <sup>64</sup>	2
Master Surgeon	2
Note: Total professional mentions N=55	

Table 6: Most Common Professions, Ste Foy

Ste Foy was not a community of the well-to-do. Instead, the parish consisted of the working poor. The description ‘beggar’ described the deceased thirty-nine times. If one were to use the term as a

<sup>61</sup> Gregory Hanlon, “Agen, Aquitaine’s complicated second city, 1600-1715,” in Gregory Hanlon et al., *Death Control in the West 1500-1800, Sex Ratios at Birth in Italy, France and England*, 128-144, 128.

<sup>62</sup> *History of Peasant Revolts*, 25.

<sup>63</sup> Note: No distinction or indication appears in the records regarding whether Agen’s clerks were clerical or lay.

<sup>64</sup> Note: Priest, Soldier, Weaver, *Avocat en parlement*, Notary, and Coachman all appear twice in the records as well.

professional moniker, then it would have been the largest in the parish by far. Additionally, clerics used the ‘poor’ as a descriptor nine times.

Although the bulk of the Ste Foy community resided at the lower end of the social ladder, there were some individuals whose profession was relatively high. For example, two notaries appear in the burial records along with two *avocats en parlement*. Not to mention a few standard professionals such as weavers, hatmakers, soldiers, shoemakers, and even a tax collector. In total though, Ste Foy was a community of the working poor with only 10.4% of entries mentioning a profession.

Matters were quite different for St Hilaire.

<b>Most Common Professions St Hilaire</b>	
<b>Profession</b>	<b>Occurrence</b>
Clerk	96
Shoemaker	28
Merchant	28
Master Shoemaker	28
<i>Avocat</i>	10
Note: Total professional mentions N=384	

Table 7: Most Common Professions, St Hilaire

St Hilaire’s professional makeup is both larger than that of Ste Foy and more diverse. Alongside the professions mentioned above there were money changers, bakers, shirt makers, domestic servants, booksellers, carpenters, dressmakers, combers, vigneron, ironmongers, coopers, carters, a dowry judge, and a major previously stationed at Besançon. In total, ninety-eight different professions appear in the records for St Hilaire.

As compared to Ste Foy, there were far more ‘elite’ professionals in St Hilaire. Defining an ‘elite’ professional as a master within a profession, a lawyer, a notary, a bourgeois, or a judge, there were eighty-one in St Hilaire compared to sixteen at Ste Foy.<sup>65</sup> Despite being four times

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<sup>65</sup> Note: Being an elite professional does not make one a notable *per se*. Instead, one can be a lawyer or medical doctor without also receiving honorifics in the burial records. In the same way that one can be a poor noble, one can also be a lowly regarded notary.

larger than St Hilaire, the community of Ste Foy had one-fifth the number of elite professionals. While the elite figures for St Hilaire stand tall next to those of Ste Foy, St Étienne operated on yet another scale.

<b>Most Common Professions St Étienne</b>	
<b>Profession</b>	<b>Occurrence</b>
Clerk	125
Merchant	41
Master Shoemaker	32
Master Tailor	31
Shoemaker	22
Note: Total professional mentions N=677	

Table 8: Most Common Professions St Étienne

At first glance St Étienne’s figures look like those of St Hilaire. However, nearly twice as many buried persons are listed as having a profession at the cathedral. Additionally, one hundred and fifty professions are listed at St Étienne compared to St Hilaire’s ninety-eight. Among these professions one finds apothecaries, landowners, consuls, gunsmiths, carpenters, theology students – at the local Jesuit college – gilders, coopers, table makers, medical doctors, prosecutors, tax collectors, perfume sellers, valets, painters, clock smiths, and even a Knight of Saint John of Jerusalem (Malta). In terms of elite professionals two hundred and forty-seven appear in St Étienne’s records.

One would expect that the occupations of St Caprais’ community would follow in this discussion. However, the canons of the church appear to have held occupations in little regard as their appearance is rare regardless of the otherwise apparent nature of the deceased’s social standing.

In contrast to St Caprais’ omission of occupational information, all Agen’s parishes recorded the home parishes of brides and grooms. By noting, recording, tabulating, and then mapping the home parishes of non-local spouses one can create a clear picture of each parish’s geographic reach across the south of France. Additionally, the geographic size of a parish’s nuptial

network and the frequency of exogenous spouses indicates the relative socio-economic standing of each parish.<sup>66</sup>

Here again one sees that despite their proximity the four parishes engaged in reasonably distinct ways when it came to exogenous marriage.

Local Brides and Grooms by Parish, 1689-1699				
Parish	Local Bride	# of Non-Local Brides	Local Groom	# of Non-Local Grooms
Ste Foy	90%	19	78%	43
St Caprais	85%	16	62%	41
St Hilaire	83%	23	73%	36
St Étienne	75%	67	60%	109

Note that these are harvest years.

Table 9: Local Brides and Grooms by Parish, 1689-1699.

The tendency across parishes was to have the wedding ceremony occur in the bride’s home parish. This behavior, along with a roughly 70% groom endogamy rate, aligns with Dupâquier’s findings for the contemporaneous Parisian basin.<sup>67</sup> This study does not explore whether the couple remained in the bride’s parish following the ceremony. Further research consisting of family reconstruction with an eye to the baptism of children would go far in answering this question.

<sup>66</sup> Marriage motivations are tied up in concerns related to the propagation of genetic material. families sought to ensure conjugally fruitful marriages amongst offspring to maximize the expected value of genetic success. Thus, even though marriage occurred between two persons, it involved the concerns of more than just the bride and groom. Parental preferences loomed large in marital matters as mothers and fathers sought a return on the investment they had made in their children. As Daly and Wilson note “every offspring that a parent commits herself to rearing represents an investment of the parent’s limited means, and that investment might have earned better fitness return elsewhere.” behind every bride or groom were parents – whether living or not – who had invested time, effort, and resources to see their children succeed as procreative agents. Martin Daly and Margo Wilson, *Homicide*, (New York: Aldine de Gruyter, 1988), 42; Parental interest is complicated when celibacy is common. In early modern France – and Europe more broadly – a distinct marriage pattern occurred consisting of “(1) a high age at marriage and (2) a high proportion of people who never marry at all.” John Hajnal, “European Marriage Patterns in Perspective,” in *Population in History: Essays in Historical Demography*, D.V. Glass and D.E.C. Eversley (eds.), (London: Edward Arnold, 1965), 102-143; For early modern France, Fauve-Chamoux notes levels of singlehood amongst both sexes in urban areas as regularly registering around a third of the population. “Le surplus urbain des femmes en France préindustrielle et le rôle de la domesticité,” 369; This study combines a neo-Darwinian focus on genetic matters with the economic motivations for migration noted in the works of Emmanuel La Roy Ladurie and Jean-Pierre Poussou. See Ladurie’s noting of migratory workers from Rougerou to Spain and Poussou’s economic basin framework for 18<sup>th</sup> century Bordeaux. Emmanuel La Roy Ladurie, *Les paysans de Languedoc*, (Paris: Champs Histoire, 1993 [1966]). Jean-Pierre Poussou, *Bordeaux et le sud-ouest au XVIIIe siècle: Croissance économique et attraction urbaine*, (Paris: Éditions de l’École des hautes études en sciences sociales, 1983).

<sup>67</sup> Jacques Dupaquier, *La population du Bassin Parisien à l’époque de Louis XIV* (Paris: Éditions de l’École des hautes études en sciences sociales, 1979), 224-225.

Overall, the rates of endogamy for Agen are in line with Alain Croix’s rates for Brittany and the Nantais as well as Pierre Goubert’s for the Beauvaisis.<sup>68</sup>

Looking specifically at the notable and noble population of Agen shows a pattern of greater endogamy but with the same prevailing preference for the bride’s parish.

Brides and Grooms by Parish (Notables and Nobles), 1689-1699				
Parish	Local Bride	# of Non-Local Brides	Local Groom	# of Grooms
Ste Foy	100%	0	80%	1
St Caprais	88%	2	88%	2
St Hilaire	95%	1	84%	3
St Étienne	90%	6	68%	19

Note that these are harvest years.

Table 10: Brides and Grooms by Parish (Notables and Nobles), 1689-1699.

Notables and nobles are of interest in terms of spousal origins since their class-status required meaningful levels of social endogamy. As Van Leeuwen and Maas note “the likelihood of meeting a partner from a particular social group also depends on the size of the various social groups and on the degree of social isolation.”<sup>69</sup> Given that all else being equal, early modern French persons would not marry outside of their social class the notable and nobles of Agen had fewer potential partners. Spouses had to be of similar social standing which increased pressure on local notable and novel populations as geographically distant spouses were more difficult to meet. In the event of hypergamy persons of higher social status had greater ability to select a spouse-based on typically secondary consideration (i.e., a nobleman marrying a wealthy commoner).<sup>70</sup>

Moving beyond the numbers it is helpful to look at the home parishes of non-local spouses at two different scales. The first is the regional which consists roughly of the modern department

<sup>68</sup> Alain Croix, *La Bretagne aux 16e et 17e siècles. La vie. La foi. La mort.* (Paris: Maloine S. A. Editeur, 1981), t.1, Alain Croix, *Nantes et le pays Nantais au XVIe siècle: Étude démographique historique*, (Paris: École pratique de Haute Études, 1974), 174-190, Pierre Goubert, *Beauvais et le Beauvaisis de 1600 à 1730*, (Paris: École pratique de Haute-Études, 1960), 63.

<sup>69</sup> Marco Van Leeuwen and Ineke Maas, “Endogamy and Social Class in History: An Overview,” *International Review of Social History*, 50 Supplement (2005), 1-23, 8.

<sup>70</sup> For a modern overview of hypergamous incentives see Ingvild Almås, et al., “The Economics of Hypergamy,” *Journal of Human Resources* 58:1 (2023), 260-281.

of Lot-et-Garonne. The second scale is larger and reflect spousal origins across the south of France. The following maps show spousal origins for all Agen. Note that these figures only reflect spousal origins which were identifiable and only include the non-notable class. The notable and noble population appear on their own further on.

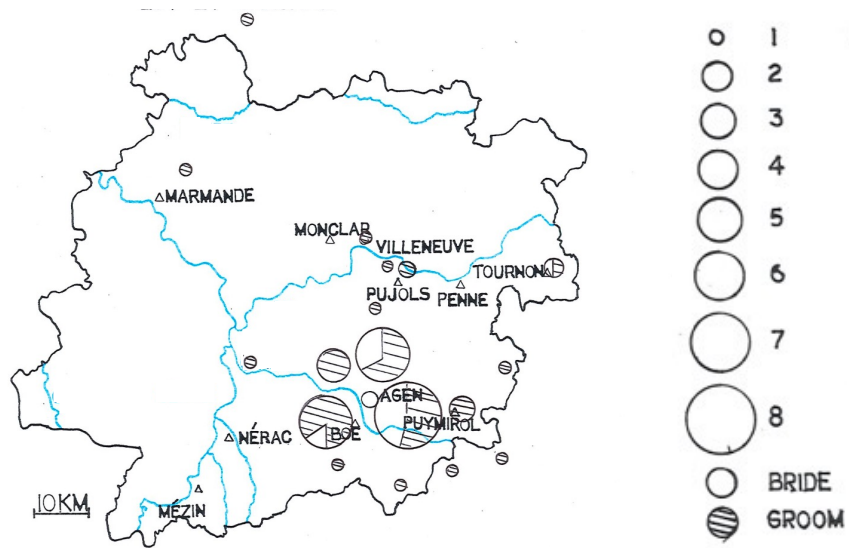


Fig. 18. Non-Notable Exogenous Spousal Origins, Regional

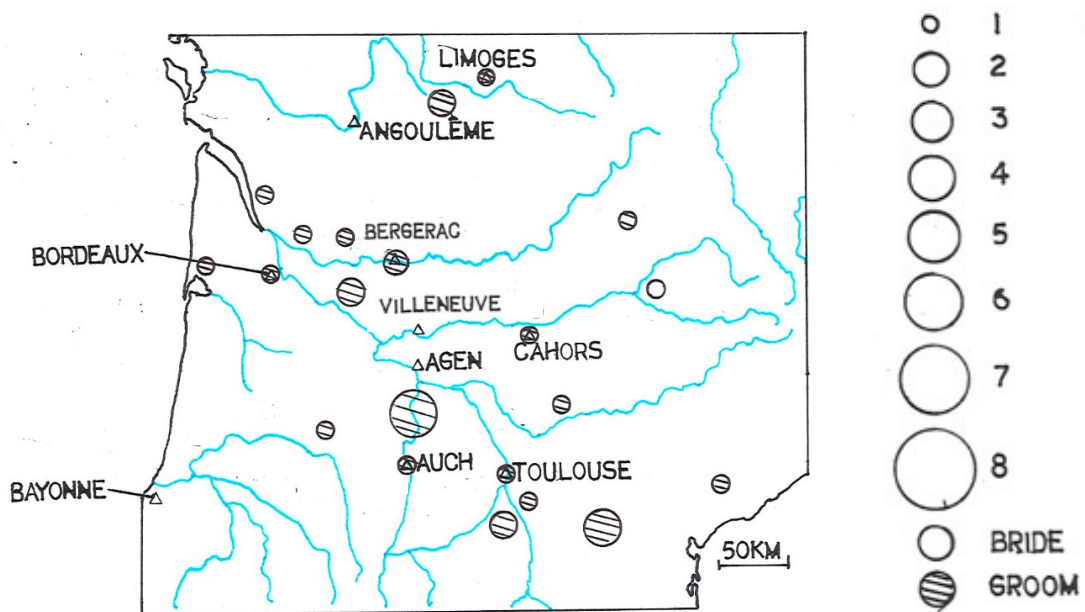


Fig. 19. Non-Notable Exogenous Spouse Origins, South of France

The most significant similarity across parishes is that grooms came from further afield than brides. The driving force behind this behavior is complex. On the one hand, one could see this as indicating a marriage market premium for grooms. Given the role of males as the heads of households, an ability to source brides from farther away could indicate a higher selectivity on the part of grooms. They could choose to not select local brides. On the other hand, brides brought capital to the marriage which the groom needed to sustain a household and further their social standings. Therefore, higher geographic mobility by grooms could indicate that brides possessed a premium in the marriage market. In aggregate brides could have selected all the local suitable grooms and then sourced grooms from further away thus indicator their own capacity to dictate favorable marriage arrangements. In this case local men would remain single as their women counterparts sought favorable terms from a larger population.

Collins hints at a bridal premium when he notes that in early modern France “female geographic mobility was a direct reflection of this need for young women to provide capital as part of their contribution to the household newly created by their marriage.”<sup>71</sup> Although Collins refers to brides who move to their groom’s parish after the ceremony his insight is helpful in viewing females as having meaningful sway since the material benefits of marriage – at least in the early years – were disproportionately skewed towards the groom. Prior to the marriage a bride would live with her father or other older family member. She most likely enjoyed a standard of living in line with that of an established individual. By marrying she entered the household of a man who had not yet reached the level of wealth and standing that her prior head-of-household possessed. Meanwhile, the groom gained the use of capital from his bride and therefore likely enjoyed a

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<sup>71</sup> James Collins, “Geographic and Social Mobility in Early Modern France,” *Journal of Social History*, 24:3 (1991), 563-577, 563.

greater standard of living than when he was single. Therefore, brides likely held greater sway and standing on the marriage market than grooms with the latter willing to travel longer distances for favorable matches.

Taken as a whole one can understand the spousal origins of Agen's exogenous partners as primarily coming from the town's immediate region with further sourcing occurring based on parish-level factors. Most exogenous partners came from communities situated either immediately on the Garonne and its tributaries or were a short commute away from such rivers. Exogenous spouses tended to be male, and this tendency correlates with distance from Agen. This pattern may reflect greater opportunities for males with socio-economic prospects or lucrative skills. At the same time, it could also reflect a marriage premium amongst brides.

Looking at Agen's notable and noble population gives the following image.

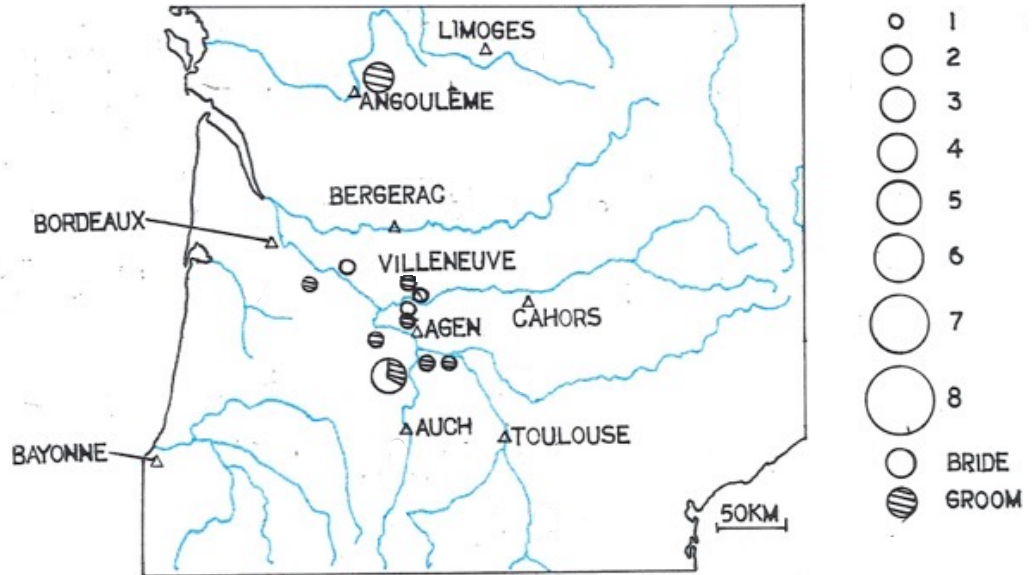


Fig. 20. Notable and Noble Exogenous Spouse Origins, South of France

Overwhelmingly, notable and noble exogenous partners came from the communities that surrounded Agen. Here again, there is a predominance of males coming from further away. Interestingly, no spouses came from the major cities such as Bordeaux and Toulouse nor from



second-tier towns such as Bergerac, Cahors, or Auch. Instead, Agen was a magnet for the well-to-do or titled located in the town's neighbouring region.

The exogenous notables were of mixed background. For example, in 1692 St Étienne saw the marriage of local brides to a bourgeois from Dunes, another from Pomevic, and a master surgeon from Puymirol. Unsurprisingly for a river town located amidst a rich agricultural region, merchants appear in the records referred to as sieurs. Additionally master craftsmen in the textile business appear in the records which aligns with Agen's recognized production industry of "serges, étamines, et drougets."<sup>72</sup> Notably absent from the records are non-local notaries, lawyers, and royal officials. These professions show up in recordings of local grooms but are conspicuously absent from exogenously sourced partners.

As for the motivation behind notable and noble spousal geographic mobility, it would seem likely that these individuals sought spouses from outside their home parishes due to favorable matches relative to local spouses or due to a lack of access to local spouses. If the eligible noble or notable population is relatively small, then there is no guarantee of there being a suitable bride or groom to marry in the first place. As Collins states "social mobility was a direct function of geographic mobility" – if a viable spouse is not available locally then a prospective bride or groom had to broaden their search radius if they wished to maintain their socio-economic status or advance therefrom.<sup>73</sup>

Agen was a town like many others in the France of Louis XIV. It had its share of merchants, administrators, labourers, craftspeople, and clerics. Its population was not monolithic. Beyond the

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<sup>72</sup> While Poussou writes of the 18<sup>th</sup>-century he referred to the textile industry in Agen as having long been established by that time. Additionally, the baptism and burial records indicate a large population of weavers in the 1690s. Jean-Pierre Poussou, "Les industries rurales dans le Sud-Ouest de la France au XVIII<sup>e</sup> siècle," in *Industries rurales de l'Europe médiévale et moderne*, J.M. Minoves, C. Verna, and L. Hilaire-Pérez (eds), (Toulouse: Presses Universitaires du Mirail, 2013), 223-244, 233.

<sup>73</sup> "Geographic and Social Mobility in Early Modern France," 563.

noble commoner divide there were gradations of nobility and notability. Whereas Ste Foy was the church of the laboring poor, St Hilaire enjoyed a more professionalized congregation. Meanwhile the canons of St Caprais and the cathedral priests of St Étienne tended to their own distinct flocks. The town's life was rhythmic and moderately stable at the close of the 1680s. With the coming of famine came a disruption of this stability. In a few short years thousands would perish – their bodies sometimes found in gardens after failing to find even grass to chew upon. It is towards this transition of life from stability to calamity that this study now turns.

### **Chapter 3: Ominous Signs: 1691**

Heading into the 1690s there were no immediate reasons for the people of Agen to suspect a famine of such scale as was to come in 1692-1695. The town had avoided significant periods of dearth since the 1660s. France had been at war against The Grand Alliance since 1688 but Agen lay safely away from the main theatres of action. While the kingdom's population in the 17<sup>th</sup>-century stagnated, there were no clear warning signs in 1690 that crisis was imminent. This changed in 1691.

The ominous signs that appeared in Agen in 1691 were due to the interrelated phenomena of weather, grain prices, and demography. Working backwards, 1691 saw an uptick in mortality and a decline in nuptiality. The most obvious motivator of this behavior was a rise in grain prices which in turn came about by meteorological conditions. By exploring each of these signs in turn one paints a picture of early rumblings of what was to come.

#### *Grain Markets*

Bread – and the grains it came from – constituted the core of the early modern French diet.<sup>74</sup> Cereals accounted for around 80% of the total daily caloric intake.<sup>75</sup> Grains were not consumed to this extent because they were much better in terms of hedonistic satisfaction than other food sources but because they were the most cheaply – and plentifully – available source of calories.<sup>76</sup> The overwhelming dependence upon grains for calories meant that “cereal dependence

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<sup>74</sup> For overviews of the French diet see Hugues Neveux, “L'alimentation du XIV<sup>e</sup> au XVIII<sup>e</sup> siècle: essai de mise au point,” *Revue d'histoire économique et sociale* 51:3 (1973), 336-379; Florent Quellier, *La table des Français: Une histoire culturelle (XV<sup>e</sup> – début XIX<sup>e</sup> siècle)*, (Rennes: Presses Universitaires de Rennes, 2007); Jean Chabonnier, “En quête de gout: Les cuisines paysannes dans le Marais poiteven au XVIII<sup>e</sup> siècle,” Master's thesis, Université Angers, 2021

<sup>75</sup> Florent Quellier, “Le repas de funéilles de Bonhomme Jacques. Faut-il reconsidérer le dossier de l'alimentation paysannes des temps modern?” *Food & History* 6:1 (2008), 9-30, 11.

<sup>76</sup> For an overview of grains and their place in the human diet see Alain Bonjean and Benoît Vermander, *L'homme et le grain: Une histoire céréalière des civilisations*, Paris: Les Belles Lettres, 2021.

conditioned every phase of social life.”<sup>77</sup> While scholars have written much on the ‘military revolution’ and its role in state capacity formation in the 16<sup>th</sup> and 17<sup>th</sup>-centuries they have spilt much less ink on the related role of grain regulation.<sup>78</sup>

With the rise in army size and permanence came the need to feed more mouths more often. An unfed army was a mutinous army. The French kingdom therefore had a need to procure bread for the men in uniform regardless of market conditions. 17<sup>th</sup>-century armies required contemporaneously massive bureaucracies to capture sufficient supply.<sup>79</sup> At the same time, the

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<sup>77</sup> Steven Kaplan, *Provisioning Paris: Merchants and Millers in the Grain and Flour Trade in the Eighteenth Century*, (Ithaca: Cornell University Press, 1984); 7. For further treatments of the mechanisms of turning wheat to bread see Steven Kaplan, *The Bakers of Paris and the Bread Question, 1700-1775*, (Ithaca: Cornell University Press, 1996); Karl-Hunnar Persson, *Grain Markets in Europe 1500-1900: Integration and Regulation*, (Cambridge: Cambridge University Press, 1999); Abbot Payton Usher, *The History of the Grain Trade in France, 1400-1710*, (Cambridge: Harvard University Press, 1913).

<sup>78</sup> Parker states that “it is interesting to note that the major waves of administrative reform in western Europe in the 1530s and 1580s and at the end of the seventeenth century coincided with major phases of increase in army size. On the one hand, the growth of a bureaucracy was necessary to create larger armies; on the other, it was necessary to control them. The rapid numerical expansion of the early seventeenth century forced some decentralization: governments used entrepreneurs to raise their soldiers, sailors, and (in the case of the Mediterranean states) their galley fleets.” Geoffrey Parker, “The ‘Military Revolution,’ 1560-1660 – a Myth?” *The Journal of Modern History* 48:2 (1976), 195-214, 208-209. For further discussion of Parker’s position see Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, 2<sup>nd</sup> ed., (New York: Cambridge University Press, 1996); Another classic exposition of the relationship between war and bureaucratization in this period (dealing with Spain specifically as the *exemplar* of Europe) see I. A. A. Thompson, “The Armada and Administrative Reform: The Spanish Council of War in the Reign of Philip II,” *The English Historical Review*, 82:325, 698-725; For France see a work such as John Lynn, “The Growth of the French Army in the Seventeenth Century,” *Armed Forces and Society* 6:4 (1980), 568-585; For a more recent discussion of war and bureaucratization as a means of fostering and furthering a competitive advantage for rulers and states in terms of providing security to their subjects see Jan Glete, “Warfare, entrepreneurship, and the fiscal military state,” in *European Warfare: 1350-1750*, Frank Tallett and D. J. B. Trim (eds.), (New York: Cambridge University Press, 2012), 278-299.

<sup>79</sup> This study avoids the topic of public and private granaries as means of alleviating famine price levels. This is done for a few reasons. The first is that granaries only ever held a small proportion of a harvest. Spatial limitations alone limited their utility. As Collet notes for the Prussian example in the 18<sup>th</sup>-century, “granaries as sources of food security” were little more than a “well-publicised fiction.” Dominik Collet, “Storage and Starvation: Public Granaries as Agents of Food Security in Early Modern Europe,” *Historical Social Research* 35:4 (2012), 234-252, 243; Within the economic literature there is debate regarding whether public granaries had any effect on smoothing prices during times of dearth. For example, Nielson notes that for in the English example “it seems that if the dearth orders [including releases of granary stocks] had any effect on the variance of grain prices, it was slight.” Randall Nielsen, “Storage and English Government Intervention in Early Modern Grain Markets,” *The Journal of Economic History* 57:1 (1997), 1-33, 33; Against Nielson’s specific claims stand the critiques of Ejrnæs and Persson who find methodological faults with Nielson’s work considering his “results on variance and skewness” as “not robust.” Mette Ejrnæs and Karl Gunnar Persson, “Grain Storage in Early Modern Europe,” *The Journal of Economic History*, 59:3 (1999), 762-772, 768.

French state recognized its traditional role of hunger alleviation.<sup>80</sup> Such a role entailed banning grain exports, moving grain from areas of relatively high supply to suffering cities, price controls, and the distribution of cheap bread by the King directly or through provincial *intendants*.<sup>81</sup> A concrete example of state capacity in response to grain shortages was the collection and movement of grain during the French famine of 1661-3, in which harvests were extracted from a region stretching east-west from Clairac and Albi and north-south from Bergerac to Toulouse to feed the people of Paris to whom “priorité ayant été donnée.”<sup>82</sup>

Alongside the state’s capacity to directly guide grain flows in times of crisis stood the private marketplace. The state, after all, was unable to feed its troops by itself. Alongside official agents were entrepreneurs operating on contractual bases.<sup>83</sup> Whereas government officials stepped up as direct buyers during times of extreme need, the quotidian supply of grain was left to private wholesalers and their networks of producers, scouts, and brokers. When not serving the needs of the crown, these merchants formed the backbone of the French grain trade.<sup>84</sup>

On its face, the market for grain ought to have been rather competitive given the products’ substitutability and nearly universal cultivation.<sup>85</sup> However, the risks associated with such a competitive market meant that “only a great banker or a merchant prince could undertake this trade on a grand scale, with its constantly changing loci of surplus and deficit, its need for a vast network

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<sup>80</sup> “Public intervention in grain markets was practiced from the very beginning of urban resurgence in medieval Europe.” Karl Gunnar Persson, “The seven lean years, elasticity traps, and intervention in Grain Markets in Pre-Industrial Europe,” 49:4 (1996), 692-714, 703.

<sup>81</sup> Patrice Berger, “Pontchartrain and the Grain Trade During the Famine of 1693,” *The Journal of Modern History*, 48:4 (1976), 37-86, 42-43.

<sup>82</sup> Francis Loirette, *L'état & la region: L'exemple de l'Aquitaine au XVII<sup>e</sup> siècle, Centralisation monarchique, politique régionale et tensions sociales*, (Bordeaux: Presses Universitaires de Bordeaux, 1998,) 171, 198.

<sup>83</sup> For an overview of early modern military contractors see David Parrott, *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe*, (New York: Cambridge University Press, 2012), 139-196.

<sup>84</sup> One may also think of rich patrons and the church providing food supplies during times of crisis as a third and very important source. Note that this source is ignored given the lack of information in this study regarding such charity.

<sup>85</sup> “Unlike, say, the oils of Provence, grain was not the ‘treasure’ of a particular place. Theoretically it was available everywhere and it was impossible to foresee where and when it might next be lacking.” *Provisioning Paris*, 81.

of correspondents, its exorbitant risks, and its enormous costs.”<sup>86</sup> Thus the early modern grain market, at a high level, consisted of a set of products that ought to have been efficiently marketable while barriers to entry in the wholesale trade represented sources of inefficiency.<sup>87</sup>

From the perspective of the end consumer grain is useless on its own. As Kaplan notes “it was not enough for the provisioning trade to assure a regular and ample supply of grain – bread was made from flour, not wheat.”<sup>88</sup> The receipt of one’s daily bread required the work of millers and bakers. As such food supplies relied on a complex network of farmers, brokers, traders, millers, bakers, sellers, and consumers.

Around Agen, the Cassini Map notes that existence of watermills upstream of the town at Paillet and Bartouille.

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<sup>86</sup> *Provisioning Paris*, 82.

<sup>87</sup> This apparent tension between efficiency and inefficiency appears in the literature under the guise of perceived market orientation or lack thereof. The works of Fernand Braudel and Robert Allen point to autarky and declining agricultural output while the likes of Emmanuel Le Roy Ladurie, and Phillip Hoffman argue for increasing market interaction and associated agricultural productivity gains. Fernand Braudel, “Économie française au 18e siècle,” *Annales. Economies, sociétés, civilisations* 6:1 (1951), 5-69, 65-68; Robert Allen, “Economic Structure and Agricultural Productivity in Europe,” *European Review of Economic History*, 4:1 (2000), 1-26, 18-21, Emmanuel Le Roy Ladurie, “Dîmes et produit net Agricole (XVe-XVIIIe siècles).” *Annales, Economies, sociétés, civilisations* 24:3 (1969), 825-832; Philip Hoffman, *Growth in a Traditional Society: The French Countryside 1450-1815*, (Princeton: Princeton University Press, 1996), 179-185; Germain examined the role of speculation – or lack thereof – within this famine in his work which, could be another source of inefficiency in pricing. Martin Germain, “Les famines de 1693 et 1709 et la speculation sur les blés,” *Bulletin du comité des travaux historiques, section des sciences économiques et sociales* 26 (1908), 150-172.

<sup>88</sup> *Provisioning Paris*, 221.



Fig. 21. Excerpt of Cassini Map, Agen<sup>89</sup>

The people of Agen did not eat one particular type of bread made of a single grain. Instead, there were at least four grain options available to them – wheat, rye, oats, and maize. Maize had appeared in the Agenais around 1652 as a human foodstuff.<sup>90</sup> At the same time, the grain market at Toulouse had stopped referring to traditional millet as ‘millet’ and instead used the term to designate maize since it had been known as ‘millet d’Espagne.’<sup>91</sup> Given Toulouse’s proximity to Agen – and its shared waterway of the Garonne – its mercurial records reflect the direction and magnitude of price movements in the town. The Toulouse records tabulated by Georges and Geneviève Frêche allow one to gain a picture of the interplay amongst these four grains.<sup>92</sup>

<sup>89</sup> Louis René Luci, “Carte générale de la France, N 73” Retrieved November 28, 2023 from: <https://gallica.bnf.fr/ark:/1248/btv1b53095187j/f1.item.zoom#>

<sup>90</sup> Gabriel Debien, “Du Béarn en Poitou: L’expansion du maïs du XVIIe au XIX siècle,” in Ministère de l’éducation nationale, comité des travaux historiques et scientifiques, *Actes du quatre-vingt-onzième congrès national des sociétés savantes*, Rennes (1966), 75-103, 77

<sup>91</sup> Georges Frêche and Geneviève Frêche, *Les Prix des Grains, des Vins et des Légumes à Toulouse: 1486-1868*. (Paris: Presses Universitaires France, 1967), 21.

<sup>92</sup> The limitations and trepidations associated with using mercurial reports are well known going back to at least the 1930s. See Victor Dauphin, *Recherches pour servir à l’histoire des prix des céréales et du vin en Anjou sous l’Ancien Régime*, Paris: L. Fournier, 1934, 7. Additionally see, Jean Meuvret, “L’histoire des prix des céréales en France dans la seconde moitié du XVIIe siècle,” *Annales*, 5 (1944), 27-44.

The general trend of the 1680s was one of price decline across grain types. Following local peaks in and around 1685 prices steadily fell through 1690 as shown below. Note that all years used are harvest years:

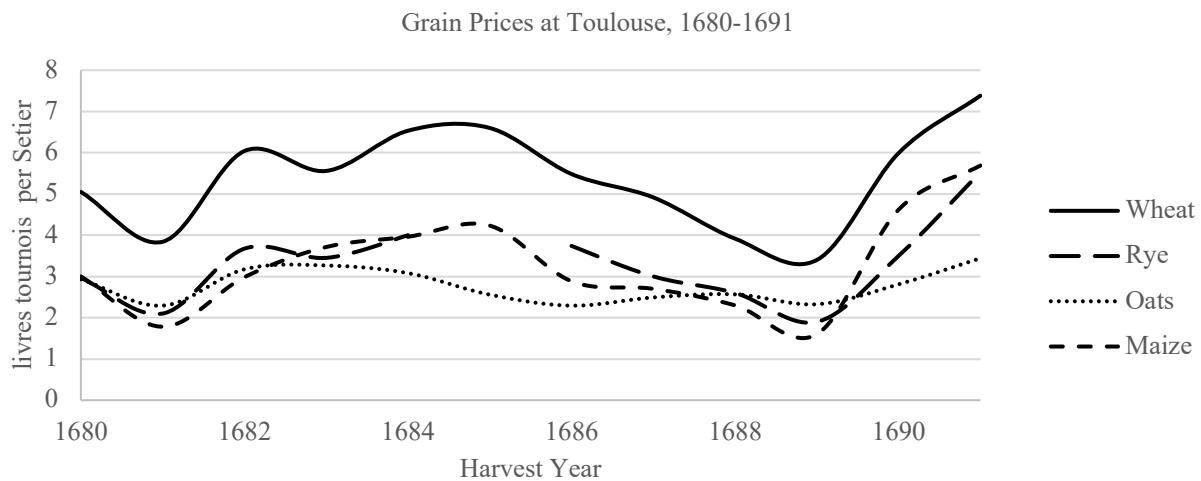


Fig. 22. Grain Prices at Toulouse, 1680-1691<sup>93</sup>

Prices began to rise from their decadal lows in 1690. The first to rise was wheat in July of 1690 followed soon by rye in September. Oats and maize finally rose in January 1691. By the end of the 1691 harvest year prices had risen from their nadirs by 139%, 189%, 77%, and 273% for wheat, rye, oats, and maize respectively.<sup>94</sup> The good times were over.

As grains, wheat, rye, oats, and maize possessed a certain level of substitutability. If wheat became too expensive, then one could either mix in cheaper grains or move entirely to a cheaper grain. This substitutability likely appears in the relative timings of the price increases with rises in more desirable grains leading to rises in other grains as buyers tried to maintain their previous

<sup>93</sup> A Toulouse *setier* equals 0.96 hectolitres. John Forster, *The Nobility of Toulouse in the Eighteenth Century: A Social and Economic Study*, (Baltimore: Johns Hopkins University Press, 2019, [1960]), 192.

<sup>94</sup> *Les Prix des Grains, des Vins et des Légumes à Toulouse*, 21.



input costs. This postulation of French substitution contradicts the work of Appleby.<sup>95</sup> Despite the inefficiencies inherent in the early modern French grain market, these price rises were the effect of relatively efficient markets as defined by price communication across geographies. As Ó Gráda argues French markets during this time “the spread of [price movement] coefficient values [were] consistent with distance and communication” during both normal and famine years.<sup>96</sup> This is to say that the price movements witnessed in 1691 were not the work of market failures but of something else – specifically, poor weather.<sup>97</sup>

### *Weather*

Bad weather did not inherently lead to famine. As Ó Gráda notes “even the poorest societies could muster the resources to guard against occasional [crop] failures.”<sup>98</sup> Therefore, it took more than a one-off period of poor weather to create a famine on the scale of what Agen experienced in the 1690s. The consistently detrimental weather that drove the famine began in 1691 when the harvest fell short of normal due to meteorological factors.

An initial issue with trying to correlate meteorological factors to the occurrence of famine in the early modern period is the lack of reliable and consistent weather data. Without such data, one must fall back on other forms of data which carry with them an assumed correlation. In these situations, one finds themselves “measuring economic (or social or political) phenomena and

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<sup>95</sup> The lack of food substitution as the cause of increased intensities of early modern French famines vis-à-vis their English counterparts appears in the work of Appleby, although later scholars have shown conclusively that Appleby’s thesis was predicated upon incomplete data available at the time. See, Andrew Appleby, “Grain Prices and Subsistence Crises in England and France, 1590-1740,” *The Journal of Economic History* 39:4 (1979), 865-887; Richard Hoyle, “Why was there no crisis in England in the 1690s?” in Richard Hoyle (ed.) *The Farmer in England 1650-1980*, (New York: Routledge, 2016), 69-100.

<sup>96</sup> Cormac Ó Gráda, “Markets and Famines in Pre-Industrial Europe,” *The Journal of Interdisciplinary History* 36:2 (2005), 143-166, 150.

<sup>97</sup> Put in a more nuanced manner, “the famines of 1693/94 and 1709/10 were both the results of bad weather and poor harvests; they were almost certainly exacerbated by wars waged on France’s borders and further afield.” Cormac Ó Gráda and Jean-Michel Chevet, “Famine and Market in Ancien Régime France,” *The Journal of Economic History* 62:3 (2002), 706-733, 709.

<sup>98</sup> *Famine*, 31.

attributing a meteorological value to them.”<sup>99</sup> Such methods can lead to pitfalls and biases due to a disconnect in type between the effect – economic, social, or political – and the presumed cause – meteorological. This is to say that harvest dates – for example – reflect agricultural phenomena in the form of maturation as opposed to weather specific data.

Given the location of Agen in the broad viticultural region of southwestern France, it is natural to think that wine harvest dates “sont également utiles, nécessaires même, à l’édification d’une histoire totale véritable.”<sup>100</sup> This position is supported by the agronomical fact that “harvest dates are closely connected to the timing of grape maturation, which is highly sensitive to climate during the growing season.”<sup>101</sup> In particular, warm summers coupled with early-season precipitation tend to drive earlier harvest dates.<sup>102</sup>

Scholars across geographies have attempted to interpolate spring and summer temperatures based on grape harvest dates.<sup>103</sup> However these methodologies have been prone to criticisms regarding their limitations in accurately aligning models with realities whereby expected and actual temperatures can differ significantly depending on the benchmarks and models used.<sup>104</sup> Then there is the matter of record quality. Even if all the harvest dates were recorded properly and the subjective bases for harvesting in the first place were consistent across time, there is always a

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<sup>99</sup> Jan De Vries, “Measuring the Impact of Climate on History: The Search for Appropriate Methodologies,” *The Journal of Interdisciplinary History* 10:4 (1980), 599-630, 600

<sup>100</sup> Emmanuel La Roy Ladurie, “Histoire et climat,” *Annales, Economies, sociétés, civilisations* 14:1 (1959), 3-33

<sup>101</sup> Benjamin Cook and Elizabeth Wolkovich, “Climate Change Decouples Drought from Early Wine Harvests in France,” *Nature Climate Change*, 6:7 (2016), 715-719, 715.

<sup>102</sup> “All other factors being equal, late harvest dates are indicative of a vine-growth period (March-April to September-October) during which average temperatures were mostly cold.” Emmanuel La Roy Ladurie and Micheline Baulant, “Grape Harvests from the Fifteenth to the Nineteenth Century,” *Journal of Interdisciplinary History*, X:4 (1980), 839-849, 839; For similar work at the continental level looking at grain harvests see, Fredrik Ljungqvist et al., “Climatic signatures in early modern European grain harvest yields,” *Climate of the Past*, 19:12 (2023), 2463-2491.

<sup>103</sup> For example, see, J. Moreno et al., “Grape harvest dates as indicators of spring-summer mean maxima temperature variations in the Minho region (NW of Portugal) since the 19<sup>th</sup> century,” *Global and Planetary Change*, 141 (2016), 39-53; I. Chuine, “Grape Ripening as a past Climate indicator,” *Nature*, 432 (2004), 289-290.

<sup>104</sup> D. J. Keenan, “Grape harvest dates are poor indicators of summer warmth,” *Theoretical and Applied Climatology*, 87 (2007), 255-256.

concern about the quality of the data as presented. For example, scholars including the renowned Emmanuel Le Roy Ladurie have utilized the well-known ‘Dijon/Burgundy’ grape harvest date series published in the 19<sup>th</sup>-century which has since been showed to contained significant “printing, typing, and copying errors” that misdated harvests by up to over twenty days at times.<sup>105</sup>

Given limitations in the availability and quality of data related to grape harvest dates, it is best to utilize them in a qualitative rather than quantitative matter. This is to say that the direction of the dates – prior to or after the average harvest date – is of value to this study while specific numerical values are for illustrative purposes only.

Furthermore, it is important to note before looking at the grape harvest data that famines are not caused by an absence of grapes. Wine was an important component of the early modern French diet, but it certainly did not constitute its entirety. In general, rural peasants survived largely off grains. As a reference one can look to the standardized diets of hospitals for the poor to gauge the relative share of diet represented by the primary food categories of bread, meat, and wine. In the closing years of the 17<sup>th</sup>-century the hospital in Caen allocated 555g of bread, 90g of meat, and around a half litre of wine to each person per day.<sup>106</sup> This level of meat consumption may have been in line with urban norms but would have been one of luxury for many day laborers. Urban areas enjoyed higher levels of meat consumption than their rural counterparts, while ports and major trading towns had access to greater diversity of foods.<sup>107</sup>

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<sup>105</sup> Emmanuel Le Roy Ladurie, *Times of Feast, Times of Famine: A History of Climate Since the Year 1000*, (New York: Farrar, Straus & Giroux, 1988); Emmanuel Le Roy Ladurie, “et al., “Une synthèse provisoire: les vendages du XVe au XIXe siècle,” *Annales*, 33:4 (1978), 763-771. Thomas Labbé, et al., “The longest homogenous series of grape harvest dates, Beaune 1354-2018, and its significance for the understanding of past and present climate,” *Climate of the Past: Discussions*, 15:4 (2019), 1485-1501, 1486.

<sup>106</sup> Bartolomé Bennassar and Joseph Goy, “Contribution à l’histoire de la consommation alimentaire du XIVe au XIXe siècle,” *Annales*, 30:2 (1975), 402-430, 411.

<sup>107</sup> For example, L’hôpital du Saint-Spirit in Marseilles in 1409 allocated its budget in the following manner: 30% for bread, 33.3% for meat, 12.6% for fish and eggs, 3.6% for legumes and fruit, 4.5% of spices and cheese, and 15.4% for wine. Ibid, 410. For the dietary consumption of the extreme high-end of the socio-economic scale see

Returning to grape harvest dates one can broadly note that later harvest periods ought to reflect colder and wetter summers. The same meteorological conditions that effect grapes also effect grain varieties. Generally speaking, “low temperature stress causes considerable agricultural yield loss.”<sup>108</sup> To this end, if summers are cold then grain crops are less able to convert nutrients to plant matter and the resulting harvest will be smaller than expected. With a decline in sunshine and warmth comes a decline in metabolism. Thus, a late grape harvest date ought to align with a decrease in grain production.

Looking at the grape harvest data for the 1690s is unfortunately not straightforwardly useful. For starters, the extant Bordeaux harvest data is sparsely available prior to 1733. For the entirety of the 17<sup>th</sup> century there are 37 entries.<sup>109</sup> Only 12 of these entries are in the second half of the century. The harvest dates for 1692-1696 are unknown. This leads to the situation where a proxy for the harvest dates in the Bordeaux region is needed. In effect, a proxy of a proxy. Three data sets are reasonably complete in France for the period under investigation: Languedoc, Ile de France, and Burgundy. As noted above, the Burgundy data should be taken with a grain of salt. These three data series are presented below for the period of 1600-1790 with their average date of harvest (relative to August 31<sup>st</sup>) shown.

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Pierre Couperie, “Régimes alimentaires dans la France du XVIIe siècle,” *Annales: Economies, sociétés, civilisations*, 18:6 (1963), 1133-1141.

<sup>108</sup> Prince Thakur, “Cold stress effects on reproductive development in grain crops: An overview,” *Environmental and Experimental Botany* 67 (2010), 429-443, 438.

<sup>109</sup> V Daux, et al., “An open-access database of grape harvest dates for climate research: data description and quality assessment,” *Climate of the Past* 8:5 (2012), 1403-1408.

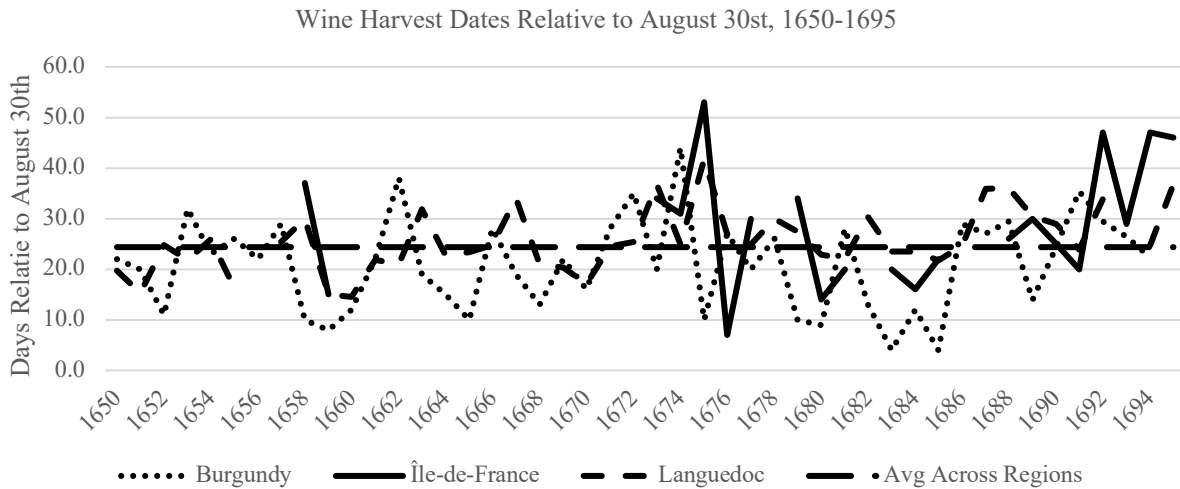


Fig. 23. Harvest Dates Relative to August 31<sup>st</sup>, 1650-1695

As one can see, the later harvest dates became the norm around 1691. As mentioned, a single late harvest – and associated colder and wetter weather – did not necessarily lead to a famine. There were plenty of one-off years of late harvests. What made the harvest of 1691 different in hindsight was that it was the start of successive years of later grape harvests.

### *Demography*

Famine takes time to get going. There is always some amount of food storage that can offset immediate shortcomings and it is not as though the entire harvest fails. Instead, there is a shortfall whose effects only come to light later in the harvest year. However, eventually stores begin to empty and the demographic impact comes to light.<sup>110</sup> For Agen, the impact of poor harvests began to emerge towards the end of the 1691 harvest year. The following figure shows the dramatic increase in burials relative to the monthly proportion averages of the 1680s.

<sup>110</sup> For a quantitative treatment of what constitutes a crisis see, Jean-Michel Chevet, “Les crises démographiques en France à la fin du XVII<sup>e</sup> siècle et au XVIII<sup>e</sup> siècle: un essai de mesure,” *Histoire & Mesure* 8:1-2 (1993), 117-144; Note that variability is not enough to indicate a crisis. Instead, one must see unexpected variations. For a treatment on demographic variability in this period see, Danièle Rebaudo, “Le mouvement annuel de la population française rurale de 1670 à 1739,” *Population* 34 (1979), 589-606.

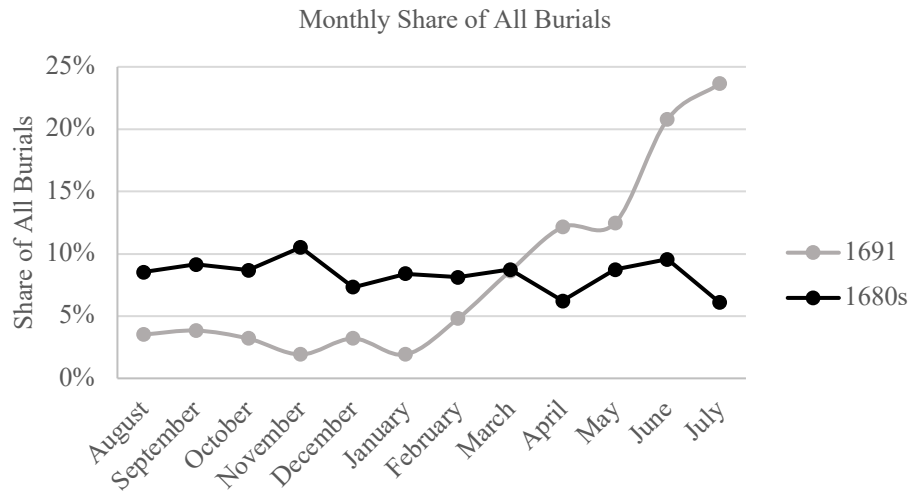


Fig. 24. Monthly Share of All Burials

For the first few months of the 1691 harvest year things were relatively normal. The lower-than-expected proportions in the figure above are the effect of the sheer size of the later month’s burials. On average in the 1680s 231 burials occurred per year. In the 1691 data 313 occurred and that is without including any records from Ste Foy. This rise in the number of burials occurred alongside a shift in the geography of burials. Whereas in the first half of the harvest year St Hilaire and St Caprais together accounted for a plurality of burials, the second half of the year saw St Étienne’s share of burials rise to over 60%. The likely cause of this shift coming from the cathedral’s role as the parish of last resort for the poor and out-of-towners.

In the harvest year of 1691 the cathedral buried 28 persons with home parishes outside the town. The prior year the figure had been 1 and two years prior it was 0. These out-of-towners were often poor such as a 62-year-old man from the Condomois named Antoine who died in April of 1692 recorded as a “poor beggar.” A nearly identical entry for the 70-year-old Pierre Ferret appears in the records only a few days later. Two ‘poor beggars’ buried away from home. But they were not always old. For example, in May of the same year Jeanne Ringeur aged 6 appears in the Cathedral’s records as the daughter of a man from Limoges 200km away. Nor were these migrants

travelling solo. As was the case with Jeanne, whole families travelled together in search of food. One such family came from the Diocese of Lombez near Toulouse. Bernard, the father, lost three daughters in May of 1692. All were buried on the same day.

Similar alterations in demographic behaviors did not occur regarding marriages and baptisms. The reason for this lack of response in 1691 likely had something to do with the uncertain duration of the harvest shortfall and the time-investments associated with baptism. If one harvest failed, then that was a problem for the poorest persons in the community. They were quickly priced out of the market. However, for middling persons, they could likely survive for a while, perhaps even comfortably. Therefore, if a couple and their families expected the harvest shortfall to pass then they would have felt little motivation to postpone the wedding. As for baptisms, the 9-month duration of pregnancy meant that by the time food began to become scarce babies were quite well along in their development. That is to say that harvest failures lead to a reduction in *future* baptisms, while child already conceived continue to appear in the records.

Despite the lack of behavioral change when it came to marriages and baptisms, the burial data clearly indicates that rumblings were afoot. Rumblings which, quickly turned into earth shattering quakes leading to the most devastating famine in early modern French history.

#### Chapter 4: Days of Hunger: 1692-1695

If the harvest of 1692 had been bountiful there would not have been a famine. Instead, the market would have recovered, store houses would have filled, and the hungry would have eaten. With a second failed harvest Agen faced what Alfani calls a “system shock” in which the inability to “rely on market forces to assure the local presence of food” begot a social, economic, and political crisis.<sup>111</sup> In short, the pre-existing systems buckled under the weight of the crisis. People died because there was no food. There was no food because the extent and duration of harvest failures exceeded anything that Agen’s and the kingdom’s institutions could handle.

The buckling of Agen’s social and economic order appears in the records via the town’s inability to adequately provide for those outside the traditional political order. A particular example of this was the apparent maltreatment of Spanish prisoners sent to Agen from the Pyrenees front of the Nine Years War. No number appears for the prisoner population at the start of the decade, nor is a date given for when the first batch arrived. However, the first death amongst the prisoners appears in the records of St Étienne in February 1692. That month saw two Spaniards buried while three others were interred in March. One of the March burials is recorded as being of a native of Madrid. More deaths followed in May, June, and August. These burials were noted as for soldiers originating from Galicia, Daroca in Aragon, Ecija in Andalusia, Salamanca, and Madrid. A *journal* entry dated July of 1693 states that the surviving prisoners left the town.<sup>112</sup>

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<sup>111</sup> Guido Alfani, “The Famine of the 1590s in Northern Italy. An Analysis of the Greatest ‘System Shock’ of the Sixteenth Century,” *Histoire & Mesure* XXVI:1 (2011), 17-50, 20.

<sup>112</sup> *Journal*, 254



On August 17<sup>th</sup>, 1694, 30 new prisoners were brought to Agen.<sup>113</sup> More prisoners must have been received around this time as well since 79 were buried by February 1695.<sup>114</sup> The buried soldiers came from Saragossa, Grenada, Bonilla east of Madrid, Dénia on the Valencian coast, Sevilla, and Felix near Almaria on the southern coast. Their ages were not recorded in the registers and no officers were taken prisoner to Agen. As outsiders the town could mistreat them with relative impunity. Who would have complained? With a famine gripping the entire kingdom maintaining a collection of Spanish prisoners in an unsanitary jail was a luxury. Decisions were made and an administrative pull back of resources meant that the jail's occupants were no longer a priority.

A similar phenomenon appears in the case of the out-of-town poor. At the height of the famine, it became common to merely note the number of unknown persons buried at the bottom of the page – a simple ‘p’ denoting the burial of a ‘pauvre.’ The image below shows an example of this style of notation.

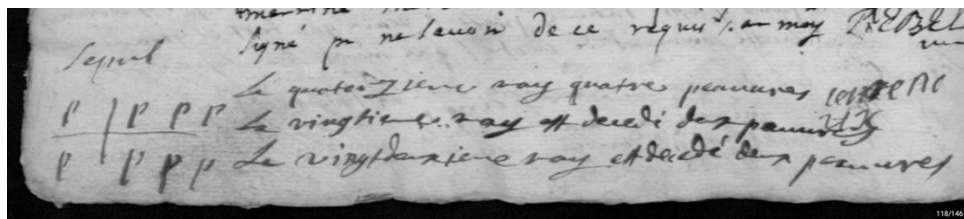


Fig. 25. Example of Notation Used for the Burial of Unknown Poor Persons

The move to record individuals merely as the letter ‘p’ denotes a clear collapse in the administrative capacities of Agen’s parishes. Clerics were overwhelmed by the number of unknown poor people buried that they jettisoned administrative niceties. For them, there was no

<sup>113</sup> *Journal*, 282.

<sup>114</sup> An entry dated September 11, 1694, notes that 28 prisoners arrived in town but were sent on their way the following day. *Journal*, 283.

reason to record a full entry when the person was unknown and likely uncared for. No families were going to appear looking for their loved ones. Instead, the bodies were buried and that was that. Whereas in the early months of 1692 one could hope to appear in the records as a poor beggar, by the height of the famine one could end up as a single letter.

### *Demography of Catastrophe*

The direct consequence of Agen's system shock was a demographic disaster experienced across the town's social classes. Burial rates rose and remained elevated, marriage rates dropped and so too did baptisms.

An increase in mortality is the telltale sign of famine. Yet, there is the question of at what point does an uptick in mortality constitute a famine? Several criteria have been proposed over the years. For example, Pierre Goubert thought that a doubling of the number of deaths relative to a community's average constituted a famine.<sup>115</sup> Jacques Dupâquier posited an equation for classifying famines as mortality events consisting of the quotient of the difference between the number of deaths in a year and the average amount and the standard deviation exhibited in normal times.<sup>116</sup>

Both methods carry with them limitations in terms of the composition of the community. During times of scarcity there is a significant amount of mobility amongst the less-well-to-do. The rural poor – the poorest of the poor– made their way to the nearest urban center. Thus, the scale of the community expanded. Furthermore, since these persons are most likely to have been in the most precarious of positions, they were more likely to die than the rest of the community. Not to

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<sup>115</sup> "Le crises démographiques en France aux XVIIe et XVIIIe siècles," 205.

<sup>116</sup> Ibid. Furthermore Hervé classified a crisis a rise in deaths of 30-60% above which the situation is a catastrophe, Le Bras Hervé, "Retour d'une population à l'état stable après une <<catastrophe>>," *Population*, 24:5 (1969), 861-869, 862.

mention that their appearance in Agen would have altered the disease pool negatively thereby hurting the local population's odds of survival.

Requisite timelines also diminish the utility of these methods. In the case of Goubert, his method relies on an average mortality rate between demographic crises. For Agen, that would require one to have data stretching back to the 1660s. For Dupâquier the method relies on the ten preceding years. Ten being a round – and thereby convenient – number, it suggests that the figure was selected for convenience rather than for an empirical reason per se.

If one assumes mortality – in average years – to adhere to the normal distribution, then one can make some simplifying assumptions.<sup>117</sup> However, the use of these assumptions relies on a sufficiently large number of ‘events’ to satisfy the conditions of the Central Limit Theorem and the Law of Large Numbers.<sup>118</sup> In this case, the number of annual burial counts is the event. The general rule of thumb is that one needs around thirty events for analysis assuming normality to hold true. Ten being less than thirty – although thirty itself is a rather arbitrarily selected number – leads one to question the utility of Dupâquier's method as a scientific necessity.

However, there is something to be said for statistical consistency over several years. This study uses a relatively simple methodology for analyzing the intensity of mortality, nuptiality, and fecundity by measuring the relative rates of these behaviors versus their averages in the 1680s on a month-by-month basis. To see how this methodology works on can start with burials. The following table shows the burial index for Ste Foy. Note that in months where the index is equal

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<sup>117</sup> For mortality and the normal distribution see, C. I. Bliss and W. L. Stevens, “The Calculation of the Time-Mortality Curve,” *Annals of Applied Biology*, 24:4 (1937) 815-852.

<sup>118</sup> A helpful definition of the law is that of Siméon Poisson, “The phenomena of any kind are subject to a general law, which one can call the Law of Large Numbers. It consists in the fact, that, if one observes very large numbers of phenomena of the same kind depending on constant or irregularly changeable causes, however not progressively changeable, but one moment in the one sense, the other moment in the other sense; one finds ratios of these numbers which are almost constant.” Translated and quoted in Hans Fischer, *A History of the Central Limit Theorem: From Classical to Modern Probability Theory*, New York: Springer, 2010, 35.

to or less than one, a ‘-’ appears rather than a number so as to emphasize the behavioral pattern of interest.

Monthly Burial Index Ste Foy				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	1.3	-	-
September	-	1.9	-	-
October	-	2.6	1.9	-
November	-	1.8	-	-
December	-	4.7	-	-
January	-	4.4	1.1	-
February	-	3.7	-	-
March	-	4.7	-	-
April	1.5	3.6	-	-
May	-	2.9	-	-
June	-	2.5	-	-
July	-	1.1	-	-

Table 11: Monthly Burial Index, Ste Foy

Repeating the process for St Hilaire and St Étienne – St Caprais lacks sufficient burial data for the 1680s – renders the following tables.

Monthly Burial Index St Hilaire				
	Harvest Years			
Month	1692	1693	1694	1695
August	N/A	N/A	N/A	N/A
September	42	42	44	4
October	3.5	5	4.5	-
November	20	16	8	2
December	14	38	20	12
January	2	22	9	-
February	2	6.3	1.7	-
March	2	14.5	-	-
April	12	46	12	8
May	-	10.3	-	2
June	1.7	8.3	-	1.1
July	-	4	1.3	-

Note: August data is N/A because 1680s average was 0  
Note: September and April data appears skewed because 1680s average was 1

Table 12: Monthly Burial Index, St Hilaire

Monthly Burial Index St Étienne				
	Harvest Years			
Month	1692	1693	1694	1695
August	3.7	3.8	5.2	-
September	3.9	6.1	2	-
October	6.7	10.7	5.3	1.7
November	1.6	4	-	-
December	4.3	8.7	2.7	-
January	4	17.3	2	-
February	2	11	1.8	-
March	3.3	22	2.7	-
April	4.3	31	-	-
May	1.5	11	-	-
June	3	10	-	-
July	5.1	18.5	-	-

Table 13: Monthly Burial Index, St Étienne

The data here paints a peculiar picture. Based solely on the indices one would assume that St Hilaire was the hardest hit by the famine. However, the parish's high index likely comes from the low averages witnessed for the 1680s wherein most months had an average of below one. Compared to non-famine year data in the 1690s this average is exceptionally low. Therefore, one ought to discount the magnitude of the indices for St Hilaire while appreciating the trend.

The picture that emerges from these tables is clear. Hints of famine began to appear in the latter months of the harvest year of 1691. These initial signs appeared primarily in St Étienne where they continued to show into the harvest year of 1692. Around the fall of 1692 there was a reprieve as burial rates returned to their 1680s averages. Then, as the harvest of 1693 failed and stores of food were certainly depleted, the indices rose across the board. The rates remained multiple times higher than the norm until the harvest of 1694 came in at which point the whole affair was over from a burial point of view.

Looking at the number of burials per year one gets the sense of *scale* at which death appeared in Agen. The following table shows the annual numbers alongside the 1680s average.

Annual Burial Counts					
Parish	Harvest Years				
	1680s Average	1692	1693	1694	1695
Ste Foy	150	89	438	106	40
St Hilaire	40	84	239	87	34
St Étienne	223	202	687	121	19
St Caprais	N/A	30	113	24	10
<b>Agen</b>	<b>N/A</b>	<b>405</b>	<b>1,477</b>	<b>338</b>	<b>103</b>

Table 14: Annual Burial Counts

For the entire town the harvest year of 1693 was the year of true calamity. That year saw burial rates climb nearly 700% relative to their 1680 average (adjusting for the lack of St Caprais data). With the coming of the 1694 harvest burials stabilized before nearly flat lining in 1695. In terms of the logistics of burials, St Étienne’s clerics were conducting nearly 2 per day for all of 1693. The months with the highest number of burials at the cathedral were March through May where the parish buried 99, 93, and 85 persons respectively – roughly three a day.

The change in magnitude of burials accompanied a shift in their timing. Using the 1680s as a baseline, one can compare the actual seasonality of burials against the expected. The resulting comparison – shown below – indicates a strong shift in behavior with expected periods of lulls instead experiencing peaks and vice versa.

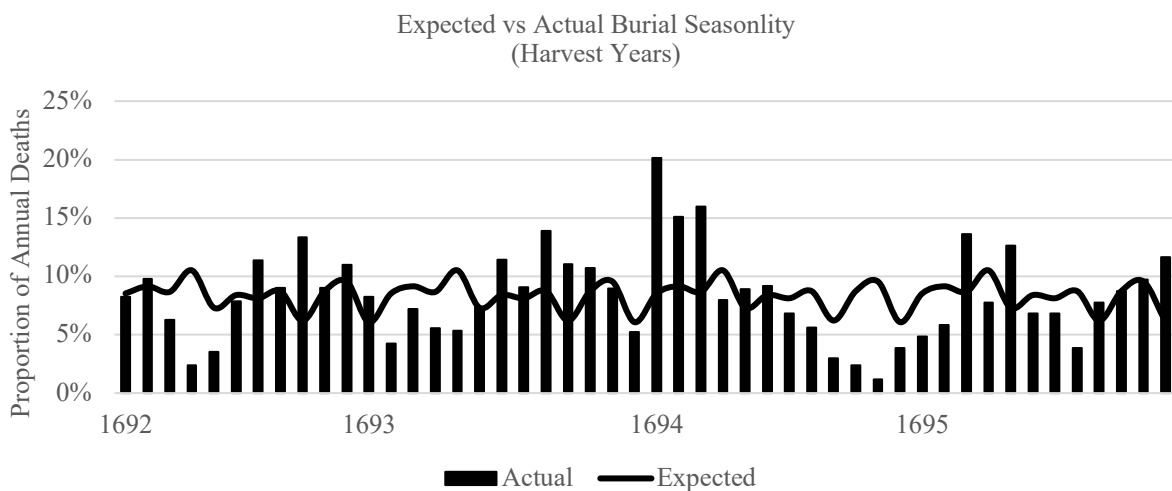


Fig. 26. Expected vs Actual Burial Seasonality

Another means of comparison is to look at the difference between expected and actual median ages at burials. A rise in the median age at burial would indicate a subsistence crisis affecting older persons while a decline would indicate the opposite. The following table outlines the movement in median ages across parishes in each harvest year.

Expected vs Actual Median Age at Burial					
Parish	Expected	1692	1693	1694	1695
Ste Foy	16	30	30	15	7
St Hilaire	20	8	30	35	26
St Etienne	20	8	15	15	15
St Caprais	30	45	30	12	17

Table 15: Expected vs Actual Median Age at Burial

The data across Agen is variable. The greatest coherence exists across the town in 1693 except for St Étienne. In that year the median age was 30 in the three other parishes. In 1693 older members of the community were more at risk of dying than younger ones. The exact cause of this behavior is unclear since disease and hunger should affect children more greatly. However, one might explain this through recourse to an absence of evidence. A high number of adult burial records may obfuscate a corresponding lack of infant and child records. As noted previously, Agen's reported infant burials were far below expectations.

Of those who died the vast majority were locals of Agen. However, there was a significant number of out-of-town persons buried during these years. All non-locals were buried by clergy from either Ste Foy or St Étienne. In total 266 non-locals were buried; 58 appear in the records of Ste Foy and the remaining 208 in those of St Étienne. Of these, 79 were Spanish soldiers. That leaves 187 non-Spanish non-locals in the records. The pattern of non-local persons appearing in the town's records reflects the entire town as shown below with an interesting twist for the prisoners.

Annual Non-Local Burial Counts				
	Harvest Year			
	1692	1693	1694	1695
Spanish Soldier	3	5	61	0
Non-Local	14	156	10	1

Table 13: Annual Non-Local Burial Counts

Whereas the non-soldier non-local burials followed a behavior like the town in general the Spanish prisoners disproportionately died in 1694. This behavior reflects the supply of Spanish prisoners more than a particular resilience amongst them. As noted above, the town received new prisoners in the fall of 1694. This is to say that it is likely that if the town had any prisoners to starve in 1693, they would have. The following figure shows the non-local – including prisoners – and local burial numbers split up for the famine years.

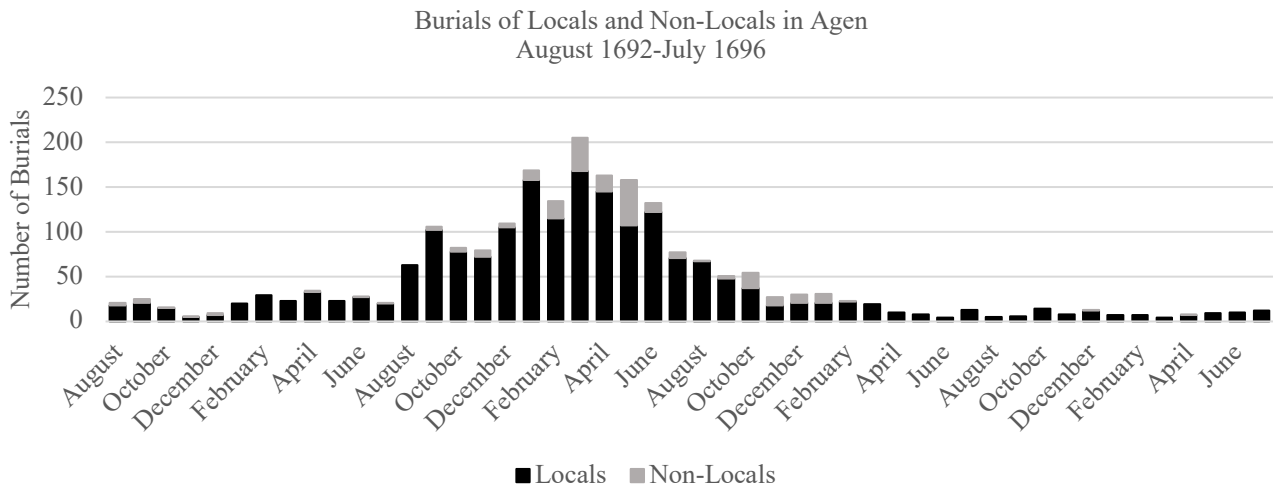


Fig. 27. Burials of Locals and Non-Locals in Agen

The non-locals share of burials peaked from October 1694 to January 1695 when it remained above 30% as non-local deaths continued while local deaths subsided. No non-locals appear in the burials records of St Hilaire or St Caprais. As shown below, although the harvest year of 1693 was the worst year for non-locals burials the harshest period for these persons was the spring of 1694.



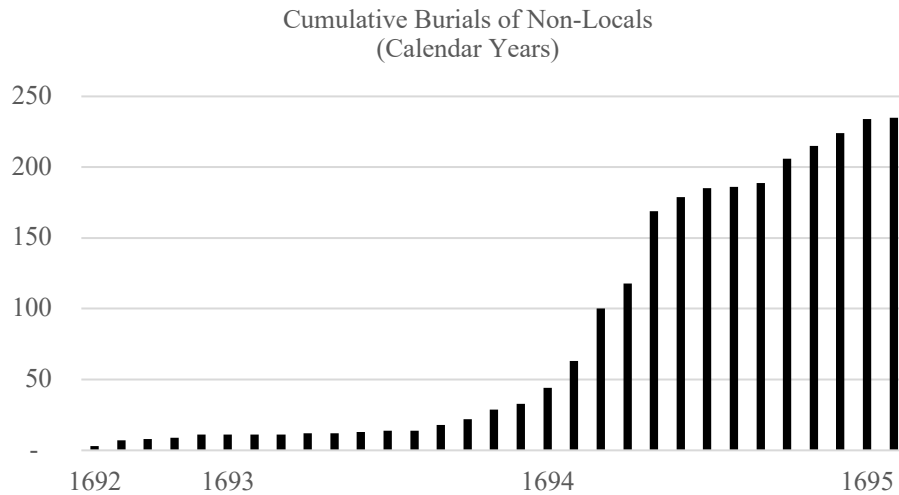


Fig. 28. Cumulative Burials of Non-Locals

Yet, there is still the question of where these persons came from. In general, non-locals buried at Agen came from the surrounding communities. The five most common places of origin were Condom, Cardonnet, Lusignan Grand, Marmande, and Puymirol. Taken together these locations account for only 29 burials. Exactly 60 places of origin appear in the Agen records. A handful of significantly more distant hometowns appear in the records such as Normandy and Portugal but on both of these occasions the person was the spouse a merchant originating from these areas. Whether these merchants had moved to Agen or were in town on business is unclear from the records.

While many places of origin appear in the records, only 92 buried non-locals have locations listed. The rest were listed as either simply being from out of town or as being unknown. This clearly complicates the picture in that a lack of evidence begets an abundance of possibilities. For a home parish or town to appear in the records someone else had to testify to the persons origins. Solitary migrants or those belonging to makeshift groups were unable or unlikely to have had

someone testify to their origins. Therefore, it is the most destitute and downtrodden who appear in the records as unknowns.

As a final note on burials, it is worth reflecting upon the role of class in shaping burial rates during famine years. As mentioned long ago in this study’s introduction there is an existing literature on the relationship between class, economics, and demography. Brenner argues that “it is the structure of class relations, of class power, which will determine the manner and degree to which particular demographic and commercial changes will affect long-term trends in the distribution of income and economic growth - and not vice versa.”<sup>119</sup> While it is certainly unfair to try to use one event in one location as a litmus test of Brenner’s position, appealing to the communal data may add some level of insight regarding the positions veracity.

If class structure reigns supreme in determining economic phenomenon, rather than demography, then one would expect to see significant disparities in class-based responses to subsistence crises which are, in an agriculturally driven economy, economic events.<sup>120</sup> To explore this one can, compare the local demographic response during the famine years between the non-notables and the notable and noble classes. The following table presents this comparison.

Class-Based Burial Counts					
	Harvest Year				
	1691	1692	1693	1694	1695
Notables + Nobles	30	38	76	31	7
y-o-y Change %	-	27%	100%	-59%	-77%
Local Non-Notables	380	350	1,240	236	95
y-o-y Change %	-	-9%	254%	-81%	-60%

Table 17: Class-Based Burial Counts

While the non-notables certainly witnessed a 2.5-time strong burial response to the famine in the harvest year 1693, all classes saw similar rates of decline in burials in 1694 and 1695. In fact, the

<sup>119</sup> “Agrarian Class Structure and Economic Development in Pre-Industrial Europe,” 31.

<sup>120</sup> Economics is, after all, the study of scarcity and what is famine if not scarcity made manifest in the food supply?

rate change between 1695 and 1691 is nearly identical at -75% for the non-notables and -77% for the notables and nobles. Therefore, as far as class matters amongst urbanites, it is in the initial spike in burials – at least for Agen. It is also possible that the urban nature of both classes could limit the impact of class consideration. In that situation one would have to look at the rural non-notables as a true basis of comparison. It is not for nothing that all of the refugees who sought food in Agen would have come from that class. However, at this time Agen’s burial data would appear to tentatively side with proponents of demography over those of class structure.

Moving past burials and into the marriage data, one would expect to see a decrease in marriages with the onset of famine expectations followed by a rise once food supplies normalized. This pattern appears to varying extents when one looks at the nuptiality indices for the four parishes. One ought to remember that in these tables a ‘-’ indicates a month of average or below average activity relative to the 1680s data.

Nuptiality Index Ste Foy				
Month	Harvest Years			
	1692	1693	1694	1695
August	-	-	-	3
September	1.2	-	-	-
October	-	-	-	-
November	-	-	2.4	-
December	-	-	-	-
January	1.2	-	-	-
February	-	-	2.2	-
March	-	-	6.2	1.6
April	1.4	-	-	-
May	-	-	-	-
June	-	1.4	-	-
July	-	-	-	-

Table 18: Monthly Nuptiality Index, Ste Foy

Nuptiality Index St Hilaire				
	Harvest Years			
Month	1692	1693	1694	1695
August	4	-	2	2
September	-	1.5	-	-
October	-	-	2.3	2.3
November	1.1	-	-	1.5
December	-	-	-	-
January	3.8	-	1.5	2.3
February	-	-	-	-
March	-	-	-	3
April	-	5.3	5.3	-
May	N/A	N/A	N/A	N/A
June	2.7	1.3	3.3	2.7
July	1.3	-	1.3	-

Note: May data is N/A because 1680s average was 0

Table 19: Monthly Nuptiality Index, St Hilaire

Nuptiality Index St Étienne				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	-	-	-
September	-	-	-	-
October	-	-	2.7	1.5
November	1.5	-	2.6	-
December	-	-	-	-
January	1.7	-	-	-
February	-	1.9	1.2	-
March	-	-	-	-
April	2	1.5	-	-
May	-	1.1	-	1.1
June	-	-	-	-
July	-	-	-	-

Table 20: Monthly Nuptiality Index, St Étienne

Nuptiality Index St Caprais				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	2	2	-
September	3	-	4.5	-
October	1.5	-	-	-
November	-	-	-	-
December	N/A	N/A	N/A	N/A
January	3.1	-	1.3	-
February	-	-	1.5	-
March	N/A	N/A	N/A	N/A
April	1.1	-	-	-
May	-	-	-	-
June	-	-	1.7	-
July	2	-	-	-

Note: December and March data is N/A because 1680s average was 0

Table 21: Monthly Nuptiality Index, St Caprais

The general picture based on marriage data is, once again, that the famine was most severe in the harvest year of 1693. Different parishes appear to have recovered at different times. For Ste Foy recovery came in November 1694 while St Hilaire, St Étienne, and St Caprais likely recovered by April of 1694, September of 1694, and August of 1694 respectively. Regardless of specific months, it is safe to say that by the fall of 1694 that marriage behavior indicated a return to better days. As for the scale of marriage occurrence one can look at the figure below.

Marriages Per Harvest Year, 1692-1695				
Parish	Harvest Year			
	1692	1693	1694	1695
Ste Foy	22	16	31	23
St Hilaire	19	12	23	20
St Étienne	38	33	43	30
St Caprais	16	7	16	3
<b>Agen</b>	<b>95</b>	<b>68</b>	<b>113</b>	<b>76</b>

Table 22: Marriages Per Harvest Year, 1692-1695

The simplest narrative one could draw from this table is that the occurrence of marriages was not as susceptible to famine as burials. All parishes saw fewer marriages in 1693 – the deadliest year of the famine – than in either 1692 or 1694. Context is useful in understanding 1695’s low number in that 1694’s bumper year of marriages likely siphoned off some which would have otherwise occurred in 1695. Note that class-based considerations are not considered in this study when it comes to marriage due to the relatively low rates of occurrence of marriage relative to the other two behaviors (i.e., the data set is too small for any semblance of significance). The following figure shows expected and actual marriage seasonality.

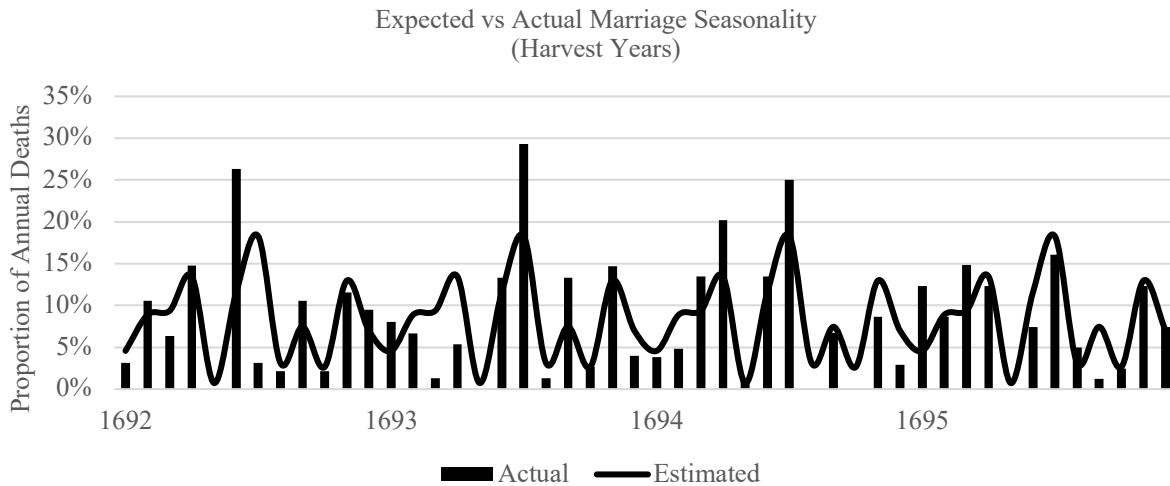


Fig. 30. Expected vs Actual Marriage Seasonality

Quite surprisingly given the alteration in seasonality witnessed in the burial data, marriage patterns in the famine years remained strikingly like those of the 1680s in terms of timing. The magnitude of marriages occurring changed but the time of year in which they occurred held constant. This would indicate the strength of religious and agricultural influence on marriage behavior. As for the magnitudes of marriages observed, both pent up demand and the desire to quickly mend family units that suffered the loss of at least one spouse likely explains the behavior.

Finally, looking at baptisms, here one expects a similar pattern to marriages and famine except for a later onset and reversal due to the 9-month period of pregnancy. As such, baptisms would have remained below their 1680s average through to the later months of the 1694 harvest year and into 1695. The tables below show the baptism indices for the four parishes relative to the 1680s. One should note that here the indices shown only for months where the baptism rate was below that of the 1680s average and therefore a ‘-’ indicates a month of average, or above, rates of baptism.

Baptism Index Ste Foy				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	-	0.3	0.9
September	0.7	-	0.5	0.8
October	-	-	0.7	-
November	-	0.3	-	-
December	0.8	-	0.4	-
January	-	0.9	0.8	-
February	0.6	0.8	-	-
March	0.5	0.3	0.6	-
April	-	0.7	-	-
May	-	0.2	0.5	0.5
June	-	-	-	-
July	0.8	0.4	-	-

Table 23: Monthly Baptism Index, Ste Foy

Baptism Index St Hilaire				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	-	0.3	0.8
September	0.7	-	0.5	-
October	-	0.5	0.5	0.9
November	0.8	-	0.7	-
December	-	-	0.3	-
January	-	-	0.7	-
February	0.4	-	-	0.4
March	0.2	-	0.8	0.6
April	0.8	0.9	-	-
May	-	0.3	0.6	-
June	-	0.7	-	-
July	-	0.2	0.8	-

Table 24: Monthly Baptism Index, St Hilaire

Baptism Index St Étienne				
	Harvest Years			
Month	1692	1693	1694	1695
August	-	0.8	0.3	-
September	-	-	0.6	-
October	0.2	-	0.3	0.8
November	0.8	-	0.4	-
December	0.5	-	0.5	-
January	-	0.8	0.7	-
February	0.6	0.4	0.2	0.1
March	0.8	0.7	0.4	-
April	0.5	0.2	-	0.7
May	-	0.6	-	-
June	0.5	0.2	0.7	-
July	-	0.4	-	-

Table 25: Monthly Baptism Index, St Hilaire

Baptism Index St Caprais				
	Harvest Years			
Month	1692	1693	1694	1695
August	0.9	-	0.3	-
September	-	-	-	-
October	0.8	0.8	0.6	0.3
November	0.4	-	0.2	-
December	0.4	0.6	0.4	-
January	-	-	-	-
February	-	-	-	-
March	0.5	0.3	-	-
April	0.1	0.5	0.5	0.4
May	0.5	-	0.5	0.5
June	-	-	-	-
July	0.9	0.3	-	0.6

Table 26: Monthly Baptism Index, St Hilaire

Each of Agen’s parishes align with the expected baptism behavior except for St Caprais. The cause of St Caprais’ deviation is likely the low base of baptisms which occurred in the parish regardless of year. Nonetheless, in the three other parishes one finds a return to normalcy in the harvest year of 1695.

The famine years saw major and sustained declines in the baptism rate during the famine. Each parish saw at least an 80% decline relative to the 1680 averages. As for timelines, St Étienne saw the first sustained decline beginning in October 1692. It took until November of 1693 for Ste Foy to seeing a sustained drop while St Hilaire’s decline took hold perhaps as late as May of 1694. Yet, by 1695 babies appeared at the baptismal fount in increasing numbers. The following table shows the aggregate number of baptisms over these years.

Baptisms Per Harvest Year, 1692-1695				
	Harvest Year			
Parish	1692	1693	1694	1695
Ste Foy	111	99	91	128
St Hilaire	73	71	53	100
St Étienne	108	108	59	138
St Caprais	44	57	39	60
<b>Agen</b>	<b>336</b>	<b>335</b>	<b>242</b>	<b>426</b>

Table 27: Baptisms Per Harvest Year, 1692-1695



Across Agen 1694 was clearly a year of low baptisms. In aggregate the figures indicate 27% decline in baptisms between 1692 and 1694. Meanwhile, 1695 saw a 76% increase year-over-year in baptisms indicating the release of pent-up desire for children.

Research by Hanlon and his acolytes – including this study’s author – points to famine as a motivator of infanticidal practices.<sup>121</sup> However, research on Agen’s baptismal records by Hanlon fails to indicate the clear occurrence of such behaviors in the famine years of the 1690s. While the baptisms records’ ratio of masculinity was elevated in 1692 the ratio “fall[s] just within the range of random variation.”<sup>122</sup> Therefore at this time sex-selective infanticide remains a mere possibility rather than a probability. It is possible that the lower number of children born in 1694 may have, in part, come about through the practice of general infanticide but one is unable to speak on the topic to any further extent.

Given the number of baptisms in Agen it is possible to look at them to consider the role of class once again on shaping behavior during famines. As was the case with burials, the Agen data does not lend itself to a ‘class-oriented’ explanation of human behavior. In fact, baptism data paints an even clearer picture of class-agnostic impacts of famine. In the harvest year of 1694 baptism rates fell by 31% amongst the notables and nobles while the non-notables saw a nearly identical decline of 33%. The only significant difference coming from a much stronger baptismal rebound in 1695 for the non-notables.

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<sup>121</sup> *Death Control in the West.*

<sup>122</sup> “Agen, Aquitaine’s complicated second city,” 132.

Class-Based Baptism Counts					
	Harvest Year				
	1691	1692	1693	1694	1695
Notables + Nobles	35	38	36	25	39
y-o-y Change %	-	9%	-5%	-31%	56%
Non-Notables	208	299	308	206	386
y-o-y Change %	-	44%	3%	-33%	87%

Table 28: Class-Based Baptism Counts

Finally, there is the consideration of the famine’s impact on baptism seasonality. Here one sees a noticeable shift in behavior in the final months of the harvest year 1693. In this period – spring of calendar year 1694 – baptisms reached their famine year low. When contrasted with the 1680s baseline this nadir corresponds to an expected period of normal to elevated levels of baptisms. The large spike at the end of harvest year 1695 corresponds to June of calendar year 1696. Working backwards from baptisms to conceptions shows a rise in procreative activity following the harvest of 1695. A bumper crop leading to many baby bumps.

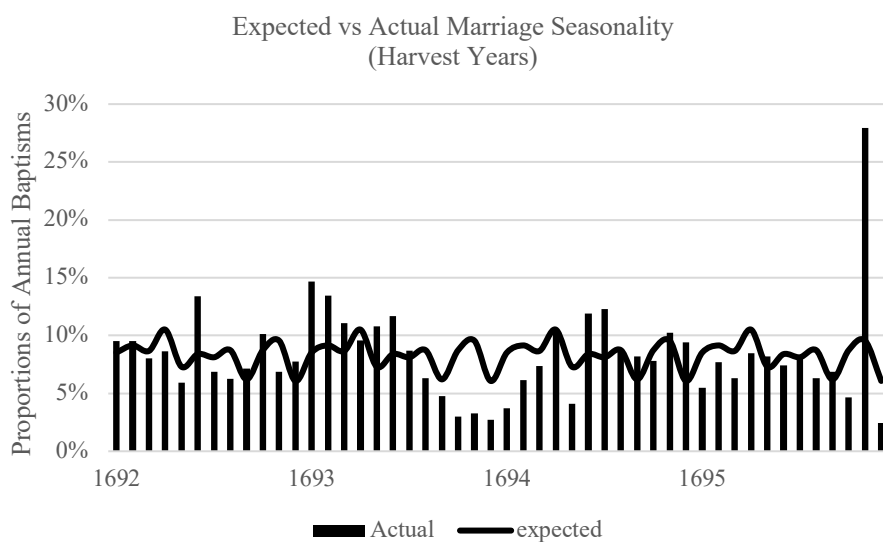


Fig. 31. Expected vs Actual Baptism Seasonality

Bringing all the data together allows one to create a calendar of sorts of the famine with key dates indicating the famine’s start, peak, and end. The following table demonstrates such a calendar.

Important Milestones – Calendar Years				
	Ste Foy	St Hilaire	St Étienne	St Caprais
Burials Rose	August 1693	September 1693	August 1692	N/A
Marriages Fell	April 1693	October 1693	May 1693	September 1693
Baptisms Fell	November 1693	April 1694	October 1692	N/A
Burials Maximum	March 1694	April 1694	July 1694	N/A
Baptism Minimum	May 1694	July 1694	February 1695	N/A
Burials Normalize	August 1694	January 1696	April 1695	N/A
Marriages Rose	November 1694	April 1694	February 1694	August 1694
Baptisms Rose	October 1695	November 1695	April 1695	N/A

Table 29: Important Milestones – Calendar Years

### *Administrative Responses*

In response to the famine Agen's town government sought to alleviate suffering with price and weight controls on bread.<sup>123</sup> The town's officials dictated a price per unit of bread while the weight of the unit itself fluctuated thereby creating the possibility of an accounting fiction where bread prices were constant in times of dearth. Weights were regulated based on the type of bread produced. *Pain blanc* was the highest tier of bread produced. *Pain blanc* was the product of white flour made from the starch-heavy components of the wheat kernel. The lowest tier of bread was that of *pain bis* which was made from the entire kernel resulting in a brown coloration. In the middle was *pain avec tout* which was a relative mixture of brown and white flour resulting in a bread with a coloration between the two others.

The first appearance of price (i.e. weight) control occurred on March 3<sup>rd</sup>, 1692, when the consul ordered the town's bakers to fix the weights at 12oz, 14oz, and 16oz for the three types of

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<sup>123</sup> The nature of bread pricing in this period makes it somewhat difficult to ascertain given the double meaning of the word '*livre*.' A *livre* is both a unit of monetary account as well as a measure of weight. As a monetary unit, a *livre* – in theory – was equal to a pound of silver although a *livre tournois*, which was the early modern unit of account, was the equivalent of around eighty grams. At the same time, a *livre* as a unit of weight represented a mass of 16 ounces. Thus, the *livre* was somewhat like the English pound except that the latter maintained its monetary consistency as a pound sterling. This is to say that a *livre* of bread could mean either a pound of bread or the amount bread one could buy for a *livre*.

bread respectively.<sup>124</sup> Thus, denoting a *pain blanc* price premium of 17% and 33% respectively over the other two. On May 23<sup>rd</sup>, the weights were reiterated with notes made that these weights were associated with a price of a sol (i.e., *sou* or 1/20<sup>th</sup> of a *livre*). On October 10<sup>th</sup> of that year the town government reiterated the weights once again.<sup>125</sup> At first glance it seems strange that the town's government explicitly reiterated the same regulation for weights of bread. However, it could have been the case that the situation had improved and therefore the weights were allowed to fluctuate. Once supplies became scarcer the reiteration of the regulation would have instituted a price ceiling. Price control was only needed once the price had already gone beyond it.

Matters became more complicated once prices began to rise. The records note the imposition of a "taxe" on bread. These records may refer to actual taxes put on bread by the town. The tax could have been used to fund subsidies for bread for the less-well-off. However, they could also refer to the level – or 'taux' – seen in the town since the records note price not weight. This matter remains ambiguous.

No bread regulations appear in the records for 1693 – perhaps indicating the effectiveness of the 1692 measures in regulating the price. In 1694 the "taxe" appears several times. Initially it only appeared relating to the *pain blanc* whose price rose per pound from 27 denier in 1692 to 58 on May 7<sup>th</sup> and 60 on May 19<sup>th</sup>.<sup>126</sup> On July 9<sup>th</sup> taxes are applied to the other two bread types raising their costs per pound from 23 and 20 denier to 38 and 22 denier respectively.<sup>127</sup> By July 16<sup>th</sup>, the *pain blanc* price declined to 41 deniers, or 3.5 sols, per pound.<sup>128</sup> Agricultural production must

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<sup>124</sup> Journal, 214. Note that 1 *livre* in Toulouse was 413.2g. Blanqui et al., *Encyclopédie du commerçant. Dictionnaire du commerce et des marchandises, contenant tout ce qui concerne le commerce de terre et de mer*. Tome II. (Paris: Guillaumin et Cie, 1839), 1356.

<sup>125</sup> Journal, 226.

<sup>126</sup> Journal, 269

<sup>127</sup> Journal, 272

<sup>128</sup> Journal, 274.

have risen in 1694 because in late August prices per pound were reduced to 18 deniers, or 1.5 sols, for *pain blanc*, 17 for *pain avec tous*, and 16 for *pain bis*.

Following 1694, bread prices rarely appear in the governmental records. In 1695, prices are regulated but for a unitary “*pain*” as opposed to the three different categories. The prices per pound in February, May, and then July were 16, 12, and 14 deniers respectively.<sup>129</sup> It would seem logical to assume that this ‘pain’ refers to *pain bis* given the low cost. Additionally, the government would have been more interested in regulating a price ceiling for the bread consumed by the poor whether than the well-to-do.<sup>130</sup>

The official prices must have carried some level of effectiveness given the enforcement power of the town. For example, the town took action against a local baker named Guillaume Goupart they found guilty of contravening the price controls.<sup>131</sup> As a result they confiscated his stock of bread. This is not to say that the official price was the only price. Under conditions of price control, producers are incentivized to sell product in the black market up to the point that marginal revenue equals the official price plus an illegality premium that ought to account for the probability of being caught.<sup>132</sup> Furthermore, the official price ought to reflect a price ceiling whereby one could sell their production at a lower rate. During a time of dearth, no political body would have done well by demanding that people pay more for food than the producer is willing to accept. At the same time bakers could have enforced the official price through communal pressure.

It is important to note that the price controls correspond with the timeline of famine noted in Table 25. They began in 1692 and subsided in 1695 with a peak in official prices in the final

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<sup>129</sup> Journal, 296, 309, and 315

<sup>130</sup> It is, of course, the poor who riot over food prices as opposed to the relatively wealthy. See, Louise Tilley, “The Food Riot as a Form of Political Conflict in France,” *The Journal of Interdisciplinary History*, 2:1 (1971), 23-57.

<sup>131</sup> Journal, 312.

<sup>132</sup> M. Bronfenbrenner, “Price Control under Imperfect Competition,” *The American Economic Review*, 37:1 (1947), 107-120, 113. For a contemporary and early critique of this position see, Emre Gönençay, “The Theory of Black Market Prices,” *Economica*, 33:130 (1966), 219-225.

months of the 1693 harvest year. Further evidence of this timeline appears in the town's expulsion of non-local beggars. On May 6<sup>th</sup>, 1694, local authorities rounded 250 non-local beggars, escorted them out of town, and gave them two sols worth of bread before sending them on their way.<sup>133</sup>

At the same time, the town gave tickets to the local poor for identification purposes. This identification presumably sought to ensure that only the worthy poor – i.e., the locals – would enjoy the benefits and charity of the town. This response was common in early modern Europe as noted by Alfani who wrote that in the Italian context that, “during severe subsistence crises [city authorities] regularly decided to expel the so-called ‘useless mouths’: people without citizenship, who were beggars, jobless foreigners, or even those employed but without any highly professionalizing skill.”<sup>134</sup> Thus, a minimization of hungry mouths served as a quick response to a shortfall in foodstuffs. The occurrence of this expulsion in May 1694 corresponds to the period of burial maxima across the town. Further indication of the famine's severity reaching a peak in the second half of the 1693 harvest year appears in the *Journals* only reference to weather in which the consul wrote that “it should be noted that the Garonne River was not navigable then on January 7<sup>th</sup> until February 8<sup>th</sup> for fear of much ice.”<sup>135</sup>

In addition to these local efforts there were policies enacted at the regional level. In January 1694 the *Intendant* had suspended all taxes and duties related to the movement of grain and legumes in the area.<sup>136</sup> This decision allowed for the easier movement of foodstuffs across jurisdictions without the added costs of taxation or the time delays associated with paying.

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<sup>133</sup> *Journal*, 269.

<sup>134</sup> “The Famine of the 1590s in Northern Italy. An Analysis of the Greatest “System Shock,” 31.

<sup>135</sup> Author's translation. *Journal*, 266.

<sup>136</sup> For treatments on demographic pressure and free(er) markets see, David Weir, “Life Under Pressure: France and England, 1670-1870,” *The Journal of Economic History*, 44:1 (1984), 27-47; Salim Rashid, “The Policy of Laissez-Faire During Scarcities,” *The Economic Journal* 90:359 (1980), 493-503.

Lastly, the church and rich persons of the town likely engaged in famine-alleviating charitable activities. As noted by Kelly and Ó Gráda “it would appear instead that societies not only had the incentive, but sometimes also the ability, to mitigate the positive [Malthusian] check through public and private charity. In other words, living standards were not the sole determinant of mortality; well-designed institutions could also matter.”<sup>137</sup> However, private, and ecclesiastical efforts at famine relief in Agen do not appear in the records used for this study and are therefore left uncommented upon.

To what extent any of these efforts were beneficial to the people of Agen is debatable, however, the historian is unable to test counterfactuals such as what would have happened if no actions were taken. The demographic evidence, however, in the form of baptisms and burials, testifies to the extent to which these efforts – if they were helpful at all – fell short for many in Agen.

With all this local data and testimony in mind it is worth exploring the frameworks in which all of this was occurring. Specifically, the realms of human physiology and economics go a long way in contextualizing the underlying mechanisms at play for the people of Agen.

### *Physiology of Famine*

Famines are fundamentally human phenomena. A famine only occurs if there are humans present who suffer. Therefore, one cannot understand the process of famine without understanding the effects of famine on the human body specifically and society in general.

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<sup>137</sup> Morgan Kelly and Cormac Ó Gráda, “Living standards and mortality since the Middle Ages,” *The Economic History Review* 67:2 (2014), 385-381, 360; For further exploration of the philanthropic role of wealthy individuals in this period see, Guido Alfani, *As Gods Among Men: A History of the Rich in the West*, (Princeton: Princeton University Press, 2023).

Starting with the individual, one can look to the process of metabolism. Through the breaking down and absorption of nutrients, living organisms grow and fuel their own movements. For humans, nutrients are consumed through the quotidian acts of eating and drinking. Energy is derived from this intake through chemical processes in the digestion system. If an individual is suffering under conditions of famine, it means that “the supply of materials for chemical energy is inadequate.”<sup>138</sup> If one remains in energy deficit for a long enough time then eventually the body will shut down and the individual will die. It is important to remember that one does not have to die to be starving – they merely need to be in a prolonged state of energy deficit.

With that said, when it comes to starvation it is not just a process of energy *per se*. There is a need for the right kind of nutritional inputs. For example, humans require nitrogen, vitamins, lipids, and carbohydrates.<sup>139</sup> Within these nutrient categories there are further requirements for specific items such as vitamin c and fatty acids.<sup>140</sup> This is all to say that the physical, biological, and ultimately chemical nature of starvation is complex. Analogously one could think of a motor vehicle. The vehicle will not move without petroleum, but it also needs transmission fluid, a functioning battery and – so long as it is not diesel powered – spark plugs.

In the early days of starvation an individual undergoes a period of “glycogenolysis and gluconeogenesis” in which the body’s stores of carbohydrates are consumed.<sup>141</sup> The body then survives by consuming lipids in a process known as “ketogenesis.”<sup>142</sup> Lipids act as a buffer for the

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<sup>138</sup> Ancel Keys, Josef Brozek, and Austin Henschel. *The Biology of Human Starvation*, vol.1. Minneapolis: University of Minnesota Press, 1950, 289.

<sup>139</sup> Ibid, chapters 20-24

<sup>140</sup> Severe vitamin c deficiency leads to Scurvy which – if untreated – leads to “generalized edema, severe jaundice, hemolysis, acute spontaneous bleeding, neuropath, fever, convulsions, and death.” Daniel Léger, “Scurvy: Re-emergence of Nutritional Deficiencies,” *Canadian Family Physician*, 54:10 (2008 Oct.), 1403-1406, 1404; Meanwhile fatty acid deficiency can pose a fatal risk through “increased susceptibility to infection” and “poor wound healing” that compounds with a “dry, scaly rash.” Kris Mogensen, “Essential Fatty Acid Deficiency,” *Nutrition Issues in Gastroenterology* June 2017, 37-44, 39.

<sup>141</sup> G F Cahill, “Starvation in man,” *New England Journal of Medicine* 1970, 282(12), 668-675, 669.

<sup>142</sup> Ibid.



body's proteins which are the final part of the human body to be consumed prior to death. While carbohydrates, lipids, and proteins act as the primary consumptive terms, the entire body is consumed in one way or another. For example, autopsy results of concentration camp survivors – who perished soon after liberation – showed decreases in liver and heart weights of around a third while those of the kidneys, pancreases, and brains dropped by a tenth.<sup>143</sup> The body shrivels up. When Madame Cryayer found a corpse in her garden in January of 1694, she did not find a properly proportioned human. Instead, she would have found a skeleton tightly draped with discolored skin.

Alongside auto-consumption, changes occur beyond the body's tissues. Almost every major component of human behavior suffers some sort of consequence brought on by prolonged starvation. For example, psychologically, “famine victims become desperate and self-absorbed, and lack shame, their baser instincts [take over] prompting actions that would be unthinkable in normal times.”<sup>144</sup> Additionally, hormone production fluctuates which often leads to irregular menstruation cycles amongst females including the cessation of reproductive processes all together.<sup>145</sup>

While most people expect that deaths during famines predominantly occur due to “actual starvation” most deaths are, in fact, caused by “nutritionally sensitive diseases brought on by impaired immunity” as well as “poisoning from inferior foods that would have been discarded in normal times.”<sup>146</sup> Of particular concern is that “starvation increases intestinal permeability” which can result in increased levels of gastro-intestinal infections.”<sup>147</sup> The occurrence of “hunger

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<sup>143</sup> *Biology of Starvation*, 187.

<sup>144</sup> *Famine*, 48.

<sup>145</sup> Sjoerd Elias, et al., “Menstruation during and after caloric restriction: the 1944-1945 Dutch Famine,” *Fertility and Sterility*, 88:4 (2007), 1101-1107.

<sup>146</sup> Joel Mokyr and Cormac Ó Gráda, “What do people die of during famines: the Great Irish Famine in comparative perspective,” *European Review of Economic History*, 6 (2002), 339-363, 340.

<sup>147</sup> Paul Kelly, “Starvation and its Effects on the Gut,” *Advances in Nutrition* 12:3 (2021), 897-903, 901.

diarrhea” as “the most feared illness” at the Auschwitz concentration camp speaks to the impact and severity of the mechanism.<sup>148</sup>

Somewhat paradoxically, relatively few people die of starvation during famines. The reason for this situation is that starvation is a slow process; one must live long enough to die of starvation. In between the onset of energy deficiency and the time it takes to starve to death lies a period of acute susceptibility to infectious and bacterial diseases. For example, when the PIRA militant Bobby Sands went on hunger strike within the controlled environment of Belfast’s H-Blocks prison it took 66 days for him to die.<sup>149</sup> Hence the notable and noble populations of Agen saw their burial rates double in the harvest year of 1693 – they died but they did not starve.

The long duration required for starvation to kill an individual naturally leads to the question of what it means to die *from* famine. If, under conditions of famines, an individual dies of starvation it is quite easy to say that famine killed them. On the other hand, if an individual dies of Typhoid Fever which – hypothetically – they *could* have recovered from if they had their usual diet is it fair to say that famine killed them? This issue is further complicated by the fact that in the pre-modern era “victims are not always registered meticulously or accurately.”<sup>150</sup> If the deceased person exhibited an emaciated body, it would not have been wholly incorrect for the parish priest recording their burial in a parish register to have stated that the person died from starvation – even if the immediate cause of death was a pulmonary infection. Matters complicate further in Agen since none of the parishes recorded famine victims as such.

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<sup>148</sup> Ibid, 898.

<sup>149</sup> Fintan O’Toole, *We Don’t Know Ourselves: A Personal History of Modern Ireland*, American ed., New York: Liveright, 2022, 334

<sup>150</sup> Bas van Bavel, et al., *Disasters and History: The Vulnerability and Resilience of Past Societies*, New York: Cambridge University Press, 2020, 124.

Broadly speaking, one can model the collective resiliency across social classes regarding starvation and disease during periods of famine. Such a model would align with the three classes of persons in pre-modern Europe – peasants, notables, and nobles. These classes are not strict tiers of society but, instead, overlap. For example, a rich peasant may have greater food security than a low-level notable. Additionally, some notables – the nouveau riche – would be wealthier than some of their old money compatriots. However, it is effectively axiomatic that nobles do not starve to death. Therefore, the threat of death by starvation only effects the lowest hanging fruit of society. The figure below denotes this model as it pertains to starvation alone.

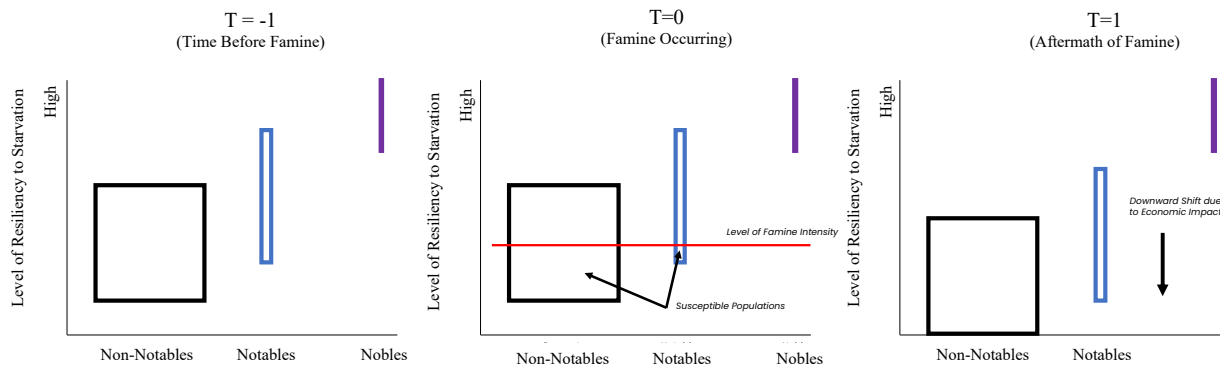


Fig. 32. Model of Class-Based Resilience to Famine.

Applying a similar model to infectious disease resiliency renders a slightly different picture. The common cold does not carry its moniker because it only effects ‘commoners’ but rather because it effects everyone in common. The same is true of famine related diseases.

While it is true that a noble is unlikely to take up the eating of rotten turnips in the face of famine, they nonetheless are susceptible to communicable diseases. Their social and economic standing may afford them better hygiene and sanitation, but they are nonetheless connected to the communal germ pool whether through public interactions or within the confines of their homes via servants, clients, or other relations. This is to say that while better fed persons are less susceptible to disease than the blatantly starving, they are susceptible, nonetheless. Put bluntly,

disease is a more equitable killer than starvation. The following figure aims to demonstrate this situation.

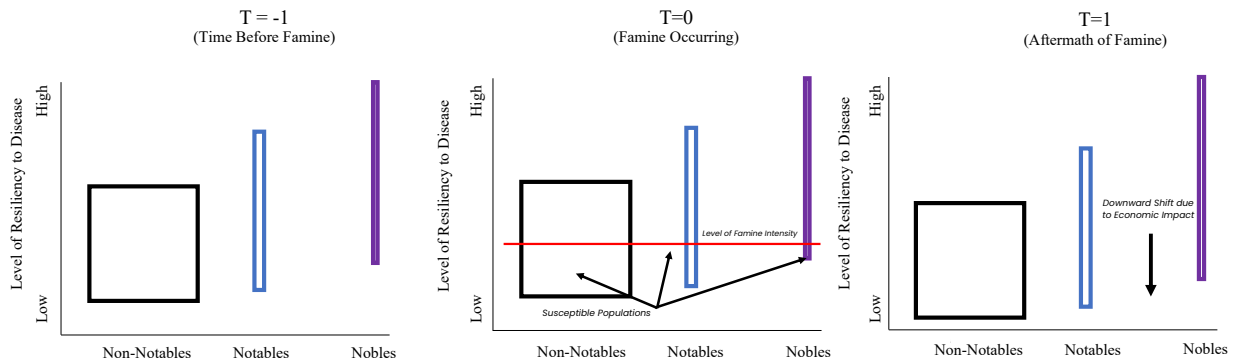


Fig. 33. Model of Class-Based Resilience to Disease.

Thus, it ought to be clear as to why it was not only the poor who appear in the parishes' records in this period. Notables and nobles were susceptible to diseases which were more common and virulent during the famine. Famine affected everyone yet in different ways.

### *Economics of Dearth*

The models of resilience showed above are useful whether one assumes a demographic regime consisting of either 'boom and bust' cycles or 'moderate growth.' With the former, one assumes that "the underlying 'normal' rates of mortality and fertility yield relatively high rates of population growth; then a mortality crisis occurs cutting the population back."<sup>151</sup> The latter, holds that the population grows at a moderate level in general over the course of hundreds or thousands of years and mortality crises occur from time to time, yet in no way limit the community's growth outside of a few years.

<sup>151</sup> Susan Watkins and Jane Menken, "Famines in Historical Perspective," *Population and Development Review* 11:4 (1985), 647-675, 647.

This study assumes the second scenario to be true due to the frequency of famines, the growth witnessed in France across the period of study, and the human tendency to reproduce to compensate for losses.<sup>152</sup> In short, for famines to have exerted an effective check on population growth they would need to have “occurred with a frequency and severity far beyond that recorded for famines in history.”<sup>153</sup> Despite this lack of long-term demographic impact, it is still necessary to explore the causes of famine to get a sense of the conditions that facilitate – then and now – the occurrence of dearth amongst populations.

Given the prevalence of Malthusian explanations within the historiography of famine, it is useful to dwell for a while on Malthus’ theory of famine origination. Malthus’ most famous claim is that “population, when unchecked, increases in a geometrical ratio. [while] Subsistence increases only in an arithmetical ratio.”<sup>154</sup> This explanation for population behavior has a certain elegance to it. Its argument is easily outlined in a simple graph. Population – i.e., demand for food – increases exponentially while agricultural supply scales linearly. Once the demand curve exceeds the line of supply, famine – or another mortality crisis – ought to check the population back beneath the line. The following figure displays this model:

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<sup>152</sup> Lachiver estimates that the population of France rose from 21.9 million in 1680 to 22.3 million in 1690 and then dropped to 21.5 million in 1700 before rising back to 22.4 million in 1710, a truly impressive rebound given the mortality shocks of 1693-4 and 1708-9. *La population française aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles*, 36; In the event of a mortality crisis, one sees selective fecundity following the event’s cessation. For example, Hanlon notes a preponderance for males amongst peasant couples whose childbearing patterns were interrupted by famine of 1649-1650 in the Tuscan village of Montefollonico suggesting that parents could willfully select the sex of the child they wish to keep – a seemingly rational choice in a rural area dominated by agricultural concerns. Gregory Hanlon, *Human Nature in Rural Tuscany: An Early Modern History*, New York: Palgrave MacMillan, 2007, 119; For a broader sense of pre-industrial family regulation one can look at Marvin Harris and Eric Ross, *Death, Sex, and Fertility: Population Regulation in Pre-Industrial and Developing Societies*, New York: Columbia University Press, 1987.

<sup>153</sup> “Famines in Historical Perspective,” 665.

<sup>154</sup> Thomas Malthus, *An Essay on the Principle of Population: An Essay on the principle of Population, as it Affects the Future Improvement of Society with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*, London: J. Johnson, 1798, 4. For commentary on the Malthusian model within the French subsistence crisis literature see, Jean-Yves Grenier, “Quelques éléments pour une étude des liens entre conjuncture économique et conjuncture démographique aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles,” *Annales de démographie historique*, (1984), 175-199, 191.

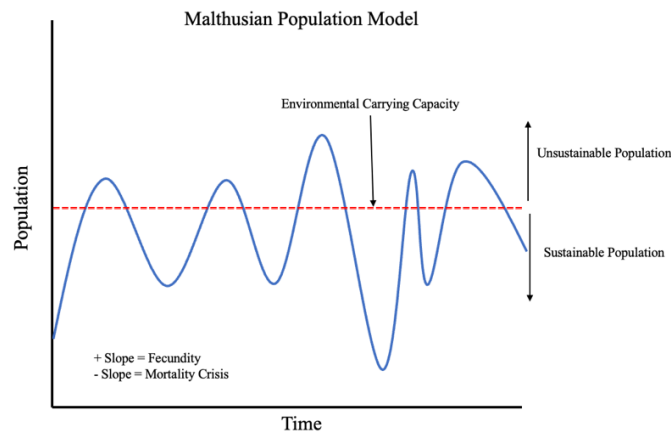


Fig. 34. Malthusian Population Model

If one ignores the impact of agricultural innovation, transportation efficiencies, and economies of scale related to concentration of landholding there remain significant flaws in Malthus' theory as it relates to famine. At its core, Malthus' theory rests on what one today would call a 'carrying capacity.' Carrying capacity refers to "the maximum population level that a given environment can support given finite resources."

Under Malthusian conditions a given region has a carrying capacity defined, in part, by the arithmetically growing supply of resources. However, "carrying capacities in nature are not fixed, static, or simple relationships," they are shaped in dynamic manners by "technology, preferences, and the structure of production and consumption" not to mention "the ever-changing state of interactions between the physical and biotic environment."<sup>155</sup> There is no such thing as a fixed carrying capacity, and insofar as one looks to find one, they will only come up with a figure of limited validity and applicability.

<sup>155</sup> K. Arrow et al., "Economic Growth, Carrying Capacity, and the Environment," *Ecological Economics*, 15:2(1995), 91-95, 92, 93. 9

A particular vulnerability to the Malthusian position is that it places a focus on death as a population's regulating force. If rates of death shaped demographic structures, then you would expect to see persons dying less after a famine than prior to one. However, deaths in normal times tend to remain rather consistent. Whereas prior to early modern famines populations grew slowly – if at all – after the famine they rose quite quickly while death rates remained like those which prevailed prior to the famine. Therefore, there must be a different regulating mechanism that accounts for the population growth after a famine. According to Bideau “en l'absence de migrations significatives, la nuptialité oscillant selon la conjuncture serait le rouage essentiel du mécanisme” that is the demographic system.<sup>156</sup> Thus, whereas Malthus and his followers focus on exogenously driven shocks in terms of death, there is reason to suspect that the meaningful driver of demography in *ancien regime* France were rates of nuptiality which in turn drove birth rates.

In Malthus' defence, he did understand the power of fecundity as a driver of human activities.<sup>157</sup> However he saw the desire to reproduce as a passive victim of the demographic checks rather than as a regulating function. Malthus' thesis holds up in the realm of theory and graphical representation but not in the world of actual behavior. If a famine occurs, and excess mortality impacts a population, it is not because of a breach in the carrying capacity of the region. Now, one could argue that famine arises from a breach of a newly-dominant carrying capacity but that would make the entire theory meaningless. If the definition becomes ‘Malthusian conditions are when excess mortality due to energy-deficit occur’ then what one has done is given two separate terms – famine and ‘Malthusian conditions’ – the same definition while pretending that they represent

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<sup>156</sup> Alain Bideau, “Les mécanismes autorégulateurs des populations traditionnelles,” *Annales. Histoire, Sciences Sociales*, 38:5 (1983), 1040-1057, 1041

<sup>157</sup> For example, Malthus knew that early marriage was an indicator of a willingness to have more children. He notes that if one had the means to support a larger family, they would marry younger. See, for example Thomas Malthus, *An Essay on the Principle of Population*, (New York: Penguin, 1988 [1798]), 173.

different things. With that said, this study posits that while the causes of famine in the 1690s were not Malthusian, its effects were in that fecundity and nuptiality declined in response to a lack of subsistence goods. A lack best exhibited by movements in grain prices.

Grain prices rose until the harvest of 1694. By the time prices started to come down, annual average costs had risen by 101% for wheat, 156% for maize, 203% for rye, and 103% for oats from their 1689 low points. Price movements were not uncommon in this period. In fact, as shown in the table below, in the forty-year period of 1670 to 1710 prices commonly shifted year over year by upwards of 10%.

Statistical Characteristics of Grain Prices at Toulouse, 1670-1710. <sup>158</sup>				
Grain Type	Wheat	Rye	Oats	Maize
Median	6.3%	9.1%	3.7%	11.8%
Standard Deviation	28.2%	42.4%	19.3%	55.5%
Variance	8.0% <sup>2</sup>	18.0% <sup>2</sup>	3.74% <sup>2</sup>	30.79% <sup>2</sup>
Index of Dispersion	1.27	1.97	1.02	2.60

Table 30: Statistical Characteristics of Grain Prices, 1670-1710

These data points paint a picture of price movements which indicate a need by the average consumer to alter their buying patterns significantly from year to year. Interestingly, maize, which was considered the lowest quality – and therefore the least fit for human consumption – of the four grains saw the largest variability in price over the period. This perhaps reflects the ‘newly introduced’ nature of the crop whereby best practices were still developing or the fact that maize was used as a crop for the poor which would have come under higher demand during times of dearth thereby driving up the price as the grain upwards. However, the notion of maize as the grain of last resort is complicated by the fact that oats were consistently the cheapest of the four grains.

In realistic terms, the price movements shown in the Toulouse data allow one to speculate about the feasibility of substitution for the people of Agen. As grains, wheat, rye, oats, and maize

<sup>158</sup> *Les Prix des Grains, des Vins et des Légumes à Toulouse*, 60-64.



possessed a certain level of substitutability. If wheat became too expensive, then one could either mix in cheaper grains or move entirely to a cheaper grain. The following table shows the substitution rates that one could have used to keep their costs – all else being equal and shown in livres tournois per setier – during the harvest years of 1692-1694 equal to that of their preferred grain in the 10 preceding years. Note that ‘N/A’ in the following table denotes an unfeasible substitution strategy (i.e., buyer would have experienced a rise in cost).

<b>Viability of Grain Substitution Strategies</b>			
<b>Preferred Grain: Wheat</b>		<b>Average Wheat Price 1682-1691: 5.58</b>	
<b>Harvest Year</b>	<b>% Wheat</b>	<b>% Rye</b>	
1692	25%	75%	
1693	N/A	N/A	
1694	N/A	N/A	
<b>Harvest Year</b>	<b>% Wheat</b>	<b>% Maize</b>	
1692	23%	77%	
1693	N/A	N/A	
1694	54%	46%	
<b>Harvest Year</b>	<b>% Wheat</b>	<b>% Oats</b>	
1692	58%	42%	
1693	20%	80%	
1694	41%	59%	
<b>Preferred Grain: Rye</b>		<b>Average Rye Price 1682-1691: 3.49</b>	
<b>Harvest Year</b>	<b>% Rye</b>	<b>% Maize</b>	
1692	N/A	N/A	
1693	N/A	N/A	
1694	N/A	N/A	
<b>Harvest Year</b>	<b>% Rye</b>	<b>% Oats</b>	
1692	21%	79%	
1693	N/A	N/A	
1694	N/A	N/A	
<b>Preferred Grain: Maize</b>		<b>Average Maize Price 1682-1691: 3.47</b>	
<b>Harvest Year</b>	<b>% Maize</b>	<b>% Oats</b>	
1692	19%	81%	
1693	N/A	N/A	
1694	N/A	N/A	
<b>Note:</b> N/A indicates years where no mixture of the two grains would have resulted in a value equal to the desired 1682-1691 price.			

Table 31: Viability of Grain Substitution Strategies

During the famine years of 1692-1694, individuals who had previously bought wheat were able to mix in cheaper grains while still maintaining some amount of wheat in their diets at previously prevailing aggregate prices. However, those who previously could only afford rye and maize could

only substitute previously cheaper grains in the harvest year of 1692. For those poor enough to have only afforded oats, grain as a bread input cost rose in price by 14%, 46%, and 73% in the harvest years 1692, 1693, and 1694 respectively. For them the famine was most disastrous. The following table shows the rise in input grain prices experienced by primarily wheat, rye, maize, and oat consumers under conditions of substitution.

Grain Input Rises for Different Consumer Categories Assuming Substitution				
Harvest Year	Wheat Consumers	Rye Consumers	Maize Consumers	Oat Consumers
1692	0%	0%	0%	14%
1693	0%	14%	15%	46%
1694	0%	35%	36%	73%
<b>Note:</b> a rise of 0% indicates that the consumers could have substituted other grains, in part or whole, in order to maintain pre-famine expenditure in terms of input costs.				

Table 32: Grain input Rises for Different Consumer Categories Assuming Substitution

These scenarios are hypothetical since the people of Agen purchased bread locally as opposed to grains on the wholesale market yet the two should correlate in some fashion. Nonetheless, these scenarios allow one to imagine the experience of folks in Agen. An important note is that the substitution model prices continued to rise through 1694 whereas the demographic and price control data indicates a decline starting with the 1694 harvest. The cause of this discrepancy remains unknown.

## Chapter 5: Aftermath and Recovery: 1696-1699

Following the disastrous years of 1692-1695 life rapidly returned to normal in the harvest years of 1696 through 1699. By exploring demographic and price data, a picture emerges of a community that, in many ways, appears to suffer from a metaphorical amnesia. One would expect that the famine would have left a lasting mark on the community, yet, by these metrics the town behaved as though nothing had happened in the preceding years. This apparent lack of impact points to the nature of urban centers in this period in that they were able to regulate population through fecundity and immigration.

### *Demographic Rebound*

To understand the rate at which the people of Agen returned to their previous behaviors it is useful to look at the number of burials, marriages, and baptisms that occurred in these years and compare them to the baseline expectations set by the town in the 1680s. The following tables do just that.

<b>Burials Per Harvest Year, 1696-1699</b>					
	Harvest Year				
Parish	1680s Avg.	1696	1697	1698	1699
Ste Foy	150	83	35	61	62
St Hilaire	20	57	28	37	33
St Étienne	63	37	22	18	34
St Caprais	N/A	11	8	10	13
<b>Agen</b>	<b>N/A</b>	<b>188</b>	<b>93</b>	<b>126</b>	<b>148</b>

Table 33: Burials Per Harvest Year, 1696-1699

<b>Marriages Per Harvest Year, 1696-1699</b>					
	Harvest Year				
Parish	1680s Avg.	1696	1697	1698	1699
Ste Foy	29	21	22	23	23
St Hilaire	15	15	18	11	12
St Étienne	46	22	29	20	26
St Caprais	16	5	13	14	16
<b>Agen</b>	<b>106</b>	<b>63</b>	<b>82</b>	<b>77</b>	<b>85</b>

Table 34: Marriages Per Harvest Year, 1696-1699

<b>Baptisms Per Harvest Year, 1696-1699</b>					
	Harvest Year				
Parish	1680s Avg.	1696	1697	1698	1699
Ste Foy	114	115	116	130	130
St Hilaire	66	67	90	77	79
St Étienne	141	139	145	160	149
St Caprais	55	44	42	55	48
<b>Agen</b>	<b>376</b>	<b>368</b>	<b>400</b>	<b>426</b>	<b>411</b>

Table 35: Baptisms Per Harvest Year, 1696-1699

The demographic data indicates that by the end of the decade the town’s baptism rate returned – and exceeded – its 1680s baseline. At the same time the annual number of marriages increased substantially, and the burials was below expectations. In many ways, these years could have been quite wonderful for town’s population. Mortality was contained and fecundity was up. The following table outlines Agen’s estimated population based on both burials and baptisms.

<b>Burials, Baptisms, and Estimated Population Agen, 1696-1699</b>				
Parish	Burials	Estimated Population (Burials)	Baptisms	Estimated Population (Baptisms)
Ste Foy	60	1,500	98	2,548
St Hilaire	39	975	83	2,158
St Etienne	28	700	136	3,536
St Caprais	11	275	48	1,248
<b>Total</b>		<b>3,450</b>		<b>9,490</b>

Table 33: Burials, Baptisms, and Estimated Population Agen, 1696-1699

Given the apparent ‘baby boom’ the baptism-based estimate is likely high although by how much is unclear. Similarly, the much lower occurrence of burials in this year – the famine having taken away ‘low hanging fruit’ – leads to too low of an estimate. One should take away from this data is that these years were clearly demographically positive for the community. Furthermore, the baptism-based population estimate would indicate a difference in population pre- and post-famine of only 326 people or 3% of the population. The impact of famine on the community in aggregate therefore was limited. But why?

One possible explanation for this apparent limited impact is that the makeup of the population was fluid. With death came opportunity. Town’s needed workers and when existing citizens perished in a crisis there was suddenly an opportunity for someone to fill the gap. This is

to say that the population of Agen did not rebound solely through fecundity. Instead, one ought to expect that there was a significant number of immigrants drawn to economic prospects in post-famine Agen. Although outside of the scope of this study, one could look to the occurrence of marriages with at least one exogenous partner in the years following the famine relative to a 1680s baseline.

### *Price Stability*

Whereas demographics returned to normal in the years immediately following the famine, wholesale grain prices did not fall back to their 1680s level. Instead, in the final years of the decade prices stabilized at levels that were low by the standards of 1693 but high by those of 1690s.

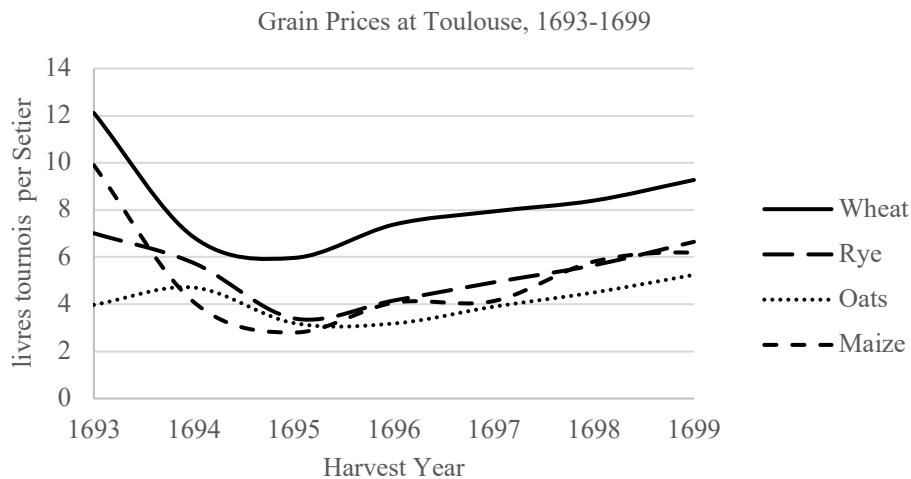


Fig. 35. Grain Prices at Toulouse, 1693-1699

This post-famine rise in grain prices was part of a fifteen-year state of elevated prices that peaked in during the famine of 1708-1710. It is therefore unclear as to what the exact relationship is between grain prices and demography. While this study clearly shows that extreme rises in price – indicating dearth – leads to catastrophic outcomes, a sustained, elevated price level appears to be of much weaker influence on behavior.

## **Chapter 6: Conclusion**

The famine of the 1690s was the worst demographic crisis to strike France between the Black Death and the present day. In the period of three years the kingdom lost over 5% of its population. The cause of the famine was simple enough – poor harvests brought about by wetter, colder weather. Yet the impact that the famine had on communities such as Agen was anything but simple.

This study has presented famine as a complex phenomenon. In fact, this study goes so far as to say that famine is both complex and misunderstood. When people speak of famine images of starving emaciated bodies come to mind. Yet very few people starve to death during famines. Furthermore, famine is not merely a condition of the poor. As evidenced by the doubling of notable and noble burials in Agen, a shortfall in foodstuffs had implications that extended across socio-economic class lines.

On the eve of the 1690s Agen was a bustling town amid two decades of relative calm. Declining food prices likely fostered a sense of prosperity. With a change in the weather came a change in the townspeople's fortunes. Slowly, and then suddenly, death reared its head. First, the most destitute of country stragglers would have appeared in town. Their numbers would have grown – almost imperceptible at first. As the immediate resources of the town declined in the face of a general harvest shortfall, deaths would have begun. Not from hunger at first but rather from infectious disease as immune systems weakened. At some point the charity of the town buckled under the weight of the crisis as the countryfolk came to seek food from the townsfolk – a reversal of usual roles. Subsequent harvests failed. Deaths piled up. The people of Agen found themselves at risk. Comradery decayed. The non-locals could no longer remain within the town walls. To save themselves, the people of Agen cast their countrymen to the wind and allowed for the Spanish

prisoners to wither. As though this exiling was a sacrifice the weather changed a few short weeks later. The harvest was a success. The famine was over. Life returned to its rhythms.

The people of Agen weathered the famine. Not all of them of course. Many died. Yet, new faces appeared to fill the gaps left by famine's unfortunate victims. One hopes that after reading these pages that the reader has a more holistic understanding of early modern famine. An understanding that places a good deal of weight on the helplessness of the situation. While the people and institutions of Agen strove to limit famine's impact on themselves and their community it ultimately was a second turn in the weather that ended the suffering. The people of Agen could do nothing to create food *ex nihilo*. They simply had to wait for the tide to turn. The famine was not defeated. Instead, like the titular gunslinger of the movie *Shane* this particular horseman of the apocalypse rode out of town on its own accord.

## **APPENDIX A: Data Tables**

Table 37: 1680s Burials – Ste Foy

<b>1680s Burials – Ste Foy</b>		
<b>Calendar Year</b>	<b>Month</b>	<b>Number of Burials</b>
1679	January	11
1679	February	16
1679	March	13
1679	April	9
1679	May	11
1679	June	11
1679	July	9
1679	August	13
1679	September	17
1679	October	9
1679	November	21
1679	December	17
1680	January	14
1680	February	8
1680	March	11
1680	April	5
1680	May	8
1680	June	13
1680	July	10
1680	August	17
1680	September	12
1680	October	15
1680	November	19
1680	December	17
1681	January	25
1681	February	11
1681	March	23
1681	April	11
1681	May	13
1681	June	15
1681	July	9
1681	August	6
1681	September	12
1681	October	8
1681	November	13
1681	December	8
1682	January	5
1682	February	11
1682	March	25
1682	April	11
1682	May	13
1682	June	15
1682	July	9
1682	August	6
1682	September	11
1682	October	10
1682	November	12



1682	December	8
Data Missing for 1683		
1684	January	12
1684	February	6
1684	March	10
1684	April	7
1684	May	14
1684	June	4
1684	July	5
1684	August	15
1684	September	14
1684	October	38
1684	November	26
1684	December	18
1685	January	18
1685	February	15
1685	March	10
1685	April	15
1685	May	15
1685	June	9
1685	July	7
1685	August	17
1685	September	23
1685	October	12
1685	November	19
1685	December	15
1686	January	10
1686	February	11
1686	March	4
1686	April	13
1686	May	11
1686	June	19
1686	July	15
1686	August	16
1686	September	10
1686	October	11
1686	November	6
1686	December	8
1687	January	10
1687	February	10
1687	March	10
1687	April	7
1687	May	6
1687	June	24
1687	July	8
1687	August	13
1687	September	11
1687	October	11
1687	November	12
1687	December	6
Data Missing for 1688		

Table 38: 1680s Marriages – Ste Foy

<b>1680s Marriages – Ste Foy</b>		
Calendar Year	Month	Number of Burials
1679	January	3
1679	February	5
1679	March	0
1679	April	4
1679	May	0
1679	June	4
1679	July	0
1679	August	0
1679	September	3
1679	October	5
1679	November	4
1679	December	0
1680	January	5
1680	February	5
1680	March	2
1680	April	3
1680	May	0
1680	June	4
1680	July	1
1680	August	3
1680	September	1
1680	October	3
1680	November	6
1680	December	0
1681	January	2
1681	February	3
1681	March	0
1681	April	3
1681	May	2
1681	June	7
1681	July	2
1681	August	1
1681	September	4
1681	October	5
1681	November	4
1681	December	0
1682	January	3
1682	February	4
1682	March	3
1682	April	0
1682	May	0
1682	June	5
1682	July	0
1682	August	1
1682	September	3
1682	October	7
1682	November	4
1682	December	0

1683	January	1
1683	February	2
1683	March	2
1683	April	3
1683	May	1
1683	June	3
1683	July	2
1683	August	0
1683	September	3
1683	October	1
1683	November	5
1683	December	0
Data Missing For 1684-1688		

Table 39: 1680s Baptisms – Ste Foy

1680s Baptisms – Ste Foy		
Calendar Year	Month	Number of Burials
Data Missing for January-June 1679		
1679	July	8
1679	August	10
1679	September	10
1679	October	9
1679	November	10
1679	December	5
1680	January	15
1680	February	13
1680	March	14
1680	April	3
1680	May	4
1680	June	7
1680	July	5
1680	August	9
1680	September	14
1680	October	11
1680	November	11
1680	December	9
1681	January	13
1681	February	12
1681	March	8
1681	April	9
1681	May	10
1681	June	5
1681	July	11
1681	August	9
1681	September	8
1681	October	12
1681	November	4
1681	December	6
1682	January	13
1682	February	10
1682	March	20

1682	April	6
1682	May	16
1682	June	9
1682	July	10
1682	August	9
1682	September	15
1682	October	8
1682	November	10
1682	December	11
1683	January	6
1683	February	9
1683	March	10
1683	April	4
1683	May	14
1683	June	5
1683	July	8
1683	August	15
1683	September	6
1683	October	5
1683	November	9
1683	December	8
Data Missing For 1684-1689		

Table 40: 1680s Burials – St Hilaire

<b>1680s Burials – St Hilaire</b>		
Calendar Year	Month	Number of Burials
Data Missing for January 1679 – August 1680		
1680	September	1
1680	October	1
1680	November	1
1680	December	0
1681	January	1
1681	February	3
1681	March	2
1681	April	1
1681	May	5
1681	June	7
1681	July	6
1681	August	0
1681	September	0
1681	October	3
1681	November	0
1681	December	1
1682	January	1
1682	February	4
1682	March	2
1682	April	0
1682	May	1
1682	June	0
1682	July	0
Data Missing August 1683-February 1686		
1686	March	3

1686	April	1
1686	May	3
1686	June	2
1686	July	1
1686	August	2
1686	September	2
1686	October	2
1686	November	1
1686	December	1
1687	January	1
1687	February	4
1687	March	0
1687	April	1
1687	May	3
1687	June	5
1687	July	3
1687	August	0
1687	September	2
1687	October	0
1687	November	1
1687	December	4
1688	January	2
1688	February	2
1688	March	4
1688	April	5
1688	May	2
1688	June	5
1688	July	0
1688	August	4
1688	September	7
Data Missing for October-December 1688		

Table 41: 1680s Marriages – St Hilaire

1680s Marriages – St Hilaire		
Calendar Year	Month	Number of Burials
Data Missing for 1679		
1680	January	0
1680	February	0
1680	March	0
1680	April	0
1680	May	0
1680	June	1
1680	July	0
1680	August	1
1680	September	1
1680	October	3
1680	November	5
1680	December	0
1681	January	3
1681	February	6
1681	March	0
1681	April	0

1681	May	0
1681	June	3
1681	July	3
1681	August	0
1681	September	0
1681	October	0
1681	November	0
1681	December	0
Data Missing for 1682-1684		
1685	January	0
1685	February	0
1685	March	0
1685	April	1
1685	May	0
1685	June	2
1685	July	0
1685	August	0
1685	September	3
1685	October	1
1685	November	3
1685	December	0
1686	January	1
1686	February	6
1686	March	1
1686	April	2
1686	May	0
1686	June	0
1686	July	1
1686	August	1
1686	September	3
1686	October	0
1686	November	1
1686	December	0
1687	January	4
1687	February	2
1687	March	0
1687	April	3
1687	May	1
1687	June	2
1687	July	0
1687	August	2
1687	September	1
1687	October	3
1687	November	0
1687	December	1
Data Missing for 1688		

Table 42: 1680s Baptisms – St Hilaire

1680s Baptisms – St Hilaire		
Calendar Year	Month	Number of Burials
Data Missing for January-June 1679		
1679	July	5

1679	August	6
1679	September	8
1679	October	9
1679	November	7
1679	December	6
1680	January	6
1680	February	1
1680	March	8
1680	April	4
1680	May	6
1680	June	4
1680	July	7
1680	August	4
1680	September	2
1680	October	9
1680	November	10
1680	December	6
1681	January	6
1681	February	5
1681	March	5
1681	April	8
1681	May	7
1681	June	2
1681	July	0
1681	August	1
1681	September	3
1681	October	5
1681	November	5
1681	December	6
1682	January	5
1682	February	9
1682	March	3
1682	April	7
1682	May	8
1682	June	3
1682	July	7
1682	August	7
1682	September	5
1682	October	6
1682	November	4
1682	December	6
1683	January	7
1683	February	8
1683	March	3
1683	April	3
1683	May	5
1683	June	4
1683	July	3
1683	August	5
1683	September	8
1683	October	8
1683	November	8
1683	December	10

1684	January	3
1684	February	6
1684	March	11
1684	April	6
1684	May	9
1684	June	3
1684	July	4
1684	August	10
1684	September	9
1684	October	7
1684	November	8
1684	December	3
1685	January	7
1685	February	7
1685	March	9
1685	April	8
1685	May	4
1685	June	1
1685	July	4
1685	August	2
1685	September	5
1685	October	8
1685	November	7
1685	December	4
1686	January	4
1686	February	6
1686	March	11
1686	April	3
1686	May	4
1686	June	3
1686	July	5
1686	August	8
1686	September	10
1686	October	2
1686	November	7
1686	December	4
1687	January	5
1687	February	5
1687	March	5
1687	April	5
1687	May	10
1687	June	6
1687	July	4
1687	August	7
1687	September	8
1687	October	3
1687	November	3
1687	December	3
1688	January	6
1688	February	9
1688	March	9
1688	April	0
1688	May	9



1688	June	4
1688	July	5
1688	August	7
1688	September	6
1688	October	5
1688	November	6
1688	December	6

Table 43: 1680s Burials – St Étienne

<b>1680s Burials – St Étienne</b>		
Calendar Year	Month	Number of Burials
1679	January	5
1679	February	6
1679	March	2
1679	April	4
1679	May	6
1679	June	9
1679	July	2
1679	August	5
1679	September	9
1679	October	0
1679	November	10
1679	December	2
1680	January	4
1680	February	1
1680	March	4
1680	April	0
1680	May	9
1680	June	2
1680	July	3
1680	August	9
1680	September	5
1680	October	6
1680	November	6
1680	December	4
1681	January	2
1681	February	9
1681	March	7
1681	April	3
1681	May	7
1681	June	7
1681	July	4
1681	August	8
1681	September	9
1681	October	3
1681	November	9
1681	December	3
1682	January	5
1682	February	8
1682	March	5
1682	April	5
1682	May	9

1682	June	5
1682	July	2
1682	August	5
1682	September	6
1682	October	2
1682	November	5
1682	December	0
1683	January	4
1683	February	3
1683	March	7
1683	April	9
1683	May	4
1683	June	4
1683	July	2
1683	August	4
1683	September	2
1683	October	5
1683	November	
1683	December	2
1684	January	2
1684	February	5
1684	March	2
1684	April	8
1684	May	7
1684	June	7
1684	July	2
1684	August	8
1684	September	8
1684	October	4
1684	November	6
1684	December	11
1685	January	7
1685	February	6
1685	March	6
1685	April	9
1685	May	4
1685	June	3
1685	July	9
1685	August	8
1685	September	9
1685	October	10
1685	November	2
1685	December	2
1686	January	4
1686	February	4
1686	March	4
1686	April	8
1686	May	8
1686	June	7
1686	July	4
1686	August	2
1686	September	1
1686	October	6

1686	November	6
1686	December	7
1687	January	3
1687	February	10
1687	March	3
1687	April	5
1687	May	7
1687	June	1
1687	July	4
1687	August	6
1687	September	7
1687	October	4
1687	November	4
1687	December	3
1688	January	12
1688	February	1
1688	March	1
1688	April	5
1688	May	1
1688	June	0
1688	July	0
1688	August	0
1688	September	2
1688	October	1
1688	November	1
1688	December	4

Table 44: 1680s Marriages – St Étienne

<b>1680s Marriages– St Étienne</b>		
Calendar Year	Month	Number of Marriages
1679	January	9
1679	February	7
1679	March	0
1679	April	1
1679	May	1
1679	June	8
1679	July	4
1679	August	1
1679	September	2
1679	October	1
1679	November	3
1679	December	0
1680	January	4
1680	February	8
1680	March	3
1680	April	2
1680	May	0
1680	June	2
1680	July	5
1680	August	7
1680	September	14
1680	October	4

1680	November	5
1680	December	0
1681	January	5
1681	February	6
1681	March	1
1681	April	4
1681	May	0
1681	June	8
1681	July	5
1681	August	2
1681	September	1
1681	October	5
1681	November	6
1681	December	3
1682	January	3
1682	February	12
1682	March	1
1682	April	1
1682	May	6
1682	June	0
1682	July	5
1682	August	0
1682	September	4
1682	October	1
1682	November	6
1682	December	2
1683	January	4
1683	February	7
1683	March	1
1683	April	5
1683	May	0
1683	June	6
1683	July	2
1683	August	3
1683	September	2
1683	October	0
1683	November	4
1683	December	0
1684	January	2
1684	February	8
1684	March	0
1684	April	4
1684	May	0
1684	June	0
1684	July	1
1684	August	0
1684	September	2
1684	October	2
1684	November	2
1684	December	0
1685	January	2
1685	February	5
1685	March	5

1685	April	1
1685	May	0
1685	June	1
1685	July	2
1685	August	2
1685	September	1
1685	October	3
1685	November	3
1685	December	0
1686	January	4
1686	February	6
1686	March	0
1686	April	1
1686	May	2
1686	June	2
1686	July	1
1686	August	4
1686	September	0
1686	October	1
1686	November	5
1686	December	0
1687	January	4
1687	February	7
1687	March	1
1687	April	6
1687	May	1
1687	June	5
1687	July	4
1687	August	3
1687	September	3
1687	October	1
1687	November	2
1687	December	1
1688	January	10
1688	February	4
1688	March	2
1688	April	0
1688	May	0
1688	June	1
1688	July	1
1688	August	1
1688	September	1
1688	October	0
1688	November	0
1688	December	0

Table 45: 1680s Baptisms – St Étienne

<b>1680s Baptisms – St Étienne</b>		
Calendar Year	Month	Number of Baptisms
Data Missing January-June 1679		
1679	July	3
1679	August	13

1679	September	16
1679	October	14
1679	November	8
1679	December	10
1680	January	10
1680	February	17
1680	March	8
1680	April	18
1680	May	13
1680	June	11
1680	July	17
1680	August	13
1680	September	3
1680	October	12
1680	November	9
1680	December	12
1681	January	16
1681	February	19
1681	March	11
1681	April	14
1681	May	8
1681	June	11
1681	July	6
1681	August	10
1681	September	9
1681	October	13
1681	November	12
1681	December	9
1682	January	19
1682	February	11
1682	March	20
1682	April	8
1682	May	9
1682	June	12
1682	July	11
1682	August	14
1682	September	9
1682	October	18
1682	November	14
1682	December	16
1683	January	14
1683	February	12
1683	March	10
1683	April	7
1683	May	9
1683	June	8
1683	July	6
1683	August	15
1683	September	16
1683	October	16
1683	November	13
1683	December	18
1684	January	12

1684	February	21
1684	March	12
1684	April	14
1684	May	10
1684	June	10
1684	July	3
1684	August	16
1684	September	16
1684	October	19
1684	November	13
1684	December	10
1685	January	25
1685	February	15
1685	March	14
1685	April	10
1685	May	7
1685	June	8
1685	July	11
1685	August	9
1685	September	10
1685	October	15
1685	November	7
1685	December	14
1686	January	11
1686	February	11
1686	March	8
1686	April	16
1686	May	10
1686	June	7
1686	July	6
1686	August	11
1686	September	8
1686	October	17
1686	November	10
1686	December	14
1687	January	16
1687	February	5
1687	March	11
1687	April	8
1687	May	16
1687	June	13
1687	July	7
1687	August	9
1687	September	15
1687	October	12
1687	November	10
1687	December	10
1688	January	16
1688	February	12
1688	March	20
1688	April	13
1688	May	10
1688	June	6

1688	July	12
1688	August	18
1688	September	6
1688	October	12
1688	November	13
1688	December	10

Table 46: 1680s Burials – St Caprais

<b>1680s Burials – St Caprais</b>		
Calendar Year	Month	Number of Baptisms
Data Missing for 1679-1687		
1688	January	11
1688	February	5
1688	March	9
1688	April	11
1688	May	8
1688	June	7
1688	July	8
1688	August	18
1688	September	36
1688	October	12
1688	November	8
1688	December	16

Table 47: 1680s Marriages – St Caprais

<b>1680s Marriages – St Caprais</b>		
Calendar Year	Month	Number of Baptisms
1679	January	2
1679	February	5
1679	March	0
1679	April	2
1679	May	1
1679	June	3
1679	July	0
1679	August	2
1679	September	0
1679	October	3
1679	November	3
1679	December	0
1680	January	2
1680	February	3
1680	March	0
1680	April	2
1680	May	0
1680	June	0
1680	July	1
1680	August	1
1680	September	0
1680	October	1
1680	November	6
1680	December	0



1681	January	2
1681	February	2
1681	March	0
1681	April	2
1681	May	0
1681	June	1
1681	July	0
1681	August	0
1681	September	2
1681	October	0
1681	November	2
1681	December	0
1682	January	3
1682	February	2
1682	March	0
1682	April	1
1682	May	0
1682	June	3
1682	July	1
1682	August	2
1682	September	2
1682	October	0
1682	November	4
1682	December	0
1683	January	3
1683	February	3
1683	March	0
1683	April	3
1683	May	0
1683	June	0
1683	July	3
1683	August	0
1683	September	3
1683	October	2
1683	November	2
1683	December	0
1684	January	2
1684	February	2
1684	March	1
1684	April	0
1684	May	0
1684	June	0
1684	July	4
1684	August	0
1684	September	0
1684	October	2
1684	November	3
1684	December	0
1685	January	3
1685	February	3
1685	March	0
1685	April	1
1685	May	1

1685	June	5
1685	July	3
1685	August	1
1685	September	2
1685	October	2
1685	November	2
1685	December	0
1686	January	4
1686	February	6
1686	March	0
1686	April	2
1686	May	1
1686	June	2
1686	July	6
1686	August	3
1686	September	1
1686	October	0
1686	November	2
1686	December	0
1687	January	2
1687	February	3
1687	March	0
1687	April	1
1687	May	0
1687	June	1
1687	July	3
1687	August	2
1687	September	2
1687	October	0
1687	November	5
1687	December	0
1688	January	2
1688	February	7
1688	March	0
1688	April	0
1688	May	0
1688	June	2
1688	July	0
1688	August	1
1688	September	2
1688	October	0
1688	November	3
1688	December	0

Table 48: 1680s Baptisms – St Caprais

1680s Baptisms – St Caprais		
Calendar Year	Month	Number of Baptisms
Data Missing January-June 1679		
1679	July	4
1679	August	4
1679	September	2
1679	October	8

1679	November	6
1679	December	5
1680	January	2
1680	February	4
1680	March	3
1680	April	15
1680	May	6
1680	June	5
1680	July	2
1680	August	4
1680	September	2
1680	October	4
1680	November	4
1680	December	8
1681	January	3
1681	February	1
1681	March	4
1681	April	6
1681	May	5
1681	June	2
1681	July	1
1681	August	2
1681	September	4
1681	October	8
1681	November	5
1681	December	2
1682	January	4
1682	February	7
1682	March	11
1682	April	2
1682	May	8
1682	June	1
1682	July	7
1682	August	5
1682	September	6
1682	October	4
1682	November	6
1682	December	5
1683	January	3
1683	February	9
1683	March	4
1683	April	5
1683	May	6
1683	June	3
1683	July	3
1683	August	4
1683	September	5
1683	October	4
1683	November	7
1683	December	3
1684	January	9
1684	February	9
1684	March	6

1684	April	6
1684	May	5
1684	June	6
1684	July	3
1684	August	5
1684	September	6
1684	October	9
1684	November	3
1684	December	5
1685	January	4
1685	February	5
1685	March	3
1685	April	7
1685	May	5
1685	June	6
1685	July	
1685	August	6
1685	September	3
1685	October	6
1685	November	8
1685	December	4
1686	January	6
1686	February	6
1686	March	6
1686	April	2
1686	May	7
1686	June	5
1686	July	6
1686	August	6
1686	September	2
1686	October	3
1686	November	2
1686	December	4
1687	January	7
1687	February	4
1687	March	2
1687	April	5
1687	May	4
1687	June	6
1687	July	3
1687	August	3
1687	September	7
1687	October	5
1687	November	5
1687	December	2
1688	January	9
1688	February	6
1688	March	11
1688	April	6
1688	May	2
1688	June	11
1688	July	7
1688	August	1

1688	September	4
1688	October	1
1688	November	6
1688	December	6

Table 49: 1690s Burials – Ste Foy

1690s Burials – Ste Foy					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
Data Missing 1689 – March 1692					
1692	March	17	17	0	0
1692	April	14	14	0	0
1692	May	23	23	0	0
1692	June	20	19	0	0
1692	July	23	22	1	0
1692	August	13	13	1	0
1692	September	13	13	0	0
1692	October	10	10	0	0
1692	November	3	3	0	0
1692	December	7	7	0	0
1693	January	0	0	0	0
1693	February	9	9	0	0
1693	March	2	2	0	0
1693	April	15	15	0	0
1693	May	10	10	0	0
1693	June	5	5	0	0
1693	July	2	2	0	0
1693	August	17	17	0	0
1693	September	26	25	1	0
1693	October	37	37	0	0
1693	November	28	28	0	0
1693	December	57	57	0	0
1694	January	58	57	1	0
1694	February	41	40	1	0
1694	March	62	62	0	0
1694	April	35	35	0	0
1694	May	33	33	0	0
1694	June	34	34	0	0
1694	July	10	10	0	0
1694	August	10	10	0	0
1694	September	10	10	0	0
1694	October	27	27	0	0
1694	November	16	16	0	0
1694	December	10	10	0	0
1695	January	14	14	0	0
1695	February	4	4	0	0
1695	March	2	2	0	0
1695	April	3	3	0	0
1695	May	4	4	0	0
1695	June	2	2	0	0
1695	July	4	4	0	0
1695	August	0	0	0	0
1695	September	2	2	0	0

1695	October	5	5	0	0
1695	November	1	1	0	0
1695	December	7	7	0	0
1696	January	5	5	0	0
1696	February	3	3	0	0
1696	March	2	2	0	0
1696	April	2	2	0	0
1696	May	3	3	0	0
1696	June	5	5	0	0
1696	July	5	5	0	0
1696	August	27	27	0	0
1696	September	18	18	0	0
1696	October	9	9	0	0
1696	November	3	3	0	0
1696	December	0	0	0	0
1697	January	3	3	0	0
1697	February	0	0	0	0
1697	March	6	6	0	0
1697	April	12	12	0	0
1697	May	0	0	0	0
1697	June	2	2	0	0
1697	July	3	3	0	0
1697	August	0	0	0	0
1697	September	0	0	0	0
1697	October	1	1	0	0
1697	November	1	1	0	0
1697	December	2	2	0	0
1698	January	6	6	0	0
1698	February	4	4	0	0
1698	March	5	5	0	0
1698	April	4	4	0	0
1698	May	2	2	0	0
1698	June	7	7	0	0
1698	July	3	3	0	0
1698	August	4	4	0	0
1698	September	16	16	0	0
1698	October	10	10	0	0
1698	November	4	4	0	0
1698	December	2	2	0	0
1699	January	5	5	0	0
1699	February	1	1	0	0
1699	March	5	5	0	0
1699	April	7	7	0	0
1699	May	4	4	0	0
1699	June	1	1	0	0
1699	July	2	2	0	0
1699	August	4	4	0	0
1699	September	4	4	0	0
1699	October	8	8	0	0
1699	November	6	6	0	0
1699	December	2	2	0	0
1700	January	8	8	0	0
1700	February	6	6	0	0

1700	March	2	2	0	0
1700	April	6	6	0	0
1700	May	7	7	0	0
1700	June	4	4	0	0
1700	July	5	5	0	0
1700	August	0	0	0	0
1700	September	0	0	0	0
1700	October	0	0	0	0
1700	November	0	0	0	0
1700	December	0	0	0	0

Table 50: 1690s Marriages – Ste Foy

1690s Marriages – Ste Foy					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
Data Missing 1689 – March 1692					
1692	March	1	1	0	0
1692	April	2	1	1	0
1692	May	0	0	0	0
1692	June	3	3	0	0
1692	July	3	3	0	0
1692	August	0	0	0	0
1692	September	4	4	0	0
1692	October	2	2	0	0
1692	November	4	4	0	0
1692	December	0	0	0	0
1693	January	4	4	0	0
1693	February	0	0	0	0
1693	March	0	0	0	0
1693	April	4	4	0	0
1693	May	1	1	0	0
1693	June	1	1	0	0
1693	July	2	2	0	0
1693	August	2	2	0	0
1693	September	1	1	0	0
1693	October	1	1	0	0
1693	November	0	0	0	0
1693	December	0	0	0	0
1694	January	1	1	0	0
1694	February	3	3	0	0
1694	March	0	0	0	0
1694	April	1	1	0	0
1694	May	0	0	0	0
1694	June	6	6	0	0
1694	July	1	1	0	0
1694	August	0	0	0	0
1694	September	1	1	0	0
1694	October	2	1	1	0
1694	November	7	7	0	0
1694	December	0	0	0	0
1695	January	5	5	0	0
1695	February	10	7	2	1
1695	March	0	0	0	0

1695	April	3	3	0	0
1695	May	0	0	0	0
1695	June	3	3	0	0
1695	July	0	0	0	0
1695	August	4	4	0	0
1695	September	0	0	0	0
1695	October	3	3	0	0
1695	November	4	4	0	0
1695	December	0	0	0	0
1696	January	3	3	0	0
1696	February	2	2	0	0
1696	March	3	3	0	0
1696	April	1	1	0	0
1696	May	0	0	0	0
1696	June	2	2	0	0
1696	July	1	1	0	0
1696	August	0	0	0	0
1696	September	3	3	0	0
1696	October	2	2	0	0
1696	November	3	3	0	0
1696	December	0	0	0	0
1697	January	1	1	0	0
1697	February	9	9	0	0
1697	March	0	0	0	0
1697	April	0	0	0	0
1697	May	1	1	0	0
1697	June	1	1	0	0
1697	July	0	0	0	0
1697	August	0	0	0	0
1697	September	0	0	0	0
1697	October	4	4	0	0
1697	November	2	2	0	0
1697	December	0	0	0	0
1698	January	5	5	0	0
1698	February	5	5	0	0
1698	March	0	0	0	0
1698	April	2	2	0	0
1698	May	1	1	0	0
1698	June	3	3	0	0
1698	July	0	0	0	0
1698	August	0	0	0	0
1698	September	3	3	0	0
1698	October	3	3	0	0
1698	November	1	1	0	0
1698	December	0	0	0	0
1699	January	2	2	0	0
1699	February	3	3	0	0
1699	March	2	2	0	0
1699	April	0	0	0	0
1699	May	2	2	0	0
1699	June	7	7	0	0
1699	July	2	2	0	0
1699	August	0	0	0	0



1699	September	0	0	0	0
1699	October	1	1	0	0
1699	November	4	4	0	0
1699	December	0	0	0	0
1700	January	6	6	0	0
1700	February	8	8	0	0
1700	March	0	0	0	0
1700	April	1	1	0	0
1700	May	0	0	0	0
1700	June	1	1	0	0
1700	July	2	2	0	0
1700	August	0	0	0	0
1700	September	0	0	0	0
1700	October	0	0	0	0
1700	November	0	0	0	0
1700	December	0	0	0	0

Table 51: 1690s Baptisms – Ste Foy

1690s Baptisms – Ste Foy					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
Data Missing 1689 – March 1692					
1692	March	6	6	0	0
1692	April	8	7	1	0
1692	May	6	6	0	0
1692	June	8	8	0	0
1692	July	9	9	0	0
1692	August	11	10	1	0
1692	September	7	7	0	0
1692	October	11	11	0	0
1692	November	13	13	0	0
1692	December	6	6	0	0
1693	January	12	11	1	0
1693	February	7	7	0	0
1693	March	6	6	0	0
1693	April	12	12	0	0
1693	May	12	12	0	0
1693	June	7	7	0	0
1693	July	7	7	0	0
1693	August	20	20	0	0
1693	September	15	15	0	0
1693	October	12	12	0	0
1693	November	3	3	0	0
1693	December	9	9	0	0
1694	January	11	11	0	0
1694	February	9	8	1	0
1694	March	4	4	0	0
1694	April	4	4	0	0
1694	May	2	2	0	0
1694	June	7	7	0	0
1694	July	3	3	0	0
1694	August	3	3	0	0
1694	September	5	5	0	0

1694	October	6	6	0	0
1694	November	15	15	0	0
1694	December	3	3	0	0
1695	January	9	9	0	0
1695	February	11	11	0	0
1695	March	8	8	0	0
1695	April	6	6	0	0
1695	May	6	6	0	0
1695	June	11	11	0	0
1695	July	8	8	0	0
1695	August	9	9	0	0
1695	September	8	8	0	0
1695	October	10	10	0	0
1695	November	12	12	0	0
1695	December	8	8	0	0
1696	January	13	13	0	0
1696	February	17	17	0	0
1696	March	13	13	0	0
1696	April	14	14	0	0
1696	May	6	6	0	0
1696	June	9	9	0	0
1696	July	9	9	0	0
1696	August	7	7	0	0
1696	September	8	8	0	0
1696	October	12	12	0	0
1696	November	10	10	0	0
1696	December	11	10	1	0
1697	January	8	8	0	0
1697	February	17	17	0	0
1697	March	9	9	0	0
1697	April	5	5	0	0
1697	May	11	11	0	0
1697	June	8	8	0	0
1697	July	7	7	0	0
1697	August	13	13	0	0
1697	September	13	13	0	0
1697	October	7	7	0	0
1697	November	5	5	0	0
1697	December	4	4	0	0
1698	January	15	15	0	0
1698	February	16	16	0	0
1698	March	8	8	0	0
1698	April	12	12	0	0
1698	May	5	5	0	0
1698	June	11	10	1	0
1698	July	8	8	0	0
1698	August	11	11	0	0
1698	September	13	13	0	0
1698	October	8	8	0	0
1698	November	8	8	0	0
1698	December	3	3	0	0
1699	January	11	11	0	0
1699	February	13	13	0	0

1699	March	14	14	0	0
1699	April	10	10	0	0
1699	May	13	13	0	0
1699	June	18	18	0	0
1699	July	9	9	0	0
1699	August	11	11	0	0
1699	September	12	12	0	0
1699	October	13	12	1	0
1699	November	13	13	0	0
1699	December	7	7	0	0
1700	January	14	14	0	0
1700	February	21	21	0	0
1700	March	6	6	0	0
1700	April	13	13	0	0
1700	May	5	5	0	0
1700	June	6	6	0	0
1700	July	10	10	0	0
1700	August	0	0	0	0
1700	September	0	0	0	0
1700	October	0	0	0	0
1700	November	0	0	0	0
1700	December	0	0	0	0

Table 52: 1690s Burials – St Hilaire

1690s Burials – St Hilaire					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
Data Missing for 1689 – August 1690					
1690	September	11	9	2	0
1690	October	1	1	0	0
1690	November	1	1	0	0
1690	December	1	1	0	0
1691	January	3	1	1	1
1691	February	1	0	1	0
1691	March	3	2	1	0
1691	April	7	7	0	0
1691	May	7	6	1	0
1691	June	3	2	1	0
1691	July	2	2	0	0
1691	August	7	7	0	0
1691	September	7	7	0	0
1691	October	7	6	1	0
1691	November	4	2	2	0
1691	December	4	3	1	0
1692	January	5	5	0	0
1692	February	6	5	1	0
1692	March	11	10	1	0
1692	April	12	10	1	1
1692	May	10	9	1	0
1692	June	13	10	2	1
1692	July	20	19	1	0
1692	August	11	10	1	0

1692	September	21	21	0	0
1692	October	7	4	1	2
1692	November	10	9	1	0
1692	December	7	6	1	0
1693	January	2	1	1	0
1693	February	7	7	0	0
1693	March	4	3	1	0
1693	April	6	6	0	0
1693	May	0	0	0	0
1693	June	6	6	0	0
1693	July	3	3	0	0
1693	August	13	12	1	0
1693	September	21	19	1	1
1693	October	10	10	0	0
1693	November	8	7	1	0
1693	December	19	19	0	0
1694	January	22	19	2	1
1694	February	22	21	1	0
1694	March	29	25	4	0
1694	April	23	20	3	0
1694	May	31	30	1	0
1694	June	29	26	3	0
1694	July	12	11	1	0
1694	August	13	11	2	0
1694	September	22	21	1	0
1694	October	9	8	1	0
1694	November	4	4	0	0
1694	December	10	10	0	0
1695	January	9	8	1	0
1695	February	6	4	2	0
1695	March	2	2	0	0
1695	April	6	6	0	0
1695	May	0	0	0	0
1695	June	2	1	1	0
1695	July	4	3	1	0
1695	August	5	4	1	0
1695	September	2	2	0	0
1695	October	2	2	0	0
1695	November	1	1	0	0
1695	December	6	4	2	0
1696	January	1	1	0	0
1696	February	1	1	0	0
1696	March	1	1	0	0
1696	April	4	4	0	0
1696	May	6	5	1	0
1696	June	4	4	0	0
1696	July	1	1	0	0
1696	August	12	11	1	0
1696	September	17	15	2	0
1696	October	2	2	0	0
1696	November	4	4	0	0
1696	December	1	1	0	0
1697	January	4	4	0	0

1697	February	2	2	0	0
1697	March	7	7	0	0
1697	April	4	3	1	0
1697	May	3	3	0	0
1697	June	1	0	1	0
1697	July	0	0	0	0
1697	August	0	0	0	0
1697	September	0	0	0	0
1697	October	1	0	0	1
1697	November	0	0	0	0
1697	December	2	2	0	0
1698	January	4	4	0	0
1698	February	3	3	0	0
1698	March	2	2	0	0
1698	April	6	4	2	0
1698	May	6	5	1	0
1698	June	2	1	1	0
1698	July	2	1	1	0
1698	August	5	4	1	0
1698	September	4	4	0	0
1698	October	1	0	1	0
1698	November	3	3	0	0
1698	December	2	2	0	0
1699	January	4	4	0	0
1699	February	4	4	0	0
1699	March	4	3	0	1
1699	April	0	0	0	0
1699	May	4	4	0	0
1699	June	3	3	0	0
1699	July	3	3	0	0
1699	August	9	9	0	0
1699	September	3	3	0	0
1699	October	3	3	0	0
1699	November	1	0	1	0
1699	December	2	2	0	0
1700	January	1	1	0	0
1700	February	3	2	1	0
1700	March	4	3	1	0
1700	April	0	0	0	0
1700	May	6	5	1	0
1700	June	0	0	0	0
1700	July	1	0	1	0
1700	August	0	0	0	0
1700	September	0	0	0	0
1700	October	0	0	0	0
1700	November	0	0	0	0
1700	December	0	0	0	0

Table 53: 1690s Marriages – St Hilaire

1690s Marriages – St Hilaire					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
Data Missing 1689 – April 1692					
1692	May	1	0	1	0
1692	June	0	0	0	0
1692	July	1	1	0	0
1692	August	2	1	1	0
1692	September	1	1	0	0
1692	October	1	1	0	0
1692	November	3	3	0	0
1692	December	0	0	0	0
1693	January	5	4	1	0
1693	February	0	0	0	0
1693	March	0	0	0	0
1693	April	0	0	0	0
1693	May	1	0	1	0
1693	June	4	3	1	0
1693	July	2	2	0	0
1693	August	0	0	0	0
1693	September	2	2	0	0
1693	October	0	0	0	0
1693	November	1	1	0	0
1693	December	0	0	0	0
1694	January	0	0	0	0
1694	February	3	0	3	0
1694	March	0	0	0	0
1694	April	4	3	1	0
1694	May	0	0	0	0
1694	June	2	2	0	0
1694	July	0	0	0	0
1694	August	1	1	0	0
1694	September	0	0	0	0
1694	October	3	3	0	0
1694	November	2	2	0	0
1694	December	0	0	0	0
1695	January	2	1	1	0
1695	February	4	4	0	0
1695	March	0	0	0	0
1695	April	4	2	2	0
1695	May	0	0	0	0
1695	June	5	5	0	0
1695	July	2	2	0	0
1695	August	1	1	0	0
1695	September	1	1	0	0
1695	October	3	3	0	0
1695	November	4	4	0	0
1695	December	0	0	0	0
1696	January	3	3	0	0
1696	February	2	2	0	0
1696	March	1	1	0	0
1696	April	0	0	0	0
1696	May	0	0	0	0

1696	June	4	4	0	0
1696	July	1	1	0	0
1696	August	2	2	0	0
1696	September	2	2	0	0
1696	October	1	1	0	0
1696	November	0	0	0	0
1696	December	1	1	0	0
1697	January	1	1	0	0
1697	February	4	4	0	0
1697	March	0	0	0	0
1697	April	0	0	0	0
1697	May	0	0	0	0
1697	June	2	1	1	0
1697	July	2	1	1	0
1697	August	3	3	0	0
1697	September	3	3	0	0
1697	October	0	0	0	0
1697	November	3	3	0	0
1697	December	0	0	0	0
1698	January	1	1	0	0
1698	February	2	2	0	0
1698	March	0	0	0	0
1698	April	2	0	2	0
1698	May	1	1	0	0
1698	June	2	2	0	0
1698	July	1	0	1	0
1698	August	2	2	0	0
1698	September	0	0	0	0
1698	October	2	2	0	0
1698	November	2	1	1	0
1698	December	0	0	0	0
1699	January	2	2	0	0
1699	February	1	1	0	0
1699	March	1	0	1	0
1699	April	1	1	0	0
1699	May	0	0	0	0
1699	June	0	0	0	0
1699	July	0	0	0	0
1699	August	4	4	0	0
1699	September	1	1	0	0
1699	October	0	0	0	0
1699	November	2	2	0	0
1699	December	0	0	0	0
1700	January	1	1	0	0
1700	February	3	3	0	0
1700	March	0	0	0	0
1700	April	0	0	0	0
1700	May	0	0	0	0
1700	June	1	1	0	0
1700	July	0	0	0	0
1700	August	0	0	0	0
1700	September	0	0	0	0
1700	October	0	0	0	0

1700	November	0	0	0	0
1700	December	0	0	0	0

Table 54: 1690s Baptisms – St Hilaire

<b>1690s Baptisms – St Hilaire</b>					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	4	3	0	1
1689	September	7	4	1	2
1689	October	2	2	0	0
1689	November	7	6	1	0
1689	December	6	5	1	0
1690	January	5	5	0	0
1690	February	6	6	0	0
1690	March	13	11	2	0
1690	April	7	7	0	0
1690	May	3	2	1	0
1690	June	3	2	1	0
1690	July	8	7	0	1
1690	August	7	5	1	1
1690	September	7	7	0	0
1690	October	6	6	0	0
1690	November	6	5	1	0
1690	December	4	3	1	0
1691	January	5	2	2	1
1691	February	7	7	0	0
1691	March	4	3	1	0
1691	April	0	0	0	0
1691	May	0	0	0	0
1691	June	0	0	0	0
1691	July	0	0	0	0
1691	August	0	0	0	0
1691	September	0	0	0	0
1691	October	0	0	0	0
1691	November	4	3	1	0
1691	December	10	5	4	1
1692	January	3	2	1	0
1692	February	6	6	0	0
1692	March	1	1	0	0
1692	April	8	8	0	0
1692	May	13	13	0	0
1692	June	2	2	0	0
1692	July	4	4	0	0
1692	August	6	6	0	0
1692	September	3	3	0	0
1692	October	8	8	0	0
1692	November	6	3	3	0
1692	December	7	5	1	1
1693	January	13	13	0	0
1693	February	2	1	1	0
1693	March	1	1	0	0



1693	April	5	5	0	0
1693	May	9	8	1	0
1693	June	6	6	0	0
1693	July	7	7	0	0
1693	August	11	9	2	0
1693	September	8	8	0	0
1693	October	4	4	0	0
1693	November	9	7	2	0
1693	December	7	7	0	0
1694	January	7	7	0	0
1694	February	7	7	0	0
1694	March	7	6	1	0
1694	April	6	6	0	0
1694	May	2	2	0	0
1694	June	2	2	0	0
1694	July	1	1	0	0
1694	August	1	1	0	0
1694	September	2	1	1	0
1694	October	4	4	0	0
1694	November	5	5	0	0
1694	December	2	0	2	0
1695	January	4	3	1	0
1695	February	6	6	0	0
1695	March	4	3	1	0
1695	April	8	8	0	0
1695	May	4	4	0	0
1695	June	9	9	0	0
1695	July	4	4	0	0
1695	August	3	3	0	0
1695	September	7	6	1	0
1695	October	7	7	0	0
1695	November	9	7	1	1
1695	December	11	10	1	0
1696	January	27	25	1	1
1696	February	2	2	0	0
1696	March	3	3	0	0
1696	April	7	7	0	0
1696	May	8	7	0	1
1696	June	10	10	0	0
1696	July	6	6	0	0
1696	August	7	7	0	0
1696	September	7	7	0	0
1696	October	6	6	0	0
1696	November	5	5	0	0
1696	December	5	5	0	0
1697	January	4	4	0	0
1697	February	10	10	0	0
1697	March	13	12	1	0
1697	April	5	4	1	0
1697	May	1	0	0	1
1697	June	3	3	0	0
1697	July	4	4	0	0
1697	August	6	6	0	0

1697	September	7	6	1	0
1697	October	7	7	0	0
1697	November	8	8	0	0
1697	December	10	8	2	0
1698	January	10	10	0	0
1698	February	12	11	1	0
1698	March	7	5	2	0
1698	April	8	7	0	1
1698	May	5	5	0	0
1698	June	6	6	0	0
1698	July	11	11	0	0
1698	August	4	4	0	0
1698	September	3	3	0	0
1698	October	8	7	1	0
1698	November	8	8	0	0
1698	December	5	5	0	0
1699	January	6	6	0	0
1699	February	5	4	1	0
1699	March	11	10	0	1
1699	April	10	9	0	1
1699	May	5	5	0	0
1699	June	8	8	0	0
1699	July	8	7	0	1
1699	August	12	11	1	0
1699	September	6	6	0	0
1699	October	4	4	0	0
1699	November	9	8	0	1
1699	December	5	5	0	0
1700	January	11	10	1	0
1700	February	7	7	0	0
1700	March	6	5	1	0
1700	April	4	4	0	0
1700	May	6	6	0	0
1700	June	8	8	0	0
1700	July	6	6	0	0

Table 55: 1690s Burials – St Étienne

1690s Burials – St Étienne					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	0	0	0	0
1689	September	2	2	0	0
1689	October	4	3	1	0
1689	November	1	1	0	0
1689	December	3	2	1	0
1690	January	7	6	1	0
1690	February	7	6	0	1
1690	March	8	7	1	0
1690	April	1	1	0	0
1690	May	0	0	0	0
1690	June	3	1	2	0
1690	July	1	0	1	0
1690	August	3	1	2	0

1690	September	0	0	0	0
1690	October	0	0	0	0
1690	November	0	0	0	0
1690	December	0	0	0	0
1691	January	4	2	2	0
1691	February	0	0	0	0
1691	March	2	0	2	0
1691	April	3	0	3	0
1691	May	6	5	1	0
1691	June	1	1	0	0
1691	July	0	0	0	0
1691	August	1	1	0	0
1691	September	2	1	1	0
1691	October	1	1	0	0
1691	November	0	0	0	0
1691	December	2	1	1	0
1692	January	0	0	0	0
1692	February	5	4	1	0
1692	March	14	13	1	0
1692	April	24	20	4	0
1692	May	26	23	3	0
1692	June	42	36	5	1
1692	July	45	40	5	0
1692	August	27	27	0	0
1692	September	30	26	4	0
1692	October	20	20	0	0
1692	November	13	13	0	0
1692	December	13	12	1	0
1693	January	16	13	3	0
1693	February	12	11	1	0
1693	March	15	14	1	0
1693	April	13	7	6	0
1693	May	12	12	0	0
1693	June	17	13	3	1
1693	July	14	12	2	0
1693	August	28	27	1	0
1693	September	47	44	3	0
1693	October	32	31	1	0
1693	November	33	31	0	2
1693	December	26	25	0	1
1694	January	69	62	7	0
1694	February	66	62	4	0
1694	March	99	92	4	3
1694	April	93	85	6	2
1694	May	85	81	3	1
1694	June	58	51	6	1
1694	July	51	45	6	0
1694	August	38	35	3	0
1694	September	15	14	1	0
1694	October	16	15	1	0
1694	November	7	6	1	0
1694	December	8	8	0	0
1695	January	8	6	2	0

1695	February	11	8	3	0
1695	March	12	12	0	0
1695	April	0	0	0	0
1695	May	4	3	1	0
1695	June	0	0	0	0
1695	July	2	2	0	0
1695	August	0	0	0	0
1695	September	2	2	0	0
1695	October	5	5	0	0
1695	November	6	5	1	0
1695	December	0	0	0	0
1696	January	0	0	0	0
1696	February	2	2	0	0
1696	March	0	0	0	0
1696	April	2	2	0	0
1696	May	0	0	0	0
1696	June	1	1	0	0
1696	July	1	0	1	0
1696	August	7	7	0	0
1696	September	5	3	2	0
1696	October	3	3	0	0
1696	November	4	4	0	0
1696	December	1	1	0	0
1697	January	1	1	0	0
1697	February	3	3	0	0
1697	March	2	1	0	1
1697	April	2	2	0	0
1697	May	2	1	0	1
1697	June	3	3	0	0
1697	July	4	2	0	2
1697	August	2	2	0	0
1697	September	0	0	0	0
1697	October	2	0	1	1
1697	November	1	1	0	0
1697	December	0	0	0	0
1698	January	5	5	0	0
1698	February	1	1	0	0
1698	March	0	0	0	0
1698	April	0	0	0	0
1698	May	7	6	1	0
1698	June	2	2	0	0
1698	July	2	2	0	0
1698	August	3	3	0	0
1698	September	2	2	0	0
1698	October	1	1	0	0
1698	November	0	0	0	0
1698	December	2	2	0	0
1699	January	3	3	0	0
1699	February	0	0	0	0
1699	March	1	0	1	0
1699	April	1	1	0	0
1699	May	3	1	2	0
1699	June	1	1	0	0

1699	July	1	1	0	0
1699	August	3	3	0	0
1699	September	0	0	0	0
1699	October	2	1	1	0
1699	November	1	1	0	0
1699	December	0	0	0	0
1700	January	2	2	0	0
1700	February	6	6	0	0
1700	March	0	0	0	0
1700	April	7	5	2	0
1700	May	7	5	2	0
1700	June	5	2	1	2
1700	July	1	1	0	0

Table 56: 1690s Marriages – St Étienne

1690s Marriages – St Étienne					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	0	0	0	0
1689	September	0	0	0	0
1689	October	0	0	0	0
1689	November	2	2	0	0
1689	December	0	0	0	0
1690	January	3	3	0	0
1690	February	0	0	0	0
1690	March	0	0	0	0
1690	April	1	0	1	0
1690	May	0	0	0	0
1690	June	0	0	0	0
1690	July	0	0	0	0
1690	August	0	0	0	0
1690	September	0	0	0	0
1690	October	0	0	0	0
1690	November	0	0	0	0
1690	December	0	0	0	0
1691	January	0	0	0	0
1691	February	1	1	0	0
1691	March	0	0	0	0
1691	April	0	0	0	0
1691	May	0	0	0	0
1691	June	0	0	0	0
1691	July	0	0	0	0
1691	August	0	0	0	0
1691	September	0	0	0	0
1691	October	0	0	0	0
1691	November	0	0	0	0
1691	December	0	0	0	0
1692	January	0	0	0	0
1692	February	0	0	0	0
1692	March	0	0	0	0
1692	April	1	1	0	0
1692	May	0	0	0	0
1692	June	4	0	3	1
1692	July	4	3	1	0

1692	August	1	0	1	0
1692	September	3	2	1	0
1692	October	1	1	0	0
1692	November	7	4	3	0
1692	December	0	0	0	0
1693	January	9	5	3	1
1693	February	3	2	0	1
1693	March	1	1	0	0
1693	April	4	4	0	0
1693	May	0	0	0	0
1693	June	5	4	0	1
1693	July	4	2	2	0
1693	August	2	1	1	0
1693	September	2	2	0	0
1693	October	0	0	0	0
1693	November	3	1	2	0
1693	December	0	0	0	0
1694	January	2	2	0	0
1694	February	16	12	2	2
1694	March	0	0	0	0
1694	April	3	3	0	0
1694	May	2	2	0	0
1694	June	2	2	0	0
1694	July	1	1	0	0
1694	August	1	0	1	0
1694	September	4	2	2	0
1694	October	9	9	0	0
1694	November	12	10	1	1
1694	December	1	1	0	0
1695	January	5	4	1	0
1695	February	10	10	0	0
1695	March	0	0	0	0
1695	April	0	0	0	0
1695	May	0	0	0	0
1695	June	0	0	0	0
1695	July	1	1	0	0
1695	August	3	2	1	0
1695	September	3	2	1	0
1695	October	5	5	0	0
1695	November	2	2	0	0
1695	December	0	0	0	0
1696	January	0	0	0	0
1696	February	7	6	1	0
1696	March	0	0	0	0
1696	April	0	0	0	0
1696	May	2	2	0	0
1696	June	4	3	1	0
1696	July	4	3	1	0
1696	August	0	0	0	0
1696	September	4	4	0	0
1696	October	2	2	0	0
1696	November	3	2	1	0
1696	December	2	2	0	0

1697	January	0	0	0	0
1697	February	1	1	0	0
1697	March	0	0	0	0
1697	April	2	2	0	0
1697	May	1	1	0	0
1697	June	3	3	0	0
1697	July	1	1	0	0
1697	August	2	2	0	0
1697	September	6	5	1	0
1697	October	1	1	0	0
1697	November	2	1	0	1
1697	December	1	0	0	1
1698	January	4	3	1	0
1698	February	6	3	3	0
1698	March	0	0	0	0
1698	April	3	1	1	1
1698	May	0	0	0	0
1698	June	3	3	0	0
1698	July	4	2	2	0
1698	August	0	0	0	0
1698	September	1	1	0	0
1698	October	3	2	1	0
1698	November	0	0	0	0
1698	December	0	0	0	0
1699	January	6	5	0	1
1699	February	2	2	0	0
1699	March	5	5	0	0
1699	April	0	0	0	0
1699	May	3	3	0	0
1699	June	5	4	0	1
1699	July	3	1	2	0
1699	August	0	0	0	0
1699	September	3	3	0	0
1699	October	0	0	0	0
1699	November	6	6	0	0
1699	December	4	3	1	0
1700	January	6	4	1	1
1700	February	3	2	1	0
1700	March	0	0	0	0
1700	April	1	0	1	0
1700	May	3	3	0	0
1700	June	5	4	1	0
1700	July	1	1	0	0

Table 57: 1690s Baptisms – St Étienne

1690s Baptisms – St Étienne					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	14	11	3	0
1689	September	8	4	4	0
1689	October	2	2	0	0
1689	November	1	1	0	0
1689	December	5	5	0	0

1690	January	15	11	4	0
1690	February	15	12	3	0
1690	March	15	14	1	0
1690	April	11	11	0	0
1690	May	14	11	3	0
1690	June	13	9	3	1
1690	July	10	9	1	0
1690	August	13	9	4	0
1690	September	12	9	3	0
1690	October	12	11	1	0
1690	November	11	11	0	0
1690	December	10	9	0	1
1691	January	12	9	3	0
1691	February	12	10	2	0
1691	March	15	14	1	0
1691	April	13	12	0	1
1691	May	8	8	0	0
1691	June	11	8	3	0
1691	July	8	8	0	0
1691	August	13	10	3	0
1691	September	3	2	1	0
1691	October	10	8	2	0
1691	November	8	6	2	0
1691	December	9	7	2	0
1692	January	16	12	3	1
1692	February	14	10	4	0
1692	March	7	7	0	0
1692	April	10	10	0	0
1692	May	7	5	2	0
1692	June	9	7	2	0
1692	July	8	7	1	0
1692	August	12	12	0	0
1692	September	12	10	2	0
1692	October	3	3	0	0
1692	November	8	5	3	0
1692	December	5	4	1	0
1693	January	16	13	3	0
1693	February	10	6	4	0
1693	March	11	8	3	0
1693	April	6	3	3	0
1693	May	10	5	5	0
1693	June	6	6	0	0
1693	July	9	9	0	0
1693	August	10	6	4	0
1693	September	12	11	1	0
1693	October	16	12	4	0
1693	November	12	9	3	0
1693	December	17	13	4	0
1694	January	12	8	3	1
1694	February	6	6	0	0
1694	March	9	7	2	0
1694	April	2	0	2	0
1694	May	6	3	3	0



1694	June	2	2	0	0
1694	July	4	4	0	0
1694	August	4	1	3	0
1694	September	6	6	0	0
1694	October	4	2	1	1
1694	November	4	4	0	0
1694	December	5	5	0	0
1695	January	10	5	4	1
1695	February	3	3	0	0
1695	March	5	3	1	1
1695	April	0	0	0	0
1695	May	0	0	0	0
1695	June	8	5	3	0
1695	July	10	8	2	0
1695	August	13	12	1	0
1695	September	12	8	3	1
1695	October	10	8	1	1
1695	November	11	11	0	0
1695	December	11	9	2	0
1696	January	17	15	2	0
1696	February	2	0	2	0
1696	March	13	12	1	0
1696	April	9	6	2	1
1696	May	18	9	7	2
1696	June	12	9	3	0
1696	July	10	6	3	1
1696	August	13	10	3	0
1696	September	21	16	5	0
1696	October	11	6	5	0
1696	November	11	6	5	0
1696	December	9	7	2	0
1697	January	6	5	1	0
1697	February	11	9	2	0
1697	March	10	10	0	0
1697	April	12	9	3	0
1697	May	9	4	4	1
1697	June	16	10	6	0
1697	July	7	6	1	0
1697	August	10	7	3	0
1697	September	13	12	1	0
1697	October	11	7	4	0
1697	November	20	14	5	1
1697	December	13	11	2	0
1698	January	14	8	4	2
1698	February	16	14	2	0
1698	March	12	8	3	1
1698	April	8	6	2	0
1698	May	10	8	2	0
1698	June	11	6	4	1
1698	July	15	10	5	0
1698	August	11	4	7	0
1698	September	11	11	0	0
1698	October	7	5	2	0

1698	November	15	15	0	0
1698	December	11	8	3	0
1699	January	13	11	2	0
1699	February	17	16	1	0
1699	March	20	16	4	0
1699	April	15	11	4	0
1699	May	15	9	6	0
1699	June	10	9	1	0
1699	July	11	10	1	0
1699	August	10	7	3	0
1699	September	12	7	4	1
1699	October	15	13	2	0
1699	November	10	9	0	1
1699	December	9	4	4	1
1700	January	14	11	3	0
1700	February	15	12	2	1
1700	March	17	9	8	0
1700	April	10	8	2	0
1700	May	16	7	9	0
1700	June	10	7	3	0
1700	July	12	9	3	0

Table 58: 1690s Burials – St Caprais

1690s Burials – St Caprais					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	4	3	1	0
1689	September	1	1	0	0
1689	October	10	7	2	1
1689	November	2	1	1	0
1689	December	0	0	0	0
1690	January	1	1	0	0
1690	February	1	0	1	0
1690	March	2	2	0	0
1690	April	0	0	0	0
1690	May	1	1	0	0
1690	June	0	0	0	0
1690	July	3	2	1	0
1690	August	3	2	1	0
1690	September	1	1	0	0
1690	October	4	3	1	0
1690	November	2	2	0	0
1690	December	2	2	0	0
1691	January	2	2	0	0
1691	February	3	2	1	0
1691	March	0	0	0	0
1691	April	3	3	0	0
1691	May	3	3	0	0
1691	June	4	4	0	0
1691	July	5	5	0	0
1691	August	3	3	0	0
1691	September	3	3	0	0
1691	October	2	2	0	0
1691	November	2	2	0	0

1691	December	4	4	0	0
1692	January	1	1	0	0
1692	February	4	4	0	0
1692	March	2	2	0	0
1692	April	2	2	0	0
1692	May	3	3	0	0
1692	June	10	10	0	0
1692	July	9	9	0	0
1692	August	7	7	0	0
1692	September	8	7	1	0
1692	October	5	4	1	0
1692	November	2	2	0	0
1692	December	0	0	0	0
1693	January	2	2	0	0
1693	February	1	1	0	0
1693	March	2	2	0	0
1693	April	0	0	0	0
1693	May	1	0	1	0
1693	June	0	0	0	0
1693	July	2	1	1	0
1693	August	5	4	1	0
1693	September	12	11	1	0
1693	October	3	3	0	0
1693	November	10	9	1	0
1693	December	7	7	0	0
1694	January	20	19	1	0
1694	February	5	5	0	0
1694	March	15	14	0	1
1694	April	12	12	0	0
1694	May	9	9	0	0
1694	June	11	10	1	0
1694	July	4	4	0	0
1694	August	7	7	0	0
1694	September	4	3	1	0
1694	October	2	2	0	0
1694	November	0	0	0	0
1694	December	2	2	0	0
1695	January	0	0	0	0
1695	February	2	1	1	0
1695	March	3	2	1	0
1695	April	1	0	1	0
1695	May	0	0	0	0
1695	June	0	0	0	0
1695	July	3	2	1	0
1695	August	0	0	0	0
1695	September	0	0	0	0
1695	October	2	2	0	0
1695	November	0	0	0	0
1695	December	0	0	0	0
1696	January	1	1	0	0
1696	February	1	1	0	0
1696	March	1	1	0	0
1696	April	0	0	0	0

1696	May	0	0	0	0
1696	June	0	0	0	0
1696	July	5	4	1	0
1696	August	0	0	0	0
1696	September	1	1	0	0
1696	October	0	0	0	0
1696	November	0	0	0	0
1696	December	1	1	0	0
1697	January	0	0	0	0
1697	February	1	1	0	0
1697	March	3	1	2	0
1697	April	0	0	0	0
1697	May	4	4	0	0
1697	June	0	0	0	0
1697	July	1	1	0	0
1697	August	0	0	0	0
1697	September	0	0	0	0
1697	October	1	1	0	0
1697	November	1	1	0	0
1697	December	0	0	0	0
1698	January	2	2	0	0
1698	February	0	0	0	0
1698	March	0	0	0	0
1698	April	1	1	0	0
1698	May	0	0	0	0
1698	June	2	1	1	0
1698	July	1	1	0	0
1698	August	2	2	0	0
1698	September	1	1	0	0
1698	October	1	1	0	0
1698	November	1	1	0	0
1698	December	1	1	0	0
1699	January	0	0	0	0
1699	February	0	0	0	0
1699	March	1	1	0	0
1699	April	1	1	0	0
1699	May	1	1	0	0
1699	June	1	1	0	0
1699	July	0	0	0	0
1699	August	1	1	0	0
1699	September	3	1	2	0
1699	October	3	2	1	0
1699	November	3	1	1	1
1699	December	0	0	0	0
1700	January	1	1	0	0
1700	February	0	0	0	0
1700	March	2	1	1	0
1700	April	2	2	0	0
1700	May	3	3	0	0
1700	June	0	0	0	0
1700	July	1	1	0	0

Table 59: 1690s Marriages – St Caprais

1690s Marriages – St Caprais					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	3	3	0	0
1689	September	1	1	0	0
1689	October	1	1	0	0
1689	November	4	4	0	0
1689	December	0	0	0	0
1690	January	3	3	0	0
1690	February	1	1	0	0
1690	March	0	0	0	0
1690	April	1	1	0	0
1690	May	0	0	0	0
1690	June	2	2	0	0
1690	July	0	0	0	0
1690	August	0	0	0	0
1690	September	0	0	0	0
1690	October	1	1	0	0
1690	November	0	0	0	0
1690	December	0	0	0	0
1691	January	0	0	0	0
1691	February	3	2	1	0
1691	March	0	0	0	0
1691	April	0	0	0	0
1691	May	0	0	0	0
1691	June	0	0	0	0
1691	July	0	0	0	0
1691	August	0	0	0	0
1691	September	0	0	0	0
1691	October	0	0	0	0
1691	November	0	0	0	0
1691	December	0	0	0	0
1692	January	2	2	0	0
1692	February	3	2	0	1
1692	March	0	0	0	0
1692	April	1	1	0	0
1692	May	0	0	0	0
1692	June	0	0	0	0
1692	July	1	1	0	0
1692	August	0	0	0	0
1692	September	2	2	0	0
1692	October	2	2	0	0
1692	November	0	0	0	0
1692	December	0	0	0	0
1693	January	7	5	1	1
1693	February	0	0	0	0
1693	March	1	1	0	0
1693	April	2	1	1	0
1693	May	0	0	0	0
1693	June	1	0	1	0
1693	July	1	1	0	0
1693	August	2	2	0	0
1693	September	0	0	0	0

1693	October	0	0	0	0
1693	November	0	0	0	0
1693	December	0	0	0	0
1694	January	2	0	1	1
1694	February	2	2	0	0
1694	March	0	0	0	0
1694	April	0	0	0	0
1694	May	0	0	0	0
1694	June	1	1	0	0
1694	July	0	0	0	0
1694	August	2	2	0	0
1694	September	3	3	0	0
1694	October	1	1	0	0
1694	November	0	0	0	0
1694	December	0	0	0	0
1695	January	3	2	1	0
1695	February	3	1	2	0
1695	March	0	0	0	0
1695	April	1	1	0	0
1695	May	0	0	0	0
1695	June	3	1	1	1
1695	July	0	0	0	0
1695	August	0	0	0	0
1695	September	0	0	0	0
1695	October	0	0	0	0
1695	November	1	1	0	0
1695	December	0	0	0	0
1696	January	0	0	0	0
1696	February	2	1	1	0
1696	March	0	0	0	0
1696	April	0	0	0	0
1696	May	0	0	0	0
1696	June	0	0	0	0
1696	July	0	0	0	0
1696	August	2	2	0	0
1696	September	0	0	0	0
1696	October	0	0	0	0
1696	November	0	0	0	0
1696	December	0	0	0	0
1697	January	0	0	0	0
1697	February	3	3	0	0
1697	March	0	0	0	0
1697	April	0	0	0	0
1697	May	0	0	0	0
1697	June	0	0	0	0
1697	July	0	0	0	0
1697	August	1	1	0	0
1697	September	2	2	0	0
1697	October	0	0	0	0
1697	November	0	0	0	0
1697	December	0	0	0	0
1698	January	2	1	1	0
1698	February	5	5	0	0

1698	March	0	0	0	0
1698	April	2	2	0	0
1698	May	0	0	0	0
1698	June	1	0	1	0
1698	July	0	0	0	0
1698	August	0	0	0	0
1698	September	1	1	0	0
1698	October	0	0	0	0
1698	November	1	1	0	0
1698	December	0	0	0	0
1699	January	3	3	0	0
1699	February	4	4	0	0
1699	March	3	3	0	0
1699	April	0	0	0	0
1699	May	1	1	0	0
1699	June	1	1	0	0
1699	July	0	0	0	0
1699	August	1	1	0	0
1699	September	1	1	0	0
1699	October	3	3	0	0
1699	November	0	0	0	0
1699	December	0	0	0	0
1700	January	2	2	0	0
1700	February	3	3	0	0
1700	March	0	0	0	0
1700	April	1	1	0	0
1700	May	4	3	1	0
1700	June	0	0	0	0
1700	July	1	1	0	0

Table 60: 1690s Baptisms – St Caprais

1690s Baptisms – St Caprais					
Calendar Year	Month	Total	Non-Notables	Notables	Nobles
1689	August	3	3	0	0
1689	September	7	5	0	2
1689	October	4	4	0	0
1689	November	4	4	0	0
1689	December	4	4	0	0
1690	January	9	9	0	0
1690	February	6	6	0	0
1690	March	9	9	0	0
1690	April	10	9	0	1
1690	May	4	4	0	0
1690	June	6	6	0	0
1690	July	4	4	0	0
1690	August	2	2	0	0
1690	September	3	3	0	0
1690	October	3	3	0	0
1690	November	9	8	1	0
1690	December	4	4	0	0
1691	January	6	6	0	0
1691	February	7	6	1	0
1691	March	9	8	0	1

1691	April	3	1	2	0
1691	May	2	2	0	0
1691	June	1	1	0	0
1691	July	3	2	0	1
1691	August	2	2	0	0
1691	September	3	3	0	0
1691	October	5	4	1	0
1691	November	9	8	1	0
1691	December	1	1	0	0
1692	January	4	2	2	0
1692	February	7	7	0	0
1692	March	5	5	0	0
1692	April	5	5	0	0
1692	May	1	1	0	0
1692	June	2	2	0	0
1692	July	6	6	0	0
1692	August	3	3	0	0
1692	September	10	8	2	0
1692	October	5	5	0	0
1692	November	2	1	1	0
1692	December	2	2	0	0
1693	January	4	4	0	0
1693	February	4	4	0	0
1693	March	3	2	1	0
1693	April	1	1	0	0
1693	May	3	3	0	0
1693	June	4	4	0	0
1693	July	3	2	1	0
1693	August	8	7	0	1
1693	September	10	10	0	0
1693	October	5	5	0	0
1693	November	8	8	0	0
1693	December	3	3	0	0
1694	January	9	9	0	0
1694	February	7	7	0	0
1694	March	2	1	0	1
1694	April	4	4	0	0
1694	May	0	0	0	0
1694	June	0	0	0	0
1694	July	1	1	0	0
1694	August	1	1	0	0
1694	September	3	3	0	0
1694	October	4	3	1	0
1694	November	1	1	0	0
1694	December	2	2	0	0
1695	January	4	4	0	0
1695	February	7	5	1	1
1695	March	0	0	0	0
1695	April	4	3	0	1
1695	May	3	2	1	0
1695	June	3	3	0	0
1695	July	7	7	0	0
1695	August	4	4	0	0



1695	September	7	7	0	0
1695	October	2	2	0	0
1695	November	6	6	0	0
1695	December	6	6	0	0
1696	January	6	6	0	0
1696	February	10	9	1	0
1696	March	6	6	0	0
1696	April	3	3	0	0
1696	May	3	3	0	0
1696	June	5	5	0	0
1696	July	2	2	0	0
1696	August	0	0	0	0
1696	September	3	3	0	0
1696	October	2	2	0	0
1696	November	3	3	0	0
1696	December	4	3	1	0
1697	January	5	5	0	0
1697	February	7	7	0	0
1697	March	4	4	0	0
1697	April	6	6	0	0
1697	May	4	4	0	0
1697	June	1	1	0	0
1697	July	5	5	0	0
1697	August	2	2	0	0
1697	September	0	0	0	0
1697	October	4	4	0	0
1697	November	2	2	0	0
1697	December	3	3	0	0
1698	January	5	5	0	0
1698	February	3	0	2	1
1698	March	3	3	0	0
1698	April	4	3	1	0
1698	May	4	4	0	0
1698	June	7	6	1	0
1698	July	5	5	0	0
1698	August	7	7	0	0
1698	September	5	5	0	0
1698	October	3	3	0	0
1698	November	5	4	1	0
1698	December	5	4	0	1
1699	January	5	5	0	0
1699	February	7	7	0	0
1699	March	6	5	0	1
1699	April	4	3	1	0
1699	May	2	1	1	0
1699	June	3	3	0	0
1699	July	3	3	0	0
1699	August	4	4	0	0
1699	September	4	4	0	0
1699	October	5	4	1	0
1699	November	2	2	0	0
1699	December	6	6	0	0
1700	January	5	5	0	0

1700	February	3	2	0	1
1700	March	6	6	0	0
1700	April	4	4	0	0
1700	May	5	3	2	0
1700	June	3	2	1	0
1700	July	1	1	0	0

Table 61: 1690s Occupational Mentions at Burial – Ste Foy

<b>1690s Occupational Mentions at Burial – Ste Foy</b>	
Occupation Mentioned	Number of Mentions
Spanish Soldier	39
Clerk	13
‘Poor’	9
Master Tailor	4
Merchant	4
Priest	2
Master Surgeon	2
Butcher	2
Soldier	2
Notary	2
Weaver	2
Beggar	2
Foundry Worker	1
Shoemaker	1
Surgeon	1
Tailor	1
Master Carpenter	1
Parliamentary Lawyer	1
Servant	1
Gardener	1
Master Hat Maker	1
Lawyer	1
Coachman	1
Marshal	1
Tax Collector	1
Money Lender	1
Nail Maker	1
Labourer	1

Table 62: 1690s Occupational Mention at Burial – St Hilaire

<b>1690s Occupational Mentions at Burial – St Hilaire</b>	
Occupation Mentioned	Number of Mentions
Clerk	96
Shoemaker	28
Merchant	28
Master Shoemaker	28
Baker	15
Lawyer	10
Master Tailor	9
Gardener	9
Bourgeois	7

Carter	7
Carpenter	7
Notary	5
Tailor	5
Master Surgeon	5
Sailor	5
Domestic	4
Miller	4
King's Counsellor at Presidial Court	4
Linen Comber	3
Oiler	3
Comber	3
Archer	3
Boatman	3
Shoemaker	2
Entrepreneur	2
Bookseller	2
Nail Maker	2
Hat Maker	2
Bailiff	2
Locksmith	2
Medical Doctor	2
Priest	2
Porter	2
Cooper	2
Soldier	2
Iron Worker	2
Wig Maker	2
Money Changer	1
Shirt Maker	1
Master Cobbler	1
Dress Maker	1
Surgeon	1
Wool Comber	1
Vignerone	1
Gatekeeper	1
Beggar Woman	1
Poor Man	1
Iron Monger	1
Mason	1
Counsellor at Presidial Court	1
Serge Maker	1
Counsellor	1
Luthier	1
Master Marshal	1
Armourer	1
Cake Maker	1
Procurer	1
School Teacher	1
Harrower	1
Weaver	1
Sergeant	1
Saddler	1

Prosecutor at Presidial Court	1
Linen Carder	1
Master Serge Maker	1
Rope Maker	1
Planer	1
Master Weaver	1
Dragoon	1
Master Iron Worker	1
Chef	1
Basket Maker	1
Leather Curer	1
Chief of the Tax Collectors	1
Archdeacon	1
Valet	1

Table 63: 1690s Occupational Mentions at Burial – St Étienne

<b>1690s Occupational Mentions at Burial – St Étienne</b>	
Occupation Mentioned	Number of Mentions
Clerk	125
Merchant	45
Master Tailor	32
Master Shoemaker	31
Shoemaker	22
Weaver	20
Master Weaver	19
Master Carpenter	18
Bourgeois	17
Parliamentary Lawyer	16
Baker	12
Tailor	11
Prosecutor	11
Butcher	10
Carpenter	10
Traveler	9
Master Surgeon	9
Master Cooper	9
Carder	9
Bourgeois and Merchant	9
Priest	8
Master Comber	8
Servant	8
Royal Notary	7
Beggar	7
Lawyer	6
Cooper	6
Master Carder	5
Painter	4
Surgeon	4
Master Hatmaker	4
Prisoner	4
Apothecary	3
Consul	3

Dragoon	3
Hatmaker	3
Notary	2
Counsellor	2
Brassier	2
Cook	2
School Master	2
Royal Sergeant	2
Master Receiver	2
Valet	2
Priest – Master of Music	2
Hemp Comber	2
Jurat	2
King’s Master Counsellor	2
Army Captain	2
Lieutenant Principal	1
Lieutenant General	1
Landowner	1
Hat Merchant	1
Archdeacon	1
Master Clerk	1
Gunsmith	1
Miller	1
Priest and Canon	1
Theology Student	1
Presidial Prosecutor	1
Gilder	1
Lieutenant	1
Serge Maker	1
Master Baker	1
Master Clockmaker	1
Table maker	1
Master Iron Worker	1
Master Marshal	1
Master Gilder	1
Master Fringe Maker	1
Master Trimmer	1
Iron Worker	1
Master Merchant	1
Master Butcher	1
Master Waxer	1
Seneschal Prosecutor	1
Grocer	1
Perfume Merchant	1
Parliamentary Counsellor	1
Honorary Counsellor	1
Royal Counsellor	1
Master Furbisher	1
Master Blacksmith	1
Wood Merchant	1
Mason	1
Fieldhand	1
Sawyer	1

Master Rail Maker	1
Cutler	1
Clock Smith	1
Master Winemaker	1
Ordinary Judge	1
Soldier	1
Pastry Chef	1
Lieutenant of the King's Army	1
Bourgeois and Merchant and Jurat	1
Knight of St John of Jerusalem	1
Upholsterer	1
Crocheter	1
Glove Maker	1
Prosecutor and Jurat	1
Tailor and Porter	1
Linen Comber	1
King's Counsellor at the Seneschal	1
Mariner	1
Merchant and Traveller	1
Master Glove Maker	1
Hosier	1
Cloth Cleaner	1
Lieutenant Colonel	1
Master Tin Potter	1
Army Captain	1

Table 64: 1690s Spouse Home Parish – Ste Foy

<b>1690s Spouse Home Parish – Ste Foy</b>			
Groom Home Parish	# of Occurrences	Bride Home Parish	# of Occurrences
St Étienne	6	St Caprais	6
St Caprais	5	St Étienne	5
St Hilaire	4	St Hilaire	2
Villeneuve-sur-Lot	2	Layrac	1
Lusignan	2	Monbusq	1
Pauliac	1	Cauterets	1
Penne-d'Agenais	1		
Mauzac-et-Grand-Castang	1		
Madaillan	1		
Foulayronnes	1		
Poitiers	1		
Dourbies	1		
Gimbrède	1		
Clermont-Dessous	1		
Merens	1		
Layrac	1		
Auch	1		
<b>Note:</b> These counts only reflect origins which were identifiable			

Table 65: 1690s Spouse Home Parish – St Hilaire

<b>1690s Spouse Home Parish – St Hilaire</b>			
Groom Home Parish	# of Occurrences	Bride Home Parish	# of Occurrences
St Étienne	7	St Étienne	8
St Caprais	3	St Caprais	6
Sainte-Radegonde	3	Ste Foy	3
Monbusq	2	Sainte-Radegonde	2
Nantes	1	Villeneuve-Sur-Lot	1
Fraisse	1	Dunes	1
Casseneuil	1	Sainte-Rafine	1
Collégial Saint-Nicolas de Nogaro	1		
Saint-Maurin	1		
Montbrun	1		
Condom	1		
Seyches	1		
Dunes	1		
Layrac	1		
Ste Columbe en Bruilhois	1		
<b>Note:</b> These counts only reflect origins which were identifiable			

Table 66: 1690s Spouse Home Parish – St Étienne

<b>1690s Spouse Home Parish – St Étienne</b>			
Groom Home Parish	# of Occurrences	Bride Home Parish	# of Occurrences
Ste Foy	7	Ste Foy	5
St Hilaire	6	St Caprais	5
St Caprais	4	St Hilaire	3
Condom	6	Mauzac	2
Montbron	6	Auch	1
Puymirol	2	Saint-Amans-des-Cots	1
Lusignan	2	Marmande	1
Artigues	1	Ailhons	1
Saint-Aubin	1	Caudecoste	1
Gimbrède	1	Fleurance	1
Dunes	1	Tournon-d'Agenais	1
Pomevic	1	Castels	1
Le Porge	1	Montbron	1
St Pierre de Clerax	1	Lectoure	1
Sainte Livrade Sur Lot	1	Boë	1
Tournon-d'Agenais	1	Artigues	1
Limoges	1	Mauzac	1
Layrac	1	Tilac	1
Saint-Ferréol Bon-Encontre	1	Saint Arnaud	1
Casseneuil	1		
Saintes	1		
Sainte-Ruffine	1		
Pérignac	1		
Blain	1		
Laugnac	1		
Monclar d'Agenais	1		
Foulayronnes	1		
Bourdeaux	1		

Villeneuve-Sur-Lot	1		
Monbusq	1		
Sainte-Redegonde	1		
Fronsax	1		
Caudecoste	1		
Cardonnet	1		
Laplume	1		
Plassac	1		
Gailac	1		
Fleurance	1		
Bazas	1		
Sauveterre-Saint-Denis	1		
Donzac	1		
Redon	1		
<b>Note:</b> These counts only reflect origins which were identifiable			

Table 67: 1690s Spouse Home Parish – St Caprais

<b>1690s Spouse Home Parish – St Caprais</b>			
Groom Home Parish	# of Occurrences	Bride Home Parish	# of Occurrences
Ste Foy	6	Ste Foy	7
St Étienne	6	St Hilaire	2
Condom	3	Larroque	2
Montbron	3	St Étienne	1
Serres	3	Laugnac	1
St Hilaire	2	Libourne	1
Cahors	2	Puymirol	1
Latour, Haute-Garonne	2	Mérens	1
Chalons	1		
Artigues	1		
Nérac	1		
Saint-Ferréol	1		
Abbeville	1		
Faugères	1		
Dax	1		
Saint-Armans	1		
Saint Jean de Thurac	1		
Queyssac	1		
Toulouse	1		
<b>Note:</b> These counts only reflect origins which were identifiable			

Table 68: 1690s Buried Persons Home Parish

<b>1690s Buried Persons Non-Local Place of Origin</b>			
Place of Origin	# of Women	# of Men	Total Occurrences
Condom	7	3	10
Cardonnet	2	5	7
Lusignan	3	2	5
Marmande	2	2	4
Puymirol	2	1	3
D'artigues	1	1	2
Gascony	0	2	2
Cassou (Bon Rencontre)	1	1	2



Libourne	1	1	2
Roquefort	2	0	2
Castillon-la-Bataille	1	1	2
Layrac	2	0	2
Marsac	1	1	2
Garaison	1	0	1
Macau	1	0	1
Saint-Vincent, Pyrénées-Atlantiques	0	1	1
Percurayre (Montjoi)	1	0	1
Bordeaux	0	1	1
Montauban	1	0	1
Sauvagnas	0	1	1
Gabaude (Murat-su-Vèbre) [Soldier]	0	1	1
Serres	0	1	1
Curnier	0	1	1
Salamanca	0	1	1
Le Faubourg	1	0	1
Magalas	0	1	1
Madrid	0	1	1
Royan	0	1	1
Dolmayrac	1	0	1
Normandy	0	1	1
Nantes	1	0	1
Les Ferrés	0	1	1
Amiens	1	0	1
Tournon	0	1	1
Laroque-Timbault	1	0	1
Montpellier	1	0	1
Montreal-du-Gers	1	0	1
Gramont	1	0	1
Beaumont-du-Périgord	0	1	1
La Roche-Posay	1	0	1
Sainte-Colombe	1	0	1
Neaux	0	1	1
Saint-Maurin	0	1	1
Dunes	1	0	1
Chabonais	0	1	1
Pessac	1	0	1
Saint-Colombe-en-Bruilhois	1	0	1
Belesta	1	0	1
Montfaucon	0	1	1
Landes	1	0	1
Montbron	1	0	1
Colayrac Saint Cirq	1	0	1
Saint-Barthélemy-d'Agenais	1	0	1
La Bastide-Clairence	0	1	1
Saint-Germain-d'Esteuil	0	1	1
Chaliers	0	1	1
Biron	0	1	1
Serignac-Sur-Garonne	0	1	1
Laurens	0	1	1
Portugal	1	0	1

## Bibliography

### Archival Sources:

#### *Archives départementales Lot-et-Garonne*

- Agen – Baptêmes – 1653-1692 – E SUP AGEN GG 92
- Agen – Mariages – 1677-1687 – E SUP AGEN GG 9
- Agen – Mariages – 1683-1691 – E SUP AGEN GG 36
- Agen – Mariages – 1686-1691 – E SUP AGEN GG 37
- Agen – Sépultures – 1665-1687 – E SUP AGEN GG 6
- Agen – Sépultures – 1654-1692 – E SUP AGEN GG 90
- Agen – Baptêmes, Mariages – 1679-1683 – E SUP AGEN GG 71
- Agen – Baptêmes, Sépultures – 1679-1681 – E SUP AGEN GG 69
- Agen – Baptêmes, Mariages, Sépultures – 1688-1692 – E SUP AGEN GG 11
- Agen – Baptêmes, Mariages, Sépultures – 1669-1685 – E SUP AGEN GG 34
- Agen – Baptêmes, Mariages, Sépultures – 1688-1691 – E SUP AGEN GG 36
- Agen – Baptêmes, Mariages, Sépultures – 1688-1692 – E SUP AGEN GG 37
- Agen – Baptêmes, Mariages, Sépultures – 1692-1692 – E SUP AGEN GG 38
- Agen – Baptêmes, Mariages, Sépultures – 1692-1708 – E SUP AGEN GG 39
- Agen – Baptêmes, Mariages, Sépultures – 1692-1697 – E SUP AGEN GG 73
- Agen – Baptêmes, Mariages, Sépultures – 1692-1698 – E SUP AGEN GG 74
- Agen – Baptêmes, Mariages, Sépultures – 1698-1703 – E SUP AGEN GG 75
- Agen – Baptêmes, Mariages, Sépultures – 1692-1723 – E SUP AGEN GG 93
- Agen – *Journal des consuls*, 1684-1697

### Published Sources:

- Blanqui et al. *Encyclopédie du commerçant. Dictionnaire du commerce et des marchandises, contenant tout ce qui concerne le commerce de terre et de mer*. Tome II. Paris: Guillaumin et Cie, 1839.
- Couyba, L. *Études sur la Fronde en Agenais et ses origines*. Villeneuve-sur-Lot: Imprimerie Renaud Leygues, 1901.
- Labénazie, Bernard. *Histoire de la ville d'Agen et pays d'Agenois: tome I*. Lot-et-Garonne: Mlle A Barrès, 1888.
- Lauzun, Philippe. *Les Couvents de la ville d'Agen avant 1789, Tomes 1-2*. Agen: Michel et Médan, 1893.

### Studies:

- Alfani, Guido. *As Gods Among Men: A History of the Rich in the West*. Princeton: Princeton University Press, 2023.
- Alfani, Guido. *Calamities and the Economy in Renaissance Italy: The Grand Tour of the Horsemen of the Apocalypse*. New York: Palgrave Macmillan, 2013.

- Alfani, Guido. "The Famine of the 1590s in Northern Italy. An Analysis of the Greatest 'System Shock' of the Sixteenth Century." *Histoire & Mesure* XXVI:1 (2011), 17-50.
- Allen, Robert. "Economic Structure and Agricultural Productivity in Europe." *European Review of Economic History* 4:1 (2000), 1-26
- Almås, Ingvild. et al. "The Economics of Hypergamy." *Journal of Human Resources* 58:1 (2023), 260-281.
- Appleby, Andrew. "Grain Prices and Subsistence Crises in England and France, 1590-1740." *The Journal of Economic History* 39:4 (1979), 865-887.
- Arrow, Kenneth. et al. "Economic Growth, Carrying Capacity, and the Environment." *Ecological Economics* 15:2(1995), 91-95.
- Bayes, Thomas. "An Essay Towards Solving the Problem in the Doctrine of Chances." *Philosophical Transactions of the Royal Society* 53 (1763), 370-418.
- Benedict, Philip. "Review of *La Bretagne aux 16e et 17e siècles. La vie. La foi. La mort* by Alain Croix." *Journal of Modern History* 55:4 (1983), 721.
- Bennassar, Bartolomé and Goy, Joseph. "Contribution à l'histoire de la consommation alimentaire du XIVe au XIXe siècle." *Annales. Economies, sociétés, civilisations* 30:2 (1975), 402-430.
- Bercé, Marie. *History of Peasant Revolts: The Social Origins of Rebellion in Early Modern France*. Translated by Amanda Whitemore. Ithaca: Cornell University Press, 1990 [1986].
- Berger, Patrice. "Pontchartrain and the Grain Trade During the Famine of 1693." *The Journal of Modern History*, 48:4 (1976), 37-86.
- Bevir, Mark. "Objectivity in History." *History and Theory* 33:3 (1994), 328-344.
- Bideau, Alain. "Les mécanismes autorégulateurs des populations traditionnelles." *Annales. Histoire, Sciences Sociales* 38:5 (1983), 1040-1057.
- Biraben, Jean-Noël and Bonneuil, Noël. "Population et économie en pays de Caux XVIe et XVIIe siècles." *Population* 41:6 (1986), 937-960.
- Biraben, Jean-Noël, and Blanchet, Didier. "Essai sur le mouvement de la population de Paris et de ses environs depuis le XVIe siècle," *Population* 53:1-2, 215-248. 232-233
- Biraben, Jean-Noël. "Alimentation et démographie historique." *Annales de Démographie Historique* (1976), 23-40.
- Bloch, Marc. *French Rural History: An Essay on its Basic Characteristics*. Translated by Janet Sondheimer, London: Routledge & Kegan Paul, 1966 [1931].
- Bloch, Marc. *The Historian's Craft*. Translated by Peter Putnam. New York: Random House, 1964 [1949].
- Boberg-Fazlic, Nina, Sharp, Paul, and Weisdork, Jacob. "Survival of the richest? Social status, fertility and social mobility in England 1541-1824," *European Review of Economic History* 35, 365-392.
- Bonneuil, Noël. "Traitement de données manquantes dans les séries issues des registres paroissiaux." *Population* 53:1-2 (1998), 249-270.
- Bourgeois-Pichat, Jean. "Le mariage, coutume saisonnière." *Population* 4 (1946), 623-642.
- Braudel, Fernand. "Économie française au 18e siècle." *Annales. Economies, sociétés, civilisations* 6:1 (1951), 5-69.

- Braudel, Fernand. *Civilisation Matérielle, Économie et Capitalisme, XVe-XVIIIe siècle, tome 1: Les structures du quotidien: Le possible et l'impossible*. Paris: Armand Colin, 2022.
- Brenner, Robert. "Agrarian Class Structure and Economic Development in Pre-Industrial Europe." *Past and Present* 70 (1976), 30-75.
- Brian, Eric and Jaisson, Marie. *The Descent of Human Sex Ratio at Birth: A Dialogue Between Mathematics, Biology, and Sociology*. Dordrecht: Springer, 2007.
- C. I. Bliss and W. L. Stevens, "The Calculation of the Time-Mortality Curve," *Annals of Applied Biology*, 24:4 (1937) 815-852
- Cahill, G. F. "Starvation in man" *New England Journal of Medicine* 1970, 282(12), 668-675.
- Chabonnier, Jean. "En quête de gout: Les cuisines paysannes dans le Marais poitevin au XVIIIe siècle." Master's thesis, Université Angers, 2021
- Chauvet, E. and Décamps, H. "Lateral interactions in a fluvial landscape: The River Garonne, France." *Journal of the North American Benthological Association* 8:1 (1989), 9-17.
- Chevet, Jean-Michel. "Les crises démographiques en France à la fin du XVIIe siècle et au XVIIIe siècle: un essai de mesure." *Histoire & Mesure* 8:1-2 (1993), 117-144.
- Clark, Gregory and Hamilton, Gillian. "Survival of the Richest: The Malthusian Mechanism in Pre-Industrial England." *The Journal of Economic History* 66:3 (2006), 1-30.
- Clark, Gregory. *A Farewell to Alms: A Brief Economic History of the World*. Princeton: Princeton University, 2007.
- Collet, Dominik. "Storage and Starvation: Public Granaries as Agents of Food Security in Early Modern Europe." *Historical Social Research* 35:4 (2012), 234-252.
- Collins, James. "Geographic and Social Mobility in Early Modern France." *Journal of Social History*, 24:3 (1991), 563-577
- Cook, Benjamin and Wolkovich, Elizabeth. "Climate Change Decouples Drought from Early Wine Harvests in France." *Nature Climate Change* 6:7 (2016), 715-719.
- Couperie, Pierre. "Régimes alimentaires dans la France du XVIIe siècle." *Annales: Économies, sociétés, civilisations*, 18:6 (1963), 1133-1141.
- Croix, Alain. *La Bretagne aux 16e et 17e siècles. La vie. La foi. La mort*. Paris: Maloine S. A. Éditeur, 1981.
- Croix, Alain. *Nantes et le pays Nantais au XVIe siècle: Étude démographique historique*. Paris: École pratique de Haute Études, 1974.
- Cummins, Neil. "Lifespans of European Elites, 800-1800." *Journal of Economic History* 77:02 (2017), 406-439
- Cunningham, Andrew and Grell, Ole Peter. *The Four Horsemen of the Apocalypse: Religion, War, Famine and Death in Reformation Europe*. New York: Cambridge University Press, 2000.
- Curtis, Daniel and Han, Qijun. "The Female Mortality Advantage in the Seventeenth-Century Rural Low Countries." *Gender & History* 33:1 (2021), 50-74.
- Daly, Martin and Wilson, Margo. *Homicide*. New York: Aldine de Gruyter, 1988.
- Dauphin, Victor. *Recherches pour servir à l'histoire des prix des céréales et du vin en Anjou sous l'Ancien Régime*, Paris: L. Fournier, 1934

- Daux, V., et al. "An open-access database of grape harvest dates for climate research: data description and quality assessment." *Climate of the Past* 8:5 (2012), 1403-1408.
- de Vries, Jan. "Measuring the Impact of Climate on History: The Search for Appropriate Methodologies." *The Journal of Interdisciplinary History* 10:4 (1980), 599-630.
- de Vries, Jan. "The Industrial Revolution and the Industrious Revolution." *The Journal of Economic History* 54:2 (1994), 249-270.
- Debien, Gabriel. "Du Béarn en Poitou: L'expansion du maïs du XVIIe au XIX siècle," in Ministère de l'éducation nationale, comité des travaux historiques et scientifiques, *Actes du quatre-vingt-onzième congrès national des sociétés savants*. Rennes (1966), 75-103.
- Deweever, Richard. "On the Changing Size of Nobility under Ancien Régime, 1500-1789." Master's Thesis. Paris: École Normale Supérieure, 2017.
- Deyon, Pierre. *Amiens, capitale provinciale: étude sur la société urbaine au XVIIe siècle*. Paris: Mouton & Co, 1967.
- Dupâquier, Jacques et al. *Histoire de la Population Française, vol.2, De la Renaissance à 1789*. Paris: Presses Universitaires de France, 1988.
- Dupâquier, Jacques. "Le mouvement saisonnier des mariages en France (1856-1968)." *Annales de démographie historique* (1977), 131-143.
- Dupaquier, Jacques. *La population du Bassin Parisien à l'époque de Louis XIV*. Paris: Éditions de l'École des hautes études en sciences sociales, 1979.
- Dupâquier, Jacques. *La population française aux XVIIe et XVIIIe siècles, 2<sup>e</sup> édition*. Paris: Presses Universitaires de France, 1993.
- Eckert, Edward. "Seasonality of Plague in Early Modern Europe: Swiss Epidemic of 1628-1630," *Review of Infectious Diseases* 2:6 (1980), 952-959.
- Ejrnæs, Mette and Persson, Karl Gunnar. "Grain Storage in Early Modern Europe." *The Journal of Economic History*, 59:3 (1999), 762-772.
- Elias, Sjoerd et al. "Menstruation during and after caloric restriction: the 1944-1945 Dutch Famine." *Fertility and Sterility* 88:4 (2007), 1101-1107.
- Emre Gönençay, "The Theory of Black Market Prices," *Economica*, 33:130 (1966), 219-225
- Fauve-Chamoux, Antoinette. "Le surplus urbain des femmes en France préindustrielle et le rôle de la domesticité." *Population* 53:1-2 (1998), 359-377.
- Forster, John. *The Nobility of Toulouse in the Eighteenth Century: A Social and Economic Study*. Baltimore: Johns Hopkins University Press, 2019, [1960].
- Foucault, Michel. "Nietzsche, Genealogy, History," in *Language, Counter-Memory, Practice: Selected Essays and Interviews* edited by Donald Bouchard. Ithaca: Cornell University Press, 1980 [1977], 76-120.
- Frêche, Georges and Frêche, Geneviève. *Les Prix des Grains, des Vins et des Légumes à Toulouse: 1486-1868*. Paris: Presses Universitaires France, 1967.
- Gadamer, Hans-Georg. *Truth and Method*. Translated by Joel Weinhammer and Donald Marshall. London: Bloomsbury Academic, 2013, [1975].

- Ganiage, Jean. *Trois villages d'Ile-de-France au XVIIIe siècle*. Paris: Presses Universitaires de France, 1963.
- Glete, Jan. "Warfare, entrepreneurship, and the fiscal military state," in *European Warfare: 1350-1750* edited by Frank Tallett and D. J. B. Trim. New York: Cambridge University Press, 2012, 278-299.
- Goubert, Pierre. *Beauvais et le Beauvaisis de 1600 à 1730*. Paris: École pratique de Haute-Études, 1960.
- Goubert, Pierre. *L'Ancien Regime, tome 1*. Paris: Armand Colin, 1969.
- Goubert, Pierre. *The French Peasantry in the Seventeenth Century*. Translated by Ian Patterson. New York: Cambridge University Press, 1986
- Grenier, Jean-Yves. "Quelques éléments pour une étude des liens entre conjuncture économique et conjuncture démographique aux XVIIe et XVIIIe siècles." *Annales de démographie historique* (1984), 175-199.
- Gullickson, Gay. "Agriculture and Cottage Industry: Redefining the Causes of Proto-industrialization." *The Journal of Economic History* 43:4 (1983), 831-850.
- Habakkuk, H. J. "The Economic History of Modern Britain." *The Journal of Economic History* 18:4 (1958), 486-501.
- Hajnal, John. "European Marriage Patterns in Perspective," in *Population in History: Essays in Historical Demography*. Edited by D.V. Glass and D.E.C. Eversley. London: Edward Arnold, 1965, 102-143.
- Hanlon, Gregory. *Human Nature in Rural Tuscany: An Early Modern History*. New York: Palgrave MacMillan, 2007.
- Hans Fischer, *A History of the Central Limit Theorem: From Classical to Modern Probability Theory*, New York: Springer, 2010
- Harris, Christine and Jenkins, Michael. "Gender Difference in Risk Assessment: Why do Women Take Fewer Risks Than Men." *Judgement and Decision Making* 1:1 (2006), 48-63.
- Harris, Marvin and Ross, Eric. *Death, Sex, and Fertility: Population Regulation in Pre-Industrial and Developing Societies*. New York: Columbia University Press, 1987.
- Henry, Louis and Blayo, Yves. "La population de la France de 1740-1860." *Population (French Edition)* 30 (November 1975), 71-122.
- Henry, Louis. "La masculinité par âge dans les recensements." *Population* 3:1 (1948), 93-114.
- Hoffman, Philip. *Growth in a Traditional Society: The French Countryside 1450-1815*. Princeton: Princeton University Press, 1996.
- Houston, Rab and Snell, K. D. M. "Proto-Industrialization? Cottage Industry, Social Change, and Industrial Revolution." *The Historical Journal* 27:2 (1984), 473-492.
- Hoyle, Richard. "Why was there no crisis in England in the 1690s?" in *The Farmer in England 1650-1980*. Edited by Richard Hoyle. New York: Routledge, 2016, 69-100.
- I. Chuine, "Grape Ripening as a past Climate indicator," *Nature*, 432 (2004), 289-290
- Johnson, Evan. "Massacre of the Innocents: Routine Infanticide in Mézin, 1649-1743." Honour's Essay. Dalhousie University, 2019.
- Johnson, S. Ryan. "Medics, Monarchs and Mortality, 1600-1800: Origins of the Knowledge Driven Health Transition in Europe." *Oxford University: Discussion Papers in Economic and Social History*, 85 (2010).

- Kaplan, Steven. *Provisioning Paris: Merchants and Millers in the Grain and Flour Trade in the Eighteenth Century*. Ithaca: Cornell University Press, 1984.
- Kaplan, Steven. *The Bakers of Paris and the Bread Question, 1700-1775*. Ithaca: Cornell University Press, 1996);
- Keenan, D. J. "Grape harvest dates are poor indicators of summer warmth." *Theoretical and Applied Climatology* 87 (2007), 255-256.
- Kelly, Morgan and Ó Gráda, Cormac. "Living standards and mortality since the middle ages." *The Economic History Review* 67:2 (2014), 385-381
- Kelly, Paul. "Starvation and its Effects on the Gut." *Advances in Nutrition* 12:3 (2021), 897-903.
- Keys, Ancel, Brozek, Josef and Henschel, Austin. *The Biology of Human Starvation. Volume 1*. Minneapolis: University of Minnesota Press, 1950.
- Labbé, Thomas et al., "The longest homogenous series of grape harvest dates, Beaune 1354-2018, and its significance for the understanding of past and present climate." *Climate of the Past: Discussions*, 15:4 (2019), 1485-1501.
- Lachiver, Marcel. *Les années de misère: La famine au temps du Grand Roi*. Paris: Fayard, 1991.
- Lam, David and Miron, Jeffrey. "Seasonality of Births in Human Populations." *Biodemography and Social Biology*, 38:1 (2010), 51-78.
- Le Bras Hervé, "Retour d'une population à l'état stable après une <<catastrophe>>," *Population*, 24:5 (1969), 861-869,
- Le Patourel, John. "The Plantagenet Domains." *History* 50:170 (1965), 289-308.
- Le Roy Ladurie, Emmanuel and Baulant, Micheline. "Grape Harvests from the Fifteenth to the Nineteenth Century." *Journal of Interdisciplinary History* X:4 (1980), 839-849.
- Le Roy Ladurie, Emmanuel, et al. *Histoire de la France Urbaine, tome 3: la ville classique de la Renaissance aux Révolutions*. Paris: Seule, 1981.
- Le Roy Ladurie, Emmanuel. "A Reply to Robert Brenner." In *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*. Reprint edition. Edited by T. H. Aston and C. H. E. Philpin. New York: Cambridge University Press, 1995 [1985], 101-106.
- Le Roy Ladurie, Emmanuel. "En haute Normandie: Malthus ou Marx?" *Annales. Economies, sociétés, civilisations* 33 (1978), 115-124.
- Le Roy Ladurie, Emmanuel. "et al., "Une synthèse provisoire: les vendages du XVe au XIXe siècle," *Annales, Economies, sociétés, civilisations* 33:4 (1978), 763-771.
- Le Roy Ladurie, Emmanuel. "Histoire et climat." *Annales, Economies, sociétés, civilisations* 14:1 (1959), 3-33.
- Le Roy Ladurie, Emmanuel. "Histoire immobile." *Annales. Economies, sociétés, civilisations* 29:3 (1974), 673-692.
- Le Roy Ladurie, Emmanuel. "Un Concept: L'unification microbienne du monde (XVIe-XVIIe siècles)." *Revue Suisse d'histoire* 23 (1973), 627-694.
- Le Roy Ladurie, Emmanuel. *Les paysans de Languedoc*. Paris: Champs Histoire, 1993 [1966].
- Le Roy Ladurie, Emmanuel. *Times of Feast, Times of Famine: A History of Climate Since the Year 1000*. New York: Farrar, Straus & Giroux, 1988.

- Lebrun, François. "Les crises démographiques en France aux XVIIe et XVIIIe siècles." *Annales: Economies, sociétés, civilisations* 35:2 (1980), 205-235.
- Lebrun, François. *La vie conjugale sous L'Ancien Regime*. Paris: Armand Colin, 1975.
- Léger, Daniel. "Scurvy: Re-emergence of Nutritional Deficiencies." *Canadian Family Physician* 54:10 (2008), 1403-1406.
- Ljungqvist, Fredrik et al. "Climatic signatures in early modern European grain harvest yields." *Climate of the Past*, 19:12 (2023), 2463-2491.
- Loirette, Francis. *L'état & la region: L'exemple de l'Aquitaine au XVII<sup>e</sup> siècle, Centralisation monarchique, politique régionale et tensions sociales*. Bordeaux: Presses Universitaires de Bordeaux, 1998.
- Louise Tilley, "The Food Riot as a Form of Political Conflict in France," *The Journal of Interdisciplinary History*, 2:1 (1971), 23-57
- Lowenthal, David. *The Past is a Foreign Country – Revisited*. New York: Cambridge University Press, 2015.
- Lynn, John. "The Growth of the French Army in the Seventeenth Century." *Armed Forces and Society* 6:4 (1980), 568-585.
- M. Bronfenbrenner, "Price Control under Imperfect Competition," *The American Economic Review*, 37:1 (1947), 107-120
- Malthus, Thomas. *An Essay on the Principle of Population: An Essay on the Principle of Population, as it Affects the Future Improvement of Society with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*. London: J. Johnson, 1798.
- Malthus, Thomas. *An Essay on the Principle of Population*. New York: Penguin, 1988 [1798].
- Mateu, André. "Fête et révolte à Agen pendant la Fronde." *Revue de l'Agenais* CVI:4 (1979).
- Mendels, Franklin. "Proto-Industrialization: The First Phase of the Industrialization Process." *The Journal of Economic History* 32:1 (1972), 241-261
- Meuvret, Jean. "L'histoire des prix des céréales en France dans la seconde moitié du XVIIe siècle." *Annales: Economies, sociétés, civilisations* 5 (1944), 27-44
- Mogensen, Kris. "Essential Fatty Acid Deficiency." *Nutrition Issues in Gastroenterology* (2017), 37-44.
- Mokyr, Joel and Ó Gráda, Cormac. "What do people die of during famines: the Great Irish Famine in comparative perspective." *European Review of Economic History* 6 (2002), 339-363.
- Monturet, Raymond, and Tardy, Dominique. "Programmes d'architecture augustéenne à Agen." *Aquitania* 9 (1991), 41-60.
- Moreno, J. et al. "Grape harvest dates as indicators of spring-summer mean maxima temperature variations in the Minho region (NW of Portugal) since the 19<sup>th</sup> century." *Global and Planetary Change* 141 (2016), 39-53.
- Neveux, Hugues. "L'alimentation du XIVE au XVIIIe siècle: essai de mise au point." *Revue d'histoire économique et sociale* 51:3 (1973), 336-379.
- Nielsen, Randall. "Storage and English Government Intervention in Early Modern Grain Markets." *The Journal of Economic History* 57:1 (1997), 1-33.



- Nietzsche, Friedrich. "On the Use and Abuse of History." Translated by Ian Johnston. [1873].  
<https://la.utexas.edu/users/hcleaver/330T/350kPEENietzscheAbuseTableAll.pdf>.
- Ó Gráda, Cormac and Chevet, Jean-Michel. "Famine and Market in Ancien Régime France." *The Journal of Economic History* 62:3 (2002), 706-733.
- Ó Gráda, Cormac. "Markets and Famines in Pre-Industrial Europe." *The Journal of Interdisciplinary History* 36:2 (2005), 143-166.
- Ó Gráda, Cormac. *Famine: A Short History*. Princeton: Princeton University Press, 2009.
- O'Toole, Fintan. *We Don't Know Ourselves: A Personal History of Modern Ireland*. American edition. New York: Liveright, 2022.
- Parker, Geoffrey. "The 'Military Revolution,' 1560-1660 – a Myth?" *The Journal of Modern History* 48:2 (1976), 195-214.
- Parker, Geoffrey. *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, 2<sup>nd</sup> edition  
 New York: Cambridge University Press, 1996.
- Parrott, David. *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe*. New York: Cambridge University Press, 2012.
- Persson, Karl Gunnar. "The seven lean years, elasticity traps, and intervention in Grain Markets in Pre-Industrial Europe." *The Economic History Review* 49:4 (1996), 692-714.
- Persson, Karl-Hunnar. *Grain Markets in Europe 1500-1900: Integration and Regulation*. Cambridge: Cambridge University Press, 1999.
- Postan, M.M. and Hatcher, John. "Population and Class Relations in Feudal Society." *Past & Present* 78 (1978), 24-37.
- Poussou, Jean-Pierre. "Les industries rurales dans le Sud-Ouest de la France au XVIIIe siècle" in *Industries rurales das l'Europe médiévale et modern*. Edited by J.M. Minoves, C. Verna, and L. Hilaire-Pérez. Toulouse: Presses Universitaires du Mirail, 2013, 223-244.
- Poussou, Jean-Pierre. *Bordeaux et le sud-ouest au XVIIIe siècle: Croissance économique et attraction urbaine*, (Paris: Éditions de l'École des hautes études en sciences sociales, 1983).
- Quellier, Florent. *La table des Français: Une histoire culturelle (XVe – début XIXe siècle)*. Rennes: Presses Universitaires de Rennes, 2007.
- Rashid, Salim. "The Policy of Laissez-Faire During Scarcities." *The Economic Journal* 90:359 (1980), 493-503.
- Rault, Wilfred et al. "Seasonality of marriages, past and present." *Population* 74:1 (2016), 675-679.
- Raytses, Vladimir I. "Le programme de l'insurrection d'Agen en 1514." *Annales du Midi* 92:153 (1981), 255-277.
- Rebaudo, Danièle. "Le mouvement annuel de la population française rurale de 1670 à 1739." *Population* 34 (1979), 589-606.
- Rebaudo, Danièle. "Le mouvement saisonnier des mariages et des remariages." *Population* 36:2 (1981), 414-417.
- Romier, Lucien. *Le royaume de Catherine de Medici: La France à la veille des guerres de religion, tome I*. Paris: Librairie académique Perrin et Cie, 1922.

- Scheidel, Walter. *The Great Leveller: violence and the History of Inequality from the Stone Age to the Twenty-First Century*. Princeton: Princeton University Press, 2019.
- Spengler, Joseph. "Demographic Factors and Early Modern Economic Development." *Daedalus* 97:2 (1968), 433-446.
- Thakur, Prince. "Cold stress effects on reproductive development in grain crops: An overview." *Environmental and Experimental Botany* 67 (2010), 429-443.
- Tholin, Georges. "Proclamation de la commune à Agen en 1514." *Annales du Midi* 13:49 (1901), 5-40.
- Thompson, I. A. A. "The Armada and Administrative Reform: The Spanish Council of War in the Reign of Philip II." *The English Historical Review*, 82:325, 698-725.
- Usher, Abbot Payton. *The History of the Grain Trade in France, 1400-1710*. Cambridge: Harvard University Press, 1913.
- Valmary, Pierre. *Famille paysanne aux XVIIIe siècle en Bas-Quercy: étude démographique*. Paris: Presses Universitaires de France, 1965
- Van Bavel, Bas et al. *Disasters and History: The Vulnerability and Resilience of Past Societies*. New York: Cambridge University Press, 2020
- Van Leeuwen, Marco and Maas, Ineke. "Endogamy and Social Class in History: An Overview." *International Review of Social History* 50 Supplement (2005), 1-23.
- Visaria, Pravin. "Sex Ratio at Birth in Territories with a Relatively Complete Registration." *Eugenics Quarterly* 14 (1967).
- Watkins, Susan and Menken, Jane. "Famines in Historical Perspective." *Population and Development Review* 11:4 (1985), 647-675.
- Wood, Gordon. "Writing History: An Exchange." *The New York Review of Books*. December 16, 1982.
- Wood, James. "The decline of the Nobility in Sixteenth and Early Seventeenth Century France: Myth or Reality?" *Journal of Modern History* 48:1 (1976), 1-29.
- Woods, Robert. "Ancient and Early Modern Mortality: Experience and Understanding." *The Economic History Review* 60:2 (2007), 373-399.
- Wrigley, E.A et al. *English Population History from Family Reconstruction, 1580-1837*. New York: Cambridge University Press, 1997.