Dueling for honor and identity economics

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30. July 2012

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Abstract

Dueling is one of the best indicators of political transition from anarchy to order. This paper explores the dynamics of dueling for honor as a social institution in England, France, and Germany. It identifies major differences regarding the frequency, duration, and nature of dueling. Although dueling for honor emerged as a self-organizing and self-regulatory collective action of the aristocracy in crisis, it transformed into a middle class institution in France and Germany. However, this institution suddenly ended in England around 1850. In this study, we will follow a cognitive version of identity economics to explain the emergence of this institution, and its divergent trajectories in these countries in terms of identity choice. We will argue that while dueling is an identity investment, it might have different values according to its diverse social meanings. We will show that different social meanings that were attached to dueling in England, France and Germany gave rise to different values in identity investment, and led to different results in enhancing social identities.

JEL Classification: D02, D74, N43, P16

Keywords: Duel for honor, Duel's embourgeoisement, Identity economics, Identity choice, orderly anarchy

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Abstract

Dueling is one of the best indicators of political transition from anarchy to order. This paper explores the dynamics of dueling for honor as a social institution in England, France, and Germany. It identifies major differences regarding the frequency, duration, and nature of dueling. Although dueling for honor emerged as a self-organizing and self-regulatory collective action of the aristocracy in crisis, it transformed into a middle-class institution in France and Germany. Yet, this institution suddenly ended in England around 1850. In this study, we will follow a cognitive version of identity economics to explain the emergence of this institution, and its divergent trajectories in these countries in terms of identity choice. We will argue that while dueling is an identity investment, it might have different values according to its diverse social meanings. We will show that different social meanings that were attached to dueling in England, France and Germany gave rise to different values in identity investment, and led to different results in enhancing social identities.

"[F]or sociological purpose there does not exist, as there does for the law, a rigid alternative between the validity and lack of validity of a given order. On the contrary, there is a gradual transition between the two extremes; and also it is possible (…) for contradictory systems of order to exist at the same time (…) in Germany the readiness to participate in a duel is still a *legal* obligation imposed by the state upon its army officers even though the duel is expressly forbidden by the Criminal Code." Max Weber (1968, 32, 318).

Introduction

Dueling for honor is one of the best indicators of political transition from the older feudalism of fragmented political power to a stronger, centralizing monarchy that lasted much longer in France than in England, and longer in Germany than in France. This process corresponds to Hobbes's transition from anarchy to Leviathan. Borrowing from public choice literature, while aristocratic civil wars can be regarded as anarchy, and the state or order as Leviathan, dueling for honor is an 'orderly anarchy,'[1] because it entails extra legal or illegal strictly codified and regulated private conflict.

Interestingly, this social institution was first extinguished in the birthplace of the industrial revolution and lasted longest in late-industrializing Germany. A one-to-one relationship appears to exist between economic development and political transition, but we will show

[1] For a detailed discussion of 'orderly anarchy', see Powell and Stringham (2009) and Leeson (2007, 2009).

that this relationship is more complex. Although dueling for honor emerged as a self-organizing and self-regulatory collective action of the aristocracy in crisis, it transformed into a middle-class institution in France and Germany. While social historians and legal scholars have extensively studied duel for honor, the economic literature has neglected this important institution till recently. Our analysis of the genesis and evolution of dueling addresses this gap and casts light upon institutional change.

While the paper affords a comprehensive multi-disciplinary review of all the literature on dueling and the existing statistics on the issue, its goals are broader. The duel for honor is a salient institution that helps understanding at least three major questions of current relevance: 1) what is the role of identity investment of different social groups in the transition from anarchy to order? To what extent, an extension of self-organizing and self-regulating collective action to violence management can be welfare-enhancing or welfare-degrading? 2) What is the role of beliefs or the social meaning ascribed to an institution as a source of sudden or incremental change of institutions? 3) Is identity economics, particularly in its perceptual version, helpful in understanding major historical changes?

In this study, we will follow a cognitive version of identity economics to explain the emergence of this institution, and its divergent trajectories in these countries in terms of identity choice. We will argue that while dueling is an identity investment, it might have different values according to its diverse social meanings. We will show that different social meanings that were attached to dueling in England, France and Germany gave rise to different values in identity investment, and led to different welfare-enhancing or welfare-degrading results.

The remainder of this paper is organized into the following sections. Section one defines the duel of honor and reviews the existing literature on this topic. Section II explores the emergence of dueling for honor as a stylized historical fact. Section III affords a theoretical explanation regarding the emergence and evolution of dueling in terms of ‘identity economics’. Section IV discusses the duel’s embourgeoisement as a controversial issue and shows the prominent role of the particular social meaning ascribed to dueling in England, France and Germany. To bring clarity to this controversial issue from the economist’s point of view, we provide a theoretical reformulation of the duel’s embourgeoisement thesis as identity choice. In doing so, section V elucidates the supply side, and section VI explores the

demand side of identity choice. Both sections explain the evolution of dueling to a rational, calculated identity investment. The welfare impact of this identity choice will also be discussed in section VI. The last section concludes by comparing the specific trajectories of dueling in the three countries.

I. The state of art on dueling

What is the duel for honor? Dueling for honor is not the same as feuding, vendettas, brawls, jousts, or tournaments. It is "a fight between two or several individuals (but always equal numbers on either side), equally armed, for the purpose of proving either the truth of a disputed question or the valor, courage and honor of each combatant. The encounter must be decided or accepted jointly by both parties and must respect certain formal rules, be they tacit, oral or written, which will give it the weight of a legal proceeding, at least in the eyes of the two adversaries" (Billacois, 1990, 5). Dueling is thus a strictly *codified private* fight[2], negotiated and mediated by seconds and observable by the public. Dueling for honor should be distinguished from both the *judicial* duel (trial by combat)[3] and dueling for chivalry (Baldick, 1965, 11–32).

The judicial duel was presided over by a public authority, i.e. the sovereign prince, whereas dueling for honor was usually illegal[4] and privately organized. The judicial duel can be traced back to A.D. 501, but the duel of honor was first described in Italy by 'doctors of duels' or 'professors of honor' from the 1360s (Giovanni da Legnano) until around 1560 (Muzio, Possevino). Their theories became known as chivalric science (*scienza cavalleresca*). Duels were popular in Italy, but the practice particularly flourished in France as a particular aristocratic social institution during the sixteenth and the seventeenth centuries and continued until the First World War. Dueling was introduced in England as a French fashion and persisted there until the first half of the nineteenth century. Germany also imported this French fashion, where it experienced a kind of golden age at the end of the nineteenth century

[2] Two treaties about the code of dueling were published in the 1590s (Stone, 1965, 245). Many codes of dueling were published since, including the *code duello* adopted at the Clonmel Summer Assizes, 1777; this contained 26 rules which were reprinted in Truman (1884, 48–53).

[3] The eminent French sociologist, Gabriel Tarde (1892, 30) distinguished *judicial* duel from German's *divinatory* duel, and defined judicial duel as a transitional form of dueling between German's divinatory duel and the duel for honor.

[4] Malta in Italy was one of the few places in which dueling was permitted by law in the sixteenth century. It was legally confined to the army in Sardinia; see Baldick (1965, 142, 144).

(McAleer, 1994, 22–23). Dueling later spread to English colonies including the United States and Canada.

This paper will focus on France, England, and Germany as the three major European countries in which the institution evolved, and identify major differences regarding the frequency, duration, and nature of dueling. These findings will help explain how this 'orderly anarchy' developed into specific forms of anarchy or order in each country. We start by reviewing the state of art on this issue in economic, legal and historical literature.

I.1 The paucity of the economic analysis of dueling

Until recently economists and economic historians have ignored of dueling for honor as an 'exotic institution'. Game theorists have been interested in strategies about who should shoot whom (Shubik, 1954)[5] and when to shoot (Kurisu, 1983, 1991), but overlooked dueling as a social institution. To our knowledge, Volckart (2004) was the first to model a similar phenomenon, specifically feuding in late medieval Germany. In addition to Volckart's work, three recent papers (Allen and Reed, 2006; Kingston and Wright, 2010, Leeson, 2011) have presented rational choice explanations for dueling.[6] Leeson's paper does not examine the duel for honor. He analyzes the judicial duel or 'trial by battle', and argues for the efficiency of this mechanism within a Coasean paradigm in allocating contested property rights in the presence of high transaction costs in a feudal world.

However, the two first papers study the duel for honor. But they only address the motivation of a rational duelist and neglect the broader question of dueling as a transitional social institution, an issue that has been discussed extensively by social historians and legal scholars. Allen and Reed (2006) suggested that the duel served as a screening device separating marginal aristocrats who had not invested in unobservable social capital within a social context in which patronage and trust were important mechanisms for monitoring political exchanges. They argued that "when patronage was ultimately replaced by a professional bureaucracy based on merit, dueling ceased to be practiced" (Allen and Reed, 2006, 88). If their argument is correct, then why did the duel particularly persist in France

[5] Shubik (1954) considers sequential shooting between three duelers and shows that the most able shooter need not survive with the highest probability, since whoever among the less able ones gets an early chance to shoot may use his shot to hit the strongest adversary.

[6] Gagné (2007) developed a non-formalized model of dueling in which agents pretend to comply non-rationally while feigning not to notice that most others do the same.

and Germany at the end of the nineteenth century despite the existence of a modern professional state bureaucracy based on merit? The real issue is not whether dueling was 'efficient' or 'inefficient,' but why dueling norms persisted despite the changing political and social factors that undermined their efficiency.

According to Max Weber, dueling has a peculiar transitional character that results from *contradictory orders*[7]. Kingston and Wright (2010) neglected this transitional character, describing dueling as a signal about an unobservable intangible asset: personal creditworthiness. Their model assumes that an 'honorable' man is one who can be trusted to repay loans. It also assumes that "there is no formal enforcement mechanism in place" (1098) – but dueling does exist as a transitional phenomenon under conditions of contradictory orders, such as incomplete formal state enforcement coexisting either with informal aristocratic community enforcement or military enforcement (a state within the state) as in Germany at the end of the nineteenth century.

The paucity of economic models about dueling is related to the fact that dueling is not studied within the broader context of the transition from anarchy to order. Economists and economic historians have recently begun to investigate the problem of political transitions and the relationships between social order and violence (Acemoglu and Robinson, 2001, 2008; North *et al.*, 2009). But the duel for honor still remains an unexplored social institution. Contrarily to economists, social historians and legal scholars have conducted the bulk of research on dueling as a social institution.

I.2 Historical and legal literature on dueling

Social historians (Baldick, 1965; Billacois, 1990; Chesnais, 1981; Coombs, 1997; Deak, 1990; Frevert, 1995; Greenberg, 1990; Guillet, 2008; Halliday, 1999; Howison, 1924; Jeanneney, 2004; Kiernan, 1988; McAleer, 1994; Morgan, 1995; Nye, 1990, 1993; Peltonen, 2003; Piccato, 1999; Reddy, 1997; Shepard, 2003; Steward, 2000; Stone, 1965; Weber, 1999; Williams, 1980) and legal scholars (Ellickson, 2001; Lessig, 1995; Licht, 2008; Posner, 1996, 2000; Schwartz *et al.*, 1984; Tarde, 1892; Wells, 2001) have investigated various features of dueling on the basis of culture, honor, gender, or court substitution in Europe, North America, and Latin America. They have mainly been concerned with the emergence and

[7] For simplicity, hereafter we will use the shorter term 'contradictory orders' instead of Weber's original term of 'contradictory systems of order.'

evolution of dueling in conjunction with the crisis of aristocracy and its relationship with monarchy and the rising bourgeoisie. Interestingly, legal scholars have focused on the transition from community self-enforcement to State law enforcement. Given the importance of anti-dueling laws since the sixteenth century and their practical ineffectiveness, these scholars questioned why the laws were passed but not enforced. One popular theory is that social norms must change before laws will be enforced (Wells, 2001) – but when and how do social norms change?

To answer this question, the legal scholars borrowed the idea of 'efficiency' or 'inefficiency' of social norms from economists. Economists had already analyzed social norms such as codes of honor and the use of apparently non-rational revelatory means such as ordeals to resolve disputed issues (Posner, 1981; Becker, 1981; Leeson, 2011) and the caste system (Akerlof, 1976). According to economists, social values provide a system of self-enforcing sanctions that increase the value of production in the presence of market failure by solving the three underlying problems of social organization: asymmetrical information, incentive compatibility, and risk sharing. Inspired by this economic literature, Schwartz *et al.* (1984) provided an efficiency explanation of dueling as a signaling mechanism for reputation. In a sense, they pioneered a rational choice theory of dueling. Other legal scholars have stressed the irrational and inefficient character of dueling as a social norm substituting for legal proceedings in a court of law (Posner, 1996, 2000).

When the state has a monopoly on legitimate force and the means to enforce it, dueling ceases to be an efficient institution. But why did dueling norms persist after changing social and political conditions had undermined their efficiency? To answer this question, Posner (1996) defined the limits of 'efficiency theory' and explored the 'cartel theory,' according to which dueling norms act as an entry barrier to the market. "Because the aristocrats were better able to educate their children in dueling than commoners, the dueling norms gave an advantage to the aristocracy" (1996, 1736). In other words, aristocratic rent-seeking can explain the persistence of dueling despite its inefficiency. Given the particular interests of the aristocracy and the acceptance of dueling as a social norm, laws were alone insufficient to eliminate the practice, so long as the people enforcing the laws did not abhor dueling. Thus states could not simply follow a norm-violation approach by imposing rewards and penalties. In contrast to the norm-violation approach, the norm-transformation approach requires a large investment that exceeds the continuing costs associated with norm-violation. The whole idea

is to provide new 'social meaning' to dueling by denying offices to convicted duelists, as opposed to a law that punishes them using execution or expropriation. Lessig (1995) conjectured that transformative laws could help a gentlemen refuse a challenge by arguing that his first duty was to serve his country.

A review of the abundant historical and legal works on dueling clearly reveals that this body of literature situates dueling within an evolutionary process of political and economic transition. Economic analysis contributed *indirectly* to this literature by casting light on information and strategic behavior. This line of research has been followed by game modeling regarding community enforcement through a reputational 'label' (Kandori, 1992), teamwork ethics (Arce and Gunn, 2005), and risk-taking for the benefit of a group (Dnes and Garoupa, 2010).[8] Economic historians have also documented the effect of reputational information shared by merchant communities (Greif, 1993) or judges (Milgrom *et al.*, 1990).

I.3 Economic analysis of dueling and challenging questions

Why is an economic analysis of dueling for honor necessary? The first peculiarity of dueling is that it is a conflictual activity that is not (or at least not directly) about *appropriating* resources. Researchers in the emerging field of conflict theory have extensively studied the *appropriative* dimension of conflictual activity (Garfinkel and Skaperdas, 2007). However, the *rule-producing* or institutional dimension of this activity still needs to be explored. Dueling as a social institution is more about this rule-producing rather than its appropriative aspect.

More importantly, the dueling rules are not externally enforced. In fact, the duel for honor is often organized despite the state's interdiction. Dueling is a salient illustration of self-organizing and self-governing forms of collective action in managing violence. Empirical and theoretical studies have already shown that privatization or nationalization is not the 'only' way to solve a commons dilemma, and that self-organized collective action might also be a solution (Ostrom, 1990). Could this analysis be extended to violence? Duel for honor is a case in order.

But how can the economist's rational choice framework explain the preference of individuals for dueling? It should not be forgotten that in the heydays of dueling, choosing dueling meant

[8] Game theory modeling has been used to apply lessons from the era of dueling in mediating national honor, see for example O'Neill (2003).

to answer the existential question of 'to be or not to be'. But that choice belonged to the aristocracy (and not to commoners) who behaved in compliance with the code of honor. Obviously, the choice of dueling or not is unlike the usual economic choice of apple versus orange, it is rather a choice dependent on the agent's identity. By identity, we mean the social categories ('man', 'woman', 'nobility', 'black', 'white', etc.) to which an individual belongs (Akerlof and Kranton, 2000, 2010). These categories are associated with particular socially determined 'self-images' that include an ensemble of 'prescriptions' or behavioral rules to which an individual complies in accordance with her/his attachment to these categories. Accordingly, the norms of how to behave depend on people's positions within their social context. Identity economics thus extends the utility function by adding the agent's identity to the individual's preferences or tastes. Although people have limited choice over their identity, under certain circumstances, they can choose their identity. Acknowledging such a choice has strong explanatory power in understanding the evolution of dueling from an aristocratic institution to a middle-class institution in France and Germany during the nineteenth century. The 'limited access' of the aristocracy to a particular intangible asset, namely 'honor' was gradually converted into an 'open access' asset by a process that certain historians have named 'duel's embourgeoisement'. But this process never occurred in England. All these stylized facts about the emergence and evolution of dueling raise many challenging questions for economists and economic historians.

How can the emergence of dueling be rationally explained? To what extent was this institution 'efficient'; and why did it persist even after changing social and political conditions had undermined its efficiency? How can economic analysis contribute to understanding the duel's embourgeoisement? Why did the duel for honor end suddenly in England in the first part of the nineteenth-century, whereas France and Germany experienced the duel's embourgeoisement throughout the nineteenth century? Addressing these questions brings us to develop an economic theory of dueling as a social institution under contradictory orders or within a transition period.

II. The emergence of the duel as a social institution

Before the sixteenth century, coercive means were widely dispersed among upper and lower aristocracy in Europe, i.e., the European nobility and gentry. Anarchy or aristocratic civil wars and feuds were endemic as late as 1607. The change in the tenant-landlord relationship from a military loyalty bond to a more exclusive bond of economic rent in the early

seventeenth century was probably the most fatal blow to the private armies of aristocracy, and weakened the power of nobles over the gentry. The diminishing of the aristocratic army and the increasing monopoly of the monarch over violence changed the balance of power: the aristocracy became more dependent on the monarchy, while the monarchy increasingly relied on the commercial bourgeoisie for the financial resources required to wage wars and fund the Court. The crisis from 1558 to 1641 (Stone, 1965) forced the aristocracy to submit to the sovereignty of the monarchy. In return, the nobility retained and even increased its political rights and ascendancy in the Court, keeping the bourgeoisie in second place. The upper aristocracy paid few or no direct taxes and shared the privilege of exploiting the peasants with the tax collector. Despite their rivalry and sporadic tensions, the monarchy and the nobility remained inseparable accomplices.

The situation was quite different for the lower aristocracy or the gentry. Their meager rents, their reluctance to engage in the 'ignoble' profession of trade, and their lack of competence except in fighting left them nothing but harsh competition for offices in the new standing armies or ballooning bureaucracies. Minor nobles were constantly threatened with destitution due to chronic insecurity, so nobles in Catalonia, Galicia, and Naples were implicated in endemic banditry, and squires in England were occasionally involved in smuggling. Their difficult situation sometimes led to subversive outbreaks, such as the 1520 Knights' War in Germany. Given their potential destructive power, the lower nobility could blackmail governments to expand their armies at the expense of the peasants, especially during the Thirty Years' War (1618–1648).

During the sixteenth and seventeenth centuries, Europe underwent a period of intense social, political, and religious tension and conflict. The aristocracy, the old ruling class, was in crisis and disintegrating into its various strata. It needed something to unite its ranks and restore cohesion. In other words, the collective action of the aristocracy needed a mechanism to shun free-riding and strategic behavior among its individual members. Dueling and its code of honor provided a social glue to unite lower and upper aristocracy in this transitional period. According to Demeter, the duel "strengthened their sense of belonging to a single privileged class" (1965, 119). Borrowing some terminology from identity economics (Akerlof and Kranton, 2010), the duel of honor provided identity, purity, and distinction to the aristocracy as the legitimate heir of the nobility of the sword from feudal times. It gave the entire class a military character and encouraged its patronage of new mass armies, while the new

parliament and Courts enabled the nascent bourgeoisie and lawyers to have an increasingly strong influence.

Both upper and lower aristocracy benefited from dueling. By claiming the right to duel, the high nobility was symbolically showing that it had not surrendered its independent spirit to the monarchy. The duel of honor never emerged when entitlement to any form of property depended on the sovereign, which explains why it never appeared under oriental despotism in Persia or China. Dueling only appeared when the nobility was the "principal nerve of our state" (Billacois, 1990, 98), and "when the monarchial model blurs, when the model of a deliberating assembly, a parliament in the most etymological sense of the word, takes over" (Ibid, 30). A strong and stable Absolutist monarchy was more able to control dueling; the practice never took root in Spain, where the undisputed authority of the Catholic Church and the monarchy were united in banishing the duel. The Spanish aristocracy preferred bullfighting, as did commoners.[9]

Lower aristocracy benefited from dueling for another reason. The practice was most common among minor country gentry or squires, "who hunt in the day, get drunk in the evening, and fight the next morning" (Young, 1925, 205). The enjoyment factor cannot be discounted, as the lives of country gentry tended to be monotonous,[10] but the major advantage of dueling was its leveling effect: "The duel was the sign and seal of a mystic equality between higher and lower, a fraternal bond uniting the whole multifarious class. It was, in short, a leveler, even though in practice a peer would oftenest be embroiled with one of his own kind, a squire with another of the squires (…) A duke ought to accept a challenge from a simple gentleman, Selden argued, because by treating him improperly the duke brought himself to the same level" (Kiernan, 1988, 52).

Although upper and lower nobility had their own reasons for advocating the duel, they shared a common interest: maintaining the superiority of blue-blood aristocracy over law. The duel was reminiscent of the early feudal right of private warfare. The abundant anti-dueling edicts throughout Europe exemplified its formal condemnation by sovereigns, but why were monarchs so frequently dismissive of dueling? The answer may be related to aristocratic civil war. Unlike dueling, which normally involved only the principals and not their friends and

[9] Billacois (1990, 38–39) explained how cultural factors affected the banishment of dueling in Spain. He argued that because honor was not a conquest but a family treasure, the duel could not re-establish a contested honor.
[10] Chekhov (1921, 30) referred to this 'fun factor': "When there is no war, they are bored".

servants,[11] feudal private warfare engaged groups of retainers, servants, and tenants. Additionally, while dueling was strictly controlled by rules and guaranteed fair combat, feudal private warfare involved murderous assault by superior numbers, surprise ambushes, and attacks from behind. Dueling was thus a great step forward in the domestication of violence. "Violence in word or deed was thus regulated, codified, restricted, sterilized" (Stone, 1965, 244). Compared with the aristocratic civil wars that might be described as anarchy, the duel was a form of orderly anarchy, and a monarch could afford to be more lenient toward orderly anarchy than pure anarchy.

Historians have identified a link between weakened royal authority, civil war, and increased dueling. No exact and reliable statistics are available about numbers of duels and the number of people killed during duels, but French and English historians have collected many 'impressionistic statistics' (Billacois, 1990) about the emergence of dueling from the second half of the sixteenth century until the second half of the seventeenth century (Billacois, 1990; Cockburn, 1720; Kiernan, 1988; McAleer, 1994; Stone, 1965). Table 1 presents the peak periods of dueling in France, where dueling originated, based on these impressionistic statistics; Table 2 presents the trough periods.

An overview of the peak and trough periods reveals two findings. First, increased dueling is related to weakened royal authority, either because a monarch was too young (e.g., Louis XIII and Louis XIV), or because a monarch's right to rule was disputed (e.g., Henri III and Henri IV until 1598). Second, civil war stimulated dueling, whereas foreign war usually reduced the number of duels. The Thirty Years' War and the civil wars collectively known as the Fronde (catapult) encouraged dueling, especially because they undermined the authority of the sovereign. Foreign wars, if supported by public opinion, were a source of internal unity and effectively discouraged dueling among gentlemen. Similar results appear for Britain; dueling for honor appeared in England around 1590 (Cockburn, 1720), and as in France, increased in prevalence until 1620. The rates of increase were similar in the two countries until 1600, when the rate in France increased faster than in England. The disparity was especially obvious from 1610 to 1620 (Billacois, 1990), and dueling rates declined sharply in

[11] In England, the duel was usually between two individuals, whereas in France it could become a group duel. (Stone, 1965, 243).

England after 1620 (Stone, 1965). Dueling experienced a resurgence in England from 1644 to 1655,[12] before and during the English Civil War.

Table 1. Peak periods of dueling in France

Peak period	Political situation	Estimated number of deaths
1562–1598	• Valois dynasty, crippled royal authority • Chain of civil wars under religious pretext	8000*
1604–1607	• Peace at home and abroad (Peace of Vervain) • Disputed authority of Henry IV	6000 **
1611–1614	• Minority of Louis XIII • Meeting of the Estates General	25000***
1621–1626	• Richelieu as a strong minister • Military operations against the Protestant fraction	
1631–1633	• Period of 'covert war'. France manages to delay its entry in the Thirty Years' War	
1649–1653	• Following the Treaty of Westphalia and the partial re-establishment of peace abroad, civil wars collectively known as the Fronde (Catapult) of the princes	**Total:** 39000

*Kiernan (1988, 75); Chesnais (1981, 104) estimated 7000 to 8000 deaths during the 1590s. **Stone (1965, 246) reported 6000 pardons by the king from 1600–1610; Tarde (1892, 43) estimated 7000 to 8000 deaths during the period 1589-1608. ***McAleer (1988, 18) estimated an average of 500 deaths annually from 1610 to 1660. Major Truman (1884, 22) estimated that the 'dreadful mania' took 20,000 lives, "more gentle blood than thirty years of civil war", and Chesnais (1981, 103-104) reported 30000 deaths for the period 1610-1640. Considering the latter estimation, the total amounts to 43000 deaths.

Table 2. Trough periods of dueling in France

Trough period	Political situation
1618–1621	• Resurgence of politico-religious conflict in Europe
1637–1649	• France's open participation in the general European conflict

[12] Cromwell banned the duel in 1654. In the United States, the War of Independence stimulated the practice of dueling, but "the Civil War killed the duel" (Wells, 2001, 1838).

Thus, the emergence of the duel as a social institution was related to a transitional period during which the economic and independent military power of the aristocracy was in decline, and while the nascent bourgeoisie was not strong enough to act independently from the monarchy. The growing monopoly of the central state over violence was still insufficient to warrant the rule of law, so the duel served as an intermediary step between anarchy and order during a time of contradictory orders.

How can the emergence of dueling as a social institution be theoretically explained? What are the sources of its particular intensity and lethality during the sixteenth and seventeenth centuries? Was dueling welfare-enhancing or welfare-degrading?

III. Theoretical framework: cognitive version of identity economics

Our theoretical framework in analyzing dueling is identity economics. Since the pioneering works of Akerlof and Kranton (2000, 2010) in new identity economics, this growing field of theoretical and empirical studies has extensively ramified (Hill, 2007; Horst *et al.*, 2007). In this study, we will follow a cognitive version of identity economics (Bénabou and Tirole, 2007, 2012). In this version, identity is understood as 'beliefs' about one's deep values. The dynamics of beliefs is explained through the confrontation of their supply and demand. The supply side addresses the cognitive issues and the demand side pertains to individuals' preferences. We first identify the supply side and the factors that are relevant in determining the level of supply. We then disentangle different components of the demand side. Finally, we discuss the welfare impact of an increase in identity investment in the presence of two different types of demand.

III.1 Supply of beliefs

The supply side captures the investments in identity or in beliefs. Two general types of identity should be distinguished: i) identity with immutable traits such as race or gender; and ii) malleable identity such as religion. Throughout the sixteenth to eighteenth centuries, honor was a 'limited access' intangible asset that belonged to the aristocracy. While the aristocratic identity is not as immutable as gender, its caste and rank privileges constitute strong distinctive traits. However, the aristocracy comprised upper and lower levels; and the

‘aristocratic’ identity of the lower nobility was not as ‘rigid’ as the upper nobility. Moreover, as described in the preceding section, by the end of the sixteenth century, the whole aristocracy experienced a weakening economic and political position that ushered in a period of crisis for this social class. The ‘identity’ of the aristocracy became more ‘malleable’.

But what do we mean by ‘investment’ in identity? In the cognitive version of identity economics, the investment in identity refers to imperfect memory or awareness about one’s self. When the identity is more ‘malleable’, and the individual is unsure of her/his own deep preferences, moral standards, strength of faith, commitment to culture or social group, an investment is warranted to improve one’s self-image by self-signals (Baumeister, 1986). The investment is thus informational. In this context, dueling can be interpreted as an investment to reconstruct the social identity of the aristocracy. As argued in the preceding section, this institution contributed to the unity of lower and upper aristocracy.

Four general relationships determine the variation of the supply side.

First, identity investments are higher whenever identity is more malleable and whenever objective information regarding the ‘self’ (self-image or self-awareness) is scarce or unsure. This explains why the lower nobility intensively participated in lethal dueling during the sixteenth and seventeenth centuries. The war of faiths accentuated this identity crisis. For instance, in France, dueling was first practiced by poor, rootless, and aggressive gentry and petty nobility, many of whom served on both sides in the Thirty Years’ War. This schism of the French population between two faiths, Catholics and Protestants (which was aggravated by civil wars), was a major reason for dueling being embraced so vigorously in France.

Second, investment efforts might be cumulative in the presence of *escalating commitments* (Staw, 1976). There are situations in which individuals with considerable amount of economic or social assets (for example, reputation, wealth, career) persist in investing more and more in them despite the fact that the marginal return no longer justifies such an investment. The explanation in terms of identity economics is that a higher level of investment raises the stakes on perceiving the asset as beneficial to one’s long term welfare, and the way to ‘demonstrate’ these perceived prospects is to maintain an ever-increasing level of investment. This ‘self-justification’ generates excessive specialization (for instance, honor versus wealth) and enhances unproductive activities. Bloody dueling among the upper aristocratic families in England, France and Germany in the seventeenth and eighteenth

centuries can be explained by escalating commitments. The aristocratic duel in France was a potlatch of destruction (Vahabi, 2011) through which the aristocracy asserted its power. “Such was the political meaning of duels: both a violent challenge to the man in power, a refusal to submit to his orders, and a refusal to take power or to participate in power. The duel is an injunction to the King to be king, and a warning to the monarch to behave like a gentleman” (Billacois, 1990, 233).

Third, identity investment is hill-shaped with regard to the strength of prior beliefs, “being highest when people are most uncertain of their long-run values: adolescents, immigrants, new converts, traditional societies faced with globalization” (Bénabou and Tirole, 2007, 2). This explains why the middle classes in France and Germany in the nineteenth century massively partook in dueling (see sections IV, V and VI).

Fourth, a particular action or investment that is meant to enhance an identity might lead to more *ambiguity* due to the social meaning that can be ascribed to the action. This relationship is still unexplored in identity economics. In the perceptual version of identity economics, an action is regarded only as a source of information. But an action can be interpreted in different ways and afford various social meanings. If the social meaning of an action promotes an identity different from the one it initially was supposed to enhance, then it can be a source of ambiguity. The duel’s embourgeoisement that will be discussed in the next sections is a case in order. We will see that different social meanings that were attached to dueling in England, France and Germany gave rise to different values in identity investment, and led to different results in enhancing social identities.

III.2 Demand of beliefs

The demand side of beliefs refers to preferences that comprise of two components: *affective* and *functional*. The affective demand concerns preferences related to mental-consumption motives and includes self-esteem and ‘anticipatory savoring’ (Elster and Lowenstein, 1992). This type of demand stems from hedonic value of self-esteem and utility from memories cherishing how generous, kind, honest or productive the person has been in the past. It also derives from ‘anticipatory savoring’ pertaining to the prospect of pleasure or pain that ensues from one’s present economic and social assets. The demand for dueling throughout the sixteenth to eighteenth centuries was *affective*. It could reassure the lower and higher nobility of their self-esteem and reinvigorate their reminiscences about their honorable status beyond

any law. Such a reassurance was particularly demanded in a period of crisis in which the privileged position of the aristocracy was threatened by the ascendancy of the monarch and merchants.

A strong sense of 'self' is a source of self-discipline, consistent choices and perseverance in pursuing one's objectives. The *functional* or *instrumental* demand is defined by this requirement of self-control to mobilize energy and resist any temptations to defect. In certain cases, identity and efforts are complements. Status-seeking, wealth accumulation and other entrepreneurial behaviors are examples of such complementarities. The duel's embourgeoisement in France during the second half of the nineteenth century and the student dueling in Germany from the end of the nineteenth century till the fifties in the twentieth century are salient illustrations of *functional* demand. As will be shown in the following sections, dueling was a source of reputation for French journalists and politicians; and a membership fee for German students to join the club of privileged 'cultivated gentlemen'.

III.3 Welfare results of an increase in identity investment

In studying the impact of identity investments on demand, we assume the absence of any externality related to identity. We relax this assumption in sections V and VI to understand the identity choice and provide a theoretical explanation for duel's embourgeoisement.

The cognitive version of identity economics has shown that the welfare result of an increase in identity investment (supply of beliefs) hinges upon the type of demand. In case of *affective* demand, an increase in identity investment is welfare decreasing; whereas in case of *functional* demand, the effect is welfare enhancing.

In the first case, "identity investments always reduce expected welfare, being *in fine* a form of wasteful signaling" (Bénabou and Tirole, 2007, 2). Consequently, in the presence of *affective* demand, the more identity is malleable, the more identity investment would result in decreasing the welfare. Moreover, the escalating-commitment mechanism might worsen the welfare outcome. In fact, this result explains why the frequent lethal dueling among upper and lower nobility in the sixteenth and seventeenth centuries was welfare-decreasing (see Table 1).

In the second case, namely in the presence of *functional* demand, "more malleable beliefs and the resulting ability to shape them through actions can (under specific conditions) raise *ex*

ante welfare, by improving the individual's capacity to resist temptations and make consistent choices." (Bénabou and Tirole, 2007, Ibid.). This result explains the welfare-enhancing of dueling in the second half of the nineteenth century in France. This non-lethal middle-class dueling that drastically augmented in the 80s and 90s (see section V and VI, Tables 6, 7, 8) was a source of career promotion.

IV. Duel's embourgeoisement

Dueling as a social institution was a French fashion imported into England and Germany. In England, dueling first began in 1590 and ended in 1852[13], whereas in France it continued until the First World War, and until the end of the Second World War in Germany. An earlier rise of the industrial bourgeoisie and entry into world trade was linked to an earlier demise of dueling. England was the birthplace of the industrial revolution and had the shortest period of dueling, whereas Germany experienced late industrialization and the longest period of dueling; France was an intermediary case.[14] The persistence of this social institution appears to be inversely related to the economic development of capitalism.

This observation might be more than a simple correlation. Utilitarian thinkers, the result of eighteenth-century enlightenment, never ceased to oppose dueling, because the 'code of honor' does not involve the 'blood cost' (Bacon and Spedding, 1868, 411). In England, blood was seen as money and could not be shed without a rational calculation of costs and benefits. Why did the bourgeoisie in France and Germany not follow the same rational thought processes?

IV.1 Duel's embourgeoisement: a controversial issue

Dueling continued longer in France and Germany because of what certain historians have named "duel's embourgeoisement". The term was initially coined by Weberian Frevert (1995)[15] to characterize the social nature of the duel for honor in Germany as a "middle-class" institution during the nineteenth century. The term was also used by Nye (1993, 133) to describe the duel's status in nineteenth century France.

Frevert formulated the concept of duel's embourgeoisement against Marxist Kiernan who defended the thesis that the European duel in modern times was the last stronghold of aristocratic privileges against the invasion of mass industrialized society represented by an

[13] The last publicly recorded duel in England was fought over an election dispute in 1852 (Kiernan, 1988, 218). *Chamber's Encyclopaedia* in 1860 reported that "the practice has fallen into disrupture by the gradual operation of public opinion, and in this country it may probably now be regarded as finally abolished" (Vol. 3, 692). In 1877, the *Encyclopaedia Britannica* described the duel as "obsolete in England" (Vol. 7, 511-515).

[14] Criminal statistics from the German Reich reveal that from 1882 to 1912, 2,111 prosecutions were initiated against duelists and until 1936, a total of 4,222 people were convicted for dueling offences (Frevert, 1995, 6). According to McAleer (1994, 23), Germany had a lower dueling rate than France but a higher rate and an absolute number of fatalities.

[15] Frevert's professorial dissertation on dueling was submitted for publication in 1989, published in Berlin in 1991 and translated in English by Anthony Williams in 1995. We refer to this English translation.

ascending middle class. He labeled dueling in the nineteenth century as "the phantom virtue of a bygone era" (Kiernan, 1988, 274). The focus of debate was about the social nature of dueling during its evolution in the nineteenth century, particularly in the second half of this century. Frevert questioned Kiernan's thesis by raising a few preliminary questions: who did duel with whom? Why? And to what end? Did the social strata, which supported dueling, change during the processes of social change? Which institutions, political parties or groups supported dueling and which ones endeavored to restrict or forbid it? According to her, the central question of whether or not the duel of honor in the nineteenth century was merely a relic of the feudal era, or was a middle-class institution could not be answered without tackling these preliminary issues.

By reminding the large numbers of middle-class duelists and advocates of dueling such as Max Weber, Heinrich Simon, Heinrich Heine, and Ferdinand Lassalle[16], Frevert asks whether it can be assumed that there must have been strong tendencies on the part of the German middle class to incorporate dueling, originally the privilege of the aristocracy, into their own way of life. She doubts the validity of such an assumption in view of the proven anti-aristocratic stance adopted by these men: "it is at least doubtful whether it is possible to interpret this fact as a drive towards feudalization on the part of the middle class" (Frevert, 1995, 7). Accordingly, she suggests the concept of "duel's *embourgeoisement*" instead of the "feudalization of German's bourgeoisie"[17]. Blackbourn (1991, 14) also advocates Frevert's thesis by acknowledging that she "shows that those German bourgeois who engaged in duels were not simply imitating aristocratic norms; the meaning of the duel for middle class Germans was shaped by the place it occupied within a specifically bourgeois code of honour."

[16] Could we add Karl Marx's name to this list? According to Kiernan's account of Marx's position on dueling, one cannot totally exclude him: "Intrinsically, Marx went on, the duel could not be called simply either good or bad. 'There is no doubt that the duel is irrational and the relic of a past age of culture.' On the other hand, because of the one-sidedness of bourgeois life (he must have meant its prostration before what could be measured in pounds, shillings, and pence) 'certain individualistic feudal forms assert their rights in opposition to it'. Thus the duel 'as an exceptional *emergency resort* may be adopted in exceptional circumstances.'" (Kiernan, 1988, 279). Interestingly enough, the father of French rationalism, René Descartes, fought a duel for the love of Madame de Rozay around the age of thirty, when he was writing his *Regulae*. He also authored a book on the *Art of Fencing* (Billacois, 1990, 113). Other eminent French figures can be added to the list of duelers during the second empire: Lamartine, Louis Blanc, Ledru-Rollin, Proudhon, Victor Hugo, Alexandre Dumas, and many others. Similarly, in the Third Republic, Léon Gambetta, Boulanger, Jules Ferry, Aristide Briand, Marcel Proust, Jean Jaurès, Léon Blum were among the duellers (for a detailed list of French duellers, see Jeanneny, 2004).

[17] For a detailed analysis of the concept, see Kocka (1993).

In reviewing the debate Frevert versus Kiernan, McAleer first notes that the latter fails to credit "the extent socially to which bourgeois participation in the Wilhelmine duel kept it flourishing until very late" (1994, 7). In fact, at the end of the nineteenth century, "the Germans were Europe's most tenacious and serious duelists - serious because the most striking aspect of the German duel was its deadliness. This is what makes the German duel so fascinating, compelling the historian to ask why it endured into the twentieth century with such persistence." (McAleer, 1994, 3).

Despite his critical stand towards Kiernan, McAleer does not share Frevert's thesis regarding the *embourgeoisement* of the duel. In his viewpoint, the duel was innately antithetical to "classical liberalism with its cultural commitment to rational moral law and social justice" (McAleer, 1994, 197). He rather prefers to describe the adherence of bourgeoisie to the duel as a process of "feudalization" or a deficit of "bourgeoisness" in the German middle classes.

The problem with McAleer's contention is that he compares the *real* process of embourgeoisement with its *ideal-typical* expression, namely classical liberalism. In reality, middle classes are composed of individuals who do not perceive institutions in terms of structuralist aggregate divisions such as "bourgeois" versus "feudal". They do not necessarily adopt or reject an institution because of its conformity with classical liberalism or any other specific ideology. They behave in accordance with the way dueling is socially perceived as an identity investment. All depends on the social meaning of dueling. If dueling is regarded as the only means to demonstrate one's 'honor', then one incurs the costs of such an investment whatever the verdict of classical liberalism or socialism might be. Blackbourn stresses that in the bourgeois-aristocratic debate, "what matters is the terms on which this symbiosis of old and new took place" (1987, 73). In our viewpoint, Blackbourn's structuralist interpretation misses the point that an institution is not a rigid, indivisible macro entity, reducible to aggregate divisions of "bourgeois" versus "feudal". It is always a *combination* of different formal and informal, macro and micro ingredients, since it is primarily a shared mental representation, a common belief system. "Shared mental models reflecting a common belief system will translate into a set of institutions broadly conceived to be legitimate." (North, 2005, 104). This explains why the change of an institution usually starts by ascribing a new *social meaning* to it.

IV.2 Dueling and its different social meanings

The duel for honor has many aspects that can be decomposed and reconstructed in various forms of mental representations. In this way, the duel as an initially aristocratic institution can acquire different social meanings through its historical evolution. In this paper, we distinguish three different social meanings of dueling that explain its diverse path-dependent trajectories. It was an *undesired anarchy* in England, a *desired anarchy* in France and a *military order* in Germany.

IV.2.1 Undesired anarchy

In England, in the eyes of the Crown and nobility, dueling represented *anarchy* and an infringement on the hierarchy of rank. “When Gervase Markham gave Thomas Lord Darcy the lie, he was sued in Star Chamber, and Bacon in his speech for the prosecution argued that the discrepancy of rank aggravated the offence.” (Stone, 1965, 249).

The Crown was not alone in viewing dueling as a form of anarchy; the revolutionaries, Cromwell and his army, shared this view because dueling was against the law and the state. Since the adoption of the Magna Carta, collective action of the English ruling classes was instituted in the name of law. Magistrates and laws were central to English political thought from the Tudors onwards. The state was so distinct from the holders of power that Charles I could be tried and condemned for High Treason. The King was perceived (by himself and others) more as a magistrate than as the first among gentlemen, which explains why the revolutionaries justified their insurrection in the name of law. “In England, where Puritanism, capitalism, free enterprise and freedom of thought were important in a society which was otherwise very hierarchical, only isolated and more or less anti-social individuals felt the need to fight duels. The English revolutionaries were not duelists because duelists are rebels” (Billacois, 1990, 32).

IV.2.2 Desired anarchy

France never had an equivalent to the English Magna Carta, and the King did not simply represent the state and laws. Louis XIV’s famous statement “L’Etat, c’est moi” (I am the state), was the motto of the French king; he was the gentleman among gentlemen or the strongest predator among predators. After the second half of the sixteenth century, royal authority was eclipsed in France with the last of the Valois, the contested legitimacy of the

House of Bourbon, and the two minorities of Louis XIII and Louis XIV. The weakened power of the sovereignty enabled the nobility to implement its own justice while remaining nostalgic about a unique and unanimously acknowledged royal authority. Aristocracy and monarchy were fundamentally opposite accomplices in a coherent political system. According to Montesquieu, "The fundamental maxim is: No monarch, no nobility; no nobility, no monarch" ([1748] 1802, Book II). This delicate balance could allow the monarch to become a despot and the nobility to convert into oligarchy.

In this sense, after the end of the sixteenth century, "the dominant view in France was one which saw the duel above all as a rebellion against the social order" (Billacois, op.cit., 93). It was praised in France for the same reason that it was hated in England: in France, the duel was a true leveler, a libertine act, a *desired anarchy*, and it blurred three different types of distinctions: 1) those between the king and aristocrats; 2) those between gentry and nobility; and finally 3) those between aristocracy and bourgeoisie.

As noted earlier, Nye (1993) describes the French dueling in the second half of the nineteenth century as *embourgeoisement* of the duel. How does he defend his thesis?

"Fencing and the duel served to dramatize and symbolically represent the principal ideological components of republic ideology – individual liberty and equality – and therefore helped universalize and popularize the civic value system of the Third Republic. In principle, any man, no matter what his origins, could cultivate the art of fencing and engage in duels because the new regime recognized all men as free agents responsible for their actions. On the other hand, fencing and the duel helped promote equality...A world that recognized, at least in theory, no social boundaries in an activity once reserved for a narrower elite was a male social universe of perfect individualism and equality." (1993, 167). The duel for honor is thus not necessarily a relic of aristocratic privileges and irreconcilable with 'classical liberalism'. It can be reinterpreted as an anarchist, individualistic act of liberty and equality in conformity with republican values[18]. In fact, the evolutionary potential of an institution is conditioned not only by its initial conditions but also by the way it is represented in public opinion, beliefs, and values. Accordingly, the evolution of an institution depends on the new social meaning that can be ascribed to it.

[18] McAleer acknowledges that the French duel of the end of the century was a case of duel's embourgeoisement. Nevertheless, he insists that this did not happen in Germany (1994, 207).

IV.2.3 Military order

In contrast to France, the duel was neither a leveler nor a rebellion against order in Germany. It was a source of *military order*, hierarchy, and the caste system. Dueling for the honor of officers was a moral *duty* rather than an act of heroic voluntarism, which explains why the code of honor was not just a custom or a social value, but an obligation that was systematically enforced by the military jurisdiction.

From its inception in the last third of the sixteenth century, the duel was regarded as part of 'caste honor' (*standesehre*) among *satisfaktionsfähig*: aristocrats and officers, state officials, and students. Friedrich Wilhelm I of Prussia, the so-called 'Soldier-King' (1713–1740) adumbrated the fundamental link between dueling and militarism, and McAleer noted, "Duels were undertaken out of a feeling of co-responsibility for the collective reputation of Germany's social elite, out of a sort of tribal egotism, and not from a selfish amour proper" (1994, 35).

A double standard between 'military honor' and 'civilian honor' was instituted after the Prussian Law Code of 1794: a duel could only exist among officers and noblemen; armed clashes among other civilians, including the bourgeoisie, were handled by criminal law. Civilians were thus denied treatment under the dueling statutes. In the 1820s and 1830s, the German Bürger achieved the right to duel, and the switch from swords to pistols facilitated their participation. As in France, the duel became bourgeois in Germany, but the army, the one undeniably non liberal, non bourgeois institution in Germany, remained the duel's chief procurator[19]. The German army permeated civilian life in a multitude of ways and on a large scale; Frevert coined the term 'social militarization' to describe this process (1995, 36). Dueling blossomed in Germany especially from 1870–1914; *social militarization* thus led to the longest continuation of dueling in Germany, compared with England and France.

The double standard between civilian and military honor was maintained until the end of the nineteenth century. Max Weber alluded to this double standard when he wrote about contradictory orders.

[19] As long as the officer corps had been recruited exclusively from the aristocracy, its honor had been aristocratic. But this altered with the growing recruitment of the officers from middle classes. "By 1861, nearly 20 percent of higher-ranking German army officers were bourgeois (…). By the eve of the First World War, the proportions had shifted much further in favour of the bourgeoisie. By then, as many as 48 percent of Prussian generals and colonels were middle class, while three-quarters of the majors and first and second lieutenants were of bourgeois origin." (Frevert, 1991, 275).

As discussed earlier, dueling as identity investment might have different values according to its diverse *social meanings*. This observation is extremely important in understanding the historical evolution as a gradual change of institutions by ascribing a new *social meaning* to them that contributes to the formation of a new identity despite the persistence of its traditional form. Norbert Elias was among the first social thinkers who noticed this point: "The terms gradually die when the functions and experiences in the actual life of society cease to be bound up with them. At times, too, they only sleep, or sleep in certain aspects, and acquire a new existential value from a new social situation" (2000, 8-9). From time to time, competing or contradictory identities might be partners and coevolve in a process of incremental change resulting in a sudden punctuated equilibrium.

V. Dueling and identity choice: supply side

In this section, we try to provide a theoretical explanation of duel's embourgeoisement in terms of identity choice. In section III, we assumed the absence of externalities for identity. In this section, we start by relaxing this assumption.

As Akerlof and Kranton (2000) correctly argued, any action initiated by a person belonging to a social group can have an externality for all others. For example, a dress is a symbol of femininity. Now, if a man puts on a dress, his action might be interpreted as a threat to the male identity. In this case, his action incurs a negative externality for other men identifying themselves with this male code of dressing. The identity's externality becomes decisive whenever one can choose her/his identity. The choice of an identity largely depends on whether the identity has a positive or negative externality. A positive externality leads to a larger acceptance of the identity by newcomers which in turn might alter the identity due to the extension of the members of the original social group.

The identity choice is particularly important in the case of duel's embourgeoisement. Identity economics can explain the reasons of duel's embourgeoisement in France and Germany in contrast to England by underlining the externality effect of dueling. Dueling provided a *positive* externality in France and Germany during the nineteenth century for two different reasons. It was welcomed in France as *desired anarchy*, and in Germany as *military order*. In both countries, the aristocracy *adapted* to the idea of middle-class dueling, and the middle classes adopted (*imitated*) dueling and then *invented* the nonlethal form of dueling. By contrast, the duel's embourgeoisement never occurred in England and suddenly ended in the

end of the first half of the nineteenth century, since it was perceived as *undesired anarchy*. The English aristocracy did not adapt to the idea of duel's embourgeoisement, and the English bourgeoisie had a stronger (less malleable) identity than middle classes in the late-industrializing countries such as France or Germany. The imitable (flexible) or rigid character of dueling derives from the type of externality (positive or negative) related to dueling as identity investment.

In an identity economics perspective, the whole issue boils down to identity choice. As we showed earlier, this choice largely depends on the supply and demand sides of beliefs and the *positive* or *negative* externality related to identity.

On the *supply side*, the identity choice depends on the degree of malleability of the aristocracy's identity and that of middle classes.

V.1 Malleability of the aristocracy's identity

The question is the readiness of the nobility to adapt or resist to assimilate commoners in its 'gentleman pact'. In England, the aristocracy refused such an adaptation, while the German and French aristocracy adapted to the idea of middle-class dueling.

V.1.1 English aristocracy

The duel was a rigid, non-imitable tradition in England, since the aristocracy could not *adapt* to the idea that this institution was *adopted* by commoners. A subtle allusion to this refusal might be seen in C.R. Leslie's well-known painting of Monsieur Jourdain fencing with his maid-servant. As Kiernan correctly pointed: "It may be guessed that some were turning away from dueling because in England; where so many were eligible, it was in danger of becoming vulgarly popular, as it already was in America where everyone was eligible." (1988, 213). Extending dueling to other social groups would be synonymous with transforming it to a "vulgarly popular" practice in the eyes of English aristocracy and hence discreditable. It is not then surprising that the author of the *British Code of Duel* recommended in 1824 that, before a duel was arranged, it should be established that "both parties belonged to the class of gentlemen" (Frevert, 1993, 221).

V.1.2 French aristocracy

Contrarily to the English aristocracy, the French nobility adapted to the duel's embourgeoisement during the Restoration period. In contrast to the *British Code of Duel*, the publication of a new code of dueling in 1836 by the Comte de Chatauvillard and countersigned by men representing France's most illustrious families, including eleven peers of France and the cream of military elite (Jeanneney, 2004, 78) facilitated the duel's embourgeoisement. The widespread acceptance of this new code, the first of its kind since the seventeenth century, contributed largely to the predominance of a nonlethal type of dueling that is known as the "first blood duel" (*duel au premier sang*). As Chatauvillard put it in the *Essai sur le duel*, "in the present state of our manners, an ordinary duel (*au premier sang*) suffices the noble need to expunge an offense." (1836, 122). The author claimed that he was publishing this code because he regarded it as his "humanitarian duty to modernize and regularize a practice that was a necessary and inevitable feature of civilized life" (Nye, 1993, 137). It should be noted that first-blood duels were necessarily sword duels. While pistol duels could only be terminated by death or by the exchange of agreed-upon number of shots, sword duel (either by épée or sabre) could be stopped when an injury produced a flow of blood[20]. The sabre was more practiced by army officers and required a certain level of skill, whereas épée was more accessible to commoners (Jeanneney, 2004, 35). That is why the épée, which was probably the least favoured of the three sanctioned weapons in the period before 1848, rose to prominence as the proper weapon for settling disputes of honor in the Third Republic (Guillet, 2008, 202; Reddy, 1997, 257). Table 3 summarizes the percentage of using each of the three major dueling weapons during the 1880s.

Table 3. Dueling instruments in 1880s

Epée	Sabre	Pistol*
89%	1%	10%

Source: the data are based on Nye, 1993, 186.
*All pistol duels were not murderous, particularly because they were often fought at a greater and safer distance during this period.

[20] The choice of pistol versus épée was not only a technical matter, but also a philosophical issue on which two different schools opposed. One recommended pistol, since its outcome depended on mere 'luck'; and the other, épée, because of its insistence on 'bravery' (Jeanneney, 2004, 34-39). Guy de Maupassant who considered the duel as "a stupid necessity imposed by human foolishness" argued that only pistol duel is the consistent type of dueling (1883, v-viii). German gentlemen had their lethal pistol barrier duel and German student duel involved rapiers or, in more serious cases, sabres and padding that produced facial scars (Frevert, 1991, 277).

The predominance of first-blood duels is clearly reflected in the rise of épée dueling and that explains much of fencing's popularity: "Politicians, journalists, writers and businessmen - men in high risk categories- frequented the fencing halls to learn basic technique and stay fit" (Nye, 1990, 371). Comte de Chatauvillard's code of dueling or the French aristocracy's adaptation to the idea of modernizing the duel was a major source of duel's embourgeoisement in France[21].

V.1.3 German aristocracy

In contrast to England, the German aristocracy welcomed the extension of dueling to the *Bürgertum*[22] (the German middle class). The German legislative commission regarding the "Law on Dueling" promulgated under the King Ludwig I in 1826 drafted a list of those categories of men eligible to fight a duel for honor. These included "not only circuit judges, assistant judges, and middle-ranking state officials but also doctors, surgeons, merchants, and artists" (Frevert, 1991, 273).

The *satisfaction* of honor was regarded as higher than 'legal satisfaction' and was consented only to social groups that were among *satisfaktionsfähig*, i.e. persons worthy of carrying swords. According to August Bebel's estimation in the end of the nineteenth century, these social groups constituted 5% of the German (male) population (McAleer, 1994, 220). They were composed of the landed aristocracy, officers, well-to-do professionals from the upper-middle class, and students. They corresponded to "the estimated percentage of the population included in the first voting bracket of the Prussian three-class suffrage system" (op.cit., 35).

V. 2 Malleability of the middle classes' identity

The early or late industrializing determines whether the middle classes' identity is shaped in direct opposition to the aristocracy, or in alliance with them. This difference also explains the discrepancy between *economic* and *political* power of the middle classes particularly in the second half of the nineteenth century.

[21] It is noteworthy that when Chatauvillard's code was translated four years later (1840) into English, the Britannic press despised it as an evidence of the blossoming of a 'barbarous' practice (Kiernan, 1988, 262).

[22] Frevert (1993) notes that the German middle class with its multitude of career and property-owning groups cannot be adequately described by the Marxian or Weberian model of class. She suggests the use of *non-economic* criteria to characterize them. "In the attempt to uncover the inner cohesion and external boundaries of the *Bürgertum* by means of analysis of its culture or lifestyle, its notion of honor and honorable behavior provide essential points." (1993, 209-210).

V.2.1 English bourgeoisie

The industrial revolution and the early rise of the industrial bourgeoisie in England gave this class a far more intransigent faith in its own ways and ideas than the previous capitalist class, mercantile or financial. Earlier versions of bourgeoisie found it natural to gravitate toward aristocracy, but later versions had a collective identity represented by the liberalism of the Manchester school[23] and the anti-corn law movement led by Cobden and Bright. Early industrialization saved the English industrial bourgeoisie from subsequent workers' movements because the bourgeoisie did not need to unite with the aristocracy against the working class. At the heyday of industrial capitalism, the bourgeoisie allied with the working class against the landed aristocracy. In England, the bourgeoisie could only get its real representative, Bright, into the government by an extension of the franchise. Parallel with its increasing economic power, English bourgeoisie gained increasing political power. It indirectly shared political power with the aristocracy, through its influence on the Crown and its direct participation in the Parliament, but the capital importance of law and magistrates and the strength of parliamentary institutions helped control the army's political influence and its rent-seeking activity. Consequently, the rising bourgeoisie was not threatened with exclusion from power.

The army, the second chief stronghold of dueling, was never overinflated in England despite its great prestige after its victories over Napoleon. In fact, the army's impact on society was much weaker than in Germany, especially in Prussia (Frevert, 1993, 224). Moreover, in England, the second influential anti-dueling association was founded by the active participation of 35 generals and admirals in 1843 (Baldick, 1965, 113).

V.2.2 French bourgeoisie

In contrast to the English bourgeoisie, the French bourgeoisie was not united under its own banner and did not have a real identity: it needed to be united by Bonaparte and his army (Hobsbawm, 1962). Although the French Revolution revealed the political might of the rising bourgeoisie, this group had a weaker economic position than its English peers (Kiernan, 1988, 198-199). After Thermidor in July 1794, some French bourgeoisie began to succumb to aristocratic values: "Thermidor had shown the French bourgeoisie, or a part of it, ready as in

[23] Andrew (1980) argues that the replacement of the 'code of honor' by a 'code of Christian commerce' in the middle of the nineteenth century was the outcome of a growing self-confidence and self-awareness of the English middle classes.

former days to play the sedulous ape, and take over some of its forerunner's habits" (Kiernan, 1988, 157). With the beginning of the Restoration, the aristocracy revived its customs, notably the duel, to reassert itself, and the edict of 8 April 1819 contributed to its intensification. This edict argued for the immunity of duelers by alluding to the code of 1810. The result was an increasing number of deaths in dueling between 1827 and 1834 (see table 4).

Table 4. Number of deaths in dueling from 1827 until 1843

Year of dueling	Number of deaths
1827	19
1828	29
1829	13
1830	20
1831	25
1832	**28 (critical period)**
1833	**32 (critical period)**
1834	**23 (critical period)**
1839	6
1840	3
1841	6
1842	7
1843	6

Source: statistics of the French Ministry of Justice, cited in Tarde, 1892, 51.

As the table indicates, the highest numbers of deaths occurred between 1832-1834. In July 1836, Louis Philippe's chief prosecutor, André-Marie Dupin announced that his office would treat the duel in the future as a species of attempted murder. The edict of 22 June 1837 dealt with civilian dueling according to the criminal law. After this decision, dueling mortalities reduced drastically: from 1839 to 1843, the average number of deaths was reduced to 5.6; whereas the average for the period of 1827 to 1834 was 23.6. However, Dupin's effort to eliminate the duel altogether "merely succeeded in encouraging its less murderous forms: swords began to replace firearms and pistol duels were fought at a greater (and safer) distance" (Nye, 1993, 135).

In fact, a pro-dueling article noted in 1845 that between 1837 and 1842, the assizes courts heard cases involving 34 duels and the juries acquitted all of them. The new enthusiasm for dueling among middle classes did not subside; it only gave a nonlethal character to dueling. The new dueling code of Chatauvillard in 1836 acknowledged the French aristocracy's

adaptation to this growing tendency of the French bourgeoisie to imitate its 'code of honor' by introducing the 'first-blood' duel. But again what was the source of this desire to imitate the aristocracy?

The financial and mercantile bourgeoisie always preferred to ally with the aristocracy and the crown, whereas the lower and middle classes were republicans. The civil wars in 1848, notably the Parisian workers' revolt in June 1848, menaced the bourgeoisie. The bourgeoisie was so weakened and fearful by this point that the coup d'état of Louis Napoleon in December 1851 met no resistance. From that time on, French bourgeoisie supported Bonaparte and voluntarily declined political power to enable Bonaparte and his army to protect it against the threat of working class revolution (Marx, [1852] 1955).

During modern Bonapartism, the aristocratic custom of dueling was rehabilitated and supported, particularly by the army caste and the new middle classes including journalists, politicians, lawyers, and students, but it became nonlethal and carried out through fencing. "The passion for dueling increased in France after 1850" (Nye, 1993, 135). Steinmetz (1868) reported that almost every regiment in the garrison of Paris had a professed duelist, officer, or private. Bonapartism revived the militaristic spirit of the First Empire and strengthened it through colonial campaigning (Kiernan, 1988, 265). It created a predatory state with weak parliamentary institutions and a strong rent-seeking position for the army[24]. But the army was not the only stronghold of dueling after the French defeat in the war with Prussia in 1870.

V.2.3 German middle classes

From 1848 to 1866, Germany experienced vast growth in industry, commerce, railways, telegraphs, and ocean steamship navigation. However, this industrialization lagged behind that of England and even France, and vestiges of feudalism were widespread in this fragmented country. The German bourgeoisie was unfortunate because it emerged while its peers in other West European countries were confronting working class uprisings. The June 1848 battle in Paris frightened German Bürger more than the growing workers' and socialist movements in Germany. During the 1848–1849 revolutions, National-Liberals dominated parliaments in Frankfurt and Berlin; they were so fearful that they were incapable of taking

[24] Marx particularly underlines the privileged position of the "Society of December 10" which was the private army of Bonaparte (Marx, [1852] 1955, chapter V).

any independent initiatives. The mass of the bourgeoisie did not want to rule and found a savior in the Prussian army.

The unification of Germany under Prussia started in 1866 and ended with the victory of Bismarck and its Junker military caste over France in the 1870–71 war. The Paris Commune and the growing socialist movement in Germany convinced the bourgeoisie to cede all *political* power to the Junker army and retain its increasing *economic* domination. The government and bourgeoisie made a tacit deal. On one hand, the government had to unify and reform the country at a snail's pace by removing feudal vestiges, establishing uniform coinage, weights, and measures, freedom of occupation, and a free labor power. On the other hand, the German bourgeoisie had to leave all real political power in the hands of Junker state, and to vote for taxes, loans, and soldiers, thereby maintaining its honorific status. This meant the acceptance of the Prussian army as a state within the state. The German bourgeoisie bought its gradual emancipation from the remnants of feudalism at the price of immediate renunciation of its own political power. In Germany, this tradeoff allowed contradictory orders (and dueling as its symbol) to continue for a long time. Dueling was completely inefficient in Germany because it consolidated the rent-seeking position of the military caste and contributed to the militarization of society.

The strong Prussian-German military and bureaucratic tradition hindered the parliamentarization of the constitutional system and prevented a full embourgeoisement of the culture. Because dueling symbolized Prussian order, the opposition over civilian versus military honor became polarized[25]. This opposition lasted until the end of fascism.[26]

Table 5 recapitulates all the major factors involving in the formation of supply side of identity investment.

[25] August Bebel and other leaders of the German Social-Democratic party were actively against dueling in the Reichstag at the end of the nineteenth century (McAleer, 1994, 26–35). This party, which was the strongest European Socialist party before the First World War, had an influential role in the parliament at the time, although the Reichstag had no power.

[26] Fascism resurrected dueling. Mussolini held dueling in reverence, and three years after Hitler seized power, dueling was legalized in Germany as 'the ultimate means for the defense of honor' under the supervision of special tribunals. At this point, the privilege was extended to all Germans, because as a member of *Herrenvolk*, every German was 'noble' (Kiernan, 1988, 53–54). According to Coombs (1997), Hitler was personally against the practice.

Table 5. Factors contributing to supply side of dueling in England, France, and Germany

Country	Type of state	Place of army and parliament	Early or late industrialization	Conflict between industrial bourgeoisie and working class	Honor as a social norm	Historical duration of the duel of honor	Duel of honor as orderly anarchy
England	Semi-constitutional monarchy (state of law)	Balance of power between army and parliament	Early (industrial revolution)	Starting with the Luddite, and then Chartist movement in the early 1840s	Rigid (non-imitable) traditions	1590–1852	Undesired anarchy
France	Bonapartism	Strong and active army versus weak and passive parliament	Intermediary	Civil wars, workers' revolt in Paris in June 1848, Paris Commune in 1871	Flexible (imitable) traditions or invented traditions (embourgeoisement of dueling)	From the second half of the 16th century until 1918	Desired anarchy, a libertine act
Germany	Junker state	A state within the state (social militarization)	Late	Revolutions in 1848–1849; strong socialist movement at the end of the 19th century	Flexible (imitable) traditions or invented traditions (embourgeoisement of dueling)	From the second half of the 16th century till 1945	Order and especially military order

VI. Dueling and identity choice: demand side

The extent of *affective* and *functional* demand for dueling depends on the type of externality (positive or negative) of aristocratic identity. Although the direct measurement of affective and functional demand is not possible, recorded motivations for dueling, their frequency and rate of lethality cast light on the revealed preferences of duelers for identity investment. Disentangling these two components of demand, and their incidence on identity choice might be substantiated as follows.

VI.1 Affective demand

The extent of *affective* demand can be measured by the aristocratic political and cultural influence. Such an influence gives rise to *positive* externality in choosing aristocratic identity or the values related to that identity. The economic decline of the aristocracy started long before its political demise; and its cultural dominance lasted even longer than its political might. The aristocratic cultural dominance persisted longer whenever the nobility was more influential in politics. Given the privileged position of the aristocracy among high officers, its cultural influence depended on the place of army and its relative strength compared to parliament in the state, as well as the army's role in national unification. A stronger role for army as a 'mediator' between different social groups (French case) or as a 'savior' and national unifier (German case) meant a *positive* externality for dueling. In contrast to the French and German cases, the moderate size of the army and the significant role of parliament in England drastically reduced the positive externality of dueling.

Whereas in France, the duel was plainly a civil phenomenon by the end of century, in Germany, the (regular or reserve) military officer and his uncompromising code remained its inspiration. The officer's duel was not a form of revenge, or a simple test of courage. It was a statement of principle, a "duty" and a "confession of faith" (Kitchen, 1968, 50). Dueling's motivation was thus mainly 'self-esteem' or affective and the reaffirmation of the army's privileged position as a particular caste.

Similar to France, Germany's dueling rates peaked in the 1880s and 1890s (McAleer, 1990, 321). However, several differences should be noted. First, lethality rate was far higher in Germany where one duel in five was fatal (op.cit., 453). The deadly character of dueling was attributable to the fact that three quarters of German duels were carried out with pistols at

close quarters and multiple exchanges (op.cit., 452). Second, while in France, journalistic and political duels were more prominent[27], 'gallant' duels over women's feminine virtue were dominant in Germany. One of the prominent components of affective demand for dueling was its 'manly code of honor'. Nye (1993) and Reddy (1997) provide a detailed analysis of the masculinity and male codes of honor. In fact, the German duel was not only a buttress to upper class feelings of superiority, but also "a prop for the male ego and its domineering urges" (McAleer, 1990, 8). To sum, the affective demand for dueling was stronger in Germany than in France.

VI.2 Functional demand

The extent of *functional* demand can be measured by the accessibility of dueling to commoners as a social leveler or a means to promote middle classes' careers. The specific social meaning ascribed to dueling decides its extension to commoners. In France where dueling was a 'desired anarchy' (a social leveler as well as a source of freedom or anarchistic individualism), every fencer could be considered as a gentleman. Dueling in Germany was not at all about anarchy, it represented 'order' and particularly military honor in dire contrast with civilian honor. While 'cultivated' middle classes (students and professors) could enter the gentleman pact, it was completely banned to artisans, shopkeepers or working classes[28]. In England where dueling was an 'undesired anarchy' and against the state of law, the *functional* demand for dueling was particularly narrow. This explains the sudden end of dueling in this country.

Contrarily to England, in France, the military defeat from Prussians revived a strong sense of patriotism and the search for 'honor'. The need to build a 'reputation capital' for politicians and journalists whose influence started to impinge on the political life in the 1880s and 1890s revived dueling as an identity investment. This new wave of dueling by fencing was more civil, nonlethal (often theatrical), and Parisian. The duel was no more aristocratic, it was only an aristocratic tradition, but adopted (imitated) and now reinvented by the French middle

[27] For further details, see section VI.2.

[28] Dueling was also banned to women in all European countries. However, female duels occurred occasionally. Tarde (1892, 42) documents such duels as an exotic phenomenon. Paradoxically, he blames women for being the source of duel's persistence, since "we always fight for the gallery and particularly for the gallery of ladies" (ibid, 78). In our opinion, women who fought duels ridiculed the convention of dueling, since "by demonstrating that women too could display the courage, coolness, and discipline necessary for fighting on the field of honor, they also destroyed the masculine aura which surrounded the practice, and undermined the clear distinction conventionally between man's honor and women's." (Frevert, 1991, 287).

classes to serve their intangible asset of the reputation capital. *Functional demand* for dueling was prominent in France. Statistics on dueling during the nineteenth century clarify this process of duel's embourgeoisement. Before introducing our data, a few remarks on available sources are warranted.

The documentation on dueling for the first half of the nineteenth century is worse than the period between 1860 and 1914. The two major sources are those of Emile Desjardin (Ferréus) and Carl A. Thimm. The first one entitled *Annuaire du duel* covers the 1880s[29]. The second major source is provided by Carl Thimm ([1896]1998)[30]. The numerous shortcomings of these data notwithstanding[31], they provide a general scheme of what we call the duel's embourgeoisement. Borrowing upon the afore-mentioned sources, I have constructed a recapitulative table (Table 6) that documents the evolution of dueling from 1819 till 1900 with respect to the frequency of duels and their lethality rate.

According to Chesnais (1981, 103), there were more than 832 deaths in the army for more than one hundred duels which occurred annually during the period 1819-1826. The number of total deaths decreased to 228 for the period of 1826-1834. It should be noted that Tarde's estimation is 189 deaths for the same period (1892, 51). The lethality rate was one third for this period. Since 1835 the average number of duels per year declined to one hundred (Nye, 1990, 371), and their lethality ratio also decreased from an initial rate of one third (33 percent) to almost 6 percent (i.e. three deaths per fifty three combats) in the 1870s (Chesnais, 1981, 109). Starting from the 1880s until the 1900s, the dueling frequency began to increase rapidly, reaching a high of 400 to 500 per year (Nye, 1990, 371). Tarde's estimate of 60 duels per year in the 1880s is far too low. According to Nye's conservative estimation, the average might have been 200 duels per year between 1875 and 1900, and as late as 1911 one could

[29] The author has dissected the Parisian press for news and collected information regarding the duels. His initial plan to publish volumes on the 1870s and 1890s never realized. Tarde (1892) relies extensively on this source. Nye (1990, 1993) also frequently quotes Ferréus, though he is more critical about the author's accuracy in narrating the data. "I have found references in the press to dozens of duels in the 1880s not mentioned in *Annuaire du duel*." (Nye, 1993, footnote 66, 283).

[30] It is an international inventory gathered from the *Times* of London covering the whole period starting from April 11, 1831 until August 29, 1895 (ibid., 291-313). The French ministry of Justice, Tarde (1892), and Chesnais (1981) afford some statistics regarding the first half of the century, while Nye (1990, 1993) has compiled a master inventory of duels between 1860 and 1914 from a number of sources including those mentioned above.

[31] Among these deficiencies, one can name the lack of the official reporting by the seconds for the first part of the nineteenth century due to the lack of mass press; the paucity of information regarding duels in provinces throughout the nineteenth century, the private and unreported character of duels; the treatment of deaths caused by duelling as homicide (*assassinat*), manslaughter (*meurtre*), or simple aggression; and finally the absence of any exhaustive research and documentation regarding duelling in general.

have found as many as 5 duels occurring in Paris alone during a 20 days period (Nye, 1993, 185).

Table 6. The evolution of dueling in France from 1819 to 1914

Period	1819-1826	1827-1834	1835-1880	1880-1914
Frequency per year	>100	>100	100 on average	200 on average
Number and/or percentage of deaths	832	228 (33%)	≥6% to ≤33%	< 2%

While the dueling frequency augmented rapidly after 1880s, its lethality rate drastically decreased to less than two percent for the period of 1880-1914. This estimation is derived from Tarde's study (1892, 52) on the 1880s based on Ferréus's *Annuaire du duel* (see Table 7).

As this table indicates, only 431 duels out of a total of 598 were fought, and the rest (almost a third) were 'arranged' and 'shunned' thanks to the active role of conscientious seconds in conformity with the rules of Chatauvillard's code of dueling. The total number of 16 deaths over 431 duels that were consummated in combats amounted to one death for 26 combats.

Table 7. Dueling frequency and its lethality in 1880s

Duels consummated in combats	Arranged duels	Total number of duels	Total number of deaths
431	167	598	16

Two caveats are warranted here. First, Ferréus's total number of combats does not include a dozen of duels in the 1880s reported in the daily French journal, *Le petit journal* (3 May 1888); second, military duels are not accounted in Tarde (1892, 52). The Ferréus's *Annuaire* found only 9 duels where both duelers were in active military service in the 1880s. It is more reasonable to suspect that the frequency of dueling in the privacy of the barracks was higher, but "the military observers in the period thought that dueling in the corps was in precipitous decline" (Nye, 1993, 186). In fact, the low percentage of the pistol and saber duels confirm Nye's claim.

The fact that dueling frequency doubled since 1880s, and nonlethal duels by épée became predominant indicate the prominence of civilian duels. Three major types of civilian dueling might be distinguished in this period: 1) journalistic; 2) political; 3) private duels.

The journalistic and political duels were both public duels and there was considerable overlap between them. The journalistic duel was related to the rise of the mass press in the 1860s and the publication of papers staining the reputation of public figures by ambitious young journalists who were often less distinguished men of letters. In the 1880s, editors and managers urged the journalists to sign their papers and take more responsibility regarding the content of their accusations. This accentuated the personal flavor of contentious matters leading to an abundant number of journalistic duels (Nye, 1993, 187-190; Reddy, 1997, 184-227; Guillet, 2008, 250-254).

Political duels were duels over political or ideological disputes in the central or local states, in parliament, in the press, or during electoral campaigns between active public officials and politicians (Nye, 1993, 191-200; Jeanneney, 2004, 147-172; Guillet, 2008, 255-306).

Finally, private duels included what Nye (1993, 186) dubs 'futile' and 'serious' duels. The 'futile' duels were over matters related to the lack of respect and had usually a spontaneous character (Nye, 1993, 210-215). The 'serious' or 'gallant' duels touched on intimate details of private life (Nye, 1993, 200-210). Borrowing upon Ferréus's *Annuaire du duel*, 598 duels in the 1880s might be classified according to the three major categories of duels. Given that 63 duels are unspecified in *Annuaire*, Table 7 presents duels by type of category.

As the table 8 indicates the journalistic duels constitute the bulk of duels and the sum of journalistic and political duels (i.e. public duels) amount to two thirds of duels. It is noteworthy that according to the *Annuaire*, the journalistic duels were the least dangerous kind, since there were only two deaths and about a dozen serious injuries due to this type of dueling in the 1880s. Interestingly enough, four fifth of the duels took place in Paris (491 out of 598), and the rest occurred in major provinces (107 out of 598) (Tarde, 1892, 57). Dueling in countryside was almost extinct.

Table 8. Type of duels in the 1880s

Journalistic	Political	Private (futile and serious)	Unspecified
363	60	109	63

To sum up, while the aristocratic duel was potlatch destruction, dueling in the Third Republic was a phenomenon of 'civilized' society of Parisian journalists, politicians and middle classes to build up a reputation capital[32]. This new form of dueling satisfies the criteria of adaptive efficiency.

In Germany, functional demand for dueling was limited to "student sabre duels" (*Mensur*) (Frevert, op.cit., 219) that was the major form of dueling after 1897. The Mensur was less dangerous than many ordinary types of sports (McAleer, 1990, 218). Moreover, bouts were no longer primarily based on real or imagined insults but were arranged. During the Weimar Republic, Mensur was officially banished, but the situation changed with the rise of National Socialism. In 1933, the criminal law was rectified and student duels were expressly declared to be exempt from punishment. Although the Mensur was similar to French fencing, there was a major difference: German dueling could not be individualistic, it was always an expression of collective or 'caste' honor: "no German had the right to shed his blood for selfish reasons" (Frevert, 1995, 225). In December 1938, Hitler announced that he was reserving for himself the right to sanction duels between officers. Henceforth, all duels in which party members proposed to engage required Hitler's sanction.

Throughout the Weimar Republic and the Nazi era, student dueling societies continued to exercise their influence. Despite their initial prohibition by the Allied Control Council in 1945, and the declaration issued at the conference of university vice-chancellors in October 1949, these societies succeeded in persuading the Federal Court of Justice to exempt student dueling as a criminal offence (Frevert, 1995, 228-29). It was only after the reform of the German criminal law in 1969 that the dueling paragraphs from the criminal code were abrogated.

Comparing the relative weight of affective and functional demand in Germany and France, we conclude that the extent of *functional* demand in Germany was narrower than France, but the extent of *affective* demand was larger in Germany than in France. This explains why in

[32] There were epidemics of dueling during each general election and in the midst of political crises such as those provoked by the Boulanger or Dreyfus affair in the late 1890s. Given the prevalent corruption in French political life that erupted in 1892 during the great Panama Canal scandal, duels with a façade of honor were common. The duel between Clemenceau 'the Tiger' and Paul Déroulède was the most prominent one (see Kiernan, 1988, 269–270). Clemenceau achieved his title as 'the Tiger' due to his twenty duels. In fact, in the absence of a real party structure, the duels could compensate for the deficit of honor among suspected politicians. Duels among politicians to prove their honor were also prevalent in the North and South of the United States: see Williams (1980) and Wells (2001).

France, compared to Germany, dueling was more frequent but less lethal from the second half of the nineteenth century onwards. While dueling was transformed from a wealth-degrading into a wealth-enhancing institution in France, it persisted as a wealth-degrading institution in Germany.

VI.3 A rational calculated dueling

When economic performance requires new institutions that lack the necessary political support and cultural maturity, the flexibility of old ones becomes a major source of "adaptive efficiency" (North, 1990). This flexibility allows an incremental change, and an inner metamorphosis of the old institutions. The change starts by giving a new social meaning to the old institution. The duel for honor as an institution that provided a collective identity for aristocracy in crisis became a vehicle to gradually erase the difference between the nobility and the middle classes.

While the duel changed the status of middle classes, middle classes changed the nature of dueling. The duel for honor should draw a line "between those who do not count the cost and those who do, those for whom life has a price and those for whom it does not" (Billacois, 1990, 134). But fencing in the nineteenth century France clearly integrated the cost and price of life so that politicians, lawyers, journalists, and students could maximize their reputation capital as 'honorable gentlemen' without losing their limbs and life. The new 'first-blood' duel was a rational, calculated duel. This is not just an imitation or adoption of aristocratic dueling by middle classes but the *invention* of a new type of dueling: a bourgeois one. Nonlethal dueling was the fruit of duel's embourgeoisement that occurred in France through 'first blood' duels in the Third Republic (Nye, 1993; Guillet, 2007, 2008) and in Germany through the *Mensur* (Frevert, 1995). This was the demise of dueling through an evolutionary process. The result of duel's embourgeoisement as identity choice was the invention of a 'rational' or calculated dueling.

Conclusions

One of the major legal justifications of the advocates of dueling has been the lack of law or 'tribunal of honor' to satisfy issues related to the violation of 'honor' (Tarde, 1892, 87). It is true that laws against defamatory accusations and protection of one's reputation appeared at the end of the nineteenth century, but legal sanctions in terms of pecuniary fines cannot

necessarily give satisfaction to the proponents of dueling. It is argued that what is at stake in dueling is 'honor' and 'honor' is 'priceless' and 'sacred'. While a rational utilitarian culture tends to measure the value of any action or commodity in terms of costs and benefits, most societies hold certain goods as 'incommensurable'. Of course, the boundaries between the 'incommensurable' (sacred) and 'commensurable' (secular) are moving. However, in the case of 'dueling for honor', there is a clear paradox: while the 'honor' of aristocrats is regarded as 'incommensurable', the 'honor' of commoners is assumed to be 'commensurable'. How can the transgression of 'honor' be both 'sacred' and 'secular'?

The 'limited access to honor' discredits the claim to 'incommensurability' of honor. Interestingly enough, an 'open access to honor' makes it a universal or impersonal right for all citizens. But this can be assured only through the monopoly of violence by a democratic or consensual state. The question is then whether orderly anarchy or an extension of self-organizing and self-regulating collective action to violence management is always inefficient and welfare-degrading? We have no unconditional answer to this question.

Our study shows that dueling as an emerging institution was less inefficient than anarchy (private warfare among lords). However, it was a major source of elite destruction due to escalating commitment among upper aristocracy and intensive identity investment by lower aristocracy. Was it then less efficient than the monopoly of violence by a strong centralized state? The answer is again conditional on the type of authority. It was surely less efficient than the monopoly of violence by a constitutional monarchy based on a consensual state of law. The sudden demise of dueling in England might be regarded as the rise of a more efficient way of managing violence.

In France, however, dueling was a source of rebellion against an authoritarian predatory state and the development of individualism. The duel's embourgeoisement in France contributed to adaptive efficiency. It transformed honor from a 'limited access' (club good) to an 'open access' right (public good). The universal right of defending one's honor led to the enlargement of the members of the club of 'honorable men' (members of the fencing clubs) and hence to a non-lethal, rational and calculated violence. Contrarily to France, dueling in Germany contributed to the reproduction of caste privileges of the army and its rent-seeking position. In this sense, it was a major source of inefficiency.

Our study also showed that the sudden or incremental change of dueling as an institution depended on the social meaning ascribed to it in different countries. This social meaning is determined by the interaction of supply and demand of beliefs and the *positive* or *negative* externality related to identity. While the discrepancies between England on the one hand, and France and Germany, on the other hand, should be sought both in the supply and demand sides of beliefs, the divergent trajectories of France and Germany could be attributed to the relative weight of *affective* versus *functional* demand for beliefs.

Although identity economics has already shown its strong explanatory power in dealing with issues such as education, labor market, and taboos, its field of application can be extended to historical change. Such an extension warrants further exploration of the cognitive or interpretive aspects of identity investment.

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