Agency and Institutional Change: The Dissolution of the Guild System in the 18th Century Rhineland

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Abstract

Employing concepts from institutional economics and institutional organisation theory the article challenges the institutions-as-rule perspective by centring on endogenous institutional change through entrepreneurship. The empirical case is the dissolution of the guild system in 18th-century Rhineland, which is usually understood as a regime shift effect of the Napoleonic wars and the integration of the Rhineland into the French state. A close inspection of the developments in the woollen cloth industry in the Aachen region shows that the formal abolition of the guilds by the French concluded an erosion process that had already begun in the early 18th century and which had substantially undermined guild regulations. I suggest that entrepreneurship helps understand and explain this process: Institutional entrepreneurs found loopholes and bent or broke the guild regulations to the extent that they no longer harmed their expansive strategies.

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"The study of institutions is, and should remain, an empirical matter" (Sheilagh Ogilvie 2007, 679).

1. Introduction

The violent export of the French Revolution and the integration into the French state of the German territories on the left bank of the Rhine (1797/1802) completed and rendered irreversible a secular process of institutional transformation. This included the abolition of the manorial system and the economic and political self-regulation of the craft guilds in the Rhineland in the context of the French annexation (Kisch 1989; Acemoglu *et al.* 2011; Ogilvie 2014). However, already in the 17th and 18th centuries, a process of erosion and dissolution of the guild system began, which makes up the fo-

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cus of this article. The abolition of the manorial system was less significant, as most Rhenish peasants had long since become free or operated under leases (Steinbach [1925] 1967; Henn 1973; 1978; Esser 2019), which allowed for a relatively smooth implementation of the putting-out system.

By the late 17th century, Rhenish merchant-manufacturers exported fine woollen cloth, needles and cards, copper and brass goods, iron and hardware, and paper and glass produced in the towns and their hinterland to destinations all over Europe and beyond. Especially the region around Aachen - comprising the area of the later Prussian counties of Aachen, Eschweiler, Düren, Schleiden/Gemünd, Montjoie, and Eupen – had developed into an industrial region. The largest industry at the time, which covered almost the entire region, was the woollen fine-cloth industry. But the political jurisdictions and the institutional arrangements defining the rules and norms for the industry differed across towns and marketplaces. The cities of Aachen and Düren were subject to guild constitutions, while the smaller towns and marketplaces belonged to different territorial jurisdictions, mainly to the Duchy of Jülich. During the 17th and 18th centuries, cloth merchants from Aachen left the city for several reasons settling in Eupen, Montjoie, Burtscheid, and Vaals. They established an efficient putting-out system (Verlagssystem) with production based on domestic work and partial centralisation of labour in workshops. The agrarian constitution played a role in the emergence of the putting-out system in that most Rhenish peasants were "largely free of landed ties and endowed with comparatively favourable property rights" (Henn 1978, 246). Other peasants had lease contracts with limited feudal obligations; they could usually dispose of their contracts and labour. However, the peasants' economic situation, whether they owned the land or were lease-holders, was not favourable; their farms were usually small, and only a few ran them with an eye on the markets (Esser 2019, 43-75). Domestic work supplied by putting-out merchants was thus a widespread phenomenon.

In response to the guild-free competitors who could exploit relatively cheap labour and economies of scale, cloth merchants from Aachen and clothiers from Düren sought ways to grow their firms comparably; they found creative ways to circumvent and undermine existing guild rules and continually transgressed existing norms. By the mid-18th century, the guild rules in Düren had become virtually meaningless (Schoop 1920; Fehr 1927; Kermann 1972, 152–4),² and in Aachen, the dissolution was imminent. Many guild rules were no longer enforceable in practice, such as limiting the number of workers employed and prohibiting the relocation of production to places outside the control of the guilds. Finally, conflicting political and economic interests led to a massive struggle over the city constitution itself (*Mäkelei*) until liberally oriented citizens gained the upper hand in the early 1790 s, and a new city constitution was implemented in 1792, strengthening large merchants' and manufacturers' positions. With the French occupation of Aachen (1794), however, the new constitution became virtually irrelevant. Instead, a new political regime granting liberal property rights and freedom

¹ Since 1918 called Monschau.

² My discussion does not include Düren where, after 1744, guild regulations no longer limited the size and scope of the clothiers', because for Düren the conflicts are less well documented, c.f., Schoop (1913, 16–23; 1920, 186–96); Fehr (1927); Kermann (1972, 152–4).

of trade emerged and was consolidated after the Peace of Campo Formio (1797) – establishing the Rhine as the eastern border of France – and the formal integration of the territory into the French state (*Departement dé la Roer*, 1802). The guild system was abolished in 1798 (Müller 1982, 141).

It is almost impossible to overestimate the lasting impact of the French Revolution. The new French legal and economic order amounted to an institutional revolution that survived the Prussian incorporation of the Rhineland after the Napoleonic wars. French law, especially the Code Civil (1804) and Code de Commerce (1808), clearly defined private property rights, freedom of trade and commerce, and legal enforcement, thus providing significant advantages for commercial and industrial activity. The legal framework was supported by new bodies of economic self-organisation, such as chambers of commerce, commercial courts, and trade tribunals (Schubert 1977; Bernert 1982), which had a lasting impact on regional economic and social development (Reckendrees 2010; 2020). It was not until the second half of the 19th century that German law comprehensively replaced French law in the Rhineland. Integration into the French state not only guaranteed private property rights, it also gave access to a vast internal market and a single currency (Schultheis-Friebe 1969; Fehrenbach 1974), and the privatisation of manorial and ecclesiastical property (secularisation) gave industrialists access to water mills and water rights enabling them to convert monasteries into factories (Kaiser 1906; Schieder 1991). The political regime shift led, according to historian Paul Thomes, to a "surge in the mobility of the factors of production land, labour and capital" (2004, 16).

However, while the new regime certainly brought about radical institutional change, it would be misguided to overlook the transformations in the preceding centuries (see Kopsidis and Bromley 2016), focus only on the impact of the French Revolution, and interpret the dissolution of the guild system as a regime shift effect. While literature on England and the Low Countries (now Netherlands and Belgium) has long since emphasised the pressures on craft guilds from the putting-out and the domestic system that led to their collapse (de Vries 1976; Coleman 1977; Ogilvie 2000; Davids 2008), the dominant view regarding the dissolution of craft guilds in the German states is that it came with the French Revolution (Kisch 1989; Acemoglu *et al.* 2011; Ogilvie 2014). This is true for parts of "Germany" (and almost everywhere for the legal abolition of craft guilds), but the interpretation tends to neglect the diversity of institutional arrangements in the 18th century. "Germany" was, at the time, not a nation-state; even the territory of some "states" was scattered across regions with different socio-economic structures (including the southern part of the Low Countries).³

In what follows, I argue that institutional competition, entrepreneurial agency, and institutional entrepreneurship in the 18th century had set in motion a direction of change that would have led to the complete dissolution of the craft guilds as an eco-

³ The "Holy Roman Empire of the German Nation" was a loosely integrated union without a standing army, bureaucracy, or general taxation and consisted of distinctly different, state-like political and economic units, an association of feudal "states" and imperial immediate cities and monasteries with few shared institutions such as the Imperial Chamber Court in Wetzlar that became more influential after the 30-years wars (Whaley 2012; Stollberg-Rilinger 2019). For the political segmentation in 1792, c.f., https://www.ieg-maps.uni-mainz.de/gif/p792d_a3_mb.gif.

nomic and political factor even without the French intervention. My analysis is based on re-reading the extensive literature on the regional woollen cloth industry and a theoretical framework around agency, entrepreneurship, and institutional change. The argument has the caveat of being counterfactual because no new institutional arrangements emerged, and the transition process described was "interrupted" by the French occupation.⁴

2. Agency and Institutional Change: The Analytical Framework

My analysis takes its point of departure in the framework of Douglass C. North (1990), who systematically distinguished formal and informal institutions (rules), which "define the way the game is played," and organisations (players) that pursue the goal of winning the game "within that set of rules" through "a combination of skills, strategy, and coordination; by fair means and sometimes by foul means" (*ibid.*, 4-5). For North, utility-maximizing organisations and their entrepreneurs acting purposefully and responding to the incentives offered by a given institutional framework are the agents of institutional change; it is they who set the direction of change (ibid., 73). Furthermore, "fundamental changes in relative prices are the most important source of that change" (ibid., 84), driving "political or economic entrepreneurs to actions that alter the institutional framework" (Dolfsma and Verburg 2008, 1034). However, organisations only responding to incentive structures appear from this institutions-asrules perspective as reflections of a specific institutional arrangement with their capacity to maximise utility ultimately attributed to the quality of the institutions in place (property rights, incentives). "Entrepreneurs" are correspondently not conceived as Schumpeterian innovators in the "perennial gale of creative destruction" (Schumpeter [1942] 1994, 81–6; 1947) but as alert to opportunities (North 1990, 87).⁵

In later work, North acknowledged the limitations of his institutions-as-rules model (North 2005a; b), noting an intimate relationship between cognitive models and belief systems and the respective institutional framework. He argued that belief systems "induce political and economic entrepreneurs [...] to erect an elaborate structure of rules, norms, conventions and beliefs embodied in constitutions, property rights, and informal constraints; these in turn shape economic performance" (North 2005a, 26). While this argumentation rests on the outcome of competition between individual actors, Avner Greif and Joel Mokyr suggest that institutions (rules, expectations, and norms) rest on social constructs, "shared cognitive rules [...] that convey information which distills and summarizes society's beliefs and experience. These rules have to be self-enforcing and self-confirming, but they do not have to be 'correct'" (Greif and Mokyr 2017, 26).

A similar view, with a stronger emphasis on the capacity of organised actors to implement change – "institutional entrepreneurship" –, has emerged in institutional or-

⁴ In general, I use literature based on archival documentation; however, for some older literature, archives have been destroyed or used for paper recycling during World War II.

⁵ The entrepreneur as conceived by North is akin to Kirzner's "alert" entrepreneur (Foss and Klein 2010; Chavoushi *et al.* 2021).

ganisation theory, which has traditionally viewed institutions as taken-for-granted rules that produce organisational isomorphism (DiMaggio and Powell 1983) rather than change. The concept of institutional entrepreneurship (Hardy and Maguire 2017), defined as the ability of organised actors "to create new or transform existing institutions" (Battilana et al. 2009, 68), goes back to Paul DiMaggio (1988), who claimed that new institutions emerge "when organized actors with sufficient resources (institutional entrepreneurs) see in them an opportunity to realize interests that they value highly" (1988, 14). Elaborating on this idea and employing Schumpeter's concepts of "creative response" (1947) and "creative destruction" ([1942] 1994), Jens Beckert (1999) points out that the notion of resourceful institutional entrepreneurs who can shape institutions implies that institutions are not just rules (always) followed. As institutions create reasonable expectations about the most probable behaviour of others, they "become the object of strategic considerations" (1999, 781) of institutional entrepreneurs who do not need to perceive institutions as constraints for themselves but might purposefully engage in strategies that include choices that involve violating the rules and norms. They may try to win the game "by fair means and sometimes by foul means" (North 1990, 4-5). For Beckert institutional stability "reflects the lack of resources on the part of those actors who would be interested in changing them" (1999, 781), while successful institutional entrepreneurs, by violating existing rules and norms and establishing successful new business models, contribute to institutional change.⁶

While DiMaggio's (1988) definition of institutional entrepreneurship refers to available resources and power, Beckert (1999, 792) argues that, in addition to power, Schumpeterian entrepreneurship – entrepreneurship-as-innovation (Swedberg) – and the resulting diffusion of novel approaches may lead to economic and social change. In his view, the institutionalisation of the market as a "meta-institution" in modern societies "legitimizes the efficiency criterion as the rational principle of economic decision-making," and it has created "a sphere for exchange relations in which [the use of] power is delegitimized." Economically efficient and welfare-enhancing entrepreneurs can legitimately pursue strategies that involve violating rules and norms: "The market is designed" to allow "innovation (creative destruction) by reducing the stabilizing influence of power" and "encouraging change through competition." Because of the "meta-institution" market, "actors can realize an advantage (profit) from violating institutionalized practices, but can act, nevertheless, in a socially legitimized way" (ibid., 792).

An assumption underlying most of the literature on institutional change, but often not explicitly addressed, is that the institutional requirements for democracy and capitalism are in place. These include the separation of powers of the legislature, the executive, and the judiciary; the guarantee of fundamental rights to the individual and equality before the law; security of property rights and freedom of contracting; and finally, the possible enforcement of individual rights at independent courts. "As these institutions deny preferential treatment of individuals or groups, they constitute the legal provisions of a competitive order" (Wegner 2019, 1512). However, in the early modern time, such institutions were not yet existent, discriminating, or weakly pro-

⁶ Uber and – to some extent – Airbnb illustrate the idea in a meaningful way.

tected against the (mis-)use of power. Often the guild system serves as an example of an order in which "inefficiencies can be more easily maintained due to the dominant forces of tradition and power" (Beckert 1999, 793). In the institutions-as-power view in New Institutional Economics, such orders are usually described as socio-political formations with "exclusive" rather than "inclusive" institutions (Acemoglu and Robinson 2012) or "limited access orders" in which the "dominant coalition" grants economic privileges and exercises state functions (North *et al.* 2009, 38). Such orders lack competition in the sphere of the economy and politics. Gerhard Wegner argued that "the ability to innovate is therefore subject to significant limitation" because the regime's stability might be challenged by creative destruction if this were to affect "the rents of the dominant coalition." Still, limited access orders are not "closed systems" able to "completely shield themselves from external economic influences such as unexpected changes of relative prices" (Wegner 2019, 1509). And, it might be added, rules can be ignored.

Avner Greif (2006) argued that prescriptive rules of behaviour would have an impact if individuals were motivated to follow these rules. He defined motivation broadly as incentives which include "expectations, beliefs, and internalized norms" (ibid., 7). The institutions-as-rules approach taking the "reasons that people follow rules as exogenous to the analysis" would be useful for many purposes. But it would be "limiting to consider motivation as exogenous" (*ibid.*, 39). Elias N. Khalil also suggested in a critique of North (1990) that the "focus on institutions and how they change" (1995, 451) was legitimate, but "the thesis that economic success [was] mostly a function of efficient institutions" (ibid., 461) too narrow. The efficiency view would abstract too much from different "grades" of institutions (some being "deeper" or more comprehensive than others) and different "levels" of organisations such as, e.g., church, firm, or state. From this, it might be concluded that institutions might not always align, and organisations might benefit from some but not others. Khalil considers, therefore, the "tastes or goals of organizations" (1995, 461) as possible endogenous reasons for change. Still, identifying these "tastes and goals" or the "motivation" of organisations might pose an insurmountable challenge for historical analysis if it is not related to a comprehensive belief system such as religion that Greif and Mokyr (2017) have in mind. Therefore, Sheilagh Ogilvie suggests to "retain the empirically useful distinction between (observable) rules and (unobservable) beliefs, and [...] try to explain as much as possible in terms of observable variables – such as rules and their distributional implications – before resorting to unobservable differences between cultural beliefs" (2007, 679).

The guild systems in the 17th and 18th century Rhineland might be best understood as an institutional arrangement for political and economic governance within the "limited access order" of a feudal society (see below on the craft guild's political and economic functions in Aachen), in which craft guilds were "actors" (or organisations). These actors and the surrounding institutional framework were under pressure from external forces, the regional putting-out merchants that successfully established an efficient and more profitable production system that changed relative prices (North 1990), and at the same time, they were under pressure from within as guild members

⁷ For a more detailed argumentation, see Greif and Mokyr (2016; 2017).

in their pursuit for efficiency and profit evaded and violated institutionalised practices and norms. Particularly in Aachen, there was massive disagreement and conflict among the guild members and between the craft guilds about whether and how to grow the business, how to allocate the resources, and how to distribute the gains but also about equality, freedom, political influence, and the role of religion.

Guilds, in general, Ogilvie argues, affect "not only the size of the pie (through influencing efficiency) but also the type of pie (through establishing who is entitled to allocate inputs) and the distribution of the slices (through apportioning the output)" (2007, 662). This would result in conflicts in which actors behave differently. While some actors might want to preserve particular institutions, some would evade or sabotage them, and others even attack them. It should be acknowledged that craft guilds were not just political and economic institutions but also organisations and arenas of conflict between their members. Conflict (diverging aims of guilds and guild members) and institutional entrepreneurship, I argue in the following, were sources of the dissolution of the guild system in the 18th century Rhineland (endogenous institutional change), in addition to external factors, institutional competition and changing relative prices. Although deviant behaviour was not socially legitimised but heavily disputed and brought to court, rule-breaking and rule-evading entrepreneurs affected formal and informal institutions and rule enforcement through repeated activities. And they contributed to endogenous institutional change, including a new city constitution limiting the influence of the guilds. Ogilvie (2007) suggests that the results of such conflicts were affected by efficiency and respective distributional effects for the most powerful, and any result would only be stable if there were "an enforcing party with a monopoly of physical violence" (2007, 664). However, conflicts between the guilds and their members and between different guilds were repeated games, and it changed over time who the most powerful was.

3. Two Dominant Regional Production Systems at the End of the 17th Century

3.1 Constitutional Background

By the end of the 30-year wars, the cities and towns of the region were subject to several territorial jurisdictions with different constitutions and institutions governing the woollen cloth trade. The industry dates back to the Middle Ages, and by the early 14th century, cloth from Aachen was traded throughout Europe (Bruckner 1967, 197). The system of political and economic governance in the free imperial city of Aachen originated in the 12th century. Free imperial cities were under the emperor's protection, but had their own city constitution. In addition to noblemen, the Aachen constitution gave members of merchants' and artisans' guilds, to which only Catholics had access, the right to vote and participate in the city government (each represented guild had four seats in the Grand Council) and the power to regulate their respective trades. The economically strong guilds and those with a large membership had political rights, while less important trades were not represented (Kley 1916; Schué 1924; Bruckner 1967, 196–7, 363–4; Sobania 1991). The other towns in the region were under the jurisdiction of larger territories; their authorities followed mercantilist prin-

ciples, and as they were primarily interested in generating tax revenue through trade did not impose restrictions on trade and commerce.

Eupen was granted market privileges in the mid-16th century and city rights in 1674 by the Duke of Limburg (Spanish Habsburg; Austrian Habsburg). Montjoie, founded in the 13th century around a castle, was governed by the Duke of Jülich. Vaals belonged for a long time to St. Adalbert Abbey and became part of the United Netherlands in 1661. Burtscheid developed from a monastery and was under the authority of abbesses with a seat and a vote in the Imperial Assembly. The details of political governance and protection of all these places were complex. Small towns like Burtscheid had to give up some rights in exchange for protection and political and economic freedom. Burtscheid had to cede its judicial rights to Aachen, and a mayor and council members from Aachen constituted the city government. Even the self-governing city of Aachen was under military protection of the Duke of Jülich, who was to enforce the law of the Holy Roman Empire of the German Nation.

3.2 Diverging Production Systems

In the 17th and 18th centuries, different production systems emerged in the guild city Aachen and the more "liberal" towns Eupen, Montjoie, and Burtscheid, where cloth merchant-manufacturers (Verleger) established a putting-out system, production based on domestic rural labour enabling them to bypass the cumbersome and inflexible guild system. Verviers was a cloth centre in nearby Limburg with similar weight as Aachen. Its production system might be regarded as a blend between the "liberal" and the guild system. But since the interactions between Verviers and Aachen were very limited, and for space limitation, I cannot include it in my discussion (Lebrun 1948; Barkhausen 1960). Everywhere, there was an increasing concentration on woollen cloth, particularly high-quality fine cloth, as a business's profit potential in the 18th century was linked to product quality. The large merchants were almost exclusively involved in fine-cloth production for export markets and occupied the central position in the industry, also in the guild system. They had the commercial knowhow of interregional and international trade and the necessary wealth to finance the purchase of quality wool, the largest cost component accounting for 50-60% of total production costs (Anonymous 1796, 156–60). In terms of ownership, no transaction occurred over the different stages of production, as these merchants subcontracted directly or indirectly all necessary crafts.

The Guild System in Aachen

Fine-cloth production is a complex process involving several production stages carried out by specialised crafts (Anonymous 1796; Reckendrees 2006). In a stylised form, cloth production for export was mainly organised as follows in Aachen: Formally, the production process was under the control of master clothiers, members of the weavers' guild and regulated by superordinate guild authorities (*Werkmeistergericht, Wollenambacht*) (Anonymous 1788; Kley 1916, 128–69; Bruckner 1967, 196–7). But by the late 17th century, it was mainly the cloth merchants who could afford to buy the merino wool used for fine cloth in Amsterdam or Spain. They operated as *Ver*-

leger and commissioned clothiers to make the cloth (Seidl 1923, 15, 30; Bruckner 1967, 198–9). On behalf of the cloth merchants, and according to their requirements (length, width, quality, finish), the clothiers organised the production process (Anonymous 1789). They had the wool scoured and selected according to the quality expected by the merchant. Spinning was a domestic piecework job in Aachen, rural Limburg, or Eifel villages. The clothiers wove the cloth in their workshops. They could employ up to four weavers and looms and subcontract other weavers' guild members to fulfil the merchant's order. The woven cloth was then fulled in a fulling mill and dyed "in the piece" by a master dyer. Next, the cloth was passed to a master shearer who would dress and shear the cloth. Finally, municipal and guild institutions (Tuchsigel, Wollenambacht) inspected the finished cloth to guarantee local production quality and provide the trademark "Aachener Tuch" (Kley 1916). The roles of the merchant and the clothier often overlapped as successful clothiers (and also shearers) established merchant houses (Seidl 1923, 29).

All crafts were organised into guilds. Clothiers belonged to the weavers' guild, master shearers to the tailors' guild, and dyers had their guild but no political representation. Guild regulations ensured standards at all stages of production and in the final product; they thus reduced the need for inspections. However, they made it difficult, and sometimes even prohibited, to produce larger quantities and thus achieve economies of scale. Regarding guild rules and observable practices, economic historian Ulrich Pfister argued that guilds had a function similar to a firm in that they captured the control of "intra-industrial transaction costs" (2004, 165). But guilds were not firms. Artisans owned their workshops and means of production and employed journeymen and apprentices; within the guild rules, they were free to contract and subcontract their work within a highly regulated environment.

The Putting-Out System in the Guild-Free Towns

It is thought that Flemish journeymen from Ghent and Bruges, fleeing the bloody riots in the late medieval cities, brought cloth-making to Eupen in the early 15th century, from where it expanded into the Dutch market (Kisch [1964] 1989, 174–5). Immigrants built up a solid business and were welcome in Eupen. The Duke of Limburg protected their trade (and his tax revenues) by banning the import of English cloth in 1429. From Eupen, coarse cloth manufacturing spread into the region.

During the 17th century, particularly after the Treaty of Westphalia (1648) granted Aachen the status of a "Catholic city," protestant cloth merchants from Aachen were again welcome in Eupen. They brought fine-cloth production to the town and also to Montjoie. The development in Burtscheid is noteworthy because of its legal dependence on Aachen (see above). Here, the guilds and the council from Aachen tried to weaken local cloth production by prohibiting the establishment of a guild system in 1663. But doing so, they only attracted cloth merchants from Aachen who quickly developed relatively large operations (Macco 1911, 86; Seidl 1923, 47; Asten 1956, 169–70). Kisch states it well, saying that the "loss of Aachen's entrepreneurial talent was a gain for the countryside" ([1964] 1989, 165). He argued that merchants and clothiers most likely left Aachen for "sound economic reasons" (*ibid.*, 161). In fact, Protestants did not experience more religious freedom in Eupen or Burtscheid than

in Aachen. Except for the very short period from 1707 to 1714, Eupen belonged to the catholic Austrian Netherlands, and Lutheran services were not allowed. However, they experienced a favourable economic environment. Merchant-manufacturers could easily acquire land for the operation of mills and workshops inside and outside of Eupen; they could cheaply procure wood from the surrounding forests and hire foreign skilled workers as there were no guild restrictions. Eupen was granted the right to hold five free fairs, and in 1718, the duty-free import of "all articles necessary for the manufacture of cloth and fabrics" (Rutsch 1879, 26). The *Verleger* used the local knowledge of cloth making and location advantages. The soft water of the river Vesdre was ideal for dyeing cloth, and highly qualified dyers had established well-running businesses (Anonymous 1796, 64–6).

These "pioneers [...] introduced a thriving woollen cloth industry into this rural environment" (Kisch [1964] 1989, 165) by establishing the putting-out system (*Verlagssystem*) based on spinning and weaving in the Limburg hinterland and fulling, dyeing, dressing, and shearing organised in and near to Eupen. While fulling and dyeing were mainly done in independent mills, merchant-manufacturers aimed at integrating dressing and shearing into their business. But when the need emerged, they also contracted skilled artisans in Aachen (*ibid.*, 175). Integration of dressing and shearing did not necessarily mean centralisation; for a long time, the merchants operated several workshops in the city. Evidence for centralisation in larger "manufactures" is from the 1760 s, and whether these are exceptions is unclear.

Lutheran merchants from Aachen also settled in Montjoie (Bruckner 1967, 320), where Mennonites and Lutherans were tolerated but could not practice their religion. Until the late 17th century, they secretly held services in barns (Scheibler and Wülfrat 1939, 319–38). Like Eupen, Montjoie provided favourable production conditions. The river Rur gave soft water ideal for washing and dyeing, and the people in the surrounding villages were familiar with spinning and weaving, as coarse cloth had long been produced for the local market (Barkhausen 1925, 9–12). The transition to the new putting-out production system integrating dressing and shearing began later in Montjoie than in Eupen.

The details of production in both places are well described by contemporaries and by historical literature (Anonymous 1796; Barkhausen 1925; Scheibler and Wülfrat 1939; Barkhausen 1954, [1958] 1974). After buying the wool, the *Verleger* had it scoured, sorted, and selected in their houses, as these operations determined the quality of the final product and thus its marketability. They sold the finished cloth at fairs and markets throughout Europe and the Mediterranean (e.g., the Levant, the Italian states, Russia, and northern Europe) and, along with the raw materials, financed the distribution of the cloth and granted credit to the sales agents for up to 24 months in international trade (Anonymous 1796). In addition to preparing the wool, the *Verleger* organised the finishing processes in or near the towns, increasingly integrating dressing and shearing into own workshops. In Montjoie, they also operated own dye works and fulling mills (Seidl 1923; Weingarten 1922). *Verleger* were not restricted in how they organised the work, although shearers repeatedly tried to organise and gain control over their work (Henkel and Taubert 1979; Hermanns 1982; Henkel 1989a). Spinning and weaving were primarily domestic jobs in the rural hinterland (mainly

in Limburg). Intermediaries (*Baasen*) supplied the wool or yarn to the spinners and weavers and collected the yarn and cloth on behalf of the *Verleger*. These agents were usually large and relatively wealthy farmers from the area who knew the spinners and weavers and could thus establish a trusted relationship. Based on this, they could credit their principal with the wage expenditures until they had sold the cloth, significantly reducing the working capital required (Scheibler and Wülfrat 1939, 365).

The guild system in Aachen was more strongly challenged when the merchant-manufacturers in the guild-free towns expanded their putting-out businesses and grew into large enterprises. The probably largest, J. H. Scheibler, reported in the 1760s to provide employment to 4,000 people (Barkhausen 1954, 154), including numerous spinners and weavers in the countryside. Several factors contributed to this development: In the case of the remote town of Montjoie, prohibitive transportation costs could only be offset by concentrating on expensive fine-cloth qualities. The *Verleger* had to distinguish their products from their competitors by product specialisation and cloth qualities that the average artisan could not deliver (Barkhausen 1925, 100–1). In contrast, the guild system designed to protect the livelihood of all its members was based on standardised qualities and a shared trademark, *Aachener Tuch*. Competition from Dutch and English cloth pushed the manufacturers to seek new markets in southern Europe, the Levant, northern Germany, and Russia. However, serving distant markets required production on a larger scale setting off the increasing transaction and transportation costs.

Cheap labour in the hinterland and economies of scale provided cost advantages that the traditional guild system could not provide. But the regional version of putting-out based on high-quality fine cloth, specific qualities and colours, and artful patterns demanded more. In addition to excellent wool, the merchant-manufacturers needed to gain oversight of those stages of production that determined the final quality of the product – dressing and shearing – and required craftsmanship, careful handling, and quality tools such as teasles and shears. In Montjoie, they also integrated dyeing and fulling into their business. After the woven cloth was fulled and dyed, the dresser, with the help of teasels, dressed the nap of the wet cloth several times in different directions. When all the threads were raised, the cloth could be sheared. The raised fibres had to be cut to the same level without slicing the cloth, which was up to 1.5 meters wide. Depending on the cloth quality, raising and shearing were repeated several times. Therefore, and to recover from the hard work of shearing during the next stage of dressing, dressing and shearing were usually carried out by the same person.⁸

All factors led to a focus on specific markets and needs and a massive expansion of fine-cloth production. One *Verleger*, the above-mentioned Johann Heinrich Scheibler stood out (Scheibler and Wülfrat 1939, 328–33), and much of the generalisation of the successful putting-out system with centralised finishing workshops is based on his operations. After completing his apprenticeship at the age of 18, he married a clothier's widow from Montjoie in 1724 and continued to run the business under his name. Following the practices in Verviers and Eupen, Scheibler concentrated on using only fine merino wool from Spain. He improved dyeing and shearing and introduced his spe-

⁸ Further processes such as burling, brushing, and pressing are here omitted (Anonymous 1796; Rees 1819; Reckendrees 2006, 7–8).

ciality, patterned cloth dyed in the wool, whereas the clothiers in Aachen and Eupen predominantly produced piece-dyed fine cloth. The precious cloths were sold at fairs, especially in Frankfurt, and from there went to northern, eastern and southern Europe, and also established a network of commissioned traders in Europe, around the Mediterranean, and in Persia. He operated several shearing workshops in Monschau; the first larger building in which dressing and shearing might have been centralised was established around 1750 (Kermann 1972, 149). The *Verleger* Offermann in the neighbouring village Immgenbroich followed in the 1760s.

In general, the size of centralised workshops in Eupen, Montjoie, or Vaals is not well documented for the years before 1780. Georg Forster, in his portrait of the "factory" of Johann Arnold von Clermont, described in 1790 that Clermont employed 160 weavers in Vaals, Aachen, and Burtscheid, spinning was in the countryside, and in his own houses he centralised fulling, dyeing, dressing, and shearing (Forster [1790] 1989, 137, 141–3). A report from 1796 on Eupen refers to up to 100 shearers working for one manufacturer (Anonymous 1796, 64–6). However, this figure from the very end of the 18th century might not apply to previous decades and be exaggerated, and one *Verleger* might have had several workshops in the town. Spinning and weaving were not integrated into the merchant's own operations before 1793 when Scheibler in Montjoie established the first weaving "manufacture" in Montjoie, the Burgau (Weingarten 1922, 31; Barkhausen 1925, 48, 63).

4. Institutional Change Through Entrepreneurs?

The favourable cost structure and the opportunity for product specialisation and quality improvement offered by the putting-out production system to merchants in Eupen, Montjoie, and Burtscheid challenged the businesses in Aachen, who were unable to scale up operations similarly and improve quality because of guild regulations. The result is often described as the decline of the cloth industry in the city (Kisch [1964] 1989). However, this interpretation focuses on the guilds and neglects that most cloth merchants, many of them Protestants, were not guild members but contracted them. Like their counterparts in Eupen and Montjoie, they operated as Verleger. Not they but their contract partners in Aachen were subject to guild regulations, and also not those contracted elsewhere, as long as they did not take woven cloth or wool washed and scoured in Aachen out of the city. In addition, the social background of the Verleger in Aachen was not limited to merchants, clothiers and shearers too – members of the guilds – developed their business in this direction (Seidl 1923, 29). Throughout the late 17th and 18th centuries, entrepreneurs continued to find ways to bypass guild rules. They employed spinners and weavers in the countryside and operated fulling mills and dyeing works outside the city gates. Guild conflicts and trials before the Imperial Chamber Court of the Holy Roman Empire suggest that key rules, such as limits on the number of employees and the prohibition of relocating production to areas outside the guilds' domain of control, were no longer fully enforceable in practice.

The story of the cloth industry in Aachen is a story of the decline of the guilds and a powershift from the guilds to large capitalist enterprises but not a story of the industry's decline. Throughout the 18th century, cloth merchants – and master artisans –

were able to reduce the reach and scope of guild regulations and contributed to their de facto dissolution of the guild system before its abolition by the French. These entrepreneurs found creative ways to cope with existing institutions, bent the rules to the extent possible, and violated them if it appeared profitable. They followed different strategies related to exiting and subverting the system and to vertical integration of production. The institutional entrepreneurs did not merely react to a new production system, they responded to the restrictions of the guild system at the time, and sometimes earlier, when *Verleger* in Eupen and Montjoie began scaling their putting-out business and established centralised workshops. Of course, the guilds in Aachen countered these evasive strategies by taking the matter to the city council and to the Imperial Chamber Court in Wetzlar. But the lengthy trials at the Court were expensive as they required a legal representative in Wetzlar, and by the 1760 s, the guilds could no longer uphold these costs (Beckers 1936, 51). In the following, different forms of evasive and rule-breaking activities are presented in brief.

It furthermore needs to be remembered that the guilds could only impose their rules on their members. Those cloth merchants who were not guild members, particularly Protestant cloth merchants, could and would operate as putting-out merchants. Only if they had brought the wool to the city and washed and scoured it there could the authorities subject them to follow the norms of the *Wollenambacht*.

4.1 Contracting Labour Outside the City

At the end of the 17th century, cloth merchants from Aachen contracted spinning and weaving outside the city (Seidl 1923, 51). Others like Johann Wespien organised dyeing and shearing outside Aachen and spinning and weaving in the city (Macco 1911, 87). For dyeing, they provided the technical argument that it was not "possible to produce all required colours in as good and marketable a form as in the dyeing works outside" (Seidl 1923, 50). Manufacturers from Burtscheid and Eupen had their cloth dyed in Aachen for the same reason (Dechesne 1926, 33–4; Müller 1992/93, 212; Kermann 1972, 138). This might explain why counter moves from the dyer guild are not reported. The city council finally acknowledged the loophole in 1765 and allowed dyeing cloth produced in Aachen outside the city against a tax (Seidl 1923, 51–2).

Weaving and shearing were a more significant concern. The respective guilds repeatedly asked the city to abolish processing yarn and cloth outside of Aachen (e.g., 1663, 1697, 1699, 1705, 1737, 1739, and 1757; see Seidl 1923, 50, 51; Heizmann 1923, 15). Most affected were the weavers, as their operations required comparatively less skill, and weavers were abundant in the countryside. When the master clothiers complained in 1757 about merchants who had cloth woven abroad "out of mere profit," the city council confirmed its abolition to process wool scoured in Aachen outside the city, taking over the weavers' view that it deprived many fellow citizens of work and plunged them "into a miserable, sustenance-less state" (Winzen 1994, 108). But the regulation that wool scoured in Aachen should not be woven or finished elsewhere was not necessarily observed as suggested by the repeated reconfirmation of the rules (1663–1757). The restriction also did not apply to cloth merchants from Aachen who contracted all their operations outside of Aachen (Seidl 1923, 67).

4.2 Bending the Rules by Vertical Integration

Since 1703, several cloth merchants used the possibility of reducing their dependence on the shearers' guild by establishing own workshops, in which they quickly employed up to 20 shearers (Seidl 1923, 51), which was legal if they processed their own wool. A prominent example was the later mayor of Aachen, Johann Wespien (1756–1769), who established a shearer workshop in 1737 (Kermann 1972, 129). The expanding business of the cloth merchants encouraged related forms of strategising among members of the shearers' guild: calculating the trade-off between expected profits from larger contracts with merchants and punishment for violating the guild regulations, they went for profit and employed substantially more journeymen than they were allowed to employ in Aachen (Müller 1992/93; Winzen 1994).

In their struggle with the guilds, the cloth merchants finally achieved the right to employ as many workers as they wanted and were not limited to hiring journeymen trained by a guild master. Although it is unclear when they fully succeeded, during the 1760s they won the fight. Already before, guild regulations did not cover all stages of production. For example, a merchant – also master shearers – could employ any number of workers at the cloth presses if they were not learned journeymen. This rule allowed for transgressions because it was difficult to control for which tasks a worker was used. When the city council in 1760 allowed the employment of any foreign shearers, whether trained by a guild master or not (Janssen [1739–1780] 1890, 258, 295; Müller 1992/93, 216, 218), it became almost impossible to control the number of workers on a specific task. Earlier, shearers must have finished their apprenticeship in Aachen (regulation from 1715, Seidl 1923, 57).

A well-documented conflict (from 1750 to 1764) is the struggle between the shearers' guild and the master shearer Matthias Fischer, who was accused in 1751 of employing so many shearers that "other hard-working and skilful fellow masters have no work and no sustenance [...] almost half stand idle and live in poverty" (Winzen 1994, 31). Fischer argued that the limit on journeymen would not apply to master artisans who operate a pressing shop in addition to their shearing shop. He also mentioned several others who employed more than four journeymen. All can be recognised as cloth merchants. He also referred to the Imperial Craftsmen's Order (Reichshandwerkerordnung, 1731), in which the general limit to the number of journeymen was removed so that "diligent and skilful" artisans could develop their business. In Aachen, where the guilds were involved in the city administration, the Order was interpreted to the effect that it was the guild to decide whether such a skill level was given, not the single artisan (Winzen 1994, 33). Fischer's appeal to the Imperial Chamber Court resulted in a 13-year trial during which he seemingly did not change his practice. In 1761, he himself reported to employ 20 journeymen because of the high amount of work for the upcoming Frankfurt fair (ibid., 28-30).

A group of cloth merchants supported his view. In a forceful statement, they demanded to remove the limits on employment generally. How many journeymen were needed was an issue of market conditions, sometimes a master would need two or three, and sometimes 15 or 20 journeymen, they argued. Also, the number of required hands would increase with the quality of the cloth; processing fine cloth

needed more journeymen. And finally, it played a role if the shearer operated the presses as well. The existing restrictions would force the cloth merchant to give work to sloppy craftsmen, although paying for good work. It would make the business in the neighbouring towns thrive if the manufacturers in Aachen did not have the means to prosper. However, in 1762 the city council confirmed in a majority decision the limit on journeymen for artisans under contract with a cloth merchant (Winzen 1994, 34–6). Within the council, the view was split. There was apparently the fear that cloth merchants would move their business outside the city (like Johann Arnold von Clermont two years before). In a similar case from 1761, two council syndici argued that allowing to employ more journeymen would prevent Burtscheid from taking over all cloth production (Winzen 1994, 36–43). This probably reflected that in 1757 and 1759, journeymen from Aachen had left the city and established their own shops outside the city gates or worked in Burtscheid (Seidl 1923, 53).

The last restrictions to the number of workers employed by cloth merchants fell in 1768 when the guilds were to accept the interpretation that a merchant who was a guild member and produced on his account was not competing for orders with master shearers. Thus, he could work with as many journeymen as needed, whereas master shearers contracted by clothiers or merchants were still limited to a maximum of four journeymen. The effect of this new regulation was that a Catholic cloth merchant with guild membership could establish a similar production system as *Verleger* in Eupen or Monschau (Müller 1992/93, 220).

4.3 Shaping the Institution from Within

Since the early 18th century, several cloth merchants bought into the shearers' guild to expand their trade by adding their own shearing workshop (Heizmann 1923, 13) and "hoping to shape this framework to their needs" (Kisch [1964] 1989, 178). There were also master shearers who operated as *Verleger*, such as Johann Matthias Nellessen, who contracted spinners and weavers in the Limburg countryside (Jansen 1985, 60–1) and had his cloth fulled in Eupen in the 1760s (Schollen 1911, 91), and master shearers who are reported to have been members of the weavers' guild too. While the motives cannot be identified, the cloth merchants who became members of the shearers' guild most probably did so because dressing and shearing decided about the quality of the finished cloth. They certainly wanted to control this process. One of these merchants was Johann Heinrich Heupgen, who became a guild member in 1732 and operated a shearing workshop since then, in addition to contracting other shearers. However, many masters contested that he sheared his masterpiece himself and rejected his membership. The conflict ended at the Imperial Chamber Court, which did not come to a decision until 1753 (Winzen 1994, 49–51).

While the case was heard, Heupgen ran his workshop obviously without interruption employing – although the number might be exaggerated – up to 40 journeymen (Janssen [1739–1780] 1890, 105). But as other masters did not regard Heupgen as a guild member, the journeymen who worked for him would not find work in any other master's workshop: they had lost their "worthiness of the guild." If Heupgen found workers despite the ban, it might be for paying higher wages than the small masters,

a practice artisans had complained about earlier (Winzen 1994, 49-51). The conflict accelerated in 1753 when the guild did not admit Heupgen's son (born in 1736, four years after the conflict had begun), who had learned the trade in his father's workshop, to the master shearer exam. It required the mediation of the two mayors of Aachen for the two parties to settle on an agreement. He and his son were both approved as master artisans after they had refunded the guild's expenditures on another conflict (Winzen 1994, 53-6).

The compromise was not yet the end of the conflict because now journeymen in other workshops rejected – obviously encouraged by their employers – to cooperate with shearers who had worked with Heupgen, resulting in several tumultuous situations (Winzen 1994, 57–62). After Heupgen appealed, the Imperial Chamber Court requested the Aachen city council to support the merchant, additionally emphasising that the guild could not limit the number of journeymen he would employ. But it took until 1755 to reconfirm the compromise and finally settle the conflict (Winzen 1994, 62–7), probably because the guild could not finance additional trial costs (Müller 1992/93, 219). From then on, cloth merchants who were guild members were allowed to employ the "necessary" number of journeymen (*ibid.*, 236).

An interesting aspect of this conflict is that the rule-bending strategies were heavily criticised by guild members and by journeymen working in artisan workshops who tried to defend their position. At the same time, other journeymen worked for those cloth merchants if they offered higher pay and even worked in Burtscheid if labour demand was high, which in 1759 resulted in the situation that master shearers could not complete their contracts (Winzen 1994, 83). The guilds were under pressure from two sides: from cloth merchants and guild members who wanted to change the system and from journeymen who saw their livelihood secured by the guild monopoly they tried to protect. I cannot engage here with the multiple conflicts between journeymen and guild masters or journeymen and cloth merchants centralising the work in the guild-free towns. These conflicts were often massive. Whereas it appears that most journeymen in Aachen defended the guild institutions or left and went to nearby towns for higher pay, journeymen in Eupen and Montjoie mobilised the idea of the "guild" in struggles for collective rights. 9

4.4 Exit

It was not only in response to the reaffirmation of the status as a Catholic city that cloth merchants left Aachen also in the 17th century, most notably the big merchant house of the Protestant Johann Arnold von Clermont who moved to Vaals in 1760 but also others at about the same time (Müller 1992/93, 208). Clermont, the father of whom had moved from Burscheid to Aachen in 1712 (Macco 1911, 84), established a large business in Vaals and praised the religious freedom there. He published two massive attacks (Anonymous 1788, 1789) on the antiquated, growth-restricting guild system of Aachen, which had a significant impact on the perception of the industry (e.g., Barkhausen [1958]

⁹ Cf., Henkel and Taubert (1979); Hermanns (1982); Henkel (1989a; 1989b); Knotter (2018), and the discussion about establishing an employer organisation to fight collective contracting in Monschau in Barkhausen (1925); Scheibler and Wülfrat (1939); Kisch ([1964] 1989).

1974; Kisch [1964] 1989). In 1790 Clermont employed about 160 weavers in Burtscheid and Aachen, had the cloth fulled and dyed on his premises, and owned a large "manufacture" for dressing and shearing (Forster [1790] 1989, 137–43).

On the other hand, Protestant cloth merchants from the Austrian Netherlands, the Duchy of Jülich, and Burtscheid also moved to Aachen, particularly after 1750. Müller argued they "found an underemployed workforce of shearers and master weavers," as evidenced by the fact that "factory owners from Burtscheid and Vaals hired labour from Aachen clothiers" (1992/93, 212). An example is the Protestant Christian Friedrich Claus, who moved his merchant house "Hoffstadt & Claus" from Burtscheid to Aachen after being granted residency in 1773 when many restrictions had already become ineffective. Claus is said to have employed thousands of people in Aachen (Stuhlmann and Scheins 1913, 260–1; Mummenhoff 1956, 288). Although "thousands" might not have been meant literally, his large business was probably not much different from larger *Verleger* in Eupen, Monschau, or Vaals.

4.5 Political Influence

In the 18th century, Aachen was not under democratic rule. Fourteen guilds elected the council members and, more importantly, formed coalitions in support of the two majors (Meuthen 1962/63). Each guild that elected representatives had an equal number of seats, irrespective of their size or economic relevance. There was fierce competition for votes in each guild, and financially strong cloth merchants and other wealthy citizen used their influence to convince voters to elect the "right" representatives. Politically active cloth merchants, for example, did not resist using their economic position as the main contractor of the crafts (or as house owners or creditors) to influence the decisions within the guilds (Müller 1982, 111, 119). Katharina Winzen quotes, for example, in connection with the 1756 election of guild representatives to the council, the head of the shearer guild saying that it was improper "for the merchants to interfere with our noble shearers' guild and to order those masters to whom they give work, at the loss of such work, to give their votes to certain subjects chosen by the same gentlemen" (1994, 73). The resulting campaigns have been termed *Mäkelei*, which involves activities from inviting voters to parties to straightforwardly buying votes.

The *Mäkelei* in 1786 (Carl 1985), during which "liberal" forces had gained a majority, led to significant disagreements over constitutional matters (Müller 1982, 110–24). It was only resolved six years later. By then, radical changes to the constitution had been discussed, the most far-reaching from Christian Wilhelm von Dohm (1790). He developed a constitution that deprived the guilds of their political rights and economic privilege and reduced them to election bodies. The citizens of Aachen, irrespective of their profession, could freely select the guild in which they wanted to vote; participation was however limited to male Catholics who met property requirements. This proposal was not well received by the guilds, the Duke of Jülich, or other monarchs. Still, the constitution finally imposed by the Imperial Chamber Court (Reichskammergericht 1972), included some remarkable novelties. For example, a new guild was introduced, the "guild of the wealthy." Access was based on self-earned wealth, and there was no birth membership. More importantly, the large merchant-

manufacuterers, particularly those from the cloth and needle industry, were to establish a "factory-, manufacture- and trade council" with lifelong membership that was to be heard before the city council could make any decision affecting their trades.

That the new constitution did not narrow the political position of the guilds more substantially might be explained by French Revolution: In 1792, the Imperial Chamber Court and the Duke of Jülich wanted to calm the city and appease the small artisans. Klaus Müller still concludes, "the small artisan masters left the governance of the city for the economically and socially leading groups" (1982, 229). Whatever the effects of the new constitution might have been, in 1792 – and then again in 1794 – French troops occupied the city.

5. Conclusion

In this article, I have developed the argument that the dissolution of the guild system in the Rhineland was not the effect of an external shock, the French occupation, but that entrepreneurship and institutional competition from neighbouring towns brought about the dissolution. The conventional story is that the guilds and the Aachen cloth industry came under pressure from the emerging, more efficient putting-out system combining domestic work and centralised work in manufactures. However, a closer inspection of the developments in Aachen shows that at the same time when the *Verlagssystem* emerged in Eupen or Montjoie, cloth merchants from Aachen developed similar practices. And when putting-out merchants began to centralise production, cloth merchants in Aachen vertically integrated into dressing and shearing, within the city and outside the city gates, albeit most probably on a smaller scale. These institutional entrepreneurs used the loopholes the regulations provided, bent, or broke the system's rules, and moved into the guilds to change them from within.

The guild system in Aachen was economically and politically under pressure throughout the 18th century. External pressure came from the cost and specialisation advantages of the export-oriented putting-out system as developed in Eupen or Montjoie because of their favourable institutional environments that provided merchantmanufacturers with the opportunities they needed. It also came from changes in international markets. The guilds and their members had to react to these challenges, but usually they wanted to conserve existing regulations and their power. The supporters of the old system were, on the one hand, guild members whose economic power was shrinking and who increasingly depended on wealthy merchant-manufacturers who wanted to change the system. On the other hand, most of the journeymen defended the old system because it seemed to provide security.¹⁰

Internal pressure came for Aachen cloth merchants and weavers and shearers who were guild members but wanted to expand, vertically integrate, and better control production, and who followed their aims bending the boundaries and violating the norms of the system. They had different economic, ideological, and social backgrounds. There were Protestant cloth merchants who were not allowed to become citizens of

¹⁰ The economic decline in Düren from the 1720s to the 1740s indicates that this was an illusion, see the literature cited in fn. 2.

Aachen or guild members; there were Catholic cloth merchants who, like their Protestant counterparts, bent the rules and tried to vertically integrate or shift part of the production outside the city; and there were clothiers and shearers – guild members – who wanted profit from scaling their operations and contracting with the export-oriented merchants, who were to provide products as good as their competitors. These cloth merchants¹¹ also challenged the guilds by influencing elections and decision-making in the city, even if they were not guild members.

Concepts borrowed from New Institutional Economics help explain the external dynamics of the changing competitive environment; concepts from institutional organisation theory help focus on the endogenous processes within an institutional environment. I showed that organisations and other actors do not just passively adapt to existing institutions or migrate to a more favourable environment. Even in a society in which the market did not function as a "meta-institution" (Beckert) creating legitimacy for violating existent institutional norms and practices, these actors have agency and can challenge and even change institutions through institutional entrepreneurship. Despite lack of economic and political openness, entrepreneurship changed the guild system in Aachen. Of course, their newly gained opportunities in the second half of the 18th century should not be overstated; the institutional environment was undoubtedly more favourable in Eupen and Montjoie. But they helped bring the dissolution of the guild system on its way. Whether this dissolution did not materialise in the new city constitution of 1792 because of the French Revolution, as speculated above, or whether it effectively required the external shock of the exported revolution is a question that cannot be answered here.

References

- Acemoglu, D., D. Cantoni, S. Johnson, and J. A. Robinson. 2011. "The Consequences of Radical Reform: The French Revolution." *American Economic Review* 101 (7): 3286–307.
- Acemoglu, D. and J. A. Robinson. 2012. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. New York: Crown Publishers.
- Anonymous. 1788. [Clermont, Johann Arnold von] Freymüthige Betrachtungen eines Weltbürgers zum Wohle von Aachen bey Gelegenheit der bevorstehenden Constitutions-Verbesserung dieser Reichsstadt. Frankfurt: (no publishing house).
- Anonymous. 1789. [Clermont, Johann Arnold von] Beytrag zu den Verbesserungs-Vorschlägen in Betreff der Kaiserlichen freyen Reichsstadt Aachen besonders ihrer Tuchmanufakturen. Düsseldorf: Dänser.
- Anonymous. 1796. Die feine Tuchmanufaktur in Eupen, ihre sämtlichen Geheimnisse, Vortheile und Preise nebst Tabellen. Gotha: Ettingersche Buchhandlung.
- Asten, E. v. 1956. "Die religiöse Spaltung in der Reichsstadt Aachen und ihr Einfluß auf die industrielle Entwicklung in der Umgebung." *Zeitschrift des Aachener Geschichtsvereins* 68: 77–190.
- Barkhausen, E. 1925. Die Tuchindustrie in Montjoie, ihr Aufstieg und ihr Niedergang. Aachen: Aachener Verlags- und Druckerei Gesellschaft.

¹¹ And needle merchants who are not dealt with in this article.

- Barkhausen, M. 1954. "Der Aufstieg der rheinischen Industrie im 18. Jahrhundert und die Entstehung eines industriellen Großbürgertums." *Rheinische Vierteljahrsblätter* 19: 135–77.
- Barkhausen, M. 1960. "Verviers. Die Entstehung einer neuzeitlichen Industriestadt im 17. und 18. Jahrhundert." Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte 47 (3): 363–75.
- Barkhausen, M. (1958) 1974. "Government Control and Free Enterprise in Western Germany and the Low Countries in the Eighteenth Century." In *Essays in European Economic History*. 1500–1800, edited by P. Earle, 212–73. Oxford: Clarendon Press.
- Battilana, J., B. Leca and E. Boxenbaum. 2009. "How Actors Change Institutions: Towards a Theory of Institutional Entrepreneurship." *Academy of Management Annals* 3 (1): 65–107.
- Beckers, P. 1936. Parteien und Parteienkampf in der Reichsstadt Aachen im letzten Jahrhundert ihres Bestehens. Aachen: La Ruelle.
- Beckert, J. 1999. "Agency, Entrepreneurs, and Institutional Change. The Role of Strategic Choice and Institutionalized Practices in Organizations." *Organization Studies* 20 (5): 777–99.
- Bernert, G. 1982. "Die französischen Gewerbegerichte (Conseils de Prud'hommes) und ihre Einführung in den linksrheinischen Gebieten zwischen 1808 und 1813." In *Vom Gewerbe zum Unternehmen. Studien zum Recht der gewerblichen Wirtschaft im 18. und 19. Jahrhundert*, edited by K.-O. Scherner and D. Willoweit, 112–51. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Bruckner, C. 1967. Zur Wirtschaftsgeschichte des Regierungsbezirks Aachen. Die Wirtschaft des Aachener Bereichs im Gang der Jahrhunderte. Köln: Rheinisch-Westfälisches Wirtschaftsarchiv.
- Carl, H. 1985. "Die Aachener Mäkelei 1786–1793. Konfliktmechanismen in der Endphase des Alten Reiches." Zeitschrift des Aachener Geschichtsvereins 92: 103–88.
- Chavoushi, Z. H., M. R. Zali, D. Valliere, N. Faghih, R. Hejazi, and A. M. Dehkordi. 2021. "Entrepreneurial Alertness: A Systematic Literature Review." *Journal of Small Business & Entrepreneurship* 33 (2): 123–52.
- Coleman, D. C. 1977. The Economy of England, 1450-1750. Oxford: Oxford University Press.
- Davids, K. 2008. The Rise and Decline of Dutch Technological Leadership: Technology, Economy, and Culture in the Netherlands, 1350–1800. 2 vols. Leiden: Brill.
- de Vries, Jan. 1976. *The Economy of Europe in an Age of Crisis, 1600–1750.* Cambridge: Cambridge University Press.
- Dechesne, L. 1926. L'industrie drapière de la Vesdre avant 1800. Paris, Liége: Librairie du Recueil Sirey.
- DiMaggio, P. J. 1988. "Interest and Agency in Institutional Theory." In *Institutional Patterns and Organizations*, edited by L. Zucker, 3–22. Cambridge: Ballinger.
- DiMaggio, P. J. and W. W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48 (2): 147–60.
- Dohm, C. W. v. 1790. Entwurf einer verbesserten Constitution der Kaiserl. Freyen Reichsstadt Aachen ihren partiotischen Bürgern vorgelegt vom Clevischen Subdelegato. Frankfurt, Leipzig.
- Dolfsma, W. and R. Verburg. 2008. "Structure, Agency and the Role of Values in Processes of Institutional Change." *Journal of Economic Issues* 42 (4): 1031–54.

- Esser, F. D. 2019. Der Wandel der Rheinischen Agrarverfassung Der Einfluss französischer und preußischer Agrarreformen zwischen 1794 und 1850 auf die bäuerlichen Rechtsverhältnisse im Rheinland. Wien, Köln, Weimar: Böhlau.
- Fehr, M. 1927. Geschichte der Dürener Tuchmacher. Herausgegeben zum 75jährigen Jubiläum des Dürener Webervereins 1927. Düren: Zander.
- Fehrenbach, E. 1974. Traditionale Gesellschaft und revolutionäres Recht. Die Einführung des Code Napoléon in den Rheinbundstaaten. Göttingen: Vandenhoeck & Ruprecht.
- Forster, G. (1790) 1989. Ansichten vom Niederrhein, von Brabant, Flandern, Holland, England und Frankreich im April, Mai und Junius 1790. Frankfurt: Insel Verlag.
- Foss, N. J. and P. G. Klein. 2010. "Entrepreneurial Alertness and Opportunity Discovery: Origins, Attributes, Critique." In *Historical Foundations of Entrepreneurship Research*, edited by H. Landström and F. Lohrke, 98–120. Cheltenham: Edward Elgar.
- Greif, A. 2006. Institutions and the Path to the Modern Economy: Lessons from Medieval Trade, Political Economy of Institutions and Decisions. Cambridge, New York: Cambridge University Press.
- Greif, A. and J. Mokyr. 2016. "Institutions and Economic History: A Critique of Professor McCloskey." *Journal of Institutional Economics* 12 (1): 29–41.
- Greif, A. and J. Mokyr. 2017. "Cognitive Rules, Institutions, and Economic Growth: Douglass North and Beyond." *Journal of Institutional Economics* 13 (1): 25–52.
- Hardy, C. and S. Maguire. 2017. "Institutional Entrepreneurship." In *The SAGE Handbook of Organizational Institutionalism*, edited by R. Greenwood, C. Oliver, T. B. Lawrence, and R. E. Meyer, 261–80. London: Sage.
- Heizmann, H. F. 1923. "Die wirtschaftliche und rechtliche Lage der arbeitenden Klassen in Aachen um die Wende des 18. Jahrhunderts." Dr. phil. (masch. Diss.), Universität Tübingen.
- Henkel, M. 1989a. "Taglohn, Tradition und Revolution. Ein Tarifvertrag aus dem Jahre 1790." Internationale Wissenschaftliche Korrespondenz für die Geschichte der Arbeitsbewegung 26 (1): 42–66.
- Henkel, M. 1989b. Zunftmiβbräuche: "Arbeiterbewegung" im Merkantilismus. Frankfurt am Main: Campus-Verlag.
- Henkel, M. and R. Taubert. 1979. Maschinenstürmer. Ein Kapitel aus der Sozialgeschichte des technischen Fortschritts. Frankfurt am Main: Syndikat.
- Henn, V. 1973. "Zur Lage der rheinischen Landwirtschaft im 16. bis 18. Jahrhundert." Zeitschrift für Agrargeschichte und Agrarsoziologie 21: 173–88.
- Henn, V. 1978. "Die soziale und wirtschaftliche Lage der rheinischen Bauern im Zeitalter des Absolutismus." *Rheinische Vierteljahrsblätter* 42: 240–57.
- Hermanns, L. 1982. "Die Tuchscherer. Eupens erste solidarische Arbeiterschaft." *Geschichtliches Eupen* 16: 150–71.
- Janssen, J. (1739–1780) 1890. "Die historischen Notizen des Bürgermeisterei-Dieners Johannes Janssen." In Beiträge und Material zur Geschichte der Aachener Patrizier-Familien, Vol. 3, edited by H. A. Freiherr von Fürth, 4–390. Aachen: Cremer'sche Buchhandlung.
- Jansen, J. C. G. M. 1985. "Specifieke Kenmerken van de Limburgse Economie." Studies over de Sociaaleconomische Geschiedenis van Limburg/Jaarboek van het Sociaal Historisch Centrum voor Limburg 30: 56–89.

- Kaiser, P. 1906. Der kirchliche Besitz im Arrondissement Aachen gegen Ende des 18. Jahrhunderts und seine Schicksale in der Säkularisation durch die französische Herrschaft. Ein Beitrag zur Kirchen- und Wirtschaftsgeschichte der Rheinlande. Aachen: Albert, Jacobi & Cie.
- Kermann, J. 1972. Die Manufakturen im Rheinland 1750-1833. Bonn: Ludwig Röhrscheid.
- Khalil, E. L. 1995. "Organizations Versus Institutions." *Journal of Institutional and Theoretical Economics* 151 (3): 445–66.
- Kisch, H. (1964) 1989. From Domestic Manufacture to Industrial Revolution. The Case of the Rhineland Textiel Districts. New York: Oxford University Press.
- Kisch, H. 1989. From Domestic Manufacture to Industrial Revolution. The Case of the Rhineland Textile Districts. New York: Oxford University Press.
- Kley, H. 1916. Geschichte und Verfassung des Aachener Wollenambachts wie überhaupt der Tuchindustrie der Reichsstadt Aachen. Ein Beitrag zur Entwicklung der deutschen Tuchindustrie und des Zunftwesens. Siegburg: Kratz.
- Knotter, A. 2018. Transformations of Trade Unionism. Comparative and Transnational Perspectives on Workers Organizing in Europe and the United States, Eighteenth to Twenty-First Centuries. Amsterdam: Amsterdam University Press.
- Kopsidis, M. and D. W. Bromley. 2016. "The French Revolution and German Industrialization: Dubious Models and Doubtful Causality." *Journal of Institutional Economics* 12 (1): 161–90.
- Lebrun, P. 1948. L'industrie de la laine à Verviers pendant le XVIIIe et le début du XIXe siècle. Contribution à l'étude des origines de la révolution industrielle. Liège: Faculté de Philosophie et Lettres.
- Macco, H. F. 1911. "War Johannes Wespien Tuchfabrikant?" Zeitschrift des Aachener Geschichtsvereins 33: 83–9.
- Meuthen, E. 1962/63. "Der gesellschaftliche Hintergrund der Aachener Verfassungskämpfe an der Wende vom Mittelalter zur Neuzeit." Zeitschrift des Aachener Geschichtsvereins 74/75: 299–392.
- Müller, K. 1982. "Studien zum Übergang vom Ancien Régime zur Revolution im Rheinland. Bürgerkämpfe und Patriotenbewegung in Aachen und Köln." *Rheinische Vierteljahrsblätter* 46: 102–60.
- Müller, K. 1992/93. "Die Reichsstadt Aachen im 18. Jahrhundert." Zeitschrift des Aachener Geschichtsvereins 98/99 (II): 205–30.
- Mummenhoff, W. 1956. "Die Bürgerrechtsverleihungen in der Reichsstadt Aachen während der Jahre 1656 bis 1794 (1797)." Zeitschrift des Aachener Geschichtsvereins 68: 191–332.
- North, D. C. 1990. Institutions, Institutional Change, and Economic Performance: The Political Economy of Institutions and Decisions. Cambridge, New York: Cambridge University Press.
- North, D. C. 2005a. "Institutions and the Performance of Economies over Time." In *Handbook of New Institutional Economics*, edited by C. Ménard and M. M. Shirley, 21–30. New York: Springer.
- North, D. C. 2005b. Understanding the Process of Economic Change, Princeton: Princeton University Press.
- North, D. C., J. J. Wallis, and B. R. Weingast. 2009. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. New York: Cambridge University Press.

- Ogilvie, S. 2000. "The European Economy in the Eighteenth Century." In *The Short Oxford History of Europe, Vol. XII: The Eighteenth Century: Europe 1688–1815*, edited by T. W. C. Blanning, 91–130. Oxford: Oxford University Press.
- Ogilvie, S. 2007. "Whatever Is, Is Right'? Economic Institutions in Pre-Industrial Europe." *Economic History Review* 60 (4): 649–84.
- Ogilvie, S. 2014. "The Economics of Guilds." *Journal of Economic Perspectives* 28 (4): 169–92.
- Pfister, U. 2004. "Protoindustrielle Produktionsregimes in institutionenökonomischer Perspektive." In *Die Wirtschaftsgeschichte vor der Herausforderung durch die New Institutional Economics*, edited by K.-P. Ellerbrock and C. Wischermann, 160–78. Dortmund: Gesellschaft für Westfälische Wirtschaftsgeschichte.
- Reckendrees, A. 2006. "Diverse Paths to Factory Production, 1780s–1840s: the Woollen Cloth Industry in the West Riding of Yorkshire and in the West of the Rhineland (Prussian Rhine-Province)." Cologne Economic History Papers 1.
- Reckendrees, A. 2010. "Institutioneller Wandel und wirtschaftliche Entwicklung Das westliche Rheinland in der ersten Hälfte des 19. Jahrhunderts." In *Deutschland als Modell? Rheinischer Kapitalismus und Globalisierung seit dem 19. Jahrhundert*, edited by D. Gilgen, C. Kopper and A. Leutzsch, 45–87. Bonn: J. H. W. Dietz Nachf.
- Reckendrees, A. 2020. "Why Did German Early Industrial Capitalists Suggest Workers' Pensions, Arbitration Boards and Minimum Wages?" Jahrbuch für Wirtschaftsgeschichte / Economic History Yearbook 61 (2): 351–76.
- Rees, A. 1819. "Woollen Manufacture." In *The Cyclopaedia or Universal Directory of Arts, Science, and Literature*, edited by A. Rees. London: Longman, Hurst, Rees, Orme & Brown.
- Reichskammergericht. 1972. Abdruck des beym höchstpreislichen Kayerlichen Reichs-Kammer-Gericht am 17th Hornung 1792 in Sachen Aachen CONTRA Aachen publizierten Urtheils mit Beylage unter Buchstabe A oder Verbesserter Constitution der Reichs-Stadt Aachen. Aachen: Müller.
- Rutsch, C. 1879. Eupen und Umgegend. Nebst einer Karte von Eupen [cited from the online resource geneagraphie]. Eupen: Mayer.
- Scheibler, H. C. and K. Wülfrat. 1939. "Die 'Feine Gewandschaft' in Monschau." In Westdeutsche Ahnentafeln, Vol. 1, edited by H. C. Scheibler and K. Wülfrat, 315–99. Weimar: Böhlau.
- Schieder, W. 1991. Säkularisation und Mediatisierung in den vier Departements 1803–1813. Edition des Datenmaterials der zu veräussernden Nationalgüter. Teil I. Einführung und Register. Boppard am Rhein: Harald Boldt Verlag.
- Schollen, M. 1911. "War Johannes Wespien Tuchfabrikant?" Zeitschrift des Aachener Geschichtsvereins 33: 89–99.
- Schoop, A. 1913. Handel und Industrie in Düren vor der französischen Zeit. Düren: Zander.
- Schoop, A. 1920. Quellen zur Rechts- und Wirtschaftsgeschichte der rheinischen Städte: Jülichsche Städte 1: Düren. Bonn: Hanstein.
- Schubert, W. 1977. Französisches Recht in Deutschland zu Beginn des 19. Jahrhunderts. Köln: Böhlau.
- Schué, C. 1924. "Die reichsstädtische Verfassung und ihre Entwicklung." In *Aachener Heimatgeschichte*, edited by A. Huyskens, 176–82. Aachen: La Ruelle.

- Schultheis-Friebe, M. 1969. "Die französische Wirtschaftspolitik im Roer-Département 1792–1814." Dr. Phil., Universität Bonn.
- Schumpeter, J. A. 1947. "The Creative Response in Economic History." *Journal of Economic History* 7 (2): 149–59.
- Schumpeter, J. A. (1942) 1994. Capitalism, Socialism and Democracy. London: Routledge.
- Seidl, A. 1923. "Die Aachener Wollenindustrie im Rahmen der rheinischen bis zur Gewerbefreiheit 1798." Dr. Phil. (masch. Diss.), Universität zu Köln.
- Sobania, M. 1991. "Das Aachener Bürgertum am Vorabend der Industrialisierung." In *Vom alten und neuen Bürgertum. Die mitteleuropäishe Stadt im Umbruch*, edited by L. Gall, 183–228. München: Oldenbourg.
- Steinbach, F. (1925) 1967. "Die rheinischen Agrarverhältnisse." In Colletanea Franz Steinbach. Aufsätze und Abhandlungen zur Verfassungs-, Sozial- und Wirtschaftsgeschichte, geschichtlichen Landeskunde und Kultruraumforschung, edited by F. Petri and G. Droege, 409–33. Bonn: Ludwig Röhrscheid.
- Stollberg-Rilinger, B. 2019. *The Holy Roman Empire: A Short History*. Princeton: Princeton University Press.
- Stuhlmann, F. and M. Scheins. 1913. "Zwei Geschäftsreisen Aachener Großkaufleute in das östlliche und nördliche Europa im 18. Jahrhundert." Zeitschrift des Aachener Geschichtsvereins 35: 259–317.
- Thomes, P. 2004. 1804–2004. 200 Jahre mitten in Europa. Die Geschichte der Industrie und Handelskammer Aachen. Aachen: Shaker.
- Wegner, G. 2019. "Entrepreneurship in Autocratic Regimes How Neo-Patrimonialism Constrains Innovation." *Journal of Evolutionary Economics* 29 (5): 1507–29.
- Weingarten, H.-F. 1922. "Die Tuchindustrie in Montjoie. Ein Beitrag zur Geschichte der rheinischen Tuchindustrie." Dr. Phil. (masch. Diss.), Universität zu Köln.
- Whaley, J. 2012. Germany and the Holy Roman Empire. Vol. 2: From the Peace of Westfalia to the Dissolution of the Reich 1648–1806. Oxford: Oxford University Press.
- Winzen, K. 1994. "Auseinandersetzungen im Aachener Tuchgewerbe in der Mitte des 18. Jahrhunderts. Reichsstadt und Reichshandwerksordnung." Masch. MA-Arbeit, Philosophische Fakultät, Universität Bonn.