

A “Calling” for Artistic Productivity: The Work Ethic of Educated Artisans in the Reformation Era

Jan Wetzel

Abstract

Over a century after its publication, Max Weber’s *The Protestant Ethic* remains a foundational text for understanding both the historical genesis of modern capitalism and the subjectivity of contemporary occupational life. Weber’s thesis powerfully shaped the classical understanding of modernity as a unique phenomenon tied to the emergence of capitalism in Christian Western Europe, arguing that Protestantism established a “calling” that drove the rational, systematic pursuit of worldly success. However, his enduring argument relies heavily on theological texts rather than the lived experiences of historical actors. To investigate how Protestant ideas actually shaped cultural conceptions of work at the dawn of the early modern period, this article examines Reformation-era art manuals written by and for educated artisans in southern German cities, mainly Nuremberg. The analysis confirms that workers indeed utilized theological concepts in their understanding of work, yet it challenges Weber’s conclusions in three key respects. First, it demonstrates that Protestant theological elements were not used in isolation but were synthesized with other cultural resources, particularly humanism. Second, rather than fostering economic traditionalism—as Weber claimed of Lutheranism—it shows how artisans actively integrated the Lutheran ethic of love with concepts of artistic productivity. Third, this anti-traditionalism differed from the Calvinist model as put forth by Weber; it was not an isolating force but one deeply rooted in the artisanal community. As these interpretations of educated artisans diverged from the more communitarian views held by peasants and poorer tradespeople of the era, the analysis highlights a critical dimension missing from Weber’s story: an actor’s specific occupational position decisively mediated how they synthesized theology into their understanding of work.

Keywords

Protestant Ethic, Max Weber, Religion, Protestantism, Work Ethic, Early Modern, Europe, Artisan

Introduction

A core element of Weber’s *The Protestant Ethic and the Spirit of Capitalism* is the claim that early modern Europe witnessed a historically exceptional transformation of the cultural conception of work (Weber 2012). Occupation as vocation (*Beruf*), traditionally a means of material subsistence and social standing, was transformed into a “calling” (*Berufung*). This shift toward work as a rational, systematic pursuit of worldly success was, according to Weber, the catalyst for overcoming economic traditionalism and enabling the rise of modern capitalism. Weber’s thesis has had a lasting impact beyond its historiographic aim, becoming a core element of sociological understandings of the modern occupational world. Most notably, Boltanski and Chiapello (2018) have extended this lineage, arguing that a new “spirit of capitalism” emerged in the twentieth century, reinvigorating the idea of inner motivational drives within capitalism.

As fruitful as such adaptations have been, they suffer from a fundamental flaw: they adopt Weber’s thesis without engaging with it critically. Such engagement is vital, though, because, as Steinert (2010) has argued, the *Protestant Ethic* can be regarded as a “misconstruction.” Weber sought to trace the transformation of cultural conceptions of work primarily through religious texts—specifically by tracking changing theological justifications and meanings across various biblical translations—while largely ignoring the perspectives of the workers themselves. Given this conspicuous absence of the actual occupational world in Weber’s methodology, Steinert argues that the focus should be redirected toward concrete historical application, examining how, for instance, the guilds, as the most significant institutions of work in early modern Europe, did (or did not) change through the Reformation (Steinert 2010, 96).

This paper responds to Steinert’s appeal, operating on the guiding assumption that analyzing theological texts and their translations in isolation is insufficient for grasping the significance of religion within the occupational

sphere. The focus must shift from theological concepts in the abstract to how concrete actors interpreted and applied them. To this end, this study revisits Weber's "calling" in the historical context in which he originally set its genesis, examining manuals on the art of perspective produced by German artisans in Reformation-era Nuremberg. While the primary function of these manuals was to convey technical knowledge, they also contained social paratexts that permit inferences about the authors' conceptions of work. As Nuremberg was both a preeminent hub of economic activity and an early center of Protestantism—becoming the first Free Imperial City to officially adopt the Reformation in 1525—it is presented as a most likely case for testing Weber's claims regarding the influence of Protestant theology on the conception of work.

This paper's objective is twofold: first, it evaluates the plausibility of Weber's thesis regarding the theological influence on work by constructing a "most likely case" through the testimonies of educated Reformation-era artisans; second, it leverages these findings to further the understanding of the relationship between religious and occupational subjectivity in early modern Europe. The goal is not to "debunk" Weber, but to honor his own stance that a "one-sided spiritualistic analysis" should not simply replace an "equally one-sided 'materialistic'" one (Weber 2012, 125). However, while Weber left the precise interaction between "spiritual" and "material" elements unspecified, this paper seeks to provide more concrete answers regarding how they shaped early modern conceptions of work.

Weber's Thesis Specified: The Two Psychosocial Mechanisms of "Calling"

What, again, was Weber's thesis? Any attempt to engage with Weber's *Protestant Ethic* must contend with the argument's complex and composite nature. Most successfully, economic history has addressed this complexity by isolating Weber's empirical finding that Protestant regions achieved superior long-term economic performance compared to Catholic ones. While some scholars have concentrated on testing the empirical claim directly (Becker and Woessmann 2009; Cantoni 2015; Spater and Tranvik 2019) others offer alternative explanations; for instance, they argue that Bible literacy generated human capital, which fostered general education and eventual prosperity (Akçomak et al. 2016; Becker and Woessmann 2009). Another research strand focuses on political economy, arguing that the Reformation secularized higher education and public administration, creating the institutional conditions for a modern economy (Cantoni et al. 2018).

The economic-historical literature is instructive insofar as it takes up Weber more seriously than sociology usually does. If Weber's thesis holds, disentangling and empirically testing the elements of his argument yield more scientifically robust findings. However, by focusing strictly on quantifiably testable mechanisms, economic history loses the core of Weber's argument: the emergence of a new cultural conception of work rooted in Protestant theology. Weber's sociological deep reading of religious texts, which takes considerable space in his analysis, is bracketed out from the start. Instead, researchers tend to isolate specific elements of Protestant reasoning—such as Luther's advocacy for mass literacy—to provide alternative explanations that bypass Weber's "inner" mechanisms.

This seems problematic, as exactly this was arguably the core of Weber's original thrust, distancing himself from what he viewed as simplified "materialist" explanations for the emergence of capitalism, primarily those advanced by Marxism. It is therefore crucial to first recapitulate his thesis on how theological concepts could fundamentally transform the world of work. According to Weber, this occurred through two psychosocial mechanisms that formed the cultural conception of work as a "calling": first, through the theological intertwining of the divine and earthly spheres, which essentially transformed work into a form of worship; and second, through the doctrine of predestination, which generated an insatiable drive for worldly success.

Operating as the primary psychosocial mechanism, the intertwining of the divine and earthly spheres collapsed the medieval spiritual hierarchy that had previously elevated a cloistered religious elite above the laity. By reframing all legitimate occupations as equally mandated—or "called"—by God, Protestantism granted unprecedented dignity to ordinary labor and effectively sanctified secular activity. As Weber (2012, 42) put it, the Reformation's primary achievement was to "increase drastically the infusion of work (organized by a 'calling') with a moral accent and to place a religious value, or reward, on it." Believers could seek divine favor not through

monastic withdrawal or indulgences, but through active participation in the worldly sphere. Consequently, daily life became profoundly religiously loaded; mundane economic routines were reimagined as a continuous divine service.

However, according to Weber's account, this did not yet generate the internal drive to work he considered so vital for the emergence of capitalism. This required a second psychosocial mechanism, which he linked to the idea of predestination and "inner-worldly asceticism." Weber tied this to the theological distinction between Lutheranism and Calvinism. As Weber points out, the "authority of the Bible, from which Luther believed he took the idea of the calling, actually generally favored economic traditionalism. ... Every believer must stay at his 'livelihood' ... the striving for material gain that goes beyond one's own needs, Luther argued, must be a symptom of one's lack of grace. Indeed, because striving for gain appears to be possible only at the expense of others, this pursuit must be viewed as an unequivocal abomination" (Weber 2012, 42–43). This perspective was accompanied by Luther's skepticism toward the commercialization of both ecclesiastical and secular affairs—a sentiment that served as an important political catalyst for the Reformation.

This is why Weber dismissed the Lutheran "calling" and moved only after a few pages to other Protestant denominations, above all Calvinism (Weber 2012, 45). He argued that only there did the doctrine of predestination create a profound psychological vacuum; the relentless search for signs of divine election compelled believers to treat worldly success as a proxy for spiritual salvation (Weber 2012, 55–80). This redirected religious energy into a "this-worldly asceticism," where work became a continuous, rationally organized, and self-disciplined pursuit. By interpreting prosperity as a visible indicator of grace, Calvinists (and other "ascetic" strands of Protestantism) were driven to work and reinvest their wealth rather than consume it. Ultimately, it was this specific psychosocial pressure that shattered traditional economic boundaries, providing the decisive impulse for the birth of the modern "capitalist spirit".

Case Selection: Educated Artisans of the Free Imperial Cities

As compelling as Weber's two psychosocial mechanisms are, he failed to systematically relate them to the occupational world. His stance—that the disciplined work ethic he described was inherently "modern"—is thus unconvincing. As Steinert (2010, 95–96) argues, this overlooks the vast diversity of work, ranging from independent entrepreneurs and professionals in law or medicine to dependent employees and precarious forms of work, all of which are undoubtedly "modern." Moreover, Weber neglected the concrete pressures of market forces, corporate hierarchies, competition, and the financial requirements of capital equipment that all shape attitudes toward work. This lack of differentiation also extends to the historical analysis. Weber similarly overlooked the specific nature of the occupational world in which the Reformation and its novel conception of work proliferated. Aside from his characterization of vocation as "traditionalist" (to which Lutheranism adhered) he provided no further detail. In his account, the Protestant concept of being "called" appears to encompass the world of work in its entirety, insofar as it transitions toward "modernity."

In contrast to Weber, the following analysis adopts a less teleological methodology, seeking to reconstruct the implications of Protestant theology for the conceptualization of work through the analysis of art manuals authored by educated artisans working in southern German Free Imperial Cities during the Reformation, such as Nuremberg, Augsburg, Frankfurt, Strasbourg, or Ulm. The urban milieu of highly educated artisans is interpreted as a most likely case in two respects.

More generally, the case exemplifies the historical coincidence of economic and religious dynamism. On the one hand, the Free Imperial Cities of southern Germany—"Free" because they were directly subject to the Holy Roman Emperor rather than a territorial lord—functioned as commercial and technological hubs and were, therefore, hardly bastions of economic traditionalism. Nuremberg, where the majority of the publications analyzed here appeared, had approximately 40,000 inhabitants at the time of the Reformation (Close 2009, 23). Since the High Middle Ages, its burghers had cultivated a distinct civic self-confidence. Hartmann Schedel (1440–1514), a proud native of the town, in his famous *Nuremberg Chronicle* of 1493 described the city as a "renowned house of

trades of the German lands,” inhabited by “hardworking and industrious people ... ingenious artisans, inventors, and masters of wondrous and subtle works useful for human necessity and adornment”¹ (Schedel 1493, fol. Cv).

Schedel describes a milieu of highly educated artisans who produced precision instruments—such as astrolabes, globes, clocks, surveying devices, and firearms—alongside more affordable consumer goods and various works of art (Fig. 1). This group operated at the intersection of two significant shifts: one economic and the other scientific. Regarding the former, these artisans were integrated into an expanding market defined by competition and international exchange, exporting high-end products extensively to France and Italy while actively participating in the Frankfurt Fair and attempting to establish a rival local trade assembly. Regarding the latter, the manufacture of sophisticated technical devices in Nuremberg necessitated advanced, increasingly theoretical knowledge, a phenomenon Paola Bertucci (2017) characterizes as the “Artisanal Enlightenment.” Driven by an industrious spirit, this milieu was likely predisposed to an anti-traditionalist ethic similar to the one Weber associated with the Protestant work ethos.

On the other hand, these Free Imperial Cities were among the most consequential agents of the early Reformation, which almost all of them quickly embraced. This is why the Reformation has been widely understood as an “urban event” (Broadhead 1995; Close 2009; Schlögl 2015), a perspective shared by economic historians (for an overview, see Becker et al. 2016, 8). Although the decision to adopt the Reformation ultimately lay with urban elites, Close stresses that the “urban Reformation in southern Germany cannot be reduced to an exclusively top-down or bottom-up process. Internally, it was often a product of compromise between the town council, its burghers, and its clerics” (Close 2009, 252; cf. Broadhead 1996, 581). This dynamic is evident in the very modality of the Nuremberg Reformation. While the council retained final authority, a key moment in the decision-making process was the Religious Colloquy of 1525 (Fig. 2), a multi-day deliberation in which burghers participated extensively (Broadhead 1995; Rittgers 2019). This applies even more to the educated artisans who are the focus of this study. Furthermore, Nuremberg served as the communication hub of the German lands; it was here that many Reformation writings were printed, leading Luther to describe the city as “the eye and ear of Germany.” Consequently, the citizenry was permanently integrated into theological debates through these constant flows of communication.

In a more specific sense, the case of these educated artisans serves as a “most likely” scenario because Protestant theology produced particular occupational effects. First, it led to an intensification of the moral critique of luxury, creating a corresponding need for artisans to justify their trades. Second, the Reformation spurred an educational expansion that opened up new economic prospects for skilled artisans.

The *moral critique of luxury* so prevalent in the Reformation was, to be sure, by no means unprecedented. Anti-materialist reformists such as the Cathars, Waldensians, and radical Franciscans challenged the medieval Church’s wealth throughout the Middle Ages (Bailey 2003). The late fifteenth century had seen another wave of Catholic piety that was a precondition for the Reformation. The Italian Renaissance, with its growths in wealth and luxury (Syson and Thornton 2001), had been met with moral concern. However, the Reformation radicalized critiques of luxury. Luther’s (1520) influential treatise *To the Christian Nobility of the German Nation* can be read, for instance, as a critique of the financial conduct of the Roman Curia (Prügl 2017, 61). Its ostentatious display, competing in grandeur with that of the nobility as well as powerful elite families and nowhere more visible than in the enormous expenses for St. Peter’s Basilica, whose construction began in 1506, became a symbol of the illegitimate ecclesiastical commercialization.

Since Reformation criticism was directed primarily against the Catholic Church, it affected religious art in particular, which increasingly came to be regarded as a form of luxury detrimental to piety, a development that culminated in the iconoclastic outbreaks of the sixteenth century (Viladesau 2021). In addition, political unrest led to a general decline in demand, which particularly affected higher-ranking artisans. In 1538, the German artisan and author Heinrich Vogtherr the Elder (1490–1556) lamented that the changes had “in our own times, throughout the entire German nation, brought about a notable diminishment and decline of all subtle and liberal arts”² (Vogtherr 1538, fol. 2r). A few years later, Augustin Hirschvogel (1503–1553)—an author who will be examined further below—observed that, owing to “the headlong course and disorder of the world, the honorable and useful

arts, and with them the artists and craftsmen themselves, are perishing and falling into contempt”³ (Hirschvogel 1543, fol. 2r).

One response to the altered conditions of demand consisted in an innovative adaptation of supply. As demand for religious imagery collapsed, artists were compelled to adjust the content of their work by turning to secular motifs, an option conveniently facilitated by pattern books such as Vogtherr’s (Speelberg 2024, 53). Others changed their occupation altogether. Hirschvogel, for example, as a youth before the Reformation (Fig. 2), had been a glass-painter apprentice in Nuremberg but was forced to abandon this trade when the Reformation reduced the demand for artistic stained glass, subsequently reinventing himself as a cartographer (Pilz 1972). In this regard, too, the educated artisans constitute a most likely case for analyzing the impact of theological debates on cultural conceptions of work. Faced with a professional insecurity that was rooted in theology, they had ample cause for intellectual reflection on their craft.

The second, more specific effect of Reformation on this milieu was the *educational expansion*, especially through print. With the invention of movable-type printing in the mid-fifteenth century, a new market for printed knowledge had emerged. In addition to religious and humanist texts, publishers increasingly produced instructional and practical manuals—a genre that has recently attracted growing interest within the history of science, technology, and media (Creager et al. 2020; Remond 2020). These publications included not only theoretical treatises on art and architecture, but also manuals aimed at artisans (Seidenfuß 2006, 127). The print revolution concerned not only texts but images as well, which for the first time in history could be reproduced at scale through woodcut and copperplate engraving (Cárdenas 2024), drawing artists into this new field.



Figure 1. Producers and consumers of the perspective manuals: skilled artisans in the free imperial cities in the sixteenth century (selection from Book of Trades by Hans Sachs and Jost Amman, 1568)

While the Reformation, as already indicated, promoted a marked skepticism toward luxury goods, prints were the major exception. Since Reformation theology insisted on the personal relationship of every Christian with God *sola scriptura* (by scripture alone), it presupposed widespread literacy. From an economic perspective, this generated a new form of demand for books. The individual engagement with the divine mediated through text fostered a proto-industrial print economy capable of producing and circulating millions of copies of scripture into households across social strata (Kaufmann 2022). In this sense, the Reformation was not only a theological movement but fundamentally aligned with educational expansion. In this context as well, educated artisans most likely had the opportunity to synthesize the experience of educational expansion with theological reflections, particularly to the extent that this expansion transformed their work. In summary, it can be said that the Reformation specifically confronted educated artisans in early modern cities with a distinctive constellation of challenges and opportunities; these circumstances most likely prompted them to integrate theological debates with their professional situations.

Sources: Art Manuals for and by Artisans

It is precisely within this constellation of challenges and opportunities that the following corpus is situated: a series of manuals on art, especially on perspective, published in the decades after the Reformation. With few exceptions (Fig. 2), the perspective manuals examined here were printed in Nuremberg and are identified on the basis of the comprehensive analysis provided by Seidenfuß (2006, 18–20).

The authors of these manuals belonged to the upper stratum of the artisan milieu introduced above (Fig. 1). Most were master painters or goldsmiths, with two notable exceptions: Hieronymus Rodler (1485–1539), who served as secretary and chancellor to John II, Count Palatine of Simmern (1492–1557), while also running the court printing house established by the count, a respected patron of art and learning; and Hermann Ryff (1500–1548), an unusually prolific humanist author who produced dozens of medical and technical works and translated Vitruvius. Their active engagement with the dynamic early modern print market likely encouraged the authors to enter the emerging field of book publishing alongside the management of their workshops. The entrepreneurial character of their undertakings is evident in its financial risks: Lautensack, for instance, died in debt, leaving more than 500 unsold copies of his book—an unmistakable commercial failure (Seidenfuß 2006, 164).

The publication of the art manuals coincided with the period of confessional change. Figure 2 indicates that all authors (except the younger Lautensack and Lencker) were in youth or early adulthood when Luther posted the Ninety-Five Theses in 1517 and spent most of their lives in the period leading up to the Reformation's consolidation with the Peace of Augsburg in 1555. Drawing on Mannheim (1952, 306–312), this group can be described as a “generation unit.” Given their comparable occupational positions and their shared exposure to the same formative historical events, it is plausible that they developed a similar pattern of thought.

Before turning to the analysis, it is worth noting that the genre of perspective manuals likely coalesced in Nuremberg because the city was home to Albrecht Dürer (1471–1528), who exemplified a paradigmatic conjunction of entrepreneurial ambition, creative imagination, and artistic self-consciousness. He collaborated on the *Ship of Fools* by the humanist Sebastian Brant (1457–1521), the most successful pre-Reformation work of popular literature (Price 2005, 114–15). His godfather was Anton Koberger (1440–1513), arguably the most prolific printer, publisher, and bookseller of the late fifteenth century, and among the first to operate on a genuinely entrepreneurial basis. In short, Dürer was deeply embedded in the emerging European print economy and, from an early age, was intimately familiar with its aesthetic as well as its economic logics. His *Underweysung der Messung*, published in 1525 and initiating the subsequent wave of perspective manuals (Fig. 2), positioned itself precisely at this nexus.

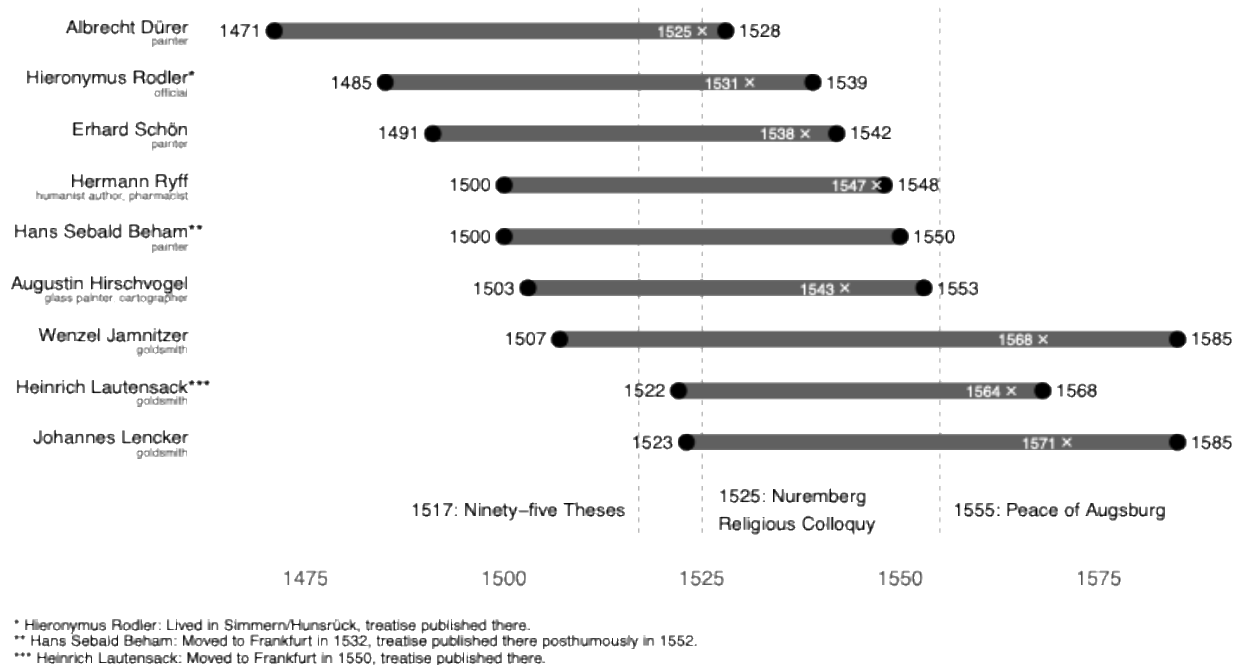


Figure 2. Historical timeline (black dots represent dates of birth and death of the authors, white crosses the date of the publication of their manuals, dotted lines Reformation events)

The specific subject of these textbooks was linear perspective. This technique constituted one of the most consequential innovations of art, design, and architecture of the early modern period in Europe. Potentially mediated through Arabic mathematical knowledge (Belting 2011), it spread in Renaissance Italy, from where it moved northward and became one of the core technologies of what is classically referred to as “Western art” (Panofsky 1991). As will be elaborated below, the manuals examined here sought to make perspective teachable in a systematic, mass-mediated form, whereas it had previously been transmitted solely through workshop-based instruction.

In what follows, though, the manuals’ technical content is deliberately set aside. Instead, attention turns to the social paratexts of their title pages, forewords, and afterwords. Why should these be considered a good source? It is true, first of all, that paratexts were conventional performances of the early modern book market, in which authors sought patronage, among other things. It is equally true that we cannot read stable inner motivations such as a distinct Protestant work ethic directly from these texts (then again, neither can Weber derive them from Bible translations).

Yet it is important to note, not least given the target audience of young artisans, that these books were expensive. Prospective buyers would have examined them carefully before purchasing and needed to be convinced that the book would be useful for their own work—that the investment such a volume undoubtedly represented was, in effect, a lasting investment in oneself. To that extent, the introductions did present ambitious “folk theories” that invited an inner self-examination of motives, goals, and obligations. To be successful, these theories had to resonate with the lifeworld and self-understandings of their readership. It is therefore plausible that they indirectly inform us about the self-understandings of the artisan milieu described above. Further support for this reading comes, as will be shown, from the fact that the texts were by no means merely conventional but displayed both shared motifs and idiosyncrasies. This makes clear that the authors themselves reflected on their identity and their work and committed those reflections to paper in a relatively unfiltered manner.

The argument proceeds in two steps. First, it is shown that the authors articulated an understanding of artistic productivity, grounded in a work ethic oriented toward the “common good” while simultaneously encouraging

industriousness and inventiveness. Second, it is demonstrated that the circulation of theoretical knowledge that enabled innovation was framed as a Christian duty, attributable to a Lutheran ethic of love. Against Weber, it is argued that the practical appropriation of Lutheran ideas within the artisanal world of work likewise generated an anti-traditional effect.

Learning by the Book: The Productivity of Artistic Skill

First, let us consider the concept of artistic productivity, which was certainly fraught with preconditions given the traditional nature of the working world. The manuals themselves can be considered “anti-traditional” insofar as they transferred the register of learned, book-based knowledge into the world of artisanal work. Although Dürer was already highly esteemed by the time he published his book, he nonetheless felt obliged to justify his claim to learned authority—an authority that, as an artisan in a stratified society, could not simply be presumed. In his dedication to the humanist Willibald Pirckheimer (1470–1530), one of the most important representatives of Nuremberg's political and intellectual elite, Dürer (1525, fol. 1v) stated that he had written his book “not that I think I have proven anything great or remarkable to you with this, but rather that you may understand and appreciate my sincere and good intentions.”⁴ For the authors who followed Dürer, this act of appropriation was potentially even more fraught, which is why they continued to describe themselves as “uneducated” craftsmen who could express their knowledge only “as simply and poorly”⁵ as they could (Lautensack 1564, fol. 5v).

The context of a “traditionalist” understanding of (occupational) position so crucial for Weber's story of modernization through Protestantism was thus clearly present in these writings. At the same time, however, the books did not in fact conform to the traditionalism that structured the world of work. The authors were not only aware of this mismatch; they deliberately sought to legitimize this transgressive move in three ways: by appealing to the “common good,” by devaluing traditional forms of knowledge, and by cultivating inventiveness and industriousness.

First, the authors *appealed to the “common good”* of their knowledge, as Jamnitzer (1568, fol. 4r) put it verbatim. They did not publish their books, as Lautensack (1564, fol. 59r) put it, “out of vainglory or pride,” but rather to “help and advice.” In doing so, the artisans appropriated a concept that functioned as a regulative idea at the center of medieval political thought (Kempshall 1999), as well as political organization and conflict in the European city. The perceived advance of self-interest—together with an alleged erosion of the common good through ecclesiastical privileges, newly accumulated mercantile-capitalist wealth, and entrenched political oligopolies—helped to generate a wider sense of social transformation and thereby provided particularly fertile ground for the Reformation. Accordingly, the Reformation repeatedly took up questions of the common good, even though reformers offered divergent answers that were interpreted differently across local constellations (Broadhead 1996, 586).

The claim that this knowledge could be useful to everyone was stressed repeatedly. Ryff specified that one might “form and shape by carving, hewing, engraving, etching, cutting, casting, modeling, pouring, and printing, in all kinds of materials, such as wood, stone, marble, metal, ivory, plaster, wax, casting sand, and the like”⁶ (Ryff 1547, fol. 1r). Hence, the art of perspective, as Dürer (1525, fol. 1v) had already written, was “not only useful for painters, but also for goldsmiths, sculptors, stonemasons, joiners, and all those who make use of measurement.”⁷ This notion was echoed almost verbatim by the other authors. Hirschvogel (1543, fol. 2v) declared an intention to serve “many artists, especially painters, sculptors, goldsmiths, silk embroiderers, stonemasons, joiners, and also all others”⁸; Rodler (1531, fol. 1r) addressed “all art-lovers, especially painters, sculptors, goldsmiths, silk embroiderers, stonemasons, joiners, and all others who desire to make use of the art of measurement”⁹; Lautensack (1564, fol. 1r) wrote for “goldsmiths, painters, sculptors, stonemasons, joiners, &c.”—in short, “art-loving craftsmen,”¹⁰ Lencker (1571, fol. 1r) for “all lovers of good arts,”¹¹ Beham (1552, fol. 1r) for “artful artisans.”¹² Rodler's frontispiece visually reinforced this claim to commonality by depicting multiple trades working together under a shared roof (Fig. 3).



Figure 3. Artisans of various trades gathered beneath the imaginary roof (woodcut on the frontispiece of Rodler's 1531 manual)

The concern with accessibility for all was also reflected in the fact that the authors explicitly addressed themselves to young apprentices, “not the highly learned and experienced ..., but the simple youths who nonetheless take delight in this art”¹³ (Beham 1552, fol. 2v). Rodler maintained that Dürer’s book was “made so excessively artificial and incomprehensible that it is useful only to the most highly learned”¹⁴ (Rodler 1531, fol. 2r); by contrast, his own work, he claimed, enabled readers to “learn more easily than from some previously printed books,” not least because it was “illustrated with many beautiful and useful figures”¹⁵ (Rodler 1531, fol. 1r).

Second, the authors *devaluated traditional knowledge*—that is, “tacit knowledge” (Polanyi 2009) and knowledge gained through experience, transmitted in the workshop from master to apprentice. Dürer objected that gifted apprentices were taught only through routine practice, which led them to produce work “powerfully, but thoughtlessly, and only according to their own whim”¹⁶—a whim that could be mistaken. He concluded: “That such painters have taken pleasure in their errors has only one cause: they never learned the art of measurement, without which no true artisan can become or be. And this is the fault of their masters, who themselves never learned it”¹⁷ (Dürer 1525, fol. 1v). Lautensack (1564, fol. 4v) offered a telling allegory for how uneducated artisans produced inferior work: “It has come to this, as the old painters used to say: If someone tried to paint an angel, and it failed, they would simply paint a devil instead. One sees this in many things, for people pay no heed to measurement.”¹⁸

The manuals were intended to provide a learned corrective to workshop knowledge and, indeed, to encourage autodidactic learning. Beham (1552, fol. 2r) stated: “For a diligent young man may, even without any master, gain from this little book a thorough instruction and understanding, so that through his own practice he may properly learn the true foundation of this art.”¹⁹ When Beham—who early on had shown sympathy for radical strands of the Reformation—invoked the “true foundation,” the phrase resonated with the principle of *sola scriptura*: a mode of learning grounded in intensive self-study through books. Just as in the Reformation this philological principle was directed against the authority of the clergy, here it was (echoing Dürer) turned against “uncomprehending masters ... who cannot show [their apprentices] the true foundation of drawing and painting”²⁰ (Beham 1552, fol. 2r).

Thirdly, the authors sought to *cultivate inventiveness and industriousness*. As Dürer (1525, fol. 1v) wrote, perspective would “extend one’s understanding, prompt further inquiry, and lead to the invention of far more than

I am able to show here.”²¹ Rodler (1531, fol. 3r) reiterated the point, arguing that anyone who diligently applied themselves to this art “may thereby produce many more beautiful things than could be achieved from one’s own faculties and mere visual estimation.”²² Writing a few decades later, Lautensack (1564, fol. 2r) maintained that no further proof was needed that artisans and builders trained in perspective could “surpass the unlearned with their works.”²³

The artistic excellence promised by this new body of knowledge, the authors repeatedly insisted, was not freely given but had to be arduously acquired. As Schön (1540, fol. 2r) put it, one had to cultivate perseverance in learning this new art, “for what is entirely easy cannot be artful; rather, what is artful requires great diligence and labor.”²⁴ Lautensack developed this argument at greater length. He criticized the conveniences of the urban economy, which, in his view, effectively recast apprentices as consumers. Because so much was readily available, he observed, “whatever one makes or is supposed to make, one can immediately find for purchase, so that one no longer needs to think much about the art; hence the proverb has arisen: someone buys a work of art for a kreuzer, and will not make it as well himself in his entire lifetime.”²⁵ It didn’t help, he added, that there was little economic incentive to learn, as there were “plenty, here and there, who do not know this art and yet make a living; why would you rack your brain over it?”²⁶



Figure 4. Tempus fugit motif on the title page of Lautensack’s 1564 manual

The notably “talkative” Lautensack was also the author who most explicitly derived a work ethic from these considerations. His principal point of reference, however, was not Protestantism but the humanist canon, specifically Virgil’s (70–19 BCE) *Georgics* and its admonition *fugit irreparabile tempus* (irretrievable time slips away). Lautensack alluded to this dictum by reworking the then-popular pictorial motif of the winged hourglass and pairing it with the motto, “I run swiftly, no one can turn me back”²⁷ (Fig. 4). In this way, he translated a humanist commonplace into an ethic of work. The poem that opened his manual is a pointed warning. His intended reader—the young apprentice—was supposed to learn diligently,

So that already in your youth
you may attain the crown of art,
which will hold you in honor in old age
and will turn your heart to joy.
But if you idle for a while,
until time has hurried past, ...
then everyone will mock you

that you have gone on sleeping so long.²⁸
(Lautensack 1564, fol. 1r)

Time appears here as something to be used productively; failure to do so exposed the artisan to public derision: “It is no shame not to know something; the shame lies in the refusal to learn”²⁹ (Lautensack 1564, fol. 4r).

Lautensack’s poem unmistakably recalls Weber’s reading of Benjamin Franklin’s maxim “time is money” (Weber 2012, 14), which Weber traced to the English Puritan theologian Richard Baxter (1615–1691) and situated within the tradition of “ascetic Protestantism” (Weber 2012, 103–107). Lautensack’s moralization of time, however, sits uneasily within this genealogy. Even if some familiarity with Calvin cannot be excluded, his social and cultural milieu was overwhelmingly Lutheran: he grew up in Nuremberg and later moved to Frankfurt. Moreover, his injunction predates Baxter by roughly a century and is plainly grounded in humanist, rather than Christian, motifs.

Sharing is Caring: Productivity of Love

So far, it has become apparent that accounts of the productivity of artful work contain only sparse explicit references to Protestant theology; the principle of *sola scriptura* remained implicit. The work ethic observed fits the authors’ placement in the early modern city and deviates from Weberian economic traditionalism; however, it fails to meet the criteria of a divine “calling.” The following section, by contrast, develops an argument showing that the authors’ conception of work also drew directly on theological ideas. This occurred in a manner not described by Weber—namely, to foster artistic diligence and innovation as a Christian act of love.

As Martin Brecht demonstrates, the idea of Christian love constituted Luther’s decisive breakthrough in the late 1510s. In contrast to ecclesiastical or scholastic interpretations of Christianity, Luther developed an “ethic that was newly based on faith and its responsibility, in which not least was one’s secular and daily activity considerably reevaluated as a service of love” (Brecht 1993, 388). Weber already drew explicitly on this Lutheran notion, which has been framed here as the first psychosocial mechanism of the “calling.” As noted above, he interpreted the attendant ideal of communal solidarity, however, as a key argument for Lutheran economic traditionalism, insofar as it opposed the impersonal forms of exchange characteristic of market relations (Weber 2012, 43–45). Such restorative, anti-commercial appropriations of the Reformation can indeed be found among poorer guilds, such as the weavers of Augsburg (Broadhead 1996, 587–593). Most prominently, they lay at the ideological core of the peasants’ “social movement” (Ebbinghaus 2024), which was ultimately successfully suppressed in the German Peasants’ War of 1524–1525. The *Twelve Articles* of 1525, the central document articulating the peasants’ demands, called in multiple respects for a return to more communal arrangements of the economy and were explicitly directed against the increasingly commercialized, self-serving practices of the high clergy and feudal lords.

Lutheranism put in practice not by poor weavers or peasants, but by educated artisans, yields a different picture, though. Sharing their work through the production of perspective manuals—a distinctly entrepreneurial undertaking—was conceptualized by these authors, especially by Dürer, Jamnitzer, and Lautensack, precisely as an expression of love of one’s neighbor. Those who possessed a skill, argued Lautensack (1564, fol. 59v), would “make their way and can go wherever they choose; those without such abilities, by contrast, are left behind.”³⁰ The possession of skill entailed an ethical obligation to assist those who had not yet acquired it. He underscored this point by sharply criticizing those who refused to share their knowledge:

Although they could often help others with the skill God has given them, they are so hard-hearted that, even when they clearly see they could assist someone with just a tiny contribution, and kindle in them a genuine eagerness for the craft, they still prefer to lock everything away, shutting doors and chests so that nobody learns anything from them. And what would it amount to if a person mastered every art in the world, yet kept it all to himself, begrudged it to everyone, and let it simply decay inside him? That is why I ask everyone to give their verdict: what sort of creature is a person like that?³¹ (Lautensack 1564, fol. 59v)

Lautensack reinterpreted the Gospel through the lens of an ethic of productivity. Although his theological references remained implicit, they were clearly recognizable as being rooted in the Gospel. For example, his description of someone who mastered “every art in the world” yet kept it “all to himself” drew on Mark 8:36:

“What good is it for someone to gain the whole world, yet forfeit their soul?” (NIV). Also present was the *Parable of the Talents* (Matthew 25:14–30), which taught that what God had entrusted to a person should not be wasted. Whereas in the biblical text the increase of capital—since “talents” denoted a substantial sum of money—functioned primarily as a metaphor for religious fidelity, Lautensack, translated this logic back into the economic realm. In doing so, he extended the demands of the Gospel to occupational conduct itself; he argued that where people kept their knowledge to themselves, there was less overall prosperity.

In Jamnitzer, the same moral logic appeared, but with the biblical grounding made explicit:

And just as God works unceasingly in his creation, so too should we work and not remain idle, everything to his holy praise and for the greatest benefit of our neighbor, each according to the gift that God has bestowed upon him, as Paul teaches. For although gifts and skills are unequal, and in one person shine more splendidly and greatly than in another, yet all of it comes from one and the eternal Giver, who will in due time demand an account, on the day of his glory, of each person’s stewardship, whether from the one entrusted with a single pound or from the one who has received ten pounds to administer. Therefore, no one should hide his entrusted little talent in a sweat-cloth; rather, to the benefit and welfare of his neighbor, he ought to serve with it to the best of his ability, since no one can carry even the least thing with him out of this vale of tears. We have nothing beyond what we brought into this world, and it is plain that we shall bring nothing out of it.³² (Jamnitzer 1568, fol. 3r)

When Jamnitzer spoke of the “shine” of individual talent, he clearly drew on the New Testament image of the lamp that is not concealed but placed where it can illuminate others (e.g., Matthew 5:14–16; Mark 4:21; Luke 11:33; cf. Luke 8:16, where the light is set “on a stand, so that those who come in can see the light” [NIV]). The reference to the “ten pounds” alluded to the canonical *Parable of the Ten Minas* (Luke 19:11–27) in which a nobleman entrusted sums to his servants before departing; upon his return, he rewarded those who had increased the money and condemned the servant who, out of fear, had merely preserved it in a cloth, casting productive use, public accountability, and the refusal to “bury” entrusted resources as moral imperatives. Just as Jamnitzer, Hirschvogel (1543, fol. 2r), and Lautensack (1564, fol. 59v) directly echoed the phrasing of Luther’s (1522, fol. 63v) New Testament translation when they insisted that they did not wish to hide their knowledge in a “sweat-cloth.”

With respect to Weber, what is decisive in these passages was precisely how they departed from his notion of Lutheran traditionalism. The authors clearly embraced the Lutheran theological premise that all forms of work shared the same dignity and were equally understood as a “calling.” Although this premise, as Weber rightly observed, entailed a fundamental acceptance of social hierarchy—and although the authors did not openly challenge the estate-based order—they nevertheless articulated a self-reinforcing, two-sided ethical obligation of work grounded in Christian love: those who possessed resources or skills were obliged to share them with those who did not, while recipients, in turn, were morally bound to deploy what they had received in a productive, socially beneficial manner. Far from reinforcing traditionalist sufficiency, this ethic of love generated an increase in “benefit and welfare” (Jamnitzer) of the urban community.

This interpretation of the Lutheran ethic of love established conditions under which striving for gain was not at the expense of others, but instead uplifted the community as a whole; consequently, personal gain did not have to be inhibited. Here, then, a common-good-oriented “culture of growth” (Mokyr 2017) becomes visible, and with it a mechanism that functions, in a sense, as an alternative to Weber’s second psychosocial mechanism of “calling” in ascetic Protestantism described above. The ethical foundation of this alternative mechanism was the premise that all goods were received from God. Precisely because nothing was ever fully one’s own (since nothing could be carried into heaven), nothing was truly lost through giving: “Freely you have received; freely give” (Matthew 10:8 [NIV]). Those who worked more, especially more skillfully, could give more and were thereby regarded as more pious. The social feedback that sustained this ethic was the esteem of one’s neighbors.

Moreover, this mechanism was self-reinforcing, in a manner structurally analogous to the logic Weber famously captured in the dictum “God helps those who help themselves” (Weber 2012, 68). Just as in Weber’s account the uncertainty of election drove Calvinist believers to seek confirmation of divine favor through worldly success, the unequal distribution of God-given talent (Jamnitzer: “gifts and skills are unequal, and in one person shine more

splendidly and greatly than in another”) prompted individuals to discover and realize their received “talents” through diligence. Worldly success could, accordingly, be understood as the dutiful fulfillment of divine endowment; this was legitimized provided that the fruits of that success were shared with the community. Furthermore, failing to “shine” in one’s “calling” could be regarded as a sin, a failure toward God, who, in the Protestant sense, was most visible in the person of one’s neighbor.

Crucially, this dynamic did not arise from a “deep spiritual isolation” (Weber 2012, 61) bred by anxiety over one’s status among the elect that Weber highlighted in Calvinism. Instead, a *prosocial* mechanism produced a comparable effect: disciplined work was motivated not by existential dread but by an ethic of grateful stewardship and a positive identification with those who distinguished themselves through exceptional achievement while explicitly disavowing personal pride. The more one developed and shared their “gifts,” the more pious one appeared in the eyes of the community, thus reinforcing the cycle. Individual achievement functioned not as a solitary marker of election but, since it lifted others as well, as an expression of Christian love directed toward the artisanal community (Fig. 3).

This also clarifies why Dürer was such a pivotal figure for these authors: in his distinctive combination of artistic (and economic) achievement and piety, he perfectly embodied their version of a Lutheran work ethic. By a wide margin, he was the most famous German artist of the sixteenth century. He worked for the highest elites of the Holy Roman Empire and served on Nuremberg’s council, representing an extraordinary instance of social mobility for an artisan. Yet he also invested considerable effort not only in disseminating his art to burghers through prints but in producing groundbreaking works of art education. For Dürer’s readers, who could directly experience how their own work improved through the “Christian” generosity of a celebrated artist sharing his knowledge, the effects of this ethic were immediately tangible, making it seem compelling to build on Dürer’s work and to render it accessible to an even broader public.

Conclusion

The account developed here has added several pieces to Weber’s unfinished puzzle; what remains is to assemble them more fully. One initial observation is straightforward: at least in the case presented here, Weber’s intuition of a fundamental connection between Protestant theology and cultural concepts of work seems plausible. References and allusions to theology do indeed appear in texts produced by artisans. Beyond this point, however, the picture becomes more complicated, and new insights have emerged that run counter to Weber’s portrayal.

First, changing the perspective from Protestant theology alone to its adaption to the occupational world has shown that there were no clear-cut adaptations as Weber suggests; instead, there was an *amalgam of ideological references*. Although the texts did invoke Protestant theology, such references were neither dominant nor exclusive, nor were they articulated with any marked consistency. The notion of the “common good,” far older than the Reformation, retained its centrality as a shared moral framework within urban society. Humanist thought was equally significant, though its presence varied with the authors’ educational backgrounds, reaching its most elaborated expression in figures such as Dürer and Jamnitzer. With respect to the incitement of artistic ambition, humanism’s model of classical antiquity operated less as a celebratory ideal than as a benchmark, foregrounding artisans’ perceived inadequacy vis-à-vis ancient achievements. This sense of “falling short” provided a powerful justification for exceptional artistic striving, arguably a core mechanism of what historians conventionally subsume under the term “Renaissance.”

Second, although the authors were Lutheran Protestants, no “*economic traditionalism*” in a strict sense could be found. This might be explained as the “calling” to artistic excellence was, above all, a matter of educating the next generation of artists. They were to be inculcated with the very values that, in the authors’ view, would secure their future professional success—diligence, of course, but also patience and perseverance in learning, and a willingness to delay gratification. While this ethical stance may be regarded as broadly characteristic of early modern artisans, who typically underwent lengthy apprenticeships (Doepke and Zilibotti 2008, 776–777), the surge of innovation in Renaissance art fostered the belief that sharing knowledge systematically could forge an artisanal community capable of competing, whether at the level of the city or the “imagined community”

(Anderson 2006) of “Teutschland” as a whole. As Dürer (1528, Aij r) hoped, German artisans would, as they learned from his book, “in time, not yield the prize to any other nation.”³³

This confirms the economic-historical approach that emphasizes the importance of human capital, which was considerably increased through education. But in contrast to works that have emphasized that the better economic performance of Protestant regions was an unintended consequence of the literacy needed to study the Bible (Becker and Woessmann 2009; cf. Rubin 2024, 1059), here the linkage was clearly recognized by contemporaries. This recognition emerged most readily in the higher crafts, which produced particularly valuable goods and therefore required distinctive forms of education to remain competitive in export markets. It was not enough, as Dürer (1525, fol. 1v) put it, to work “with utmost diligence”³⁴; artistic goods had to compete on quality. By understanding their work as a “calling” that aspired to artistic excellence, combined with the duty to share what they had learned with the artisanal community, the authors operated, in effect, with a folk theory of human capital growth in the urban economy.

This particular form of self-understanding becomes even clearer when set against other contemporary appropriations of the Reformation. As has been shown for Augsburg, guild politics in the Reformation-era diverged sharply by occupational position. Poorer trades such as weavers aligned themselves—much like the peasantry (Ebbinghaus 2024)—with communitarian and egalitarian principles. By contrast, wealthier and more capital-intensive trades such as butchers resisted these demands, fearing a loss of status. Discursively, this conflict played out as a struggle over how to interpret the Reformation, articulated as a debate over the meaning of the urban “common good” (Broadhead 1996). For the artisans examined here, however, the situation differed in important respects: their standing did not rest on inherited guild privileges but on artistic expertise on the one hand and public recognition of their work on the other. It was against this background that their understanding of artistic productivity took shape.

Third, there was a *non-Calvinist mechanism of intensified work*. This finding entails furthermore a relativization of the supposed effects Luther’s traditionalist view of work (Weber 2012, 41). What has become visible is that Lutheran ethics clearly were able to provide a “combination” (Spater and Tranvik 2019, 1965) of internal drives to excel in artful work and external incentive mechanisms. On the one hand, pedagogical manuals emphasized the intrinsic value of artistic labor as a “calling,” asserting that quality must be perpetually refined rather than restricted by estate-based standards of “sufficiency.” Figures such as Dürer and Beham explicitly challenged the traditional authority of the masters, framing their treatises as anti-traditional instructional knowledge rooted in the “true principles” of art. Ethically, this connection was embedded in the Lutheran concept of Christian love, which provided both an internal impetus (pleasing God by cultivating one’s divinely bestowed “talents”) and external incentives (gaining communal recognition for piety by increasing and sharing those talents).

The notable departure from Weber’s mechanism lies in the absence of capital accumulation as a direct outcome. The sources examined here lack the ascetic renunciation of consumption and the monetary saving that Weber viewed as central to Calvinism. Instead, what emerges is systematic innovative behavior—a quality no less vital to the emergence of capitalism. Consequently, these findings align less with Weberian narratives of rationalization and more with contemporary accounts of capitalism that shift the focus from output maximization to competition and creativity, from an “industrial” to an “industrious” revolution (de Vries 2008). This reveals a distinct facet of modern economic activity: one defined not by individual isolation, but by an individual’s embeddedness within a community whose economic viability depends on human capital that is reproduced as collective knowledge and skill.

A number of limitations and resulting further questions remain. Most importantly, this study is based on a single case and is largely shaped by the available sources. This constraint necessitated a focus on Nuremberg and leaves open whether similar dynamics can be observed in other cities. Vogtherr’s pattern book, published in Strasbourg in 1538, at least suggests the presence of a comparable ethic: he remarked that he shared his design patterns “out of brotherly love”³⁵ (Vogtherr 1538, fol. 2r). Semantically, the formulation may allude to reformers other than Luther (for instance, Zwingli), yet it operates within a similar moral register. It therefore seems plausible that

educated artisans in other free imperial cities developed analogous modes of thinking as well, albeit inflected in distinct ways by the particular Reformation traditions that shaped each local context.

Moreover, it remains an open question whether this conception of work diffused downward into less prestigious crafts. Was Nuremberg particularly conducive to ideological innovation because it lacked guilds, such that artisans could not exercise political power through corporate institutions and—unlike in cities such as Augsburg—were not represented on the city council (Close 2009, 24)? Put more analytically, how did the positions of occupational groups relate to the formation of work subjectivities? Comparative perspectives are therefore necessary to assess the extent to which these books were representative of educated artisanal milieus in Protestant cities, or whether they primarily functioned as self-presentations by a distinctive, mission-conscious elite of craftsmen. Given that it is implausible for people across all occupations to develop the same religiously induced work ethic (Steinert 2010, 95), attention to such differentiation is all the more crucial.

A further limitation is that the sources examined postdate the Reformation and therefore do not permit a strict before-and-after comparison. If, as suggested here, the Reformation operated by amalgamating ideological elements that already existed beforehand (including, but not limited to, humanism), further research is needed to reconstruct the precise processes of combination. This would require comparing the Free Imperial Cities with cities and regions that remained Catholic, in order to assess whether alternative amalgams emerged there—or failed to do so—and thereby to identify the Reformation’s specific effects on the occupational world. Regarding Weber’s “grand narrative,” as this analysis has demonstrated that Lutheran Protestantism cannot be treated monolithically, the question naturally arises as to the status of Calvinism, which was arguably more decisive to Weber’s thesis on the cultural origins of capitalism. The psychosocial mechanism of election-related anxiety driving a rational, ascetic life cannot thus be assumed to work independently of occupational position. Thus, further research requires an analogous empirical examination of how theological doctrines were practically appropriated across various occupational contexts.

References

- Akçomak, İ. Semih, Dinand Webbink, and Bas Ter Weel. 2016. “Why Did the Netherlands Develop So Early? The Legacy of the Brethren of the Common Life.” *The Economic Journal* 126 (593): 821–60. <https://doi.org/10.1111/ecoj.12193>.
- Anderson, Benedict. 2006. *Imagined Communities*. Verso.
- Bailey, Michael D. 2003. “Religious Poverty, Mendicancy, and Reform in the Late Middle Ages.” *Church History* 72 (3): 457–82. <https://doi.org/10.1017/S0009640700100319>.
- Becker, Sascha O., Steven Pfaff, and Jared Rubin. 2016. “Causes and Consequences of the Protestant Reformation.” *Explorations in Economic History* 62 (October): 1–25. <https://doi.org/10.1016/j.eeh.2016.07.007>.
- Becker, Sascha O., and Ludger Woessmann. 2009. “Was Weber Wrong? A Human Capital Theory of Protestant Economic History.” *Quarterly Journal of Economics* 124 (2): 531–96. <https://doi.org/10.1162/qjec.2009.124.2.531>.
- Beham, Hans Sebald. 1552. *Das Kunst und Lere Büchlin*. Egenolff.
- Belting, Hans. 2011. *Florence and Baghdad: Renaissance Art and Arab Science*. Belknap.
- Bertucci, Paola. 2017. *Artisanal Enlightenment: Science and the Mechanical Arts in Old Regime France*. Yale University Press.
- Boltanski, Luc, and Eve Chiapello. 2018. *The New Spirit of Capitalism*. New updated edition. Verso.

- Brecht, Martin. 1993. *Martin Luther: His Road to Reformation, 1483–1521*. Fortress.
- Broadhead, Philip J. 1995. “The Contribution of Hans Sachs to the Debate on the Reformation in Nuremberg: A Study of the Religious Dialogues of 1524.” In *Hans Sachs and Folk Theatre in the Late Middle Ages: Studies in the History of Popular Culture*, edited by Robert Aylett and Peter Skrine. Lampeter.
- Broadhead, Philip J. 1996. “Guildsmen, Religious Reform and the Search for the Common Good: The Role of the Guilds in the Early Reformation in Augsburg.” *The Historical Journal* 39 (3): 577–97. JSTOR.
- Cantoni, Davide. 2015. “The Economic Effects of the Protestant Reformation: Testing the Weber Hypothesis in the German Lands.” *Journal of the European Economic Association* 13 (4): 561–98. <https://doi.org/10.1111/jeea.12117>.
- Cantoni, Davide, Jeremiah Dittmar, and Noam Yuchtman. 2018. “Religious Competition and Reallocation: The Political Economy of Secularization in the Protestant Reformation.” *The Quarterly Journal of Economics* 133 (4): 2037–96. <https://doi.org/10.1093/qje/qjy011>.
- Cárdenas, Livia. 2024. “Instrumente der Popularisierung: Technische und materielle Voraussetzungen des vervielfältigten Bildes.” In *Populäre Bildkulturen der Vormoderne*, edited by Ekaterini Kepetzi and Maria Männig. De Gruyter. <https://doi.org/10.1515/978311172682-008>.
- Close, Christopher W. 2009. *The Negotiated Reformation: Imperial Cities and the Politics of Urban Reform, 1525–1550*. Cambridge University Press.
- Creager, Angela N. H., Mathias Grote, and Elaine Leong. 2020. “Learning by the Book.” *BJHS Themes* 5: 1–13. <https://doi.org/10.1017/bjt.2020.1>.
- Doepke, Matthias, and Fabrizio Zilibotti. 2008. “Occupational Choice and the Spirit of Capitalism.” *Quarterly Journal of Economics* 123 (2): 747–93. <https://doi.org/10.1162/qjec.2008.123.2.747>.
- Dürer, Albrecht. 1525. *Underweysung der Messung*. Hieronymus Andreae.
- Dürer, Albrecht. 1528. *Hierinn sind begriffen vier bücher von menschlicher Proportion*. Hieronymus Andreae.
- Ebbinghaus, Mathis. 2024. “Decoupling Social Movements from Modernity: A Critical Reappraisal of Charles Tilly’s Theory on the Origins of Social Movements.” *Theory and Society* 53 (5): 1151–75. <https://doi.org/10.1007/s11186-024-09569-0>.
- Hirschvogel, Augustin. 1543. *Ein eigentliche und grundtliche anweysung in die Geometria, sonderlich aber, wie alle Regulierte und Unregulierte Corpora in den grundt gelegt, und in das Perspectiff gebracht, auch mit jren Linien auffzogen sollen werden*. Vom Berg und Neuber.
- Jamnitzer, Wentzel. 1568. *Perspectiva Corporum Regularium*. Nürnberg.
- Kaufmann, Thomas. 2022. *Die Druckmacher: wie die Generation Luther die erste Medienrevolution entfesselte*. C. H. Beck.
- Kempshall, M. S. 1999. *The Common Good in Late Medieval Political Thought*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198207160.001.0001>.
- Lautensack, Heinrich. 1564. *Des Circkels unnd Richtscheyts, auch der Perspectiua, und Porportion der Menschen und Rosse, kurtze, doch gründtliche underweisung, deß rechten gebrauchs*. Feyerabend & Lautensack.

- Lencker, Hans. 1571. *Perspectiva*. Gerlatz.
- Luther, Martin. 1520. *An den Christlichen Adel deutscher Nation: von des Christlichen standes besserung*. Wittenberg. <https://doi.org/10.11588/DIGLIT.22705>.
- Luther, Martin, trans. 1522. “Das Newe Testament Deutzsch [Septembertestament].” Wittenberg. https://www.deutschestextarchiv.de/luther_septembertestament_1522.
- Mannheim, Karl. 1952. “The Problem of Generations.” In *Essays*. Routledge.
- Mokyr, Joel. 2017. *A Culture of Growth: The Origins of the Modern Economy*. Princeton University Press.
- Panofsky, Erwin. 1991. *Perspective as Symbolic Form*. Zone Books.
- Pilz, Kurt. 1972. “Hirschvogel (Hirsvogel), Augustin.” In *Neue Deutsche Biographie*, vol. 9. Duncker & Humblot. <https://www.deutsche-biographie.de/pnd118774530.html#ndbcontent>.
- Polanyi, Michael. 2009. *The Tacit Dimension*. The University of Chicago Press. https://www.ebook.de/de/product/3643394/michael_polanyi_the_tacit_dimension.html.
- Price, David. 2005. *Albrecht Dürer's Renaissance: Humanism, Reformation, and the Art of Faith*. Nachdr. Studies in Medieval and Early Modern Civilization. Univ. of Michigan Press.
- Prügl, Thomas. 2017. “Papstkritik und Romentfremdung: Luther und die spätmittelalterliche reformatio generalis.” In *Martin Luther im Widerstreit der Konfessionen: Historische und theologische Perspektiven*, edited by Christian Danz and Jan-Heiner Tück. Herder.
- Remond, Jaya. 2020. “Artful Instruction: Pictorializing and Printing Artistic Knowledge in Early Modern Germany.” *Word & Image* 36 (2): 101–34. <https://doi.org/10.1080/02666286.2019.1631732>.
- Rittgers, Ronald K. 2019. “Religious Colloquies.” In *John Calvin in Context*, edited by R. Ward Holder. Cambridge University Press. <https://doi.org/10.1017/9781108687447.022>.
- Rodler, Hieronymus. 1531. *Eyn schön nützlich büchlin und underweisung der kunst des Messens mit dem Zirckel Richtscheidt oder Linial*. Hieronymus Rodler.
- Rubin, Jared. 2024. “Religion and Cliometric Analysis.” In *Handbook of Cliometrics*, edited by Claude Diebolt and Michael Hauptert. Springer International Publishing. https://doi.org/10.1007/978-3-031-35583-7_94.
- Ryff, Walther. 1547. *Neue Perspectiva*. Vol. 1. Petreius.
- Schedel, Hartmann. 1493. *Register Des buchs der Croniken und geschichten*. Koberger.
- Schlögl, Rudolf. 2015. “The Town and the Reformation as an Urban Event.” In *A Companion to the Reformation in Central Europe*, No. 61, edited by Howard Louthan and Graeme Murdock. Brill's Companions to the Christian Tradition. Brill.
- Schön, Erhard. 1540. *Unnderweissung der proporzion unnd stellung der possen*. Nürnberg.
- Seidenfuß, Birgit. 2006. “Daß wirdt also die Geometrische Perspektiv genandt”: *Deutschsprachige Perspektivtraktate des 16. Jahrhunderts*. VDG.

- Spatar, Jeremy, and Isak Tranvik. 2019. "The Protestant Ethic Reexamined: Calvinism and Industrialization." *Comparative Political Studies* 52 (13–14): 1963–94. <https://doi.org/10.1177/0010414019830721>.
- Speelberg, Femke. 2024. "'noch vil höher, und subtiler Künsten... an tag zu bringen': Renaissance Pattern Books and Ornament Prints as Catalysts of the Design Process." *Zeitschrift für Kunstgeschichte* 87 (1): 48–67. <https://doi.org/10.1515/zkg-2024-1005>.
- Steinert, Heinz. 2010. *Max Webers unwiderlegbare Fehlkonstruktionen: die protestantische Ethik und der Geist des Kapitalismus*. Campus.
- Syson, Luke, and Dora Thornton. 2001. *Objects of Virtue: Art in Renaissance Italy*. J. Paul Getty Museum.
- Viladesau, Richard. 2021. "Counter-Reformation Catholic Art." In *Oxford Research Encyclopedia of Religion*, by Richard Viladesau. Oxford University Press. <https://doi.org/10.1093/acrefore/9780199340378.013.805>.
- Vogtherr, Heinrich. 1538. *Ein Frembds Und Wunderbars Kunstbüchlin*. Straßburg.
- Vries, Jan de. 2008. *The Industrious Revolution*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511818196>.
- Weber, Max. 2012. *The Protestant Ethic and the Spirit of Capitalism*. Routledge.

¹ All translations are the author's own, with original texts provided in the endnotes. "berümbts gewerbhaws teüschler land" ... "arbeitsams emsigs volck ... fastsinnreich wercklewt. erfinder und maister mancherlay wunderwürdiger subtiler arbeit und kunst zum geprauch menschlicher notdurft und zierde dienlich"

² "jetzt zu unsern zeiten in gantzer Teutscher nation, allen subtilen unnd freyen Künsten, ein merckliche verkleynung unnd abbruch mitgebracht"

³ "das durch die geschwinden leufft, unnd zerrüttung der welt, die eerlichen und nützlichen kunst, und der selben Künstner, und werckleut vergehen, und in ein verachtung kumme"

⁴ "nit darum das ich vermeynt ich het euch was groß oder fürtreffentlichs damit bewysen Sonder das jr darauß meinen geneygten und güten willen versteen unnd ermessen möcht"

⁵ "auff das einfeltigst und schlechts"

⁶ "Formieren und Bilden, durch Schnitzen, Hawen, Graben, Etzen, Stechen, Abformen, Possieren, Abgiessen un Abtruckten in aller Handt Zeug, als Holtz, Stein, Marbel, Metal, Helffenbein, Gyps, Wax, Gießsandt, un dergleichen"

⁷ "nicht alleyn den maleren, sonder Goldschmiden Bildhaweren Steynmetzen Schreyneren und allen den so sich des maß gebrauchen dienstlich seyn mag"

⁸ "vilen Künstnern, fürnemblich den Malern, Bildhawern, Goltschmiden, Seydenstickern, Steinmetzen, Schreineren, und auch allen andern"

⁹ "allen kunstliebhabern, fürnemblich den Malern, Bildhawern, Goldschmiden, Seidenstickern, Steynmetzen, Schreineren, auch allen andern, so sich der kunst des Messens ... zugebrauchen lust haben"

¹⁰ "Goldschmiden, Malern, Bildhawern, Steinmetzen, Schreineren, &c." ... "Kunstliebenden Werckleuten"

¹¹ "allen liebhabern guter Künsten"

¹² "kunstbaren Werckleuten"

¹³ "nit für die hochverstendigen und erfarnen ..., sonder allein für die gar einfaltigen Jungen, so doch lusten und gefallen haben zu dieser kunst"

¹⁴ "so überkünstlich und unbegreiflich gemacht, das es alleyn den hochverstendigen dienlich"

¹⁵ "mit vil schönen darzu dienenden figuren"

¹⁶ "gewaltigklich aber unbedechtlich, unnd alleyn nach jrem wolgefalle"

- ¹⁷ “Das aber solche maler wolgefallen in jren yrthumben gehabt, ist alleyn ursach gewest, das sie die kunst der messung nit gelernet haben, on die keyn rechter werckmann werden oder seyn kan, Das aber jr meyster schuld gewest die solche kunst selbs nit gekuendt haben.”
- ¹⁸ “Es ist jetzt schier dahin komen, wie bey den alten Malern das Sprichwort gewesen ist: Wenn einer ein Engel malen wolt, und wann es nit geredt, so malet er ein Teuffel darauß, das sihet man in viel dingen, weil man der maß nicht achte”
- ¹⁹ “Dan es mag ein fleissiger Junger, auch on einigen leermeyster auß disem büchlin grundtlichen bericht und verstand fassen, damit er durch seine übung den rechten grundt diser kunst wol erlernen mag”
- ²⁰ “unverständige leermeyster ..., die jn den rechten grundt zum reissen und malen nicht anzeygen können”
- ²¹ “zü eynem grössern verstand reichen, weytter suchen und gar vil mehr dann jch ytzt anzeyg erfinden”
- ²² “wer sich in Malen, Bild un Steynhawen, Sticken, auch inn Silber, gold oder kupffer stechen, dieser kunst befleist, der mag damit vil mer schöner ding, dann auß eygnen sinnen und dem augenmeß, zuwegen bringen”
- ²³ “Welcher massen auch diejenigen, so dieser Kunst wissend tragen, mit jren wercken deren unwissende ubertreffen, Erscheinet der massen, das solches nach lenge zubeweisen unnötig”
- ²⁴ “dann, was ganntz leicht ist, kann nit kunstlich sein, was aber Kunstlich ist, das wil fleissig muhe unnd arbeyt haben”
- ²⁵ “dieweil desselben dings so viel ist fürhanden, was einer macht oder machen sol, findt er es gleich also zukauffen, das er denn der Kunst nicht viel darff nachdencken, Derhalben jetzt das Sprichwort ist auff kommen: Es kauftt einer ein Kunststuck umb ein kreutzer, er macht es sein lebtag nicht so gut”
- ²⁶ “Ey der sind da und da viel, die diese Kunst nicht können, und sich dennoch erhehren, was wiltu dein kopff darmit zurbrechen”
- ²⁷ “Ich lauff behend, Mich niemals wend”
- ²⁸ “Das du in deiner jugent schon/
Elangest doch der Kunst ein kron/
Die dich im alter helt in ehren/
Und dir dein hertz in freud wirt kehren/
So du aber schleffest ein weil/
Biß die zeit dahin fehrt mit eil/ ...
Verspottet dich denn jederman/
Daß du so lang hast geschlaffen ghan”
- ²⁹ “Es ist kein schand das einer nichts kan, es ist aber ein schand das einer nichts wil lehrne”
- ³⁰ “Wenn einer etwas kan, der kompt auß, er kom wohin er wöll, dargegen müssen die dahinden bleiben, die nichts können.”
- ³¹ “da sie aber offft und vielmals einem andern mit jrer kunst, die sie von Gott haben, auch dienen koendten, so sind sie gleichwol so hart in jrem hertzen, da sie schon mercken und sehen, dass sie einem mit eim geringen stuecklein koennen helffen, und im ein freyen lust zu solcher kunst machen, aber ehesie es theten, sie schloessen ehe alle thuer un Kisten zu, damit ja niemands vo jn etwas gewar suerd, Was were es den nun auch, wen einer alle die kuenst koente, die auff der gantze Welt weren, und hette sie all allein in seinem Kopff und hertzen, und moecht keinem Menschen nichts darvon guennen, und liess es auch also bey jm erfaulen, Darumb ich hiemit einen jegklichen wil gebetten haben, das er sein Sententz woelle sagen, was ein solcher Mensch vor ein Creatur sey.”
- ³² “Und gleich wie Gott für und für wircket in seinem geschöpff, also sollen wir auch werckhen und nit feyren, alles zu seinem heiligen lob, und zu bestem nutz unsers nechsten, ein jeglicher nach der gabe die jm got geben hat, wie Paulus lert, dan ob wol die gaben und Künst ungleich sind, und bey einem menschen herrlicher unnd grosser leuchten als bey dem andern, so kompt es doch alles von einem unnd ewigen Geber, der auch rechenschafft erfordern wird zu seiner zeyt, von eines jeden verwaltung am tag seiner herrligkeit, so wol von dem jenigen dem ein einiges pfundt vertraut ist, als dem so Zehen pfundt in verwaltung empfangen hat, Derhalben ja niemands sein gegebens pfündtlein im schweyßthuch verbergen, sondern seinem nechsten zu nutz und wolfart damit dienen soll, nach seinem besten vermügen, dieweyl niemand der geringsten eines mit sich auß disem jamerthal fuhren kan, nichts haben wie inn diese Welt bracht, auch offenbar ist, das wir nichts darauß bringen werden.”
- ³³ “mit der zeit keiner anderen Nation den preyß vor jnen lassen”
- ³⁴ “mit allem fleiß”
- ³⁵ “auß Brüderlicher liebe”