The Printing Press, Reformation, and Legitimization

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The Industrial Revolution of the late-18th and 19th centuries is often viewed as the event that shot Europe off economically from the rest of the world. But why did the Industrial Revolution happen when and where it did? It is simply not possible that, as of the middle of the 18th century, the Industrial Revolution could have happened anywhere, and England got "lucky" through some combination of natural endowments, individual genius, and luck. Even if per capita income were not substantially greater in Western Europe than in China or the Ottoman Empire on the eve of the Industrial Revolution, the economic and military fortunes of Western Europe had been slowly rising for centuries. It was not mere coincidence that the region that was able to colonize the Americas and substantial portions of Africa and south Asia was also the region where modern economic and technological growth commenced.

By the turn of the 17th century, the institutional and technological features that would eventually push Europe on to path of economic success were already present. Many of these features came to fruition in the important century between 1450 and 1550. A far from exhaustive list of important events in this period include the "finding" of the New World, the invention and spread of the printing press, the Copernican revolution, the Ottoman conquering of Constantinople and threatening of Vienna, the height of the Renaissance, and the Protestant Reformation. Many economists have pointed to at least one of these phenomena as heralding the "rise of the West". The problem, of course, is disentangling these events. Which events were

facilitated by other historical events, and, more importantly, which events were the true "prime movers" of this momentous period of economic history?

Chapter 7 focused on one of these events – the spread of the printing press in Europe and its absence in the Middle East. Some of the effects of the spread of printing are unsurprising – literacy rates rose substantially in Europe (in absolute terms and relative to the Middle East), cities with presses grew, and books became much less expensive. Perhaps more important, however, was the press' effect on the relationship between religious and political authorities. The first part of this chapter focuses on how the printing press helped fundamentally undermine this relationship in Europe. It did so by facilitating the spread of the Protestant Reformation – the event which spelled the end of Church power in many parts of Western Europe.

This leads to the question: what did the *absence* of the printing press mean for the economic and institutional trajectory of the Middle East? If the spread of printing were so important to the Protestant Reformation, is it possible that the delayed acceptance of the press prohibited a similar change from occurring in the Islamic world? This chapter answers this question in the affirmative. This is one of the primary reasons why the spread of printing was so important: where it spread, religious authority was more likely to be undermined; where it did not spread, the status quo was more likely to hold. Although it is much more difficult to pin down why something did not happen (such as an "Islamic Reformation") than why something did happen, comparing the histories of Western Europe and the Middle East can help us better understand why there was never a major undermining of religious authority in the Ottoman Empire.

An economic analysis of these interactions is particularly useful because it provides a coherent and consistent framework for thinking about the interplay between information

technology and institutional development. The framework established in this book suggests that whether the printing press was adopted was both a *cause* and a *consequence* of the strength of the legitimizing relationship between political and religious authorities. In other words, the absence of information technology (which may have been used to undermine the religious or political authority) strengthened the legitimizing relationship, while a strong legitimizing relationship is the very thing which undergirded the suppression of printing. Indeed, it is telling that once printing spread in the Islamic world, calls for an "Islamic Reformation" became much more commonplace.

This leaves one final set of questions: why does it matter who legitimizes political authority? Is religious legitimacy any worse for economic growth than other types of legitimacy? These questions are left for the next chapter.

The Spread of the Reformation²

On October 31, 1517, Martin Luther nailed his Ninety-Five Theses to the door of the All Saints Church at Wittenberg, sparking what would become the Protestant Reformation. Luther was concerned with what he viewed as theological errors (such as whether salvation could come through faith alone) as well as Church abuses that had become increasingly common in the century prior to the Reformation.³ Although Luther's complaints were initially focused on reforming the Church from within, his complaints were quickly echoed by lay and clerical interests throughout northern Europe.

The Reformation initially spread in what was a highly fragmented Holy Roman Empire.

Cities such as Nuremberg accepted the Reformation, with powerful friends of Luther appointing

preachers sympathetic to reform ideas. A contemporary movement emerged in the Swiss confederation, where Huldrych Zwingli (1484-1531) espoused many similar principles and preached to Zürich congregations in the vernacular. A hybrid Luther-Zwingli message caught on in the 1520s in many of the free cities of southern Germany such as Strasbourg and Constance.⁴

The Reformation usually took hold in a city through the efforts of a small cadre of learned, literate priests and scholars who took it upon themselves to spread Luther or Zwingli's message. Many of these reformers were quite fervent, aggressively questioning congregations about the nature of worship and the practices of the Church hierarchy and the pope. It was through the efforts of these reformers that the movement spread so quickly; most had positions in the established Church and could address the masses directly from the pulpit. In many cities, these reformers were welcomed by the city fathers or princes in order to justify the strength of their position vis-à-vis the Church. This was not the case in all cities however: the Reformation was rejected or suppressed in a number of German cities such as Cologne, Würzburg, Bamberg, and Freiburg.

Perhaps more importantly, the message of the Reformation spread from city to city through broadsheets and pamphlets, most of which were written by the lead reformers (especially Luther). Although most people were illiterate in this period, the pamphlets were written in such a manner that they would be read aloud in public meeting places, since oral communication was the primary way that the printed word spread in this period. The Reformers certainly knew this; for example, Luther's pamphlet in response to a papal bull of condemnation was addressed to "all who read or hear this little book."

In many of the cities that accepted the Reformation, such as Strasbourg and Ulm, the city councils took charge of installing the Reformation by bringing in preachers sympathetic to the

reform ideas.⁸ In the northern Hanseatic cities, it was largely the middling bourgeoisie – who were wealthy but had little political power within the cities – that encouraged the adoption of the Reformation as a means of confronting the established powers. Some of the members of these councils sought economic gains, such as confiscation of Church property, while others undoubtedly felt the pressures for change arising from preachers and the masses. In most cases, the Reformation was supported by some literate class with a modicum of power, but far enough removed from the princes or Emperor to not fear direct retribution.⁹ Once the Reformation was accepted by a town, it generally followed that the old privileges and status of the priesthood and hierarchy were removed, followed by the confiscation or destruction of the Church's material wealth ¹⁰

Protestant ideas eventually spread throughout much of Europe. In France, Calvinist churches rapidly spread in the west and south in the 1550s. These Protestants, known as Huguenots, were violently suppressed until a series of peace edicts were agreed upon in the 1570s-1590s. Similar movements occurred in the Low Countries, where Calvinist ideas spread through the 1540s-1560s. The Spanish Habsburgs reacted harshly to Protestants, burning nearly 2,000 between 1523 and 1555. Protestantism was deeply enmeshed with the broader revolt against Spanish rule and was especially popular in the northern half (Netherlands), where William of Orange co-opted the new religion. Political motives were also readily apparent in England, where Henry VIII dealt significant blows to the established church, which consolidated as the state-sponsored Anglican Church under Elizabeth I (1558-1603).

Connecting the Printing Press and the Reformation

"[The printing press is] God's highest and ultimate gift of grace by which He would have His Gospel carried forward." – Martin Luther (quoted in Spitz 1985)

Is it a coincidence that two of the most important events in the Western world of the last millennium – the spread of the printing press and the Protestant Reformation – sprouted 250 miles apart in the Holy Roman Empire, with the Reformation commencing soon after the press became entrenched throughout Europe? Is it a coincidence that the Reformers employed the "first propaganda campaign conducted through the medium of the press"?¹¹

The classic connection made between the printing press and the Reformation is a supply-side one, focusing on the role that the new information technology played in spreading Lutheran ideas. There are a number of factors supporting the supply-side theory. First, papal caricatures and broadsheets disseminated by the Reformers played an enormous role in their propaganda efforts amongst the illiterate masses. These broadsheets were easy to understand and were designed to catch the attention of the reader, often including direct insults to the Church and the papacy. ¹²

Second, the press allowed for the spread of pamphlets to literate preachers and other religious-minded individuals who brought the Reformation into cities and villages. Luther argued that printing was a special sign of God's grace not just because it allowed the mass production of biblical texts, sermons, and the like, but also because it permitted the spread of these ideas through pamphlets and broadsheets. These small pamphlets, which were generally around eight pages, provided an inexpensive, concealable, and easily transportable means for would-be reformers to spread the ideas promulgated by the lead reformers. High transport costs and lack of copyright meant that printed works were not often shipped from a printing center to other

locations – instead, works more frequently spread through reprinting. Hence, those living in cities with presses or close to presses had much greater access to inexpensive printed works.¹⁴

The connection between the printing press and the Reformation is strengthened by considering the attempts made at reforming the Church prior to the spread of the press. Some pre-Reformation attempts were made within the Church to strip power from the pope and reduce the pomp associated with the Church hierarchy, pushing instead for power to be transferred to Church Councils. Jean Gerson (1362-1429) was the leading proponent of this "reform from within" and was an important influence on Luther's writings. Such reform was unsuccessfully attempted at the Councils of Lyons (1274), Vienne (1311-12), Constance (1414-18), Pavia-Siena (1423-24), and Basel (1431-39). In fact, much of the support for the anti-papist agenda at Basel originated from those free cities of Switzerland and southern Germany which were so important to the initial spread of the Reformation. Even on the eve of the Reformation there was considerable pressure to reform the Church from within, but attempts made at Fifth Lateran Council (1512-1517) were unsuccessful.

Perhaps the most serious challenge to the Church came from the Prague preacher Jan Hus (c. 1372-1415), who led the anti-Church movement which would bear his name in the early 15th century. Hus challenged the rights of sinful Churchmen to keep their positions and wealth, a position which caused him to be burned to death as a heretic in 1415. The Hussite movement which followed established rival churches throughout Bohemia based on the denial of the Roman hierarchy, but their influence never extended beyond Bohemia. Other heresies abounded in the century prior to the Reformation. In 15th-century England, the Lollard movement spread the ideas of John Wyclif (d. 1384). Wyclif was an ardent supporter of the rights of lay rulers over the papacy and had significant influence over poorer parish priests, but the Lollard movement he

inspired was ultimately suppressed. A similar fate awaited the Waldensians in France, who rejected Church dogma and were brutally suppressed. Dickens (1968, p. 51) makes the contrast between these movements and the Reformation quite clear: "Unlike the Wycliffite and Waldensian heresies, Lutheranism was from the first the child of the printed book."

It is striking that all of the attempts at reform prior to the invention and diffusion of the printing press were rather easily suppressed by the Church. This is consistent with the argument presented earlier in this book that highly centralized institutions are able to easily suppress small revolts that are not able to spread due to a lack of information technology. Disentangling the role that the press played in the spread of the Reformation from other causes is no small task, however. For example, how can we separate the role of the press from, say, the increased selling of indulgences? In order to make a *causal* claim connecting the spread of printing to the Reformation, we must dig deeper. Rubin (2012b) did just this, collecting and analyzing city-level data on printing presses, Reformation status, and economic characteristics. The following section provides a brief overview of that analysis.

Testing the Effect of the Printing Press on the Reformation

The analysis conducted in Rubin (2012b) was confined to the Holy Roman Empire (HRE), which was the birthplace of both printing and the Reformation.¹⁷ It is useful to concentrate on the HRE because there was substantial variation in religious choice in the Empire. Cities in the HRE with populations of at least 20,000 are listed in Table 1, along with their religious affiliation in 1600 and whether the city had a printing press by 1500.

Table 1: Cities in the Holy Roman Empire (population $\geq 20,000$)

Cities (with population $\geq 20,000$) with Printing Presses by 1500

Cities (with population $\geq 20,000$) without Printing Presses by 1500

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City	Population (in 1500)	P/C (by 1600)	City	Population (in 1500)	P/C (by 1600)
Prague	70,000	С	Tournai	35,000	С
Ghent	55,000	C	Lille	26,000	C
Cologne	45,000	C	Mechelen	25,000	C
Nuremberg	38,000	P			
Bruges	35,000	C			
Brussels	33,000	C			
Augsburg	30,000	P			
Antwerp	30,000	C			
Breslau	25,000	P			
Lübeck	25,000	P			
Regensburg	22,000	P			
Strasbourg	20,000	P			
Vienna	20,000	C			

Population data from Bairoch et al. (1988)

It is immediately noticeable from Table 1 that a majority of the larger cities in the Holy Roman Empire had printing presses. This is not surprising. Printing spread outward from Mainz soon after its invention in 1450, and printers generally moved to large population centers, where demand for printed works was greatest. This is the primary reason why Steven Ozment's (1975) oft-cited claim that the Reformation was an "urban phenomenon" might be a spurious connection. If the printing press were indeed a significant causal factor in the adoption of the Reformation, then cities that were likely to adopt the Reformation were *also likely to be large*, since large cities were more likely to adopt the press.

Other factors besides population must also be taken into account if we are to understand the connection between the printing press and the Reformation. For example, a quick glance at Figure 1 indicates that proximity to Wittenberg played a role in a city's likelihood of adopting the Reformation. It is also possible that cities that housed universities were more likely to reject the Reformation (since many universities were Church strongholds) but also adopt the press

early due to their scholastic nature. A number of other factors may have led to cities with certain characteristics being more (or less) likely to adopt *both* the press and the Reformation. Therefore, in order to make a relevant connection between the two, we need to disentangle what is spurious and what is causal.

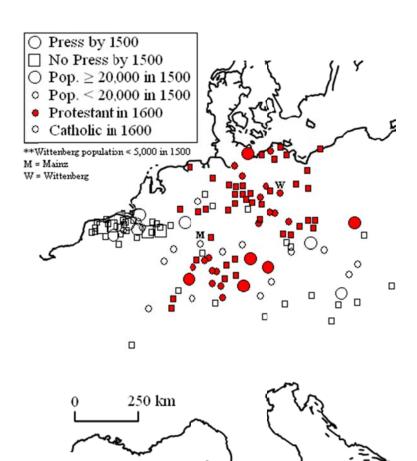


Figure 1: Protestantism and Printing in the Holy Roman Empire

Fortunately, social scientists have a method called *multiple regression analysis* which allows us to address these problems. In a nutshell, multiple regression analysis provides a 'best fit' prediction for how one variable (such as the presence of printing) affects another (such as the adoption of the Reformation) while holding all other variables constant. In other words, the results could tell us "given that a city has population X, has a university, is home to a bishop, and

many other things,¹⁹ what is the average probability that this town adopted the Reformation if it had a press? What is the average probability that it adopted the Reformation if it did not have a press?" These results are not perfect; since the sample is smaller than the population, it may give a positive result when the actual relationship is a negative one. For this reason, social scientists usually consider a result to be salient when it can be said to be true with at least 95% certainty.

The multiple regression analyses employed to test the connection between the press and the Reformation provides very strong results.²⁰ They indicate that the mere presence of a printing press prior to 1500 increased the probability that a city would become Protestant in 1530 by 36.4 percentage points and Protestant in 1600 by 43.0 percentage points, all else being equal. These results far surpass the "95% threshold" necessary for statistical significance, indicating that there is a strong causal relationship between the spread of the printing press and the spread of the Reformation.

What do these results mean in the broader context of the arguments made in this book?

While we have no counter-factual history that tells us whether an event like the Reformation would have occurred without the press, these results suggest the possibility that the printing press was necessary for the Reformation to occur when and where it did. Consider again the fate of previous revolts against the Church. The Hussite movement, Lollards, Waldensians, and others were all rather easily and brutally suppressed by the Church. Their mere presence suggests the possibility, however, that the seeds of discontent had been sown for centuries (indeed, many of Luther's arguments echoed those made by Hus). A primary difference between Luther's movement and his predecessors is that *Luther had the press*.

Politicization of Religious Institutions in the Ottoman Empire

The Protestant Reformation fundamentally and permanently undermined the power of the Church vis-à-vis secular authorities. Would this also have happened in the Ottoman Empire had the printing press been permitted on a wide scale? The suppression of printing in the Ottoman Empire (and, for that matter, much of the Islamic world) had economic effects that are difficult to quantify. This is the realm of counter-factual history; it is impossible to assess exactly how the press would have interacted with the Ottoman religious and political establishment, not to mention how it would have been received by a largely illiterate public.

However, studying the Western European case makes it possible to gain some insight into how the lack of printing affected Ottoman economic, political, and religious outcomes. This *by no means* makes the common Eurocentric mistake that the path followed by European economies is the "best" or "only" path to economic success. Instead, this line of inquiry considers how certain economic and technological achievements (such as the spread of printing) happened *in a certain economic and institutional context*, and then employs economic theory to gain insight into how the specific economic and institutional features facilitated or inhibited economic growth. It is only then that we can say something about how the presence or absence of these features may have led to different results.

Arguably the most important consequence of the spread of printing in Europe was that it helped facilitate the Reformation, which in the process fundamentally and permanently undermined the efficacy of religious legitimacy. In the Ottoman Empire, however, the exact opposite occurred – religious authority became even *more* politicized than it had been in previous Islamic regimes. It is true that the Ottoman *sultān* was able to exert greater influence over the religious establishment than in previous Islamic empires, but the high degree of religious politicization provides a striking contrast to Protestant Europe.

In fact, throughout most of pre-Ottoman Islamic history, the $muft\bar{t}$'s office was largely independent of government interference, providing an independent source of legitimacy. In the early Muslim period, political leaders appointed jurists, but these appointments were generally confined to local jurists ($k\bar{a}d\bar{t}$ s). $K\bar{a}d\bar{t}$ s were the primary enforcers of the law, and their relationship with political authorities was important to legal outcomes; yet, the top religious authorities ($muft\bar{t}$ s) remained relatively autonomous. Although muftis had no executive power, $k\bar{a}d\bar{t}$ s and $sult\bar{a}n$ s generally relied on them to provide legitimacy to their claims.

By the fifteenth century, however, the *muftī*'s office was clearly incorporated into the apparatus of the Ottoman state. This occurred during the reign of Mehmet II (r. 1444-46, 1451-81), the influential *sultān* and conqueror of Constantinople. Mehmet II brought the entire *muftī*' institutional complex, headed by the Grand *Muftī* (*Shaykh al-Islām*), under the aegis of state control. Over the course of the 15th and 16th centuries, the Grand *Muftī* became the representative of the *sultān*'s religious authority, nominating and dismissing religious judges in all of the important territories of the Empire. Since the Grand *Muftī* was under control of the state, he was clearly subordinate to the *sultān* and found it difficult to supersede the *sultān*'s power even in religious matters. For example, after being challenged by his Grand *Muftī* about a death penalty handed down to Treasury officials, the *sultan* Selim I (r. 1512-1520) told his Grand *Muftī* that his words were "a violation of the sultan's authority" and that "no one had the right or competence to question what the sultan commands or forbids."

With its institutions brought into the state, the Ottoman religious hierarchy was more centralized than any religious establishment in the history of Sunni Islam. Throughout the 16th century, the head of this hierarchy, the Grand *Muftī*, became much more important even while he became increasingly subordinate to the *sultān*. Much of the Grand *Muftī*'s increased power came

from new duties bestowed by the $sult\bar{a}n$, such as power over the appointment of judgeships. ²³ The apex of the Grand $Muft\bar{\imath}$ position came under Ebu's-su'ud (r. 1520-1566), the Grand $Muft\bar{\imath}$ under Suleiman I, who was renowned for melding the $sult\bar{a}n$'s policies with the $shar\bar{\imath}'a$. Ebu's-su'ud explicitly stretched the boundaries of Islamic law to provide religious legitimacy for Suleiman I – going as far as justifying the title of Caliph for Suleiman despite the fact that the Ottomans lacked a blood connection to Muhammad. ²⁴

Despite the subordination of religious authority to political authority, religious legitimacy was far from irrelevant. Islamic law provided the basis for the practical legal system, supplying materials for academic learning and religious discourse. The efficacy of religious legitimacy increased substantially after the Ottomans defeated the Byzantines and seized Constantinople in 1453 and then defeated the Egyptian Mamluks in 1516-17, taking over Mamluk custody of the holy cities Medina and Mecca. This vastly increased the Ottoman's position in the Muslim world and, for the first time, made the Ottoman Empire an "unmistakably Muslim empire". 25 The Ottomans infused religiosity where they had not before, although many of their subjects (especially those in the Balkans) were either not Muslims or practiced some form of Sufism. The increased religiosity can be seen in the words of Mehmet II, who upon capturing Constantinople declared that, "these tribulations are for God's sake. The sword of Islam is in our hands. If we had not chosen to endure these tribulations, we would not be worthy to be called $g\hat{a}z\hat{i}s$ [holy warriors]."²⁶ Suleiman I's campaign against the Shi'i Safavids of Persia also highlighted the use of religion to justify imperial claims; he promoted a massive propaganda campaign claiming that the Safavids were heretics and enemies of Sunni Islam, while the Ottomans were promoted as the sole defenders of Sunni Islam.²⁷

The Ottomans use of religious legitimacy went well beyond words. For example, in a response to political and military threats from the Shi'i Safavids, Suleiman I turned to religious authorities for support by building numerous *madrasas*, ordering the construction of a mosque in each village, enforcing the observance of the five daily and Friday prayers, and persecuting heretics. Elikewise, before making a controversial attack on Cyprus in 1570 (which broke a peace treaty), Selim II made sure to attain a fatwa in advance to justify the attack. In general, Ottoman *sultāns* rarely failed to make public statements of their piety – they almost always attended Friday mosque, frequently distributed alms to the poor and dervishes, and sent yearly gifts worth tens of thousands of ducats to Medina and Mecca. Even those who attempted to overthrow the *sultān* would rarely do so without the consent of the Grand *Muftī*. Ottoman *Muftī*.

In sum, Ottoman and European institutions took vastly diverging paths after the spread of printing. While religious authorities in Reformed England, Netherlands, Holy Roman Empire, and Scandinavia were permanently limited in the political arena, Ottoman religious authorities were as politicized as ever. Would such an institutional divergence have arisen had the Ottomans permitted the press? Although we will never know the answer to this question, comparing the European and Ottoman histories suggests the tantalizing possibility that Ottoman religious authorities could have been greatly undermined if the press had spread in Ottoman lands. To fully understand how the absence of the press affected Ottoman history, however, we must consider how its presence would have interacted with the established institutional complex and how this set of institutional constraints differed from those found in Western Europe.

Explaining the Diverging Institutional Paths

Why did Western Europe (particularly those parts that underwent the Reformation) and the Middle East undergo such divergent institutional histories? Why was religious authority undermined to such an extent in Europe but not the Middle East? Part of the answer has to do with the presence of printing in Europe, but much more important was how the spread (or absence) of printing *reinforced* (or undermined) the relationships between political and religious authorities.

The theories presented in this book shed a great deal of light on how these relationships reinforced each other. First, consider how the decentralization of Islam and the relative centralization of Christianity interacted with the spread of printing. The logic laid out in the previous chapter suggests that where authority is centralized and acts contrary to the public interest, an undercurrent of resentment may be present. However, it will only manifest itself in a "heretical movement" or revolt when information technology is sufficiently widespread to transmit publicly expressed preferences across the population.

This occurred in Europe when an unexpected event (Luther posting his 95 Theses) encouraged some people to publicly speak out against the Church. This triggered a cascade of dissent whereby some individuals publicly dissented, encouraging more people to publicly dissent, which encouraged even more people to publicly dissent, and the Reformation was born. Without an information technology like the printing press, heretical movements were not likely to spread, as most individuals would not have known exactly how much the rest of the population disliked the Church. Even if a small group voiced dissent, the Church could have crushed them with little worry that their word would spread – even if the rest of the population agreed with the dissent. This was clearly the result for the pre-printing heresies of Jan Hus, the Waldensians, and the Lollards, all of whom were violently suppressed.

When religious authority is decentralized, however, heretical movements are unlikely to sprout in the first place. Although religious authority was more centralized in the Ottoman Empire than in previous Islamic regimes, its level of centralization did not approach that of the medieval Church. The $mufi\bar{t}$ hierarchy was brought into the state and was given the ability to make judicial appointments, but it had less control over doctrine on a local level than the Church. Thus, the relatively decentralized Ottoman religious authorities (particularly local judges, or $k\bar{a}d\bar{t}$ s) were more likely to respond when some citizens expressed displeasure by addressing localized concerns with rulings that could be inconsistent across the Empire. Hence, even with a printing press, massive change may have occurred over time, but it was unlikely to be as sudden and widespread as the Reformation. Without a printing press, the odds of major religious reformation were even direr still. Table 2 summarizes this logic.

Table 2: Interaction of Information Technology and Religious Centralization

	Centralized Religion (Christianity)	Decentralized Religion (Islam)
Information Technology Widespread	"Heretical movements" most likely to sprout and succeed; massive and quick changes possible (Post-1500 Europe)	"Heretical movements" unlikely to sprout; massive change possible, but likely to be slow and unequally distributed (19 th -20 th century Sunni Islamic world)
Limited Information Technology	"Heretical movements" may sprout but unlikely to spread; suppression of "heretical movements" likely (Pre-1500 Europe; Shi'i Islamic world)	"Heretical movements" unlikely to sprout or spread; massive and quick changes unlikely (Pre-19 th century Sunni Islamic world)

The first column of Table 2 makes the connection between the printing press and the Reformation clear. Prior to the spread of the press, heretical movements such as the Hussite movement were likely to arise but not spread. It was only once the press was widespread that a movement like the one begun by Luther could succeed. On the other hand, this table suggests that throughout much of Sunni Islamic history, there were *two* features working against the undermining of religious authority. The decentralization of religious authority meant that an antiauthority movement was unlikely to emerge in the first place, while the absence of the printing press meant that even if such anti-authority thoughts did exist, they were unlikely to spread.

Since there are two institutional features that prevented a large-scale undermining of religious authority in much of the Islamic world, it is difficult to disentangle the two. Was it the lack of printing that upheld the position of religious authorities, was it their decentralization, or was it some combination of the two? While we can never know for sure (since an "Islamic Reformation" never actually occurred), we can draw on some facts from Ottoman history to shed some light on the causal channels. In particular, the history of printing restrictions and the Ottoman political-religious institutional complex suggest that a highly self-reinforcing system emerged in the 15th-17th century Ottoman Empire. As noted in Chapter 7, mass printing in Ottoman Turkish was a potentially significant threat to the stability of religious legitimization. If adopted, religious authorities would have lost their monopoly on the transmission of knowledge and their power to convince the public about the legitimacy of the *sultān*. As developments around the world later showed, such fears were well-founded; mass printing gradually led to a decline of the legitimizing efficacy of religious authorities in both Europe and the Middle East.³² Hence, the high degree of relatively inexpensive legitimacy bestowed by religious authorities discouraged the Ottomans from permitting the spread of printing. This had an important

consequence for the religious establishment: the absence of the printing press was *the very thing* that prevented alternatives to religious (or military, for that matter) legitimacy from emerging. On top of this, the legitimacy provided by religious authorities further encouraged the Ottomans to bring the religious establishment into the highly centralized Ottoman state, which even further discouraged religious dissent. After all, movements against religious authorities were relatively easy to suppress in the absence of printing (as was shown in Europe), since the mechanism responsible for transmitting anti-authority preferences was missing. The sequence of events was very different in Europe, where the press inspired the Reformation – an event which fundamentally transformed the mechanisms through which political authorities were legitimized.

The directions of these self-reinforcing phenomena can be traced to the births of Islam and Christianity, as Figure 2 makes clear. First, the greater degree to which Islamic political authorities are legitimized by religious authorities — a remnant of the birth of the religions — was in large part responsible for regulations placed on the printing press in the Ottoman Empire. Second, the absence of printing helped sustain the legitimizing relationship between religious and political authorities, as it discouraged the spread of alternatives to the religious establishment. As the figure suggests, the lack of printing reinforced the legitimizing relationship over time, as it became more and more difficult for alternative means of legitimacy to emerge. That is, the relationship between the lack of the printing press and religious legitimacy reinforced itself since each strengthened the efficacy of the other. The opposite occurred in Europe, as the press spread quickly and provided the means for alternatives to religious legitimacy to emerge. Third, the relative centralization of the Catholic Church and the decentralization of Islamic religious authority — also a remnant of the births of the religions — meant that a larger, more focused movement against religious authority was possible in Europe than in the Ottoman lands.

Yet, even in Europe, a cascade of anti-Church sentiment was only able to happen once a sufficiently costless information technology such as the press emerged. Indeed, despite the fact the Islamic religious authorities became more centralized in the Ottoman Empire (in terms of Figure 2, the decentralization of religious authority became "weaker over time"), the lack of the printing press meant that the "reform" of Islamic religious institutions was still unlikely to occur.

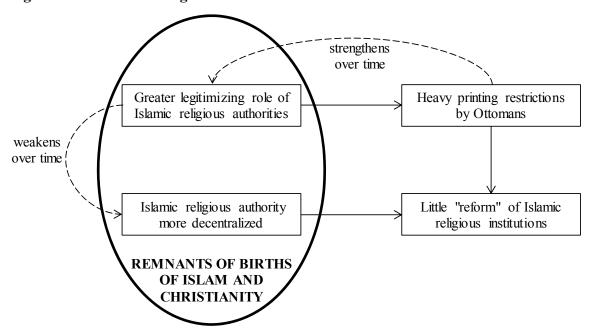


Figure 2: Self-Reinforcing Institutions and the Absence of an "Islamic Reformation"

Prior to the press, the relationships between political and religious authorities in Europe and the Middle East were different, but not dramatically so. Religious legitimacy was more important in the Middle East, but it was still important in Europe. This changed with the spread of printing in Europe, which itself was a result of the marginally weaker efficacy of religious legitimacy in Europe. Once printing spread and eventually laid the groundwork for the Protestant Reformation, the relationship between political and religious authorities began to diverge immensely in a self-reinforcing manner in Western Europe and the Middle East. Whereas

religious authorities lost most of their ability to legitimize in the former, they became part of the political establishment in the latter.

Figure 2 suggests that the lack of an "Islamic reform" movement hinged on the legitimizing power of religious authorities. This self-reinforcing institutional complex could thus have been undermined had alternative sources of legitimacy emerged. Chapter 7 noted that in the 18th and 19th centuries, local notables (*a'yān*) became increasingly important in Ottoman provincial society and administration, largely replacing religious authorities as legitimizing agents. This in turn encouraged the Ottomans to permit printing. Since (as indicated in Figure 2) religious authority had also become more centralized (and more corrupt) by this period, the self-reinforcing processes that prevented calls for an "Islamic reformation" should have been undermined. In particular, widespread access to printing could have provided the mechanism for increased public opposition to religious authorities, especially given the perceived corruption of the religious court. This is in fact precisely what occurred. Soon after printing technology became ubiquitous, calls for religious reform spread throughout the Islamic world.

The Rise of Printing and Calls for Religious Reform

Soon after the printing press spread throughout the Islamic world in the 19th century, the first real calls for a "reform of Islam" were heard by modernist thinkers. Let's be clear what is meant here: a "reform of Islam" was *not* meant to change the fundamental tenets of the religion, but it was instead intended to reform the control of the religious establishment over the religion. In many ways, therefore, the reform movement resembled the Reformation. In fact, Sunni and Shi'i Muslim thinkers from the Ottoman Empire, Iran, Egypt, India, Russia, and beyond explicitly

invoked Luther as a liberalizing force.³³ For example, the renowned Indian reformist Muhammad Iqbal (1877-1938) suggested that "we are today passing through a period similar to that of the Protestant revolution in Europe, and the lesson which the rise and outcome of Luther's movement teaches us should not be lost on us".³⁴

Why did a widespread call for an "Islamic Reformation" occur in the late-19th century, rather than centuries before? After all, many of the grievances of the would-be reformers could have been equally applied to the Ottoman Empire for at least a couple of centuries. There is not one simple explanation for the timing of these events; there were multiple, non-mutually exclusive reasons that the late-19th century saw the first large-scale push towards the "reformation of Islam". For one, the growth of secular education in the 19th and early 20th centuries provided a large base of individuals outside of the religious establishment with the human capital necessary to challenge authority. Educational reforms began throughout much of the Ottoman Empire under Selim III (r. 1789-1807) and continued throughout much of the 19th century in the Ottoman Middle East and North Africa.³⁵ Prior to this period, education was almost exclusively available to the religious and political elite. The spread of education to a larger swath of the population broke the monopoly of religious authorities over education, especially in the bigger cities such as Istanbul and Cairo. The first secular military and bureaucracy schools were opened in the Ottoman Empire in the beginning of the 19th century and foreign language and secondary schools followed a few decades later.³⁶ This permitted, in the words of Felicitas Opwis (2004, p. 30), an "intellectual atmosphere that perceived traditional religious law and its exponents largely as obstacles to progress and as antithetical to modernization. Enlightenment ideas, reason, and the rational sciences were held in high esteem, while adherence to traditional authority that could not stand the test of reason were rejected as

obsolete." This situation was not too different from Europe at the time of the Reformation, where most scholars were educated at universities (many of which were not controlled by the Church) and Renaissance and humanist ideas permeated a new intellectual atmosphere.

Secondly, by the end of the 19th century, the Islamic world had clearly fallen behind economically. Because of this, the relative decline of the Islamic world was a common theme in the calls for reform. For example, noted Iranian reformer Sayyid Jamal al-Din al-Afghani (1838-1897) called for a reformation similar to Luther's so that Islamic societies would "succeed someday in breaking its bonds and marching resolutely in the path of civilization after the manner of Western society."³⁷

Perhaps most importantly, Islamic reform movements of the 19th century were aided by the spread of the printed word. Up until the 1860s most printed books in the Islamic world were primarily secular in nature and those that were religious were primarily reprints of classic texts.³⁸ This meant that the flow of religious information and ideas remained monopolized by the religious establishment, who had every incentive to maintain their place in the political and economic hierarchy. This situation changed in the mid-19th century, however. The government set up the first permanent press in Damascus in 1865 and the Egyptian newspaper market boomed under the reign of Isma'il (r. 1863-1879).³⁹ This had the important effect of placing religious thought outside the hands of religious scholars. For the first time in the history of the Islamic world, intellectual and religious thought was neither produced, interpreted, nor transmitted through the religious establishment. Along with the spread of education, this had the effect, as noted by Felicitas Opwis (2004, p. 34), of "encourag[ing] the notion that knowledge ('ilm) was no longer an attribute specifically reserved for the religious scholars. The intelligentsia became increasingly less synonymous with the 'ulama." The spread of the work of

the Moroccan reformer Abu Shu'ayb al-Dukkali (1878-1937) illustrates this point. As one of the leaders of the Moroccan reform movement, he disseminated his work in some regions by mail, and the Egyptian Salafiyya press spread his books throughout North Africa.⁴⁰

The key contribution that the spread of printing made to Islamic reform movements was the undermining of the intellectual monopoly held by religious authorities. No longer were religious authorities the sole interpreters of legal, political, and religious knowledge; the printing press made such knowledge and interpretative ability open to any literate person. This is made clear by Francis Robinson (1993, p. 245):

[printing did] serious damage to the roots of the [religious scholar's] authority ... they were no longer necessarily around when the book was read to make up for the absence of the author in the text; ... their monopoly of the transmission of knowledge was broken. Books ... could now be consulted by any Ahmad, Mahmud or Muhammad, who could make what they will of them.

The three features noted above – the spread of education, the relative economic stagnation of the Islamic world, and the spread of the printing press – provided the environment in which calls for Islamic reform were heard. It is incredibly unlikely that such calls could have been made in a previous era, even if such reform were desired. This is evidenced from the works of those who did call for reform in earlier periods. For example, the famous Islamic scholar Taqi ad-Din Ahmad ibn Taymiyyah (1263-1328) called extensively for reform, but the impact of his calls on mainstream thought were limited, as the transmission of ideas in his day were dependent on traditional channels, particularly the madrassa system.

Although some of the background and institutional details were similar, it would be a mistake to claim that the calls for an Islamic Reformation followed the same path as the Protestant Reformation. Many of the Protestants' complaints were against the practices of the pope and the centralized Church, giving the Protestants a concrete target against which to voice

their displeasure. This was not the case in the Islamic world, and for this reason the messages underlying the calls for Islamic reform did not focus on one particular body. It would thus not be wise to take the analogy between the "Islamic reform" movement and the Protestant Reformation too far, but it is still instructive to draw comparisons between the two. Indeed, while the specifics of the complaints voiced by Islamic modernists were not the same as those voiced by the Protestants, there are some important general commonalities. First and foremost, both movements called for a revolt against traditional authority and an institutional complex whose practices were far removed from its initial purpose and message. In the case of the Reformation, practices such as the selling of indulgences and simony were merely the tip of the iceberg highlighting just how far removed the late-medieval Church was from its origins. Islamic reformers had different types of grievances, although they similarly rejected traditional authorities. This was most clearly manifested in a desire for independent reasoning (ijtihad) to be widely practiced instead of the following of old opinions of early, traditional Islamic jurists.⁴³ While there were certainly recent precedents for the use of ijtihad and the "gate of ijtihad" was not closed in theory nor in practice (see Chapter 4), 44 the reformers believed that the opposite of ijtihad – following old opinions without knowledge of the bases from which it was derived (taglid) – dominated discourse. Reformers such as Muhammad 'Abduh, Jamal al-Din al-Afghani, Rashid Rida, Sayyid Ahmad Khan, and Muhammad Iqbal blamed taqlid for the stagnation of the Islamic world, claiming that wider use of *ijtihad* would make Islamic law more adaptable to their present-day problems.⁴⁵

Secondly, the practical intentions of both movements were to modernize the religion in question. Although the theological arguments made by the Protestants pointed to reverting to the "original Church", in practice the Reformation's most important adherents were merchants,

princes, and bourgeoisie who saw it as an opportunity to rid society of the archaic and economically detrimental institutions of the Church. Likewise, reformers such as the famous Iranian 'Ali Shari'ati (1933-1977) argued that Islam was "living at the end of the Medieval period", and would follow a path similar to the Protestants who "found their new destiny by destroying their old faith, and transforming traditional Catholicism to a protesting, world-minded, political, and materialist Protestantism." He went on to urge Muslims to embrace "an Islamic Protestantism similar to that of Christianity in the Middle Ages, destroying all the degenerating factors which, in the name of Islam, have stymied and stupefied the process of thinking and the fate of the society, and giving birth to new thoughts and new movements."

The final question to be asked, then, is could something like the Reformation have happened to Ottoman religious authorities in the 15th-17th centuries had the printing press spread throughout Ottoman lands? In the end, this is an impossible question to answer. Yet, the combination of a relatively centralized religious authority (compared to previous Sunni regimes) with the ability to quickly spread the printed word provides the tantalizing possibility that local notables or other well-connected individuals primarily concerned with economic interests (such as merchants or land-holders) could have encouraged movements to reduce the legitimizing power of religious authorities. Had this occurred, the world would likely be a very different place today, and it possible that an Ottoman economic resurgence could have taken place in a manner similar to what occurred during the Industrial Revolution in England (for reasons to be discussed in the next chapter). Of course, we will never know.

¹ See, for example, Weber (1905), Tawney (1926), Pomeranz (2000), Mokyr (1990, 2002), Acemoglu, Johnson, and Robinson (2001, 2005), Greif (2006), Becker and Wößmann (2008, 2009), Iyigun (2008), Baten and Van Zanden (2008), Buringh and van Zanden (2009), Chilosi and Volckart (2010), and Dittmar (2011).

² Much of this section can be found in Rubin (2012b).

³ These abuses include these include indulgences, relic cults, clerical privileges, clerical concubinage, simony and a broad host of other perceived abuses emanating from the Church hierarchy and papacy. There were other complaints put forward by the Reformers, many of which were theological in nature.

⁴ See Cameron (1991).

⁵ These preachers were particularly effective in Saxony and Central Germany in the 1520s, where they were successful in spreading the Reformation to towns such as Altenburg, Eisenach, and Zwickau. In the late 1520s and 1530s, reforming preachers helped convert larger towns such as Strasbourg and Lübeck, with numerous Baltic cities following suit. Many major south German cities, such as Augsburg, converted in a similar manner in the 1530s. See Blickle (1984).

⁶ See Cameron (1991). Ekelund, Hébert and Tollison (2002) suggest, in a similar manner, that civil authorities sought an alternative provider of legal services and a less costly path to salvation through the Reformation, as the Church (a monopolist) was overcharging. Their analysis highlights yet another necessary pre-condition of the Reformation, complementing the one proposed in this chapter.

⁷ See Scribner (1989).

⁸ Steven Ozment has forwarded the thesis that the Reformation was an "urban event". Indeed, 50 of the 65 imperial cities either permanently or periodically accepted the Reformation. The close proximity of urbanites to each other, greater levels of wealth and literary awareness, and relative political sophistication have been given as reasons why the Reformation took off in many of the free cities of the Holy Roman Empire. Ozment (1975) suggests that such cities permitted a much greater degree of Protestant infiltration than the closed, autocratic regimes of the princes.

⁹ See Cameron (1991).

The acceptance of the Reformation by no means happened in each town for the same reason. Cameron (1991) lists three primary reasons which are not mutually exclusive: political/material reasons, those based on the Reformation's alleged appropriateness to a class, order, or constitution, and psychological/spiritual reasons. For example, in the territories of the princes, fear of imperial retribution delayed the introduction of the Reformation until the late-1520s, if at all. In 1530, many of the Protestant cities and princes signed the Augsburg Confession, despite condemnation from the Reichstag, which contained 22 articles stating the Lutheran message. The houses of Saxony, Hesse, Braunschweig-Lüneburg, Anhalt, and Mansfield all delayed acceptance until the late 1520s, but by 1530-1531 formed an alliance of Protestant electorates known as the Schmalkaldic League. By 1535, many of the important Protestant independent cities joined the League, which provided mutual defense against Catholic invasion. They were joined by Denmark, which quickly accepted the Reformation in the 1520s under the imperial edicts of Kings Frederick I (1523-1533) and Christian III (1533-1559). The defense provided by the League permitted a truce for over a decade, in part due to the Ottoman threat on Vienna. Eventually, the League was crushed by the Emperor in the Schmalkaldic War (1547), and most disputes were put to rest at the Augsburg Reichstag of 1555, which permitted sovereign princes or lords of the Holy Roman Empire to determine the faith of their subjects.

¹¹ Quoted in Febrve and Martin (1958, p. 288). Edwards (1994, p. 1) begins his book on Luther and the printing press by noting that "The Reformation saw the first major, self-conscious attempt to use the recently invented printing press to shape and channel a mass movement."

¹² The effect of printed religious drawings was significant prior to the Reformation as well and likely provided motivation for its use as propaganda by the reformers (Ozment 1975).

¹³ See Robinson-Hammerstein (1989).

¹⁴ See Edwards (1994). It is also possible that the printing press affected demand for the Reformation. Elizabeth Eisenstein (1979), for example, argues that print culture transformed cities, in some cases elevating the desires of the bourgeoisie and middle classes to greater social importance. This in turn could have made print cities more receptive to the Reformation, as the rising bourgeoisie had incentive to undermine the old order dominated by the Church and landed interests. Eisenstein (1979, p. 132) also suggests that the demand for the Reformation could have also been enhanced by the press in a more subtle way: "while communal solidarity was diminished, vicarious participation in more distant events was also enhanced; and even while local ties loosened, links to larger collective units were being forged. Printed materials encouraged silent adherence to causes whose advocates could not be found in any one parish and who addressed an invisible public from afar."

¹⁵ Dickens (1968) and Eisenstein (1979) also note the failure of pre-press heresies very well may have been due to the lack of access to the press.

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<sup>21</sup> See Masud et al. (1996, ch. 1) and Hallaq (2001, p. 192).
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¹⁶ For more on the debate between papism and conciliarism, and especially the role played by Gerson, see Dolan (1965, ch. 4).

¹⁷ A city is considered part of the HRE if it were de facto subject to the Emperor and the empire's institutions throughout the 16th century. This includes cities in present day Germany, Austria, Czech Republic, Belgium, Luxembourg, eastern France, and western Poland. This excludes Switzerland, which de facto broke away from the Empire in 1499, the Netherlands, which revolted and broke away from the HRE in the 1570s, and northern Italy (e.g., the Duchies of Savoy and Milan), which was not de facto subject to the Emperor. All results are robust to different definitions of the HRE.

¹⁸ Becker and Wößmann (2008, 2009, 2010) use distance to Wittenberg to instrument for the early spread of Protestantism.

¹⁹ The variables controlled for are: whether the city housed a university by 1450, whether the city housed a bishop or archbishop by 1517, whether the city was a member of the Hanseatic League, whether the city was an independent, Free Imperial city in 1517, whether a city belonged to a lay magnate (it was neither free nor subject to an ecclesiastical lord), a dummy for the presence of printing, whether the city was on water (ocean, sea, large lake, or river connected to another city), the number of cities located within 20 miles, the city's urban potential (the sum of the populations of all other cities weighted by their distance from the city in question; see de Vries (1984) and Bosker, Buringh, and van Zanden (2010)), the city's distance to Wittenberg, and the latitude, longitude, and interaction between the two. For more on the data, see Rubin (2012b).

²⁰ More formally, Rubin (2012b) analyzes both a probit and a two-stage probit to control for endogeneity (e.g., it is possible that cities that adopted the Reformation may have also had a press because of greater pre-press literacy). He instruments for the press with the city's distance to Mainz (the birthplace of printing), which is related to the spread of printing but should not have an independent effect on the spread of the Reformation. More details are available in Rubin (2012b).

²² Quoted in İnalcık (1973, p. 94).

²³ See İnalcık (1973, p. 172).

²⁴ For much more on the life of Ebu's-su'ud, see Imber (1997).

²⁵ See Dale (2010, p. 178-179). See also İnalcık (1973).

²⁶ Ouoted in İnalcık (1973, p. 56). See also Imber (1997, ch. 3).

²⁷ See Imber (1997, p. 5, 91).

²⁸ See Dale (2010, p. 182).

²⁹ See İnalcık (1973, p. 99).

³⁰ See Imber (1997, p. 58).

³¹ Citation needed!

³² See Eisenstein (1979), Robinson (1993, p. 245-46), and Rubin (2012b).

³³ See Kurzman and Browers (2004, p. 4-5) for more on these reform efforts.

³⁴ Quoted in Kurzman and Browers (2004, p. 5).

³⁵ See Opwis (2004, p. 30-33).

³⁶ See Opwis (2004, p. 30). Opwis also notes that these events weakened the hold of religious authorities over the legal sphere, as well.

³⁷ Quoted in Kurzman and Browers (2004, p. 4). For more, also see Opwis (2004). Other reformists saw the decline of the Islamic world as a reason to call for a return to the fundamentals of early Islam, in a manner not too different from calls by modern day groups like the Taliban. See Browers (2004).

³⁸ See Opwis (2004, p. 33-37).

³⁹ See Opwis (2004, p. 34).

⁴⁰ See Opwis (2004, p. 35).

⁴¹ Eickelman (1998) also points to mass education and communication as the impetus for an "Islamic Reformation", but he places the timing in the latter half of the 20th century.

⁴² See Opwis (2004, p. 35).

⁴³ The desire to upend traditional authority was also seen in the movements to purge "false" *hadith*s from the corpus of Islamic law. See Opwis (2004, p. 40-41).

⁴⁴ See Hallag (1984, 1986, 2001), Ali-Karamali and Dunne (1994), and Gerber (1999).

See Opwis (2004, p. 38) and Browers (2004, p. 56).
 See Blickle (1984).
 Quoted in Kurzman and Browers (2004, p. 6).