8

The Market Revolution

I. Introduction

William James Bennett, *View of South Street, from Maiden Lane, New York City*, c. 1827. Metropolitan Museum of New York.

In the early years of the nineteenth century, Americans' endless commercial ambition—what one Baltimore paper in 1815 called an "almost *universal ambition to get forward*"—remade the nation.[1] Between the Revolution and the Civil War, an old subsistence world died and a new more-commercial nation was born. Americans integrated the technologies of the Industrial Revolution into a new commercial economy. Steam power, the technology that moved steamboats and railroads, fueled the rise of American industry by powering mills and sparking new national transportation networks. A "market revolution" remade the nation.

The revolution reverberated across the country. More and more farmers grew crops for profit, not self-sufficiency. Vast factories and cities arose in the North. Enormous fortunes materialized. A new middle class ballooned. And as more men and women worked in the cash economy, they were freed from the bound dependence of servitude. But there were costs to this revolution. As northern textile factories boomed, the demand for southern cotton swelled, and American slavery accelerated. Northern subsistence farmers became laborers bound to the whims of markets and bosses. The market revolution sparked explosive economic growth and new personal wealth, but it also created a growing lower class of property-less workers and a series of devastating depressions, called "panics." Many Americans labored for low wages and became trapped in endless cycles of poverty. Some workers, often immigrant women, worked thirteen hours a day, six days a week. Others labored in slavery. Massive northern textile mills turned southern cotton into cheap cloth. And although northern states washed their hands of slavery, their factories fueled the demand for slave-grown southern cotton and their banks provided the financing that ensured the profitability and continued existence of the American slave system. And so, as the economy advanced, the market revolution wrenched the United States in new directions as it became a nation of free labor and slavery, of wealth and inequality, and of endless promise and untold perils.

II. Early Republic Economic Development

The growth of the American economy reshaped American life in the decades before the Civil War. Americans increasingly produced goods for sale, not for consumption. Improved transportation enabled a larger exchange network. Labor-saving technology improved efficiency and enabled the separation of the public and domestic spheres. The market revolution fulfilled the revolutionary generation's expectations of progress but introduced troubling new trends. Class conflict, child labor, accelerated immigration, and the expansion of slavery followed. These strains required new family arrangements and transformed American cities.

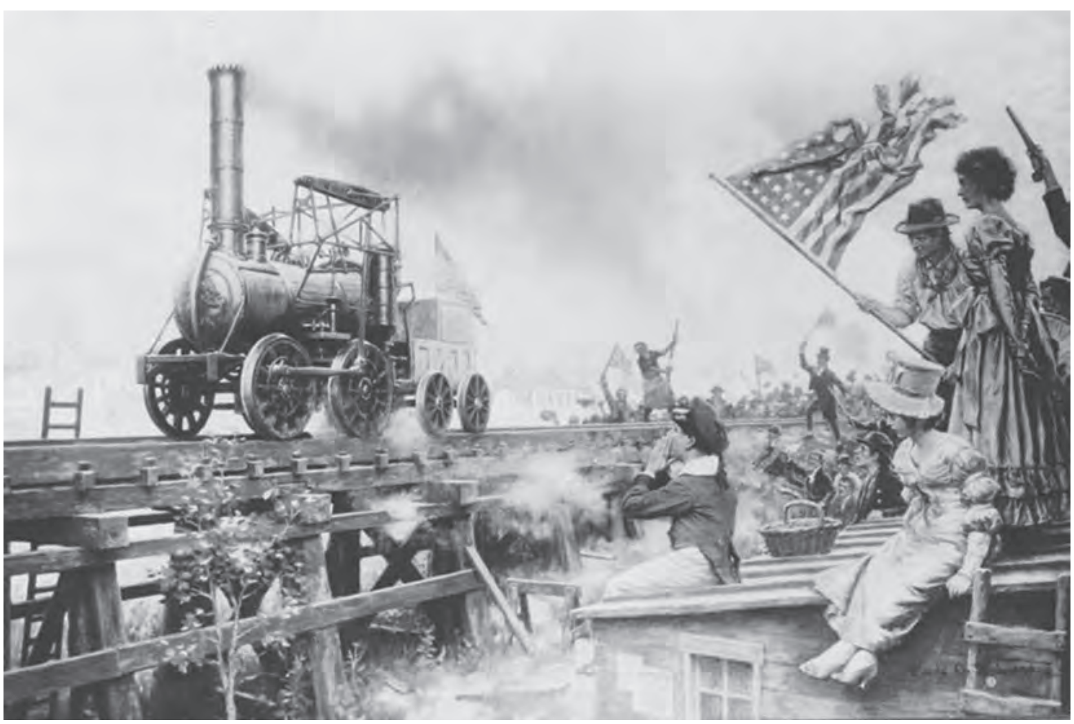
American commerce had proceeded haltingly during the eighteenth century. American farmers increasingly exported foodstuffs to Europe as the French Revolutionary Wars devastated the continent between 1793 and 1815. America's exports rose in value from $20.2 million in 1790 to $108.3 million by 1807.[2] But while exports rose, exorbitant internal transportation costs hindered substantial economic development within the United States. In 1816, for instance, $9 could move one ton of goods across the Atlantic Ocean, but only thirty miles across land. An 1816

Senate Committee Report lamented that "the price of land carriage is too great" to allow the profitable production of American manufactures. But in the wake of the War of 1812, Americans rushed to build a new national infrastructure, new networks of roads, canals, and railroads. In his 1815 annual message to Congress, President James Madison stressed "the great importance of establishing throughout our country the roads and canals which can best be executed under national authority."[3] State governments continued to sponsor the greatest improvements in American transportation, but the federal government's annual expenditures on internal improvements climbed to a yearly average of $1,323,000 by Andrew Jackson's presidency.[4]

State legislatures meanwhile pumped capital into the economy by chartering banks. The number of state-chartered banks skyrocketed from 1 in 1783, 266 in 1820, and 702 in 1840 to 1,371 in 1860.[5] European capital also helped build American infrastructure. By 1844, one British traveler declared that "the prosperity of America, her railroads, canals, steam navigation, and banks, are the fruit of English capital."[6]

Economic growth, however, proceeded unevenly. Depressions devastated the economy in 1819, 1837, and 1857. Each followed rampant speculation in various commodities: land in 1819, land and slaves in

Clyde Osmer DeLand, *The First Locomotive. Aug. 8th, 1829. Trial Trip of the "Stourbridge Lion,"* 1916. Library of Congress.



1837, and railroad bonds in 1857. Eventually the bubbles all burst. The spread of paper currency untethered the economy from the physical signifiers of wealth familiar to the colonial generation, namely land. Counterfeit bills were endemic during this early period of banking. With so many fake bills circulating, Americans were constantly on the lookout for the "confidence man" and other deceptive characters in the urban landscape. Prostitutes and con men could look like regular honest Americans. Advice literature offered young men and women strategies for avoiding hypocrisy in an attempt to restore the social fiber. Intimacy in the domestic sphere became more important as duplicity proliferated in the public sphere. Fear of the confidence man, counterfeit bills, and a pending bust created anxiety in the new capitalist economy. But Americans refused to blame the logic of their new commercial system for these depressions. Instead, they kept pushing "*to get forward*."

The so-called Transportation Revolution opened the vast lands west of the Appalachian Mountains. In 1810, before the rapid explosion of American infrastructure, Margaret Dwight left New Haven, Connecticut, in a wagon headed for Ohio Territory. Her trip was less than five hundred miles but took six weeks to complete. The journey was a terrible ordeal, she said. The roads were "so rocky & so gullied as to be almost impassable."[7] Ten days into the journey, at Bethlehem, Pennsylvania, Dwight said "it appeared to me that we had come to the end of the habitable part of the globe." She finally concluded that "the reason so few are willing to return from the Western country, is not that the country is so good, but because the journey is so bad."[8] Nineteen years later, in 1829, English traveler Frances Trollope made the reverse journey across the Allegheny Mountains from Cincinnati to the East Coast. At Wheeling, Virginia, her coach encountered the National Road, the first federally funded interstate infrastructure project. The road was smooth and her journey across the Alleghenies was a scenic delight. "I really can hardly conceive a higher enjoyment than a botanical tour among the Alleghany Mountains," she declared. The ninety miles of the National Road was to her "a garden."[9]

If the two decades between Margaret Dwight's and Frances Trollope's journeys transformed the young nation, the pace of change only accelerated in the following years. If a transportation revolution began with improved road networks, it soon incorporated even greater improvements in the ways people and goods moved across the landscape.

New York State completed the Erie Canal in 1825. The 350-mile-long human-made waterway linked the Great Lakes with the Hudson River

Engraving based on W. H. Bartlett, *Lockport, Erie Canal*, 1839. Wikimedia.

and the Atlantic Ocean. Soon crops grown in the Great Lakes region were carried by water to eastern cities, and goods from emerging eastern factories made the reverse journey to midwestern farmers. The success of New York's "artificial river" launched a canal-building boom. By 1840 Ohio created two navigable, all-water links from Lake Erie to the Ohio River.

Robert Fulton established the first commercial steamboat service up and down the Hudson River in New York in 1807. Soon thereafter steamboats filled the waters of the Mississippi and Ohio Rivers. Downstream-only routes became watery two-way highways. By 1830, more than two hundred steamboats moved up and down western rivers.

The United States' first long-distance rail line launched from Maryland in 1827. Baltimore's city government and the state government of Maryland provided half the start-up funds for the new Baltimore & Ohio (B&O) Rail Road Company. The B&O's founders imagined the line as a means to funnel the agricultural products of the trans-Appalachian West to an outlet on the Chesapeake Bay. Similar motivations led citizens in Philadelphia, Boston, New York City, and Charleston, South Carolina to launch their own rail lines. State and local governments provided the means for the bulk of this initial wave of railroad construction, but economic collapse following the Panic of 1837 made governments wary of such investments. Government supports continued throughout the century, but decades later the public origins of railroads were all but forgotten, and the railroad corporation became the most visible embodiment of corporate capitalism.

By 1860 Americans had laid more than thirty thousand miles of railroads.[10] The ensuing web of rail, roads, and canals meant that few farmers in the Northeast or Midwest had trouble getting goods to urban markets. Railroad development was slower in the South, but there a combination of rail lines and navigable rivers meant that few cotton planters struggled to transport their products to textile mills in the Northeast and in England.

Such internal improvements not only spread goods, they spread information. The transportation revolution was followed by a communications revolution. The telegraph redefined the limits of human communication. By 1843 Samuel Morse had persuaded Congress to fund a forty-mile telegraph line stretching from Washington, D.C., to Baltimore. Within a few short years, during the Mexican-American War, telegraph lines carried news of battlefield events to eastern newspapers within days. This contrasts starkly with the War of 1812, when the Battle of New Orleans took place nearly two full weeks after Britain and the United States had signed a peace treaty.

The consequences of the transportation and communication revolutions reshaped the lives of Americans. Farmers who previously produced crops mostly for their own family now turned to the market. They earned cash for what they had previously consumed; they purchased the goods they had previously made or went without. Market-based farmers soon accessed credit through eastern banks, which provided them with the opportunity to expand their enterprise but left also them prone before the risk of catastrophic failure wrought by distant market forces. In the Northeast and Midwest, where farm labor was ever in short supply, ambitious farmers invested in new technologies that promised to increase the productivity of the limited labor supply. The years between 1815 and 1850 witnessed an explosion of patents on agricultural technologies. The most famous of these, perhaps, was Cyrus McCormick's horse-drawn mechanical reaper, which partially mechanized wheat harvesting, and John Deere's steel-bladed plow, which more easily allowed for the conversion of unbroken ground into fertile farmland.

Most visibly, the market revolution encouraged the growth of cities and reshaped the lives of urban workers. In 1820, only New York had

A. Janicke & Co., *Our City, (St. Louis, Mo.)*, 1859. Library of Congress.

over one hundred thousand inhabitants. By 1850, six American cities met that threshold, including Chicago, which had been founded fewer than two decades earlier.[11] New technology and infrastructure paved the way for such growth. The Erie Canal captured the bulk of the trade emerging from the Great Lakes region, securing New York City's position as the nation's largest and most economically important city. The steamboat turned St. Louis and Cincinnati into centers of trade, and Chicago rose as it became the railroad hub of the western Great Lakes and Great Plains regions. The geographic center of the nation shifted westward. The development of steam power and the exploitation of Pennsylvania coalfields shifted the locus of American manufacturing. By the 1830s, for instance, New England was losing its competitive advantage to the West.

Meanwhile, the cash economy eclipsed the old, local, informal systems of barter and trade. Income became the measure of economic worth. Productivity and efficiencies paled before the measure of income. Cash facilitated new impersonal economic relationships and formalized new means of production. Young workers might simply earn wages, for instance, rather than receiving room and board and training as part of apprenticeships. Moreover, a new form of economic organization appeared: the business corporation.

States offered the privileges of incorporation to protect the fortunes and liabilities of entrepreneurs who invested in early industrial endeavors. A corporate charter allowed investors and directors to avoid personal liability for company debts. The legal status of incorporation had been designed to confer privileges to organizations embarking on expensive projects explicitly designed for the public good, such as universities, municipalities, and major public works projects. The business corporation was something new. Many Americans distrusted these new, impersonal business organizations whose officers lacked personal responsibility while nevertheless carrying legal rights. Many wanted limits. Thomas Jefferson himself wrote in 1816 that "I hope we shall crush in its birth the aristocracy of our monied corporations which dare already to challenge our government to a trial of strength, and bid defiance to the laws of our country."[12] But in *Dartmouth v. Woodward* (1819) the Supreme Court upheld the rights of private corporations when it denied the attempt of the government of New Hampshire to reorganize Dartmouth College on behalf of the common good. Still, suspicions remained. A group of journeymen cordwainers in New Jersey publically declared in 1835 that they "entirely disapprov[ed] of the incorporation of Companies, for carrying on manual mechanical business, inasmuch as we believe their tendency is to eventuate and produce monopolies, thereby crippling the energies of individual enterprise."[13]

III. The Decline of Northern Slavery and the Rise of the Cotton Kingdom

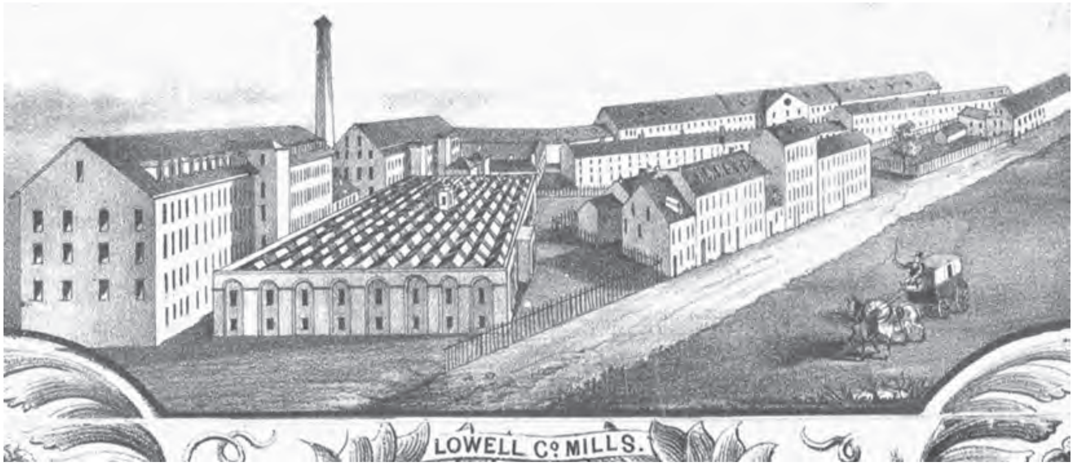
Slave labor helped fuel the market revolution. By 1832, textile companies made up 88 out of 106 American corporations valued at over $100,000.[14] These textile mills, worked by free labor, nevertheless depended on southern cotton, and the vast new market economy spurred the expansion of the plantation South.

By the early nineteenth century, states north of the Mason-Dixon Line had taken steps to abolish slavery. Vermont included abolition as a provision of its 1777 state constitution. Pennsylvania's emancipation act of 1780 stipulated that freed children must serve an indenture term of twenty-eight years. Gradualism brought emancipation while also defending the interests of northern masters and controlling still another generation of black Americans. In 1804 New Jersey became the last of the northern states to adopt gradual emancipation plans. There was no immediate moment of jubilee, as many northern states only promised to liberate future children born to enslaved mothers. Such laws also stipulated that such children remain in indentured servitude to their mother's master in order to compensate the slaveholder's loss. James Mars, a young man indentured under this system in Connecticut, risked being thrown in jail when he protested the arrangement that kept him bound to his mother's master until age twenty-five.[15]

Quicker routes to freedom included escape or direct emancipation by masters. But escape was dangerous and voluntary manumission rare. Congress, for instance, made the harboring of a fugitive slave a federal crime as early as 1793. Hopes for manumission were even slimmer, as few northern slaveholders emancipated their own slaves. Roughly one fifth of the white families in New York City owned slaves, and fewer than eighty slaveholders in the city voluntarily manumitted slaves between 1783 and 1800. By 1830, census data suggests that at least 3,500 people were still enslaved in the North. Elderly Connecticut slaves remained in bondage as late as 1848, and in New Jersey slavery endured until after the Civil War.[16]

Emancipation proceeded slowly, but proceeded nonetheless. A free black population of fewer than 60,000 in 1790 increased to more than 186,000 by 1810. Growing free black communities fought for their civil rights. In a number of New England locales, free African Americans could vote and send their children to public schools. Most northern states granted black citizens property rights and trial by jury. African Americans owned land and businesses, founded mutual aid societies, established churches, promoted education, developed print culture, and voted.

Nationally, however, the slave population continued to grow, from less than 700,000 in 1790 to more than 1.5 million by 1820.[17] The growth of abolition in the North and the acceleration of slavery in the South created growing divisions. Cotton drove the process more than any other crop. Eli Whitney's cotton gin, a simple hand-cranked device designed to mechanically remove sticky green seeds from short staple cotton, allowed southern planters to dramatically expand cotton production for the national and international markets. Water-powered textile factories in England and the American Northeast rapidly turned raw cotton into cloth. Technology increased both the supply of and demand for cotton. White southerners responded by expanding cultivation farther west, to the Mississippi River and beyond. Slavery had been growing less profitable in tobacco-planting regions like Virginia, but the growth of cotton farther south and west increased the demand for human bondage. Eager cotton planters invested their new profits in new slaves.



Sidney & Neff, detail from *Plan of the City of Lowell, Massachusetts*, 1850. Wikimedia Commons.

The cotton boom fueled speculation in slavery. Many slave owners leveraged potential profits into loans used to purchase ever increasing numbers of slaves. For example, one 1840 *Louisiana Courier* ad warned, "it is very difficult now to find persons willing to buy slaves from Mississippi or Alabama on account of the fears entertained that such property may be already mortgaged to the banks of the above named states."[18]

New national and international markets fueled the plantation boom. American cotton exports rose from 150,000 bales in 1815 to 4,541,000 bales in 1859. The Census Bureau's 1860 Census of Manufactures stated that "the manufacture of cotton constitutes the most striking feature of the industrial history of the last fifty years."[19] Slave owners shipped their cotton north to textile manufacturers and to northern financers for overseas shipments. Northern insurance brokers and exporters in the Northeast profited greatly.

While the United States ended its legal participation in the global slave trade in 1808, slave traders moved one million slaves from the tobacco-producing Upper South to cotton fields in the Lower South between 1790 and 1860.[20] This harrowing trade in human flesh supported middle-class occupations in the North and South: bankers, doctors, lawyers, insurance brokers, and shipping agents all profited. And of course it facilitated the expansion of northeastern textile mills.

IV. Changes in Labor Organization

While industrialization bypassed most of the American South, southern cotton production nevertheless nurtured industrialization in the Northeast and Midwest. The drive to produce cloth transformed the

American system of labor. In the early republic, laborers in manufacturing might typically have been expected to work at every stage of production. But a new system, piecework, divided much of production into discrete steps performed by different workers. In this new system, merchants or investors sent or "put out" materials to individuals and families to complete at home. These independent laborers then turned over the partially finished goods to the owner to be given to another laborer to finish.

As early as the 1790s, however, merchants in New England began experimenting with machines to replace the putting-out system. To effect this transition, merchants and factory owners relied on the theft of British technological knowledge to build the machines they needed. In 1789, for instance, a textile mill in Pawtucket, Rhode Island, contracted twenty-one-year-old British immigrant Samuel Slater to build a yarn-spinning machine and then a carding machine. Slater had apprenticed in an English mill and succeeded in mimicking the English machinery. The fruits of American industrial espionage peaked in 1813 when Francis Cabot Lowell and Paul Moody re-created the powered loom used in the mills of Manchester, England. Lowell had spent two years in Britain observing and touring mills in England. He committed the design of the powered loom to memory so that, no matter how many times British customs officials searched his luggage, he could smuggle England's industrial know-how into New England.

Lowell's contribution to American industrialism was not only technological, it was organizational. He helped reorganize and centralize the American manufacturing process. A new approach, the Waltham-Lowell System, created the textile mill that defined antebellum New England and American industrialism before the Civil War. The modern American textile mill was fully realized in the planned mill town of Lowell in 1821, four years after Lowell himself died. Powered by the Merrimack River in northern Massachusetts and operated by local farm girls, the mills of Lowell centralized the process of textile manufacturing under one roof. The modern American factory was born. Soon ten thousand workers labored in Lowell alone. Sarah Rice, who worked at the nearby Millbury factory, found it "a noisy place" that was "more confined than I like to be."[21] Working conditions were harsh for the many desperate "mill girls" who operated the factories relentlessly from sunup to sundown. One worker complained that "a large class of females are, and have been, destined to a state of servitude."[22] Female workers went on strike. They lobbied for better working hours. But the lure of wages was

Winslow Homer, "Bell-Time," *Harper's Weekly*, vol. 12 (July 1868): 472. Wikimedia.

too much. As another worker noted, "very many Ladies . . . have given up millinery, dressmaking & school keeping for work in the mill."[23] With a large supply of eager workers, Lowell's vision brought a rush of capital and entrepreneurs into New England. The first American manufacturing boom was under way.

The market revolution shook other industries as well. Craftsmen began to understand that new markets increased the demand for their products. Some shoemakers, for instance, abandoned the traditional method of producing custom-built shoes at their home workshops and instead began producing larger quantities of shoes in ready-made sizes to be shipped to urban centers. Manufacturers wanting increased production abandoned the old personal approach of relying on a single live-in apprentice for labor and instead hired unskilled wage laborers who did not have to be trained in all aspects of making shoes but could simply be assigned a single repeatable aspect of the task. Factories slowly replaced shops. The old paternalistic apprentice system, which involved long-term obligations between apprentice and master, gave way to a more impersonal and more flexible labor system in which unskilled laborers could be hired and fired as the market dictated. A writer in the *New York*

Observer in 1826 complained, "The master no longer lives among his apprentices [and] watches over their moral as well as mechanical improvement."[24] Masters-turned-employers now not only had fewer obligations to their workers, they had a lesser attachment. They no longer shared the bonds of their trade but were subsumed under new class-based relationships: employers and employees, bosses and workers, capitalists and laborers. On the other hand, workers were freed from the long-term, paternalistic obligations of apprenticeship or the legal subjugation of indentured servitude. They could theoretically work when and where they wanted. When men or women made an agreement with an employer to work for wages, they were "left free to apportion among themselves their respective shares, untrammeled . . . by unwise laws," as Reverend Alonzo Potter rosily proclaimed in 1840.[25] But while the new labor system was celebrated throughout the northern United States as "free labor," it was simultaneously lamented by a growing powerless class of laborers.

As the northern United States rushed headlong toward commercialization and an early capitalist economy, many Americans grew uneasy with the growing gap between wealthy businessmen and impoverished wage laborers. Elites like Daniel Webster might defend their wealth and privilege by insisting that all workers could achieve "a career of usefulness and enterprise" if they were "industrious and sober," but labor activist Seth Luther countered that capitalism created "a cruel system of extraction on the bodies and minds of the producing classes . . . for no other object than to enable the 'rich' to 'take care of themselves' while the poor must work or starve."[26]

Americans embarked on their Industrial Revolution with the expectation that all men could start their careers as humble wage workers but later achieve positions of ownership and stability with hard work. Wage work had traditionally been looked down on as a state of dependence, suitable only as a temporary waypoint for young men without resources on their path toward the middle class and the economic success necessary to support a wife and children ensconced within the domestic sphere. Children's magazines—such as *Juvenile Miscellany* and *Parley's Magazine*—glorified the prospect of moving up the economic ladder. This "free labor ideology" provided many northerners with a keen sense of superiority over the slave economy of the southern states.[27]

But the commercial economy often failed in its promise of social mobility. Depressions and downturns might destroy businesses and reduce owners to wage work. Even in times of prosperity unskilled workers might perpetually lack good wages and economic security and therefore