Pedro Calderón de la Barca. GETTY IMAGES

challenging themes and contemporary issues, scholars frequently disagree on whether he intended to defend or to criticize the existing social and political order.

After being ordained to the priesthood in 1651, Calderón was appointed official dramatist of the Spanish court. Whereas his earlier work was written for the wide audience of the public theaters, his later plays were often commissioned to celebrate birthdays and other festive occasions for a more limited audience in the royal theaters. Calderón's court drama dealt predominantly with allegorical themes from Greek mythology, such as the stories of Echo and Narcissus, Venus and Adonis, and Andromeda and Perseus. These plays were also more visually striking, taking advantage of the greater resources of court stages and scenery to produce elaborate effects and fantastical illusions. During this second stage in his career, Calderón also wrote *autos sacramentales,* short religious plays that were performed yearly for Madrid's Corpus Christi celebrations.

By the end of his life Calderón had produced over one hundred *comedias,* eighty *autos,* and twenty minor theatrical pieces (including the musical *zarzuelas*). These were performed, published, and translated throughout Europe in the seventeenth century. Calderón was the last great writer of the seventeenth century in Spain, and his death in 1681 drew to a close the Golden Age of literature.

See also **Drama: Spanish and Portuguese.**

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CALENDAR. It was widely recognized in the early sixteenth century that the calendar was inaccurate, but the question of how it should be reformed and who had the authority to do so raised fundamental issues. It was some two hundred and fifty years before all of Europe had changed.

The Christian Church had adopted the Julian calendar from the Roman Empire at the Council of Nicaea in 325 C.E.: the first general council of the church, its authority acknowledged thereafter by East and West, Protestants and Catholics. A slight error in the original Roman calculations had by 1500 accumulated to ten days, leaving the real spring equinox on 11 March instead of 21 March. What really bothered the Roman Catholic Church (though not, apparently, the Orthodox Church) was the error this produced in the date of Easter. This was supposed to fall on the Sunday on or after the full moon after 21 March, but it now often fell a month late relative to the real equinox. Nicolaus Copernicus's *De Revolutionibus Orbium Caelestium* (1543; On the revolutions of the celestial orbs) had originally been commissioned as a basis upon which to reform the calendar, but the intervening Refor-

mation and Copernicus's heretical views about the solar system overlaid the issue.

One of the last acts of the Counter-Reformation Council of Trent was to order a reform of the calendar, which it was hoped would provide a basic measure of agreement between Protestants and Catholics on at least one fundamental issue. The observations and calculations were undertaken by the Jesuit astronomer Christoph Clavius (1537–1612), and the results embodied in Pope Gregory XIII's bull of 1582. Ten days were to be removed from October 1582 to bring the calendar back in line with the seasons, and the system of leap years was modified to keep it on track; from then on there was to be a leap year only at the end of every fourth century, and not of every century as before. The old formula for calculating the date of Easter was modified but retained. The Gregorian reform was fundamentally religious rather than astronomical, and the Roman Catholic Church continued to reject Copernicus.

Only a handful of countries (Spain, Portugal, Poland, and parts of Italy) adopted the new Gregorian calendar on time, not least because the bull was promulgated so late. By 1585 most Roman Catholic countries had followed. Most Protestant states—including large parts of Switzerland, Germany, the Protestant Low Countries, Great Britain, and Scandinavia—retained the Julian calendar for another century or more, creating a patchwork of calendrical practice throughout Europe, particularly complex in the Holy Roman Empire. The key issue was not astronomical accuracy but papal authority. By accepting a papal bull, states would appear to be recognizing the authority of the pope not only to interfere in civil affairs but also to alter decisions of the early church; indeed, most Roman Catholic countries took care to adopt the new calendar by their own civil acts. In England, the mathematician and astrologer John Dee (1527–1608) argued that the time of Christ, rather than that of the early church, was the appropriate "radix of time" for Protestants, and proposed his own Elizabethan imperial calendar one day ahead of Rome, but his views were unwelcome to the authorities and in the end England did nothing.

In 1700, with the gap between the two calendars set to widen to eleven days, most Protestant states followed a resolution of the imperial Diet of Regensburg and adopted a modified version of the Gregorian calendar. They did so using their own calculations, following the German astronomer Johannes Kepler (1571–1630), and substituting an astronomical Easter for the traditional version, to the same practical effect. In Britain, where antipopery remained strong, the new calendar was not adopted until September 1752, when eleven days were omitted and a third Easter calculation adopted, also to identical effect. Sweden pursued its own course, coming fully into line in 1753. The churches of the East remained unmoved, standing fast by the decisions of early Christendom; the fast-secularizing states of eastern Europe generally went Gregorian for civil purposes around the time of World War I.

PRACTICAL PROBLEMS

Did the calendar change create practical, as opposed to political, problems? Undoubtedly it did, especially in international communications and where Protestant and Catholic jurisdictions were interspersed, as in much of central Europe and the Low Countries. The modest disruption of the familiar relationship between the feasts of the church and the seasons was quite quickly overcome, but the actual details varied according to how the reform was implemented. In Britain in 1752, for example, the eleven days September 3–13 inclusive were omitted from the calendar, bringing human events eleven days forward in the natural year. Fairs however were left at the same place in the natural year, putting their calendar dates back by eleven days (although many fairs in practice moved forward). Financial payments too kept their full natural term, leaving the financial year ending on 5 April rather than the traditional 25 March. At the same time, the start of the legal year was altered from 25 March to 1 January. The arrival of the new Christmas Day eleven days early took many by surprise in a society that still reckoned by feasts and fairs as much as by dates and diaries. There was widespread resistance and resentment, although the tale that people rioted for their eleven lost days is a myth. In Bohemia and in Augsburg, though, there were several years of strife between Catholics and Protestants over the issue in the 1580s, known as the "Kalenderstreit."

In navigating between old-style and new-style calendars, it is necessary to remember that in general Roman Catholic states were ten days ahead of Protestant and Orthodox states from 1583 until 1700. Care must be taken in the 1580s, and with Britain, Sweden, the Netherlands, and Switzerland. Catholic minorities in Protestant states may have adopted either calendar for religious purposes. For clarity, historians often note "O.S." or "N.S." after Julian and Gregorian dates respectively.

The issue of the calendar is a reminder that the reference points for the calculation of time express the most basic assumptions of society. The disputes it engendered were symptomatic of religious and political divisions in a world where nothing could be taken for granted.

See also **Copernicus, Nicolaus; Dee, John; Kepler, Johannes; Time, Measurement of; Trent, Council of.**

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CALLOT, JACQUES (1592–1635), French (Lorrainese) draftsman and printmaker. Born in Nancy, son of a herald-at-arms to Charles III, duke of Lorraine, Callot studied with a little-known court painter, Claude II Henriet, and a goldsmith, Demange Crocq. He departed for Italy in 1608, and continued his studies in Rome with the well-known printmaker Philippe Thomassin. In 1614 Callot moved to Florence, where he became an artist at the Medici court under Grand Duke Cosimo II, and he remained there for seven years. While in Florence, he honed his skill at using methods of perspective, probably during his studies with Giulio Parigi, the court architect, engineer, and impresario. Callot established a reputation as an engraver through his many prints recording events at the ducal court (*Catafalque of Emperor Matthias,* 1619, and *Soliman,* 1620), and became known especially for his ability to represent vast scenes without sacrificing detail as in his *Fair at Impruneta,* 1620, which features more than a thousand active figures.

Callot returned to his native country in 1621, and in 1623 was appointed an artist to the court of Henri II, duke of Lorraine at the ducal capital of Nancy. Callot's later production included prints depicting genre scenes, religion (*The Temptation of St. Anthony,* 1635), and events at court (*Combat at the Barrier,* 1625, and the *Parterre de Nancy,* 1625). He also depicted the brutality of war in a series of etchings recording the horrors he witnessed during the Thirty Years' War (*The Miseries of War,* 1633), and in three vast multi-plate depictions of military sieges at Breda, The Netherlands, 1627, and at La Rochelle and nearby Saint-Martin-de-Ré, both 1630. However, despite his skill in seamlessly blending topographic precision with the more conventional genre of the battle scene, it is particularly noteworthy—and perhaps a reflection of his patriotism—that he politely but defiantly declined Louis XIII's commission to depict the Siege of Nancy in 1633.

Callot was one of the most prolific, creative, and influential draftsmen and printmakers of the seventeenth century. He made more than 1,400 prints and developed technical innovations, such as hardground etching, that became standard procedure for all Western printmakers. During his time in Lorraine, Callot visited Paris often and established a relationship with printmaker and publisher Israël Henriet (c. 1590–1661), who was also the son of his first teacher. The younger Henriet obtained hundreds of Callot's copper plates through both inheritance and purchase. To satisfy the unceasing demand for Callot's work, Henriet continued publishing them for years after his friend's death. Callot was also renowned for his drawings, about two thousand of which have survived. These were often studies for his many prints, and they reveal his enormous power of invention, his love of detail and the grotesque, his brilliant contrasts of tone, and the confident, fluid, swelling, and tapering late-man-