

case. Those who today believe in the same premise ought to call for a return to the custom. Anglo-Saxon law provided a simpler, more practical means. It defined crime literally as breaking the peace; it could therefore be repaired with money. *Murther* was the name of a fine before denoting one type of killing; the payment “bought back” the peace; one notes in passing that the moral sense is not always engraved on the human heart in exactly the same terms. The English jury, also at first, was a group of 12 whose position as neighbors enabled them to testify to the facts at first hand. They rendered no verdict but told what they knew of the parties and the place.

A third procedure, combat (*duellum*), was instituted by William the Conqueror for both criminal and civil cases. It followed fairly sensible guidelines: a professional could be hired for the day and he fought with specified weapons less than deadly. If by nightfall either combatant had cried “craven,” the losing party to the suit was deemed a perjurer and was fined. If the issue was felony, he was hanged. Championship was a recognized profession and local courts kept on a yearly retainer one such qualified man to defend itself against potential claimants.

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Two medieval institutions remembered today with respect are the university and its arts curriculum. The Sorbonne, Oxford, and Cambridge live in the memory together with the cathedrals and pretty well make up the sum of merit accorded the era. The cathedral is known fairly accurately, being still extant. Not so *Universitas*, which means corporation and refers to the group of teachers in the cathedral school who set up with a few students a place for higher education. These early teaching firms dating from the 11C were self-governing like a guild.

As for the arts curriculum, its meaning also differed from what we know under the name. Art meant know-how, *techne*, as in our “mechanical arts.” The “liberal” ones were for free men and prerequisite to teaching, to serving the government, or simply to leading the life of the mind. There was a growing body of “intellectuals” who were not in the church or the professions.^o The arts they studied were seven—four and three: arithmetic, geometry, astronomy, and music; grammar, logic, and rhetoric. *Bachelor*, *master*, and *doctor* expressed

I would there were no age between sixteen and three-and-twenty; for there is nothing the between but getting wench with child, wronging the ancients, stealing, fighting, drinking.

—SHAKESPEARE, *THE WINTER'S TALE*

the degree of qualification attained. In the separate grouping of subjects the primacy of science is already evident. From the mix came the modern notion, now in decline, that the liberal arts provide any future leader in civilian life or government with what his duties will

require. After changing some of the contents to keep up-to-date, England as nation and empire thrived for a century and a half on that understanding.

Medieval undergraduates were unruly and some had a better right than later comers to dictate to their teachers, namely when students were officially the administration of the university. At Oxford, the faculty was in charge, but in Paris, those enrolled paid their teachers direct and could complain of the way the courses were given—as well as of anything else not to their taste. Representatives from the four “nations” (not national but mixed) rotated rapidly by law, while factional struggles ensured a steady round of grievances, disputes, riots, and wounds. The townsmen were fair game for mugging and murder with impunity.^o As for town life itself, its setting is familiar to present-day travelers and its crowded, unhygienic conditions fairly known from literature. [For greater detail, read *The Medieval Town* by John H. Mundy and Peter Riesenbergl]

King Henry III of England to the masters and students of the University of Paris, greeting, Because of the many tribulations and difficulties you have undergone under the evil law of Paris, we desire out of reverence for God and the holy church to aid you in restoring your condition to its due liberty. If it pleases you to come to our kingdom of England and make it your permanent center of students, whatever cities, boroughs or towns you choose we shall assign to you.

(JULY 16, 1229)

The outlook of the developing class referred to above as intellectuals appealed to students even before graduation—they had entered at 13 or 14—and they joined this subversive element, which was united not by doctrine but by temperament and habit; they were not advocates of reform or revolution but practitioners of anarchy. The ballades of François Villon give without reticence an insider’s view of the life and its perils. Graduates, students, vagrants, criminals together, they roamed the countryside in bands, unwelcome to villagers, but by now much admired for their songs of love and sadness and drink. Among many collections, a choice of some found in a German abbey form the text of Carl Orff’s popular cantata *Carmina Burana*.^o Not until early modern times were the lawless students of Europe put down by the royal heads of the budding nations.

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In science and techne the Middle Ages progressed well beyond the Romans and Greeks. Aristotle supplied the framework of Thomas Aquinas’s theology, but the Stagirite’s physics were refuted at the University of Paris. The first of the Bacons, Roger, practiced experiment, produced results in optics—he was credited with inventing eyeglasses—and promoted the idea that the test of truth is not authority or logic but experience. Toward the end of the period the versatile Cardinal Nicholas of Cusa ranged over physics,

mathematics (he suggested infinitesimals), astronomy, and geography (he commissioned the first map of Central Europe). He wrote on philosophy and jurisprudence and fruitfully advanced these disciplines. He gave up the Scholastics' way of settling questions by formal debate pro and con, and before Copernicus and Kepler, he intimated doubts of the circular motion of the planets and the earth's fixity at the center of the universe. Today, Cusa is honored by cosmologists for having conceived the cosmos as continuous, instead of divided into spheres of different materials. His ideas were not adequately followed up; he is a prime example of the truth that before science could prosper it had to become an institution. At the same time, to be fair to the Scholastics, one must heed Whitehead's reminder that by their logic-chopping they contributed to science the habit of asking what a statement implies and of not being satisfied with merely plausible answers.

Logic as an antidote to loose inference was helped in the Middle Ages by the use of the international language, not Latin, but *Medieval Latin*, a medium of exact expression, simplified in syntax and enriched in vocabulary. The modern tongues owe to it the subject-verb-predicate form of sentence and most of the abstract terms used in science, philosophy, government, business, and daily intercourse. By the end of the era, searchers after truth were well supplied also with "philosophical instruments" and machines: various types of measuring and drafting tools; and the compass and the astrolabe, supplemented by charts, to guide sailors on their way. Tacking (sailing against the wind) probably dates from the 15C if not earlier. And a comprehensive treatise on magnets served more than one purpose in science and daily life. Technicians could boast a vast experience in building, mining, and manufacturing, and a tradition of seeking the new.

The invention and utility of machinery depend on a source of power stronger than man's right arm. Before steam that power was water. The mill was the medieval machine par excellence; it served grinding, fulling, and other industrial needs. Using metal forged into exact shapes for gears and shafts, the mill was sturdy and its action continuous. The metallic ores mined in Germany were treated in new ways for durability and strength. In France steel was first made by some Carthusians monks well before their brothers in the Alps invented Chartreuse. [The book to read is *The Medieval Machine* by Jean Gimpel.] There is no need to point out the solidity and sound design of the bridges, houses, and churches that still stand to show their workmanship. The stone dressing and carving and the stained glass that we cannot duplicate are duly recognized, together with the priority of the cathedral as a skyscraper: it was the first building which, to attain height, is a frame and not a pile. The walls fill in the sides, they do not support the fabric.

Hardly remembered are the smaller artifacts—utensils, jewelry, ornaments, and the plate and chainmail armor, all of which presuppose refined

methods and high individual skill. [The book to read is *The Fate of Medieval Art* by G. G. Coulton.] Still more virtuosity went into the first mechanical clocks, which date from the last quarter of the 13C. The reliable watch came two centuries later. The importance attached to Time in the West is a distinctive trait: Swift's Gulliver looks at his watch so often that his hosts the Brobdingnagians think he is consulting his god. [The book to consult is *A Revolution in Time* by David S. Landes.]

Nor should it be forgotten that it was by medieval techne that firearms and movable type were first made. Muskets and cannon changed the tactics of war and the meaning of the word *artillery*, which gave the infantry superiority over the cavalry, thereby socially demoting the knight. As to movable type, now that it seems no longer needed thanks to the ubiquitous digitals, the moderns must not imagine that they invented it and built the machine that begot the book. Even the use of small letters in place of capitals throughout is due to a scribe contemporary with Charlemagne.

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When a book was a scroll or a codex (fastened sheets) it was expensive and rare, yet if one could have counted the number of separate titles, one would have found a good many about, including those that were compilations of the knowledge in the other books. Encyclopedias make their start with Isidore of Seville's in the 8C and reach the 15th with that of Bartholomeus Anglicus. From Spain, where (as we saw) a high Arab civilization lasted for those same 800 years, a great deal of scientific and philosophical knowledge flowed into northern parts, matching the goods and refinements, also of eastern make, that the crusaders brought back.

By oral tradition ultimately written down, the Middle Ages enjoyed a vast literature, so vast that it has not yet been entirely studied and ticketed. The cycle of stories about King Arthur and his knights has already been mentioned. Other figures and legends have likewise fed the modern imagination after filling the medieval: Roland and Oliver, Tristan and Isolde, Parsifal, the Nibelungen, Beowulf, *Burnt Njal*, and other characters in the Icelandic sagas. Huge epics about Alexander the Great or *The Romance of the Rose* or *Bertha Bigfoot* need for their appreciation a different training from that on the market today. The shorter works of poets were in strict forms meant to be sung; of these the ballade has remained in steady use. By the side of this output we have their poems in Latin and mainly on religious themes, the first in the West to use rime. The modern listener to a *Te Deum* or *Requiem* who reads the text samples the style. [A selection to read is in *Medieval Latin Lyrics*, translated by Helen Waddell.]

The cargo of poetry and wisdom in those and other than popular works

may be gauged from the summary statement that Chaucer in the 14C found in the literature of the Continent “a wealth of romances, lives of saints, *contes*, *fabliaux*,° drama, history, biography, all of great interest and importance.”° Chaucer’s own output in the 14C forms a kind of anthology of high medieval literature. Reflected in it is the place women occupied in the culture and life of the time, a mirroring that as always must be adjusted by what appears in the histories and official records. During the crusades women necessarily had a hand in the management of households and estates. As widows or regents they ruled counties and dukedoms and sometimes kingdoms, for example: Matilda of England, Eleanor of Aquitaine, Blanche of Castille, Isabel of Spain. [The book to read for the lives of outstanding figures, including two women is *Medieval Lives* by Norman Cantor.] The world for obvious reasons remembers most vividly Héloïse and Joan of Arc (properly *Darc* and no *of*).°

In the *fabliaux*, popular pieces in the vulgarest comic vein that criticize every habit, class, custom, and institution of their day, it is possible to find hostility to women. But given the other subjects that are equally attacked, this testimony needs interpreting.° The vicissitudes of marriage expose the women to satire—and the men as fornicators, the jokes being the eternal ones on the subject. Nobody has ever believed that they apply to all men, women, and married couples. [The book to read is *The Fifteen Joys of Marriage*, translated by Richard Aldington.] By the 14C the literary and other evidence shows women as men’s social and intellectual partners. The good society as it is then conceived and shown in practice could not exist without them. In that very time we meet a witness who is also a professional writer,

Christine de Pisan

Christine was the daughter of a Venetian who held office in France. He educated her and provided a husband with good prospects at court. But soon the king died, the father lost his post and died too, followed not long after by the husband. He left Christine with three children to rear. Knowing Latin and Italian, besides French literature and the manners of high society, she put this capital to use in a stream of works in verse and prose—manuals of etiquette, ballades, rondeaus, virelais, and other pieces for special occasions, all graced by fulsome dedicatory epistles.

Christine missed no chance to defend women and their rights, notably in her *Epistle to the God of Love*. The cause was taken up by another poet, Martin LeFranc in *Le Champion des Dames*, and the issue became a free-for-all known as “*la querelle des femmes*” (<131). This episode makes clear a point in the perduring “woman question,” namely, that there is a difference in the status of women, which has varied from free in the Renaissance to depressed in Victorian times, and different again in law, in custom, and in common talk. It