

THE LOST MILLENNIUM: PSYCHOLOGY DURING THE MIDDLE AGES

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The medieval period—roughly the 1,000 years from the classical Greco-Roman age to the Renaissance and modern era—has long been neglected in the history of psychology. Various reasons have been offered for why this period is treated so lightly, for example, that it was a Dark Age, or that it was dominated by anti-intellectual Christian thought. This essay challenges such reasoning and, in conjunction with critiquing these obstacles to inquiry, provides a cursory sketch of some of the more interesting figures of this millennium to stimulate psychologists to reconsider this era.

Most history of psychology textbooks cover the Ancient World in some detail. For example, such books often discuss the importance of rational medicine, the contributions of Plato to all subsequent conceptions of mind, and Aristotle's thoughts on many topics covered in an introductory psychology course (associative learning, the causes of behavior, dreams, emotions, free will, language, memory, motivation, perception, reasoning, etc.).

As far as we know, all the history of psychology texts that begin with the "modern period" still cover the principal figures of the 16th and 17th centuries (e.g., Descartes, Leibniz, Locke). Understanding Wundt requires at least a cursory consideration of the various empirical, associative, faculty, and rational traditions that preceded him.

Nevertheless, many history of psychology texts neglect the millennium that exists between Aristotle and Descartes (or more narrowly for this paper, from Rome until the Renaissance). Even the texts that cover this span in the greatest detail (Hergenhahn, 2001; Thorne & Henley, 2005; Watson & Evans, 1991) confine their discussions to a relatively small number of pages, with many of the pages focused on major social and scientific changes (e.g., the rise and subsequent reformation of Christianity, the development of universities, developments in physics) rather than on matters of psychology per se.

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If you move beyond the textbooks and explore the general academic literature on the history of psychology, you will find that the situation is even more limited. With few exceptions (e.g., Gerard, 1966; Kemp, 1996, 1997, 1998), most of what exists concerns medieval views of mental illness. It is as if questions of "experimental" psychology—thoughts about behavior, development, motivation, mind, memory, perception, learning, reasoning—simply did not exist from the close of the Ancient World until the Modern Age.

As Kemp's (1996, 1997, 1998) articles attest, perhaps no one deeply invested in the history of psychology actually believes that. But, as extant scholarship indicates, either little appears to have been said about psychological matters during the Middle Ages, or what was said is of little interest. Widely held, this latter thesis is often fleshed out by pointing to the overpowering role that the Church played upon philosophical speculations during this period and the relative scarcity of nontheological scholarship produced during these "Dark Ages." Classic texts (e.g., Boring, 1950) explain that this span of more than 1,000 years was dominated by the slavish acceptance of Aristotle on all matters of science, including psychology.

In this paper we will question this negative conception of the Middle Ages and psychology by exploring a number of issues that have served as obstacles to inquiry. Thus, our principle mission will be to challenge a variety of misconceptions about this period in the hope of sparking a new interest for this period in the history of psychology. We will also mention some of the more colorful and important contributors of the Middle Ages in order to further develop that interest. We will begin with the fall of the Roman Empire.

The Decline and Fall of the Roman Empire?

Historians suggest that the Middle Ages arose from the fusion of three very different traditions—the Roman Empire, Christianity, and the German "barbarians." The very idea of a "middle age" was the creation of Renaissance thinkers such as Giovanni Andrea (who coined the phrase in 1469) and Georg Horn (whose 1666 work, *Arca Noe*, established the idea of three historical "ages"). These writers were eager to distinguish their "Modern World" from the recent past (e.g., the Middle Age), as well as to compare it with antiquity (e.g., the Ancient World or Age of Antiquity).

Gibbon's classic treatise of Rome's decline and fall was no friend to the Middle Ages, and as Tierney and Painter (1992) suggested, his was among the widely read historical texts that popularized the medieval period as either an age of decay and degeneration after the glory that had been Rome, or as an unfortunate aberration between the Ancient World and modern times. Neither seems to be true.

By and large, the Germanic tribes were illiterate—and although their production of mystic "runes" may represent an interesting stage in the rise of a written language and the expression of symbolic representations—

as far as we know they contributed little to the psychology of the Middle Ages. One indirect exception might be through some of their conceptions of proper conduct and jurisprudence, which have had an enduring legacy on our modern legal system.

At the apex of the Roman Empire, some well-known figures, such as the Emperor Marcus Aurelius, did make important and lasting contributions to philosophy. However, on balance Rome was not then, nor from that point onward would it ever be, a "philosophical" civilization. There is simply little in Roman philosophy that cannot be found in earlier Greek or Alexandrian works, and much in the earlier works that cannot be found in Latin. Historians agree that the Romans were fiercely pragmatic and applied in their interests. In the Roman world, a good education prepared a person to do things (even if only with words, i.e., law, politics), not to speculate about them. For example, within medicine we find that Roman physicians made far greater strides in understanding and treating foot disease among legionnaires than they did in advancing our basic understanding of medicine as a theoretical science.

Dubbed by some the most learned of the Romans, Varro (116-27 BC) suggested an educational curriculum based on nine arts: grammar, logic, rhetoric, geometry, arithmetic, astronomy, music, medicine, and architecture. Before the conquest by the Germans began, all but the first three had been deleted as part of a basic Roman education, and of what was deleted, only medicine and architecture were still widely available for study. Assorted military and domestic problems, as well as an ever-loosening grip on the Hellenistic world, no doubt contributed to this state of affairs. In short, the love of speculative philosophy we associate with the ancient Greeks was already seriously in jeopardy in the West by the time of the later Roman Empire. The idea that the fall of the Roman Empire marks the decline of philosophy is then somewhat backward. The Roman Empire itself represents a decline in the sort of philosophy that would be most central to psychology.

However, Rome was an important seat of early Christianity, and before the "fall of the Roman Empire," Christianity and what we call "Western Thought" became virtually synonymous. Two Christian Saints—Augustine and Jerome—have been called "The Latin Fathers" for their influence on medieval thought (e.g., Leclercq, 1982). We will review Sts. Augustine and Jerome as illustrative of another misconception—that Christianity choked out philosophy in the later Roman and early Medieval period.

Philosophical Versus Theological Thought During the Later Roman Period?

Augustine wrote voluminously, and his *Confessions*, written around 400, is considered a classic of world literature. A motivated reader may find tantalizing similarities between Augustine's autobiography and existentialism, or perhaps even to other areas of interest to the modern psychologist.

Augustine considered extensively the nature of human knowledge, including the knowledge of science. In the Seventh Book of *The City of God*,

using Thales as his prototypical scientist, Augustine was somewhat unsympathetic to philosophical knowledge in the absence of any application to religion. Given his influence on future generations of Christian scholars as an irrefutable authority, this attitude was certainly an important part of the pervasive distrust in science that we imagine characterized the early Christian Church.

Importantly though, Augustine's writings about speculative philosophy were consistent with the prevailing Roman ideas of his day and indeed may be indicative of the low regard in which some Greek philosophers were held. Augustine himself was probably only passable at reading Greek, having been educated in an empire in which such knowledge was viewed as a luxury—even for the most educated (Augustine was initially trained as a lawyer in Roman Carthage).

Jerome (354-420) is interesting not for his psychological speculation, but because through Jerome (as with Augustine) we get a fuller glimpse of the relationship between the Church and secular writings as it was passed on to the Middle Ages. Jerome was fluent in several languages, widely read in theology and literature, and is best known for his Latin version of the Bible.

Jerome tells us that while wracked with fever he was in spirit dragged before the judgment seat and asked who he was. "I am a Christian," he replied, but was told "Thou liest, thou art a follower of Cicero." Jerome was undoubtedly shaken by this experience, and we see in his later works a tension concerning the relationship between the sacred and the secular. As one often-cited quotation of Jerome's betrays, "He who is educated and eloquent must not measure his saintliness merely by his fluency."

Both St. Augustine and St. Jerome were Church figures of epic stature, and there is little dispute that their "conflicted" ideas about secular philosophy and science helped shape the views of the Middle Ages. However, the point here is not to misconstrue or overstate their views. Augustine's ideas were completely in keeping with the Roman world in which he lived, and as such are not as illustrative of the Church's distrust of science as of Rome's. The same is true for Jerome, who is often cited as evidence for the Church's hostility toward philosophy and literature. A more thoughtful reading might suggest that not hostility, but caution, was Jerome's admonition—after all, as Leclercq (1982) noted, during the medieval period Jerome was viewed as the Church Father who had benefited most from his use of secular writings. Indeed, both Augustine and Jerome were praised as masterful stylists precisely because of their use of references to pagan works, as well as for their adherence to literary traditions apart from the more stilted forms of traditional Church writings.

The Dark Ages or the First Renaissance?

Some historians mark the beginning of the Middle Ages with the death of Augustine in 430. At this time, the Vandals, one of several

Germanic groups about to conquer the western part of the Roman Empire, were besieging Augustine's city of Hippo in North Africa. Our next theme concerns the foundations of Western thought. Was the early medieval period a "Dark Age," or was it by the time of Charlemagne something more like a rebirth of what had been lost in Rome? Individuals such as Boethius and Alcuin have long been recognized by philosophers and historians as important transitional figures for the Middle Ages. A consideration of each reveals more enlightenment than darkness.

Aenicius Manlius Severinus Boethius (ca. 480-525) was a respected Roman nobleman, a precocious political figure, and for a while advisor to Theodoric, a German ruling in Rome. Boethius's most famous work was *The Consolation of Philosophy*, written while the author was in prison awaiting execution for crimes that remain obscure but that likely concerned his views on the relationship between Rome and Byzantium. It has been suggested that for the next 1,000 years, the *Consolation* was the most widely read book after the Bible.

Boethius provided the early medieval scholars with almost all the Aristotle they had, and he was also part of an educational resurrection movement. In addition to Martianus Capella, Cassiodorus, and Isidore of Seville, Boethius helped established the curriculum and texts that were central to Western education from the time of Alcuin onward. The point is that Boethius and his contemporaries were active agents in attempting to restore scholarship to an empire long distracted by war. Their efforts suggest then not a Dark Age, but the start of a minirenaissance.

The figure most associated with enlightening this Dark Age is Alcuin (735-804). Born at York, Alcuin was well educated as a monk before arriving at the court of Charlemagne (742-814). Under Charlemagne's direction, Alcuin founded the Palatine school in Charlemagne's capital at Aachen. The Palatine school may have been a conceptual ancestor of the University of Paris, as it helped standardize the educational curriculum.

Although medievalists tend to hold Alcuin in high regard, historians of philosophy are sometimes less kind, noting that he left behind no known original works other than poetry. However, his impact on the intellectual milieu of the Carolingian Empire is clear and undisputed. There are conjectures about Alcuin's role in a variety of important events including scientific information exchanges with Islamic philosophers, exchanges of medical information with Jewish scholars, and new standards for biblical transcriptions (e.g., Heer, 1975).

Knowles (1988) contrasted Alcuin with Jerome, suggesting that Jerome sought refuge from letters as a simple monk, whereas Alcuin admonished his monastic friends that it was better to write books than to work with a spade. Whether this is fair to Jerome or not, it does illustrate that with Alcuin (or perhaps Charlemagne) a new relationship between sacred and secular scholarship had arrived. Indeed, a rebirth in philosophy, science, and medicine was taking place.

The Dark Ages or the Middle Ages?

Almost every romantic knows the love story of Peter Abélard and Héloïse. A standard subtext of that story has long been how the brilliant Abélard, a master of secular dialectics, was oppressed by the anti-intellectual St. Bernard. At least one movie version even hints that Abélard's passion for logic, and not the young Héloïse, led to his castration. Such images have caused the period between Alcuin and the "rediscovery" of Aristotle during the 12th century to be called a Dark Age even by respected modern philosophers (e.g., Copelstone, 1950). As has been pointed out repeatedly by noted medievalists (e.g., Gilson, 1954), this period does have several so-called "antiphilosophers," theologians like Sts. Bernard and Peter Damien, who have often been heralded as exemplars of the Church's disdain for philosophy. Of course, this era also had the philosophers against whom the attacks were directed.

Gilson (1940) provided the accepted antiphilosophical account when he wrote that both St. Peter Damien and Pope Gregory IX warned philosophers that "the handmaid of theology, is bidding to become the mistress!" (p. 414), and even of Martin Luther's subsequent admonition, that there is no greater enemy of grace than Aristotle's *Ethics*. Alternatively, Knowles (1988) noted that increasingly other medievalists have attempted to argue that theologians such as Damien and Bernard were not antiphilosophical at all, just aware that philosophy was best viewed as the "handmaiden to theology." Although not entirely sympathetic to this claim, Knowles acknowledged that exactly what these extremely well-educated men were objecting to may have been much narrower than some historians of philosophy have imagined. Peter Damien and the School of St. Victor serve nicely as examples.

No single individual is more commonly cited as an antiphilosopher than St. Peter Damien, given his "vicious attacks on Dialectics, Grammar, and generally speaking all that which involved the slightest reliance upon the power of natural reason" (Gilson, 1954, p. 13). Peter Damien (1007-1072) was born in Ravenna, Italy, where after his parents died he became a swineherd. From this humble start he became one of the best-educated men of his day and an established teacher of secular philosophy before joining the hermitage at Fonte Avellana in 1035. Later in his life, as Cardinal and Bishop of Ostia, Damien was one of the principal players in the important reforms of the clergy that dominated this era. His later writings are oppositional in nature and often stand in purposeful contrast to established figures such as Sts. Augustine and Anselm. His message can sensibly be portrayed as simply being against philosophy, claiming that both dialectics and the liberal arts were useless. Arguments of this sort are also attributed to several of his contemporaries and co-clerical-reformers, such as Manegold of Lautenbach and Otloh of St. Emmeran (who is said to have been especially concerned that men were putting more faith in Boethius than in God).

On the one hand, we have Damien as the savvy, erstwhile master of

secular philosophy engaged in theological reforms with far-reaching political and worldly consequences. On the other hand, we have Damien as the hermit cut off from the world and from everything but the contemplation of God. Knowles (1988) suggested that Damien, like Jerome before him, was more of a testimony to the tension between the secular and the sacred than a crusading critic: A man who "had himself taught school before his conversion, and [then later] throughout his career used all the arts of rhetoric against the study of letters and philosophy" (p. 88).

As Leclercq (1982) noted, it takes one to know one, as Alcuin ironically used quotes from Virgil to admonish a brother that he was devoting too much time to such secular Roman classics. Knowles (1988) likewise took pains to establish the actual contexts that stimulated some of Damien's most famous barbs, suggesting convincingly that his admonitions often mean "less" than they appear to mean. For example, frequently Damien is targeting very specific ongoing debates between church and state, or even individual monks or clerics who had left God's service to study secular topics and take "academic" jobs in service of the position Damien was attacking. At the risk of replacing one generalization with another, it may still be that a more accurate conception of Damien is that he was opposed to the **users** of secular logic against his own theological positions, but not to the tool of logic itself.

A second example comes from the monastery and "school" of St. Victor. This institution gave birth to many important and philosophically sophisticated theologians: Hugh of St. Victor and Peter the Lombard are perhaps the best known and most influential. Peter the Lombard, like Peter Abélard before him, is among the few thinkers of this era who are covered in some contemporary history of psychology texts (e.g., Hergenhahn, 2001).

But this same school, at basically the same time (circa 1178), also produced Walter of St. Victor and his work *Four Masters of Confusion in France*. A truly antiphilosophical tome, *Four Masters* targeted Peter Abélard as one of its primary harbingers of confusion, and Walter is also said to have remarked of his "brother" Peter the Lombard, "May your grammar be your damnation."

Our point about the men of St. Victor is that the school was concurrently home to some of the era's most philosophically sophisticated theologians and to some of philosophy's sharpest critics. This fact seems telling. This was a period of debate about the place of rational philosophy, not a second Dark Age in which earlier advances in philosophy and education were once again lost.

Aristotle as Everything?

Contact with Jewish and Medieval scholars at several points during the 12th century led to, among other things, the rediscovery of additional works of Aristotle. However, many other Ancient Greek, as well as contemporary Arabic and Jewish, treatises on various aspects of

philosophy, mathematics, science, and medicine were also (re)discovered during this century. Although they receive less attention, some of these other things (such as algebra) were perhaps of equal or greater importance (even in psychology).

Despite all these "other things," we have been told in psychology that a mindless adherence to Aristotle dominated the intellectual world from the 12th century until the Renaissance. For example, Boring (1950) wrote, "The Middle Ages [which he had previously defined as the period from 1200-1500, calling earlier times the Dark Ages] were characterized by their authoritarianism, and their science by deference for the dicta of Aristotle" (p. 12). We do not have to question the importance of the rediscovery of Aristotle, or the primacy of his influence on philosophical matters, to suggest that Boring misled psychology by neglecting the many other ideas of tremendous importance to psychology that can be linked to the period he defined as the Middle Ages. A quick survey of just a few of these other ideas and the people associated with them will provide our evidence here. We will focus on only three Englishmen, although many varied examples exist (see Grant, 1996).

The forerunner among a series of Englishmen who sought to push the boundary of knowledge, Adelard of Bath, traveled to Syria in the 12th century in search of science. His journey began by taking pupils to the university at Laon. These were the pupils to whom he would later write concerning their overtly Aristotelian philosophic education, "I learnt from my masters, the Arabs, to follow the light of reason, while you are led by the bridle of authority" (Southern, 1986, p. 86). As Southern noted, "He did not seek to fill gaps in a body of knowledge already almost complete: he sought to revive old and forgotten sciences" (p. 87). To this end, Adelard was the translator of Euclid's *Elements* as well as Arabic works in astronomy and mathematics. Thus, Adelard marks the start of a series of English scholars who are known not as mere disciples of Aristotle, but as popularizers of other Greek, Arabic, or even local and contemporary masters.

Robert Grosseteste (1175-1253) was the first Chancellor of Oxford University in about 1221, and later the Bishop of Lincoln in 1235. Grosseteste translated Aristotle's *Ethics*, and one biographer says he was the first medieval thinker to understand fully Aristotle's *Posterior Analytics*. Still, Grosseteste was a true renaissance man well before the true renaissance. A Church reformer who came into conflict with Pope Innocent IV (and in the last year of his life may have been excommunicated), one catalog of Grosseteste's works includes treatises on sound, motion, heat, color, form, and biology, all of which are of interest to psychologists, and also writings on necromancy, and diabolism as well as a host of mundane and practical matters (Southern, 1986). Later Englishmen of science credited Grosseteste with being the pioneering figure in descriptions of natural phenomena, as well as a true experimental researcher (in the modern sense) in areas of optics and visual perception.

A younger colleague of Grosseteste, Roger Bacon was born in England between 1214 and 1220. He was educated at Oxford and at

Paris and is said to have had the ambition to revise the whole of science. Many historians have commented that Bacon was both egoistic and ambitious. For example, Wipfel and Wolter (1969) observed that "Bacon is well known for his independent spirit, his harsh criticism of contemporary thinkers, and his great emphasis on mathematics and experimental science" (p. 274).

Although he was a critic of both the great Aristotelians Albert Magnus and Thomas Aquinas, he was very interested in Aristotle's "psychology".¹ Indeed, Bacon's interest in learning the secrets of man and nature aroused the suspicions of his fellow Franciscans. Feared as a necromancer and denounced as a sorcerer for the "novelty" of his ideas, Bacon spent 10 years in prison with neither books nor any scientific instruments. However, he died a free man in 1292, in the midst of writing still more original ideas about "science."

Roger Bacon's name is associated with inventions like the magnifying glass and gunpowder as well as with speculations on lighter-than-air flying machines, motors, telescopes, and microscopes. Perhaps more importantly, he was also the popularizer of the works of the Islamic scientist Alhazen. Alhazen is best known for his efforts to produce a perceptual theory that would reconcile Euclid's *Geometry* with Galen's writings on the physiology of the eye. Attempting to integrate the ideas of Aristotle, Alhazen, and others (e.g., the better known al-Kindi), Bacon arrived at his own theory of perception that makes use of inner processes such as discrimination, recognition, and memory.

With all these English pioneers, we again see a richer picture than is typically portrayed. Although we do not deny the importance—or even overreliance—on Aristotle, clearly such thinkers as Grosseteste and Bacon were both original and eclectic. In short, their ideas were not bound by Aristotle's authority.

Conclusions

Before we conclude, let us take a postmodernist moment to attend to what we have marginalized here. We have made no substantive mention of Anselm, Albert Magnus, or even Thomas Aquinas. Efforts of these well-known "scholastics" usually get a token mention in history of psychology texts, as both philosophers and historians have long established the importance of these schoolmen in shaping the course of Western civilization.

Likewise, others have seen John Duns Scotus as a forebear to

¹Although modern historians frequently speak of Aristotle's psychology—and courses taught under exactly that description could be found at the University of Paris by the 13th century—what they mean is often unclear. Kemp (1996) argued that modern conceptions of psychology as an academic discipline originate with Marulic in the 15th century, whereas Lapointe (1970) focused on Melanchoten even a bit later. Nevertheless, matters of consciousness, perception, motivation, intelligence, and behavior appear to have been components of the material taught by individuals such as Siger de Brabant at Paris that eventually drew condemnation in the late 13th century.

Wilhelm Wundt, or even Gestalt psychology (see Thorne & Henley, 2005). Similarly, Raymond Lull has enjoyed recent attention as the heretofore unknown "father" of cognitive science (e.g., Ford, Glymour, & Hayes, 1995). William of Ockham—known for Ockham's razor—has been juxtaposed to many points in psychology, such as to explanations of animal behavior by C. Lloyd Morgan (Costall, 1993) and to matters of cognition (Kemp, 1998). Even some women—such as Hildegard of Bingen (1098-1179)—have been singled out by historians, philosophers, or even psychologists on occasion (e.g., Magner, 1992).

Our tactic has been different: We have questioned the standard conception of psychology during the Middle Ages by exploring issues that have been offered as reasons in support of a benign neglect. Our objective was to show first that the fall of Rome does not signal the beginning of the so-called "Dark Ages." Moreover, we have explored both what university survey courses call the Dark Ages (500-1000 AD), as well as Boring's (1950) Dark Age, and found both to be enlightened. Finally, we have attempted to dispel the myth that Aristotle was an unchallenged authority who served to stifle completely original investigations.

Like their contemporary, the erstwhile physician Peter of Spain (later Pope John XXI), Robert Grosseteste and Roger Bacon are remembered as freethinkers, even as advocates of empirical science and experimentation. Watson and Evans (1991) suggested that Peter of Spain "deserves to be rescued from the neglect of psychologists" (p. 141), but this may be true for the entire millennium.

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