CHIRON THE EDUCATOR

Ayers Bagley
University of Minnesota

Introduction

The appearance of the first educator celebrated in western civilization has been preserved since classical antiquity in the most durable of media: in glazed ceramics and in an astronomic constellation. On a clear night his figure can be seen in that tracery of stars called Centaurus, although he is often identified with Sagittarius, Latin for "of an arrow," but understood as "the archer."[1] He is also represented in paintings on ancient vases, some dating to the seventh century B.C. (fig. 1) The image is odd; for some viewers, possibly outrageous. To quote an ancient reaction from the *Anthologia Palatina* : ". . . a horse belches out a man, and a man farts out a horse."[2] He is a centaur. His name was not originally Sagittarius, and he was not Roman by birth. Who was he? What explains his centaur form? And what significance has he in the history of education? To pursue this last question into the early modern era takes inquiry into territory where thought about education swirls with ethical and political metaphors, where practical concerns of governance are oppressive, and where the emblematic centaur-as-educator carries diverse and sometimes contradictory meanings.

Background

Greeks and Romans knew the celestial bowman as Chiron, wisest of the centaurs.[3] "The most famous of the centaurs, son of Cronus, renowned for wisdom and skill in medicine," runs the entry for "Chiron" in Webster's unabridged (1916), ". . . instructor of Achilles, Asclepius, and other heroes. . . After his death he was placed among the stars." A more detailed entry appears in the *Dictionary of Syr Thomas Eliot* (1538): "Chiron, nis, the name of a man, whom poetes doo fayne to be the one halfe of a man, the other halfe lyke a hors: who fyrst dyd fynde the vertues of herbes, and taughte Aesculapius phisike, and Apollo to harpe, and Astronomy to Hercules, and was master to Achylles, and excelled all other men of his tyme in vertue and iustyce."

Eliot's version of Chiron is in the rationalizing tradition of Euhemerous (3rd c. B.C.), in which myth is interpreted as history transformed by imagination.[4] Accordingly, Chiron was a man; his peculiar biform was the product of fanciful invention.[5] The problem is thus explained away. Consistent with Euhemeran method would be the postulation of an original veterinary Chiron, an idea understandably attractive to the Royal College of Veterinary Surgeons (London), which includes a Chiron-centaur in its armorial crest. Supportive of the veterinarian hypothesis are the testimonies of Suidas (10th c. A.D.), Isidore of Seville (7th c. A.D.), and Latin manuscripts of the fifth and fourth centuries A. D. said to derive ultimately from a Greek text by Chiron himself.[6]

The chief virtue of the veterinarian hypothesis—discounting whatever persuasive power accrues to a banal assumption—is its plausible explanation of Chiron's equinity. That is, Chiron centaur is the result of a trope likening the author to his subject. (Formulated popularly, we would have something like this: "He must be part horse himself to understand horses so well.") The veterinary hypothesis, however, finds little more in its favor. Sustaining it is frustrated by the long hiatus in historical testimony. Explicit reference to Chiron in veterinary terms has been tracked only to the fourth century A.D., although poetic allusion to the theme dates to the first century A.D.[7] The oldest sources—Homer, Hesiod, Pindar—relate Chiron's medical knowledge to mankind, not to animal care.[8] In those sources, Chiron's role as teacher is emphasized, particularly in connection with the teaching of surgical skill and herbal lore to Aesculapius and Achilles. Later writers added to the list of his students.[9] Some modern interpreters have conjectured that Chiron was the director of a medical academy.[10]

The earliest extant depictions of Chiron date from at least a century after the *Iliad* had begun to take form. Ceramic vessels of the seventh and sixth centuries B.C. bear representations of Chiron as a centaur; his human half is appareled soberly, his bearing erect, dignified, his grooming impeccable. Chiron is not seen alone in vase paintings. He is typically shown accepting Achilles into his tutelage.[11] When he receives Achilles as an infant from the hands of Peleus, father of the boy, Chiron's implied role is a combination of foster father and master. That is the earlier tradition. When Chiron receives Achilles as a lad of school age, introduced by Peleus, or by Thetis, mother of Achilles, or by both parents, the scene connotes the first day of school, the occasion on which the family commits its son to the schoolmaster for instruction. That is the newer iconography, an innovation which suggests something of the degree to which the idea of schooling had informed the Greek imagination by the end of the sixth century B.C.

Already present in the older iconography is an indication of a development in Greek culture. For when Peleus delivers the infant Achilles to Chiron, the image is a graphic expression of the idea that it is fitting to consign the education of a prince to an expert educator who has special knowledge to impart. In the exemplum of Chiron and Achilles, the prince and future hero is removed from the family setting, indeed from all kin, to obtain instruction from one who is not even a member of the same race. Uppermost in the decision are considerations of the educator's knowledge, skill, and qualities of character. By the fifth century B.C. in Athens, the noble centaur had come to symbolize the ideal schoolmaster.

But why the centaur form? Explanation may follow from the observation that Chiron imagery in vase painting was subordinated to the theme of educating Achilles, warrior prince. This leads to the question of what kind of educator would be ideal in the rearing of those who are to rule. It was from this point of view that Nicolò Machiavelli sought to understand the biform Chiron, concluding that Chiron was best interpreted as an idea. We are told in *The Prince,* Chapter XVIII (1532), that rulers who would be illustrious must learn alternative means of achieving their ends.[12]

> You must know that there are two ways of contesting, the one by law, the other by force; the first method is proper to men, the second to beasts; but because the first is frequently not sufficient, it is necessary to have recourse to the second. Therefore it is necessary for a prince to understand how to avail himself of the beast and the man. This has been figuratively taught to princes by ancient writers, who describe how Achilles and many other princes of old were given to the centaur Chiron to raise, who brought them up in his discipline; which means solely that, as they had for a teacher one who was half beast and half man, so it is necessary for a prince to know how to make use of both natures, and that the one without the other is not durable.

For Machiavelli, it is clear, Chiron was not an historical person; he was to be understood rather as a fiction useful in political education. Visually, Chiron was a symbolic image, a figure whose distinctive physical properties indicated a general concept. So, to the question: Why a centaur? Machiavelli's answer was, in effect, that the centaur visually expressed relevant dualities in nature, society, and education.

Machiavelli construed Chiron as the embodiment of an essential, pragmatic principle. Effectiveness in maintaining power, not morality, was his basic criterion. The centaur figure he found apt in representing the antinomies of bestial vs. civil, force vs. reason. He could take for granted a conventional association of horse imagery and the military education of princelings. In his cultural milieu, the linkage must have seemed self-evident.

Sixteenth-century Humanists shared Machiavelli's assumption that effective secular rule must be vested in princes. Good rulership depends on proper education, and education must begin in childhood. Later in life, when the prince assumes his powers, advisers must serve him in a way analogous to that of an educator. The education of the prince must aim to make him both wise and powerful, wise enough to govern justly and mercifully, powerful enough to maintain order and defend against enemies of the state. Erasmus expressed the idea through imagery: "Chiron taught his pupils to play the lyre, but he taught them also the fierceness of centaurs."[13] This renaissance conjugation departs from the sharp medieval division expressed, for example, in Johann Engel's *Astrolabium* whose club-wielding centaur represents the robust man of action in contrast to the various men who have a book, and are deemed studious, learned, or wise.[14]

Chiron the Educator in Alciato's Consiliarii Principum

A darker vision of Chiron, probably influenced by Machiavelli and in another way by John of Salisbury, appeared in Andreas Alciato's *Emblematum Liber,* which in Latin and its modern language translations—French, Italian, Spanish, German—was diffused throughout Europe during the sixteenth and seventeenth centuries.[15] Alciato's Chiron first appeared illustrated in a Venetian edition (1546) of the *Emblemata*.[16] (fig. 2) A lonely figure in a wooded landscape, he stands or "rears" in the foreground. His hair and beard are unruly. He points to his human head and his horsey

haunches, calling attention to his divided being. That he symbolizes more the beast than man, more the natural than the cultural, is indicated not only by the unequal divisioning of the body; animal spirits explain his posture, deficient civility his grooming, and the rustic landscape bereft of architecture define his proper haunts.

The image of the lonely Chiron corresponds minimally with Alciato's motto, "Consiliarii Principum" ("Counselors of princes"), and accompanying verses.

> Heroum genitos, & magnum fertur Achillem
>
> In stabulis Chiron erudisse suis.
>
> Semiferum doctorem & semivirum centaurum,
>
> Assideat quisquis regibus, esse decet.
>
> Est fera, dum violat socios, dum proterit hostes:
>
> Estque homo, dum simulat se populo esse pium.

> [Chiron is said to have educated great Achilles, and the offspring of heroes in his stables. Whoever advises kings ought to be a teacher who is half-beast, and a centaur who is half-man. He is a beast when he ravages his comrades and destroys his enemies; he is a man when he represents himself as being devoted to the people. (Following the translation provided in Daly, et al, 1985.)]

The isolation of Chiron suggests that attention should center on the educator-adviser himself, not on the prince or heroes he is to educate. This was not the image that flourished. Other considerations aside, it fell short on three criteria. First, an isolated Chiron was insufficiently distinguishable from any anonymous centaur. Second, and perhaps more problematic, the lonely centaur was too much like the minotaur in the *Emblematum Liber* itself, that is, the minotaur that had shed its taurine features in favor of the equine, approximating a centaur.[17] Thirdly, the Venetian icon was underdeveloped relative to the text. Acceptable, perhaps, as an expression of the duality motif, it neglects the narrative component of Alciato's opening lines—"Chiron is said to have educated great Achilles and the offspring of heroes in his stables"—thereby failing to visualize a key feature.[18]

A later example of an isolated Chiron, found in Zincgref's *Emblematum Ethico-Politicorum*, brings word and image into closer alignment.[19] (fig. 3) Beneath the motto "Exercet Utrumque" (He practices both), an ungarbed centaur standing in the foreground of a broad landscape rests a club on his right shoulder and holds an open book in his left hand; behind him are a body of water, a castle at its edge, high hills in the deepest space. The text beneath includes a caption "Pour l'un & l'autre" (For the one and the other) followed by verses in French and German:

> Le liure d'vne main la massue de l'autre,
>
> Cette-cy est du corps, cestui-là de l'esprit,
>
> Chiron par son exemple à son Achille apprit,
>
> Que pour bien viure il faut exercer l'vn & l'autre.

> [The book in one hand, the club in the other, This of the body, that of the mind, Chiron by his own example taught Achilles, That to live well it was necessary to exercise both (i.e., "the one and the other")]

Mit Sinnen und Kräfften

Wir Lehren/dass du kennst bewehrt in deinen Geschäfften

Mit Sinnen und Kräfften.

Ein wolbewerther Mann mus diese mächtige Gaben

Verehlichet haben.

The German text interprets the French, noting that he who would be fully successful in his endeavors must wed intellect with force. The interpretation reasonably omits mention of Chiron and Achilles, recognizing that the "teaching" offered by the emblem refers to imaginative modeling aided by the motifs of horse/man, club/book. Chiron exemplifies duality in the icon; he exemplifies and therefore teaches even though students are not present in the picture plane. In other words, he illustrates a conceptual model for readers, but he is not visually a behavioral model. Adult readers would understand that this icon is not an exhortation to shed clothes and wander through fields carrying club and book.

The Zincgreff emblem presupposes an ethical context; it concentrates on the individual and his conduct. Alciato's Chiron emblem presupposes a political context, pointing to relations of authority, power, and influence. Chiron's authority and power over the prince in his youth is equated with counselors' influence on him during his reign; they then exercise the power and authority he delegates to them. The Venetian icon used for Alciato's Chiron, lacking imagery of interpersonal relations, was superseded.

In the Alciato icon of Chiron that became standard, the centaur-educator is shown "teaching" in a sense associated with classrooms; he listens to recitations, ready to make corrections punctuated with birching. (Body strikers were conventional attributes of sixteenth-century schoolmasters.) This delineation of Chiron as an instructor informed the image initiated in the Italian (1549) and Spanish (1549) language editions published by Rouillé and Bonhomme.[20] (fig. 4) More specifically, it is Chiron the powerful disciplinarian of verbal learning who stands before the eye; evidence of his role as physical educator is left to the allusive power of the bow on the ground at his feet.

The iconographic pattern established in the Lyon editions was adopted by other publishers, passing from Lyon to Paris, Antwerp, and Frankfurt. It is also seen in the hefty Padua editions of 1621 and 1661, which carry lengthy glosses.[21] Minor variations differentiate the Lyon editions from the others. In the Lyon editions the scourge is raised high, poised to strike; in the images from Antwerp and Padua it is held low, the threat of application less imminent.[22] (fig. 5) Other differences are also obvious: in the Lyon editions, three boys, located quite apart from Achilles, sit on the ground, holding open books; in the Antwerp and Padua editions only two boys accompany Achilles, standing in line behind him. A flight of birds crossing

the sky in the Lyon editions is absent from the others. It is not clear whether these differences are of symbolic import.

The teaching Chiron figure established in the Lyon editions fixes attention on the foundational role of Chiron as educator rather than on his later service as counselor. Although the text itself conflates the roles of educator and court counselor, the image suggests the disciplinarian rather than the counselor or adviser, given the scourge with which Chiron threatens his charge. The boy under instruction presumably represents Achilles. If the intent here was to offer a visual summary of his tutelage and thereby express a norm of princely education during childhood, commentary would be in order. For the motif of scourge and the image of the teacher as disciplinarian owe more to the harsh Orbilian mode of which Horace complained and to medieval conventions than to classical Greek antiquity or to Renaissance educational theory influenced by Quintilian's *Institutes of Oratory*. Menacing teachers wielding body strikers belonged mainly to depictions of classrooms whose youthful members were intended for other than princely careers. Mortification of the flesh was, of course, a theme familiar to clerical asceticism.[23]

Looking now to spatial setting, the Lyon icon ignores Alciato's reference to Chiron's stables. The instructor and his students are not located in a classroom of any kind; instead, they occupy the foreground of a forlorn landscape where the background suggests remains of a ruined kingdom. The barren setting, the crumbling, neglected architecture, the threatening, punitive atmosphere—none of this reflects the ancient iconography of Chiron and Achilles as it was expressed in vase paintings or other media. No less alien to Greek and Roman depictions of the ancient educator is the somewhat wild-looking Chiron of the Venice edition. In short, the iconographies created for Alciato's Chiron emblem comply with no ancient canon. Imagery of wild centaurs was a legacy from antiquity. Wild centaurs frequently are found carved into the fabric of Romanesque churches, but not in acts of teaching anyone to read.[24] The teaching scene represented in the Lyon emblem of Chiron appears to be the product of an early modern imagination, although some degree of textual support for the image might be found in Ovid's *Art of Love,* where we read that "the boy Achilles . . . cowered . . . before an aged man [Chiron]. Those hands that Hector was to feel, he held out to the lash obediently, when his master bade" (*Artis Amatoriae* I,10–16). Commentary on Chiron and Achilles in the Padua editions of Alciato cites Ovid's *Fasti* and *Metamorphoses,* but neglects the pertinent descriptive passage from the *Art of Love*.

Modern Language Translations of Alciato's Consiliarii Principum

Uncertainty about Alciato's intention in the Chiron emblem, or disagreement with it, is detectable in sixteenth-century translations of the original Latin text into French, Italian, Spanish, and German. All agree that the Centaur is Chiron and that Achilles was his most important student. The Spanish and German translations, like the Latin original, refer to the other boys as sons of heroes; the French, as princes; the Italian ignores them. The Italian differs also in characterizing Chiron as frightful and ugly ("horrido e brutto").

Comparing other verses across translations, one commonality and some important differences emerge in the delineation of the teacher/adviser. The Latin dictates that the teacher/adviser ought to be half-beast and half-man, and explains that "He is a beast when he ravages his comrades and destroys his enemies; he is a man when he represents himself as being pious or devoted to the people." The expression "represents himself" ("simulat") carries a sense of dissembling in this context. The translations agree on this point. The French offers "semblant," which might be rendered as "feigning"; the Italian, "mostra" as "show" or "display"; the Spanish, "paracer," as "appear"; the German, "sich stelt," as "represents himself" or "acts."

The texts disagree on conduct to be approved and disapproved. The Latin and the French apparently assume the inevitability of the teacher-adviser hurting both friends and enemies and of his having no more than hypocritical concern for the public good. Although this outlook might be understood as Machiavellianism at its cynical extreme, such individualistic sentiments were not new. "And therefore at the king's court, O my brother, it's each man for himself and not for other," says Arcita (i.e., "archer" or "bowman") in Chaucer's Knight's tale.[25] A contrasting perspective is conveyed by the Italian verse, which reads: "Thus more than one can rightly be called a centaur when he instructs him who reigns to do evil. He is a beast in effect although he displays an appearance of goodness." Implying disapproval of evil instruction and hypocrisy, the Italian rendition yet begs the question of whether the prince does evil when he uses force instead of law.

The German and Spanish versions take a turn different from the others. They focus on the question of survival at court. The German is concerned about success "in the court of great lords," and recommends abandoning friends, trampling enemies, but acting friendly to everyone. The Spanish is most ambiguous: for one who would "live with a king, he should be like Chiron: fierce in conquering and punishing the vile, and otherwise firm in purpose if he wishes to appear devoted." Seeping through these lines are assumptions profoundly pessimistic about conditions at court.

Some contemporaries read the Latin, French, and Italian verses as an attack on those who shaped the values and policies of princes.[26] Here is Aneau's rendering of the French language edition of 1549 (sans icon):

> Chiron Centor nourrit en ses estables
>
> Tant Achilles, qu' autres Princes notables,
>
> Monstrant celluy qui ha les Roys en main,
>
> Demy sauluage [sic] estre, & demy humain.
>
> Beste sauvage il est: les gens foullant,
>
> Et homme il est monstrant humain semblant.

[Chiron centaur nourished in his quarters Achilles and other notable princes, Showing that he who has kings in his charge, is half savage and half human. Savage beast he is when he oppresses the people, And man he is when he shows a human appearance.]

Rather than indicting monarchs directly, the emblem blames political injustice on the counsellors of kings. Aneau's gloss explains that counsellors employ terms like "just war," "equity," and "the public good" even as they are secretly devouring the substance of the people.[27] Their fair sounding pretexts correspond to the human front presented by Chiron, which appears to be human; their rapacious actions ("plus inhumains que bestes sauuages") correspond to his bestial derrière.[28]

Alciato's educator-counsellors of princes are Sagittarians. They are destined by their stars to careers as the trustees of "the wealth of monarchs and temple finances will be in their keeping: they will be kings under kings, and ministers of state, and be charged with the guardianship of the people . . . ."[29] The moral challenge to those born under the sign of the Centaur results from conflict among their powerful drives. To maintain themselves as human, they must not allow their base appetites to overcome integrity, Piero Valeriano warns, lest they become indeed an "homme-cheval" devoid of true wisdom.[30] Aneau's gloss denounces the Sagittarians who have abandoned themselves to low impulse. The much more elaborate glosses in the Latin editions of 1621 and 1661 (Padua) cite Machiavelli, recalling his well known metaphor of the lion and the fox, used to characterize the durable prince, who must be capable of both forceful action and clever maneuver.[31]

If the education of a durable prince must be aimed at cultivating capabilities at words and deeds, persuasion and violence, lawfulness and brute force, then the mature ruler is to be notably dual in mind and character. "Precarious" describes the position of those living close to the center of power, shaping it in its youth, influencing it in its adulthood. "Perilous" describes the enterprise of those who must foster both the violent and the gentle in their student's nature. Tutors who ill-educate their charge jeopardize their own career while endangering the future well-being of the state; counsellors who ill advise the prince risk their heads along with the peace and prosperity of the people.

Machiavelli, full of Aesop, seeing vividly the animal in man, described a steely vision of the political facts of life. Alciato and his translators of the Chiron emblem, alerted readers to the ambiguities of court life and to the reprehensible conduct of semi-civilized ministers of the crown. Barthélemy Aneau and subsequent commentators excoriated them. All this is much removed from the meanings assigned to Chiron in texts and imagery surviving from Greek antiquity. Erasmus had recalled the lyre in Chiron's curriculum. And Castiglione's Count Ludovico asked: "Have you not read that music was among the first accomplishments which the worthy old Chiron taught Achilles in tender youth . . .?"[32] But John of Salisbury had reluctantly admitted reports of Chiron's music. Alciato and those who prepared the icons for his text neglected it. There is no music in Alciato's Chiron or his students. "He reads much . . . he hears no music," Caesar says of the conspirator Cassius.[33] And Lorenzo warns in *The Merchant of Venice* : "The man that hath no music in himself . . . is fit for treasons, stratagems, and spoils . . . Let no such man be trusted."[34]

Philostratus's and Covarrubias's Gentle Teacher

The immoralist, the brutal Chiron, purveyed by the *Emblemata* was not the only one known to Alciato. He would have been acquainted with the wise and gentle version of the ancient educator at least through Stephanus Niger's (or Nigri's) translation of Philostratus' *Icones* (Milan, 1521).[35] Alciato had composed a complimentary poem for this work.[36] Philostratus (3rd c. A.D.) contrasts the warmly supportive teaching methods of Chiron with the fierce career that distinguished the adult Achilles in Homer's epic. (fig. 6) The youthful Achilles, as Philostratus observes, "Cheiron still nourishes upon milk and marrow and honey."[37] When Achilles catches a hare or a fawn, Cheiron expresses delight; he "stands with forelegs bent so as to be on a level with the boy and offers him apples fair and fragrant from the fold of his garment . . . and with his hand he offers him a honeycomb dripping with honey . . .." Philostratus writes as though his subject were a painting come to life:

> Now Chieron is painted in every respect like a centaur . . . That the expression seen in the eye of Cheiron is gentle is the result of his justice and the wisdom that he has acquired through justice, but the lyre also does its part, through whose music he has become cultured; but now there is also something of cozening in his look, no doubt because Cheiron knows that this soothes children and nurtures them better than milk.

Achilles' curriculum includes horseback riding. Cheiron is his steed; the centaur "measures his gait to what the boy can endure, and turning around he smiles at the boy when he laughs aloud with enjoyment . . .."

Philostratus concludes the narrative with a revelation of the teacher's thoughts during the riding lesson. At the very moment Chiron smiles at the joyful Achilles, he thinks: " . . . you have been taught by me thus gently the art of horsemanship. . . someday you shall ride on Xanthos and Balios; and you shall take many cities and slay many men, you merely running and they trying to escape you." How is this to be interpreted? Is the smile a deception, one of those encouraging little frauds adults often work on children? Does it signify a paradox: the gentle teacher preparing his student for a life of violence?

Paradoxes are tense, therefore unstable; the urge to explanation is restless until the tension is relaxed or stabilized through containment. Reviewing the account, Philostratus the artist can be seen at work, drawing a contrast between a bucolic childhood education and a later adolescence that wreaks urban destruction. Philostratus' characterization of Chiron attributes to him extraordinary virtues: justice, wisdom, the culture of the muses. With this in mind, any tinge of hypocrisy bleaches away and what might have appeared paradoxical now assumes more a sense of irony, for Chiron's virtues lend to the soliloquy a motif of prescience, an intimation of the inevitable, which is a feature of the tragic vision. Chiron's foreknowledge of destiny is of a kind likely granted to a son of Cronus.

The gentle Chiron appears again in Covarrubias's emblem, "Elementa Velint ut Discere," in his *Emblemas Morales*.[38] (fig. 7) Here the subject is the first principles of teaching children, the foundational elements of human relations.

Deue el maestro ser muy amoroso,
Para que el niño no le cobre miedo,
Y deprenda, con gusto y con reposo,
Sin darle un papirote con el dedo:
En especial si es noble y generoso,
No se le muestre asperoniazedo,
Antes le de la alorça, y la rosquilla,
Quando leer le mande en la cartilla.

The schoolmaster is advised to begin with love, not fear; let the first taste of book learning be sweet, not bitter. Like Philostratus, Covarrubias would have teachers use honey to attract children to learning. He draws his motto from Horace's *Sermones, Satires* 1.1, where the poet speaks approvingly of teachers who "cajole little boys by awarding them cookies, Coaxing them on to the point where they *want* to learn more of their letters . . ." [ut pueris olim dant crustula blandi doctores, elementa velint ut discere prima].[39]

None of Philostratus's portrait of Chiron and Achilles was adopted by Alciato. In his Chiron emblem the distinguished jurist looked rather to the subject of governance, drawing partly on Machiavelli, as Claude Minois noted, and on a tradition still less favorably disposed to Chiron.

The Brutal Chiron of the *Achilleid* and *Polycraticus*

Precedence for a negative view of Chiron as educator can be found in the *Polycraticus* (1159), John of Salisbury's great work on rulership.[40] John, it seems, had read the *Achilleid* of Statius (lst c. A.D.) and was impressed by Achilles' speech recounting Chiron's curriculum.[41] It is a speech full of blood, killing, and descriptions of endurance testing. No previous version of Chiron yields such a violent picture. The Chiron and Achilles of Chartres Cathedral is in that tradition.[42] On a column capital just inside the Royal Portal, a ferocious centaur, armed with bow and arrow, gallops in place, riding Achilles on his back while the boy appears to strangle a large fowl. (fig. 8) The sculpture may have been carved while John was a student at the Cathedral school between 1137 and 1140. Otherwise, he certainly would have seen it when he returned as Archbishop in 1176.

John's assumption that centaurs, chimeras, and other fabulous creatures were the inventions of poets did not prevent him from finding homiletic potential in the theme of Chiron's education of Achilles. The boy, he relates, was "taken into the forest and amid the slaughter of wild beasts, becoming inured to killing and to eating disgusting food, he lost his awe of nature and fear of death." John interprets this to mean that "those who have such inclinations and desires are half-beast. They have shed the desirable element, their humanity, and in the sphere of conduct have made themselves like unto monsters." John then adapts the moral to his polemic against the blood sports of kings and courtiers. "To this day," he avers, "hunters smack of the Centaurs' training. Rarely is one found to be modest or dignified, rarely

self-controlled, and in my opinion never temperate. They were indeed imbued with these characteristics in the home of Chiron."

Although John was aware that animal slaughter did not mark the limits of Achilles' education, he had trouble reconciling music instruction in the curriculum. Somewhat reticently he reports: "In the cave of the Centaur Chiron, if entire credence is to be given the Greeks, Achilles was taught to play the lyre and cithera." This gentle phase of the curriculum Statius had allowed Chiron and note of it occurs in Achilles' speech. But Achilles is given to dwell on violence; he minimizes all else in his education. "I should have expected more from a pupil of Chiron," chides Antilochus in Lucian's *Dialogues of the Dead*.[43] Perhaps Statius was playing to the Roman taste for bloody sports.

Neoclassic imagery of Chiron has also tended to emphasize the themes of hunting and weaponry in Achilles' education.[44] Curiously, it is the music master Chiron, not the savage trainer, who has come down to us in the visual arts of the Roman world. We see him in the massively equine Chiron of Herculaneum (65-79 A.D.); we see him again on the Capitoline Tensa, and yet again in carvings on gemstones.[45] Chances are that the scene is based on a Greek prototype.[46] In any case, the feeling tone is consonant with Hellenistic terra cottas representing old pedagogues and their pupils.[47]

Chiron's Origins Revisited

The ancient association of horse and education expressed in the Chiron image can sustain a level of interpretation beyond the proposals of de-mythologizers, who espied corporeal beings behind myths, and of moralists, who sought lessons in conduct. The broader interpretation offered by Sir Sydney Colvin places Chiron in the perspective of the history of education and civilizational advance. Reaching beyond explanations that would reduce Chiron's significance to man's domestication of the horse, Colvin views him as a composite symbol standing for an array of human accomplishments and connoting psycho-cultural progress:[48]

> The myth absorbed into itself the memories of human struggles. A weighty accretion of significance ethical, political, and historical was added. Those memories are accounts of achievements of generation after generation of primitive men, pioneers, reclaimers, and founders of civilization.

Chiron understood in this way is a complex metaphor emerging at the opening of a new era in the Greek experience, when poets perceived a growth out of primitive rusticity. Chiron is an intermediary between stages of development; he represents the best of the old wisdom and technology, passing on what is most valuable to the next age.

Close to nature, Chiron as a metaphor of emergent urban man, shelters not yet in architecture but in a cave on the slopes of Mount Pelion. He is master of hunting (i.e., food-gathering) and medicine (i.e., healing), which is to say, the survival technologies requisite to life in the wilderness. Imagery from the sixth century B.C. corresponds to those motifs. On a vase in the British Museum, we see Chiron with his hunting dog.[49] (See fig.1) The

branch resting on Chiron's shoulder and the small tree nearby may "symbolize the 'pharmaka' taken from the sylvan garden of Pelion."[50] According to the oldest written sources—Homer, Hesiod, Pindar—pharmacy is part of Chiron's medical knowledge; so are surgery and incantations believed conducive to healing. The latter presuppose musical skills.[51]

The significance of Chiron is not exhausted in terms of technological advance. He is practical reason and self-discipline dominant over appetite; he controls the horse beneath his head and heart. It is in connection with the discipline of self, of judgment over impulse, that Chiron is assigned the composition of a work on ethical precepts, the so-called *Maxims of Chiron* which supposedly stated the rudiments of moral philosophy essential to a social life that would transcend barbarism. From this point of view, Chiron may be understood as a biological metaphor of man's psycho-cultural development.[52]

Chiron is a telling figure in the history of educational thought and iconography. Inherited explanations of his iconography comprise a legacy revealing as much about historical approaches to myth as about the iconology of the unique educator. Twentieth-century interest in Chiron seems less lively among professional educators than among certain other groups, e.g., a major pharmaceutical corporation called Chiron, the German Archaeological Association, The Royal College of Veterinary Surgeons, the History of Social and Behavioral Sciences Association.[53] Iconographically, the interest is expressed in the form of insignia or logos, not in imagery of iconic stature.

An estimate of Chiron's contemporary significance in the United States may be found in the Epilogue to John Updike's allegorical novel, *The Centaur:*

> Zeus had loved his old friend, and lifted him up, and set him among the stars as the constellation Sagittarius. Here, in the Zodiac, now above, now below the horizon, he assists in the regulation of our destinies, though in this latter time few living mortals cast their eyes respectfully toward Heaven, and fewer still sit as students to the stars.[54]

Notes

Because this study concentrates on imagery expressive of Chiron's educative role, especially as it appears in early modern emblem books, other imagery of Chiron receives at most incidental mention, and much is omitted entirely, e.g., Chiron atop his tomb, Chiron as soul fetcher, the rustic Chiron

disturbing the peace of the gods by neighing and galloping, the Chiron parodied on an ancient South Italian vase in the British Museum.

To date, the most broadly inclusive study of Chiron is Martin Vogel's *Chiron der Kentaur mit der Kithara.* 2 vols. (Bonn, Bad-Gotesberg: Verlag fur Systematische Musikwissenschaft, 1978). Although Vogel's interest centers on the association of Chiron with music and music teaching, he ranges over a wide variety of considerations, ancient and modern, drawing upon an enormous range of literature. Alciati's Chiron is discussed (I: 280–82) on the basis of Waldemar Deonna's essay (1959). See below, note 29. For the most comprehensive survey of relevant ancient literary sources and the fullest catalogue of ancient images of Chiron, see "Cheiron" in the *Lexicon Iconographicum Mythologiae Classicae* (Zürich/Münich: Artemis Verlag, 1986), vol. 3, part 1, pp. 237-48.

The SM numbers cited below refer to the Stirling Maxwell collection calls in the Special Collections of the Glasgow Univ. Library.

1. R. H. Allen, *Star Names and Their Meanings* (1899; 1965), pp. 148-151, 351-353. See also Emilie Savage-Smith and Ranee Katzenstein, *The Leiden Aratea, Ancient Constellations in a Medieval Manuscript* (Malibu, California: J. Paul Getty Museum, 1988).

2. *The Greek Anthology,* trans. W. R. Paton (Cambridge, Mass.: Harvard Univ. Press, 1916-1983), vol. 5, p. 225, no. 115, "On the Centaur Chiron."

3. For attributes assigned to Chiron by ancient sources, see the *Lexicon Iconographicum Mythologiae Classicae,* "Chiron."(Basel). See also: A.F. von Pauly, *Real-encyclopädie der klassischen Altertumswissenschaft* (Stuttgart, 1890), "Chiron," col. 3, pp. 2303-7; also see W. H. Roscher, *Ausführliches Lexicon der griechischen und römischen Mythologie,* "Cheiron," vol. 1, c. 888-892; Daremberg-Saglio, *Dictionnaire des Antiqui-tés grecques et romaines* (Graz, 1963), vol. I, 2, pp. 1105a-1106a, entry for "Chiron."

4. Jean Seznec, *Survival of the Pagan Gods* (Princeton Univ. Press, 1953, 1972), re: Euhemerus and his tradition, see Ch. 1.

5. Sir Thomas Browne attributed centaurs to an error of perception, i.e., ancient spectators ignorant of horseback riding saw from afar "some young Thessalians" watering their horses, and not seeing the horses heads, mis-took rider and horse for one animal. *Pseudodoxia Epidemica,* vol. 2 in *The Works of Sir Thomas Browne,* ed. Geoffrey Keynes (Chicago: Univ. of Chicago Press, 1964), p. 32

6. W. R. Dawson, "Chiron the Centaur," *Journal of the History of Medicine,* vol. 4 (1949), pp. 267-275; J.D. Gilruth, "Chiron and his Pupil Asclepius," *Annals of Medical History,* series 3, vol. 1 (1939), pp. 158-176.

7. Publius Papinius Statius, *Achilleid,* in *Statius,* trans. J. H. Mozley, vol. II (Harvard Univ. Press, 1961).

8. Dawson, op. cit ., Gilruth, op. cit., esp. Pauly, *Real-encyclopädie.*

9. See Pauly's long list of Chiron students, ibid.

10. Gilruth, op. cit., p. 160.

11. Frederick A.G. Beck, *Album of Greek Education* (Sydney: Cheiron Press, 1975); K.F. Johansen, "Achill bei Chiron" in Dragma, Martino P. Nilsson (Lund and Leipzig, 1939); D. Kemp-Lindemann, *Darstellungen des Achilleus in griechischer und römischer Kunst* (Bern and Frankfut/M.: Lang, 1975); see also P.V. C. Baur, *Centaurs in Ancient Art* (Berlin: Curtius, 1912), pp. 100-136. Interpretive discussion through this paragraph relies mainly on Beck and Johansen.

12. Nicolò Machiavelli, *The Prince,* trans. W. K. Marriott (Chicago, London, Toronto: Encyclopedia Britannica, 1952), p. 25. The metaphor of the lion and the fox traces to Plutarch's account of Lysander. Martin Vogel, *Chiron* (I: 283) observes the Machiavellian linking of Chiron with prudentia and fortitudo in Antoine de La Faye's *Emblemata et Epigrammata* (Genevae, 1610).

13. Adagia, A Chironian Wound. II.VIII. xxi., LB 583. Cited from Virginia W. Callahan, "The Mirror of Princes . . .," *Acta Conventus Neo-Latini Amstelodamensis: Proceedings of the Second International Congress of Neo-Latin Studies, Amsterdam, 1973* (München: Fink, 1979), p. 187. Callahan infers from Erasmus's lines on Chiron and from Alciato's emblem "a repudiation of the Machiavellian notion that in the court of princes the combination of bestiality and humanitas is desirable" (p. 188).

14. SM 104. Johann Engel, *Astrolabium* (1488): "Homo robustus," N4v; "Homo studiosus," O2v; "Homo doctus," O3v; "Homo sapiens," P3v; "Homo doctus," also P3v. HAIN 1100. Proctor 1876. BM ii, p. 382. GW 1900. Pellechet 759. Another copy, SM 105, dated 1494, uncolored, and cuts are cruder than in SM 104.

15. See *Andreas Alciatus,* vol. 1: *The Latin Emblems. Indices and Lists,* ed. Peter M. Daly with Virginia W. Callahan, et al, and vol. 2: *Emblems in Translation,* ed. Peter M. Daly, assisted by Simon Cutler (Toronto: Univ. of Toronto Press, 1985) ; Henry Green, *Andrae Alciati Emblematum Fontes Quatuor* . . . Published for the Holbein Society (Manchester and London, 1870); Henry Green, Andrea Alciati and His Books of Emblems (London, 1872; reprint, N.Y.: Burt Franklin, n.d.); Arthur Henkel and Albrecht Schöne, *Emblemata: Handbuch zur Sinnbildkunst des xvi. und xvii. Jahrhunderts* (Stuttgart: Metzler Verlag, 1967), columns 1669-73; Mario Praz, *Studies in Seventeenth–century Imagery*, 2d ed. (Rome: Edizione di Storia e Letteratura, 1964), pp. 249-52; *A Short Title Catalogue of the Emblem Books and Related Works in the Stirling Maxwell Collection of Glasgow* Univ. Library (1499-1917), comp. Hester M. Black, ed. and rev. by David Weston (Glasgow Univ. Press, 1988).

16. SM29. *Emblematum liber* (Venetiis, 1546).

17. The transformation has been described by David Weston in "William Stirling Maxwell and the European Emblem," exhibition catalogue, Glasgow Univ. Library, 1987. See esp. entries 15, 16, 17, and 20.

18. This observation raises other issues, of course, which involve questions concerning optimal interrelations of the pictorial and the verbal when the intent to create an emblematic image, not merely to illustrate a text. Problems of this theoretical kind have been ably explored by others, but fall outside the

purview of the present study. See, for example, Peter M. Daly, *Literature in the light of the Emblem* (Toronto: Univ. of Toronto Press, 1979); William S. Heckscher and Karl-August Wirth, "Emblem. Emblembuch," in *Reallexicon zur deutschen Kunstgeschichte,* columns 85-228; John Manning, "A Bibliographical Approach to the Illustrations in Sixteenth-Century Editions of Alciato's Emblemata," in Peter M. Daly, ed., *Andrea Alciato and the Emblem Tradition: Essays in Honor of Virginia Woods Callahan* (N.Y.: AMS Press, 1989); Daniel S. Russell, *The Emblem and Device in France* (Lexington, Kentucky: French Forum, 1985). Putting aside theoretical questions, however, and considering historical trend, John Manning's observation of changes in the illustrations of Alciato's *Emblemata* is appropos: "It would appear that a process of steady, and progressive revisions characterizes the history of the illustrative matter in the editions of the *Emblemata* during the sixteenth century, until the *pictura* is brought into line with details specified in the author's text." Ibid., p.145.

19. SM 1113. Julius Wilhelm Zincgref, *Emblematum Ethico-Politicorum Centuria* (Heidelberg, 1619).

20. SM 32, SM32a, SM Add90?

21. SM 1226, 1227.

22. SM 55, for example. (Antwerp, 1584).

23. This is not to say that all princelings escaped corporal punishment.

24. *Dictionnaire des Églises de France . . .,* ed. Jacques Brosse, et al, 5 vols. (Paris: Éditions Robert Laffont, 1966–71). Although the descriptions of the figurative images represented in the churches do not comprise comprehensive inventories, "centaures" and "Sagittaire" are often noted, particularly in structures with Romanesque origins.

25. The quotation is from J. U. Nicolson's rendering of the passage in *Canterbury Tales in Modern English* (N.Y.: Garden City, 1934), p. 35. Chaucer's own expression is thought to be: "And therfore at the kynges court my brother / Ech man for hymself ther is noon oother." See John M. Manly and Edith Rickert, *The Text of the Canterbury Tales,* vol. III, part 1 (Chicago: Univ. of Chicago Press, 1940), p. 54, lines 1181–82.

26. SM 33

27. "Homere feinct son ieune Prince Achilles auoir esté nourry, & enseingné par le Centor Chiron, demy homme, & demy cheual sauuage, donnant à entendre que telz sont les gouuerneurs des Princes, Qui hommes humains se monstrent par deuant: quand soubz couleur de iuste guerre, d'equité, ou de bien public, ilz deuorent occultement la substance du peuple, estans par derriere plus inhumains que bestes sauuages. Donnans instruction aulx Roys, & leur trouuans inuention de piller leurs subiectz, soubz quelque couleur, & tiltre honneste." This gloss is much abridged in the Lyon latin edition of 1566 [SM44].

28. Alciato had pressed the theme of rapacious financial ministers in the emblem, "Quod non capit Christus rapit fiscus," number 62 in the Wechel edition of 1542 [SM 25]. Konrad Hoffman discusses the emblem in "Alciato and the Historical Situation" in Daly, ed., *Andrea Alciato,* op. cit.,

esp., pp. 13-14. Stephen Rawles and Alison Adams, looking to the Lyon (1549) [SM 33] version of this emblem, have called attention to an account appearing in *Bibliographie Lyonnaise* (p. 158), which presents Aneau's alleged "Texte primitif," (i.e., the original gloss) and its replacement. The first version incisively indicts the despotic prince who exploits his people by knowingly appointing thievish ministers, allowing them to drain his subjects' resources, then condemning the ministers and confiscating their assets. The replacement goes far toward exculpating the prince. The same basic theme, including the motif of the sponge, appears in Guillaume Guéroult's emblem number 8, "Le Prince inique & le mauvais officier." Also related to the subject of avarice and corruption in governement is his emblem number 3, "Avarice est pernicieuse en la republic" (*Le Premier Livre des Emblemes* [Lyon: Arnoullet, 1550]).

29. This is from G. P. Goold's translation of *Astronomica,* a work by Marcus Manilius dating to Rome about the time of Tiberius's rule. See book 5 at 360, pp. 328–31, Latin and English facing (Cambridge, Mass.: Harvard Univ. Press, 1977). Waldemar Deonna provides a French translation (pp. 80-81) in his suggestive "Le Centaure, Conseil du Gouvernement et Gardian du Secret," *Genava,* N. S. vol. VII (Mai 1959): 73–87. The astrological line of interpretation based on Manilius allows another step toward understanding Alciato's Chiron. First, we note Hellenistic and Roman tendencies toward the assimilation of Chiron, Sagittarius, and Centaurus. Manilius' characterizations can then be seen contributing to the subsequent progress of the pattern. In line with this, Alciato's birch-wielding Chiron may be recognized as a further development, lending to Chiron the Centaurians' alleged skill in taming wild animals, e.g., "bringing a fiery horse to obey the reins," "soften tigers," etc. (*Astron.* 4.230ff). Similarly, Centaurians may "urge on asses with a goad" (*Astron.* 5.348). Additional linking of Centaurus and Chiron occurs in the line "Another knows how to apply the arts of healing to the limbs of animals" (*Astron.* 5.353).

30. As cited in Deonna, ibid., p. 81.

31. See esp. p. 626 in the Padua edition of 1661. Machiavelli's source for the lion and the fox metaphor was probably Plutarch's life of Lysander (vii, 3): "Those who demanded that the descendants of Heracles should not wage war by deceit he held up to ridicule, saying that 'where the lion's skin will not reach, it must be patched out with the fox's.'" *Plutarch's Lives,* trans. Bernadotte Perrin (Cambridge, Mass.: Harvard Univ. Press, 1968), vol. 4, p. 251. In the Padua edition cited, the passage is accompanied by a marginal reference to Lysander, apparently on the assumption that readers would recognize the source.

32. Baldasar Castiglione, *The Book of the Courtier,* trans. Leonard E. Opdycke (New York: Horace Liveright, 1901; 1929), p. 63. In Italian the passage runs: "Non avete vo letto che delle prime discipline che insegnò il bon vecchio Chirone nella tenera età ad Achille . . . fu musica . . .?" (*Il Libro del Cortegiano* [Torino: Unione Tipgrafico-Editrice Torinese, 1964], p. 170). Sir Thomas Hoby's translation of the passage is substantially the same, although one difference is noteworthy. Sir Thomas evidently felt it necessary to state that Chiron was a *man* (i.e.," a good olde man"), whereas

the Italian text and Opdycke's translation rest content with "good olde" or "worthy old" Chiron, tacit on the centaur question. (*The Book of the Courtier . . . done into English by Sir Thomas Hoby anno 1561* [London: David Nutt, 1900], p. 90).

33. William Shakespeare, *Julius Caesar,* I, ii, 201, 204.

34. William Shakespeare, *The Merchant of Venice,* V, i, 83, 85, 88.

35. Sp. Coll. e 149, Univ. of Glasgow Library. Philostratus. *Les Images ou Tableaux de Platte Peinture* (Paris, 1615).

36. John Manning, "Alciati and Philostratus's *Icones* ," *Emblematica*, I (Spring 1986), 207.

37. *Philostratus Imagines,* trans. Arthur Fairbanks (London: Heinemann, 1931), "The Education of Achilles," pp. 132-137.

38. Sebastián de Orozco Covarrubias. *Emblemas Morales* (1610). Centuria I, Emblem 82. SM 609. For those steeped in the tradition associating Chiron with violence in childrearing, Covarrubias's icon would have the captivating advantage of eccentricity; for readers famioliar with Alciato's Chiron emblem, it would the attention-getting advantage of opposition. Did Cov arrubias subscribe to the idea that Chiron was a punitive master? His commentary on the emblem supports that conclusion. Calling for moderation and prudence in chastizing children, Covarrubias decries brutal schoolmasters and characterizes them as pretending to be as Chiron was to Achilles ("algunos por ser medio saluages [sic], y monstruous. Como finge A [sic] chiron maestro de Achiles").

39. Horace. *The Complete Works of Horace (Quintus Horatius Flaccus).* Charles E. Passage, translator. 2 vols. (New York: Frederick Unger, 1983). vol. 2, p. 16. For the Latin, see *Q. Horati Flacci Opera,* ed. Edward C. Wickham, Scriptorum Classicorum Bibliotheca Oxoniensis (London: Oxford Univ. Press, 1901; rpt 1963), *Sermonum* I.1, l. 25–26.

40. *Policraticus* (Minneapolis: Univ. of Minnesota Press, 1938), p. 18. Although John has doubts regarding Chiron's provision for music, at least one medieval image from John's era testifies affirmatively. See the engraved copper bowl (c. 1150) depicting the lyre lesson, reproduced in Hanns Swarzenski, *Monuments of Romanesque Art* (London: Faber and Faber, 1976, 2nd edit.), p. 189; also in Vogel, op. cit., vol. 1, fig. 120.

41. Publius Papinius Statius, *Achilleid,* in *Statius,* trans. J. H. Mozley, 2 vols. (Harvard Univ. Press, 1961), vol. II, esp. pp. 591-3.

42. See the print in J. Ademar, *Influences Antiques. . .* (London: Warburg, 1939), Pl. 31.

43. Lucian of Samosata, *The Works of Lucian of Samosata,* H. W. Fowler and F. G. Fowler, 4 vols. (Oxford: Oxford Univ., Calrendon Press, 1905), vol. 1, p. 133.

44. See, for example: Giovanni Battista Cipriani (1727-85), "Chiron Instructing Achilles with the Dart" and "Chiron Instructing Achilles with the Bow," reproduced in *Apollo* 96:2 (October 1972): 334; Pompeo Batoni,

"Education of Achilles" (c. 1760), reproduced in R. Wittkower, *Art and Architecture in Italy, 1600-1750* (Baltimore: Penguin Books, 1958), p. 177.

45. For reproductions and bibliography, see the entry for "Cheiron" in the *Lexicon Iconographicum Mythologiae Classicae*. Page 245 exhibits a rare ancient example (Roman) of Chiron holding a whip and—equally rare—teaching Achilles the alphabet (Greek).

46. Christine Havelock, *Hellenistic Art* (Greenwich, Conn.: New York Graphic Society, 1968), p. 248, for the conjecture re: Theon of Samos.

47. See Beck, op. cit., pl. 15.

48. Sidney Colvin, "Centaurs in Greek Vasepainting," *Journal of Hellenic Studies,* vol. 1 (1880).

49. Oinochoe. British Museum B 620. See in Beck, op. cit; Colvin, op. cit; Gilruth, op. cit.

50. Gilruth, op. cit., p. 166.

51. See esp. Vogel, *Chiron*; see also I. Dabasis, "Cheiron Kentauros iatros," *Platon,* vol. 22 (1970), pp. 211-222; Gilruth, op. cit, p. 168; Robert Turcan, "Chiron le Mystagogue. . .," in *Mélanges d'archéologie, d'épigraphie et d'histoire offerts à Jerome Carcopino* (Paris: Hachette, 1966), esp. pp. 931-932.

52. Ludwig Edelstein, *The Idea of Progress in Classical Antiquity* (Baltimore: John Hopkins Press, 1967). No mention of Chiron.

53. An "alternative school" in the public system of Minneapolis, Minnesota (USA) has adopted "Chiron" as its name.

54. John Updike, *The Centaur* (New York: Knopf, 1963), p. 302.

List of Sources Cited

A Short Title Catalogue of the Emblem Books and Related Works in the Stirling Maxwell Collection of Glasgow Univer. Library (1499-1917), comp. Hester M. Black, ed. and rev. by David Weston (Glasgow Univ. Press, 1988).

Ademar, J. *Influences Antiques*. . . London: Warburg, 1939.

Alciato, Andreas. *Diverse Imprese*. Lyon, 1549. SM Add90.

Alciato, Andreas. *Emblematum liber*. Venetiis, 1546. SM 29.

Alciato, Andreas. *Emblemes*. Lyon, 1549. SM 33.

Alciato, Andreas. *Liber emblematum . . . Kunstbuch*. Franckfurt am Mayn, 1566. SM 45

Alciato, Andreas. *Los Emblemas*. Lyon, 1549. SM 32, SM 32A

Allen, R. H. *Star Names and Their Meanings*. 1899; 1965.

Baur, P. V. C. *Centaurs in Ancient Art*. Berlin: Curtius, 1912.

Beck, F. A. G. *Album of Greek Education*. Sydney: Cheiron Press, 1975.

Browne, Sir Thomas.*The Works of Sir Thomas Browne*. ed. Geoffrey Keynes. 2 vols. Chicago: Univ. of Chicago Press, 1964.

Callahan, Virginia W. “The Mirror of Princes: Erasmian Echoes in Alciati’s Emblematum liber,” in *Acta Conventus Neo-Latini Amstelodamensis: Proceedings of the Second International Congress of Neo-Latin Studies, Amsterdam, 1973*. München: Fink, 1979.

Castiglione, Baldasar. *The Book of the Courtier,* trans. Leonard E. Opdycke. New York: Horace Liveright, 1901; 1929.

Castiglione, Baldasar. *Il Libro del Cortegiano*. Collezione Classici Italiani 30. Torino: Unione Tipgrafico-Editrice Torinese, 1964.

Castiglione, Baldasar. *The Book of the Courtier . . . done into English by Sir Thomas Hoby anno 1561*. The Tudor Translations. London: David Nutt, 1900.

Colvin, Sidney. “Centaurs in Greek Vasepainting,” *Journal of Hellenic Studies,* vol. 1 (1880).

Covarrubias Orozco, Sebastián de. *Emblemas Morales* (1610). SM 609.

Dabasis, I. “Cheiron Kentauros iatros,” *Platon,* vol. 22 (1970): 211-222.

Daly, Peter. *Andrea Alciato and the Emblem Tradition: Essays in Honor of Virginia Woods Callahan*. New York: AMS Press, 1989.

Daly, Peter. *Emblem Theory. Recent German Contributions to the Characterization of the Emblem Genre*. Neudeln, 1979.

Daly, Peter. *Literature in the Light of the Emblem. Structural Parallels Between the Emblem and Literature in the Sixteenth and Seventeenth Centuries*. Toronto: Univ. of Toronto Press, 1979.

Daly, Peter, et al (ed.). *Andreas Alciatus. I. The Latin Emblems. Indexes and Lists; II. Emblems in Translation.* Toronto: Univ. of Toronto Press, 1985.

Daremberg, Charles and E. Saglio. *Dictionnaire des Antiquités grecques et romaines*. 6 vols. (Graz: Akademische Druck-und Verlagsanstalt, 1963–1969).

Dawson, W. R. "Chiron the Centaur," *Journal of the History of Medicine,* vol. 4 (1949), pp. 267-275.

Deonna, Waldemar. "Le Centaure, Conseil du Gouvernement et Gardian du Secret," *Genava,* N. S. vol. VII (Mai 1959): 73–87.

Dictionnaire des Églises de France, Belgique, Luxembourg, Suisse. ed. Jacques Brosse, et al, 5 vols. Paris: Éditions Robert Laffont, 1966–71.

Edelstein, Ludwig. *The Idea of Progress in Classical Antiquity*. Baltimore: John Hopkins Press, 1967.

Enciclopedia dell' Arte Antica. Roma: Istituto della Enciclopedia Italiana, 1958.

Engel, Johann. *Astrolabium* (1488). SM 104.

Engel, Johann. *Astrolabium* (1494). SM 105.

Geoffrey Chaucer Canterbury Tales in Modern English. trans. J. U. Nicolson (N.Y.: Garden City, 1934), p. 35.

Gilruth, J. D. "Chiron and his Pupil Asclepius," *Annals of Medical History,* series 3, vol. 1 (1939): 158-176.

The Greek Anthology. English translation by W. R. Paton. 5 vols. Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press, 1916; rpt. 1979.

Guéroult, Guillaume. *Le Premier Livre des Emblemes*. Lyon: Arnoullet, 1550. SM 535

Havelock, Christine. *Hellenistic Art*. Greenwich, Conn.: New York Graphic Society, 1968.

Henkel, Arthur and Albrecht Schöne. *Emblemata: Handbuch zur Sinnbildkunst des xvi. und xvii. Jahrhunderts*. Stuttgart: Metzler Verlag, 1967.

[Horace.] *The Complete Works of Horace (Quintus Horatius Flaccus).* Charles E. Passage, translator. 2 vols. (New York: Frederick Unger, 1983).

Johansen, K. F. "Achill bei Chiron." In *Dragma, Martino P. Nilsson*. Lund and Leipzig, 1939.

John of Salisbury. *Policraticus*. Minneapolis: Univ. of Minnesota Press, 1938.

Kemp-Lindemann, D. *Darstellungen des Achilleus in griechischer und römischer Kunst*. Bern and Frankfut/M.: Lang, 1975.

La Faye, Antoine de. *Emblemata et Epigrammata* (Genevae, 1610). SM 489.

Lexicon Iconographicum Mythologiae Classicae. Zürich/Münich: Artemis Verlag, 1986.

Lucian of Samosata, *The Works of Lucian of Samosata,* H. W. Fowler and F. G. Fowler, 4 vols. Oxford: Oxford Univ., Calrendon Press, 1905.

Machiavelli, Nicolò. *The Prince,* trans. W. K. Marriott. Chicago, London, Toronto: Encyclopedia Britannica, 1952.

Manilius, Marcus. *Astronomica*. Translated by G. P. Goold. Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press, 1977.

Manning, John. "Alciati and Philostratus's *Icones* ,"*Emblematica*, I (Spring 1986): 207.

Manly, John M. and Edith Rickert. *The Text of the Canterbury Tales*. vols. Chicago: Univ. of Chicago Press, 1940.

Mélanges d' Archéologie, d' Épigraphie et d' Historie offerts à Jérôme Carcopino. Paris: Hachette, 1966.

Ovid. *The Art of Love, and Other Poems*. Trans. by J. H. Mozley. Vol. 2. 2nd edit. rev. by G. P. Goold. Loeb Classical Library. 6 vols. Cambridge, Mass.: Harvard Univ. Press, 1979.

Pauly, A. F. von. *Real-encyclopädie der klassischen Altertumswissenschaft.* Stuttgart: Metzler, 1899.

Philostratus. *Les Images ou Tableaux de Platte Peinture* (Paris, 1615). Sp. Coll. e 149, Univ. of Glasgow Library.

Philostratus Imagines, trans. Arthur Fairbanks (London: Heinemann, 1931).

Plutarch's Lives: English translation by Bernadotte Perrin. 11 vols. Loeb Classical Library . Cambridge, Mass.: Harvard Univ. Press, 1968 .

Praz, Mario. *Studies in Seventeenth–century Imagery*, 2d ed. (Rome: Edizione di Storia e Letteratura, 1964).

Roscher, W. H. *Ausführliches Lexicon der griechischen und römischen Mythologie*. Leipzig: Teubner, 1884–1937. *Supplement*. Leipzig: Teubner, 1893–1921.

Russell, Daniel S.*The Emblem and Device in France* (Lexington, Kentucky: French Forum, 1985).

Savage-Smith, Emilie and Ranee Katzenstein. *The Leiden Aratea, Ancient Constellations in a Medieval Manuscript* (Malibu, California: J. Paul Getty Museum, 1988).

Seznec, Jean. *Survival of the Pagan Gods*. Princeton Univ. Press, 1953; rpt. 1972.

Schmitt, Otto, ed. *Reallexicon zur deutschen Kunstgeschichte*. Stuttgart, 1959.

[Statius, Publius Papinus]. *Statius*. trans. J. H. Mozley. 2 vols. Cambridge, Mass.: Harvard Univ. Press, 1961.

Swarzenski, Hanns. *Monuments of Romanesque Art*. 2nd ed. London: Faber and Faber, 1976.

Updike, John. *The Centaur*. New York: Knopf, 1963.

Valeriano, Pierio. *Hiéroglyphiques*. trans. Montlyart. Lyon, 1615.

Vogel, Martin. *Chiron der Kentaur mit der Kithara*. 2 vols. Bonn, Bad-Gotesberg: Verlag fur Systematische Musikwissenschaft, 1978.

Weston, David. "William Stirling Maxwell and the European Emblem," exhibition catalogue, Glasgow Univ. Library, 1987.

Wittkower, Rudolf. *Art and Architecture in Italy, 1600-1750* (Baltimore: Penguin Books, 1958)

Zincgref, Julius Wilhelm. *Emblematum Ethico-Politicorum Centuria* (Heidelberg, 1619) SM 1113.