

JOLE SHACKELFORD

Western Esotericism and the History of European Science and Medicine in the Early Modern Period

The history of science and the history of medicine were, from their beginnings as subjects in the Enlightenment and post-Enlightenment periods, hostile to esoteric ideas and practices and generally excluded them from the scope of academic study.¹ Esoteric belief systems by definition prioritize inner knowledge, knowledge that is not attainable or transferable by the standard practices of public pedagogy, but rather is acquired by direct apprehension or by internal illumination. I call these 'belief systems', because people who defend esoteric knowledge do so within a worldview, a physics and metaphysics that explains and makes sense of their hopes and experiences. Such belief systems can therefore be compared with other worldviews—cosmologies in the most general sense of the term—and points of tangency, or even zones of interpenetration, can be examined. It is just such points of confrontation and zones of commonality between the occult and manifest sciences which are of particular interest to historians of science, because it is here that the disciplinary boundaries of modern science are being negotiated. Moreover,

1 The positivist bias against consideration of esoterica and the occult sciences that still persisted in the mid-twentieth-century history of science is concisely illustrated by A. R. Hall (1954: 307). He sought 'the prehistory of chemistry', defined 'as developing chemical techniques, and factual knowledge of substances', in the history of alchemy, where 'the grain of real knowledge is concealed in a vast deal of esoteric chaff'. Commenting on the state of the history of science in the Middle Ages in 1995, David Lindberg wrote (p. 65): 'We are particularly needy when it comes to . . . alchemy, astrology, and other subjects now frequently marginalized under the rubrics 'occult' or 'pseudo-science'. . . . There is no justification for historians of science excluding certain subjects simply because they have been excluded from the canon of modern scientific disciplines.' Although the history of science has tended to be more positivist in its exclusion of occult sciences than has the history of medicine, owing to medicine's inextricable bonds to practices, it, too, 'was long dominated by a simple, positivist point of view', according to Gert Brieger (1993: 24).

it is precisely in these zones of doctrinal interpenetration that friction between religion and science ignites the conflicts that have provided rhetorical substance to debates about belief and secularization.

Western esoteric belief systems include spiritual and mystical forms of Christianity, heterodoxies that orthodox Trinitarians would decline to call Christian at all, and other theologies and systems of metaphysics that are not literally natural-philosophical in orientation, but which provided an ideological foundation for medieval and early modern alchemy, astrology, many kinds of magic, and all sorts of other so-called occult sciences. These were cultivated in the Middle Ages and were tolerated to some degree at the fringes of academic learning and professional activity into the early modern period. However, with the rise of positivist philosophy in the European Enlightenment, what had enjoyed marginal acceptance as occult sciences were dismissed as pseudo-sciences, accompanying the general disregard for the role of religious thought—of superstition—in the development of Western science.

A few early twentieth-century historians understood that the heroes of scientific development in many cases also wrote about and practiced pseudo-sciences, for example Tycho Brahe's astrology, but these cases were dismissed as vestigial superstition. The techniques of astrology and alchemy that they perceived as contributing to the 'real sciences' of astronomy and chemistry could be logically separated from their theoretical matrices, and studies of these esoteric belief systems in the context of science and medicine remained, well, esoteric.² Only recently

2 For example, Singer 1959: 185: 'The word [alchemy] has come to suggest magic, obscurantism, futile symbolism, and fraud. Most of this is just, but. . . Many alchemical works have scientific elements. Moreover the alchemists contributed certain processes and apparatus. . . . Many instruments and appliances of alchemy passed direct to the modern scientific chemist.' Even the pioneer explorer of the role of occult sciences in the formulation of experimental scientific methods, Lynn Thorndike, who wrote that 'the history of both magic and experimental science can be better understood by studying them together' (1923, I: 2), in practice discriminated between 'alchemy of the incoherent and mystical variety' (1923, II: 783) and practical experiments that contributed to the development of modern science. The assumption that alchemy at best contributed to experimental method and technological advance, and not to theoretical development, is implicit in a comment by Herbert Butterfield (1965: 203): 'It would appear that experimentation and even technological progress are insufficient by themselves to provide the basis for the establishment of what we should call a "modern science." . . . Alchemy had certainly failed to produce the required structure of scientific thought.' Nathan Sivin (1990: 16) succinctly summarized

has alchemy come to be studied as a mainstream medieval and early modern science. But even these newer studies implicate alchemy in the development of mechanical matter theory and materialism, leaving esoteric alchemy mainly to history of religion, literary studies, and New Age enthusiasm.³ Astrology has not fared much better.⁴ And magic is still valued primarily by those historians of science who have seen it as a motivation and legitimation for active intervention in natural processes, namely for promoting experimentation and technological application.⁵

The second half of the twentieth century witnessed a movement to reconsider the relationship between religion and science in the West,

the disciplinary alienation between historians who saw alchemy as the prelude to chemistry and those who were interested in alchemy as a religious and social phenomenon. He predicts that there will be little progress in the history of alchemy 'until the chemists and specialists in religion are willing to learn from each other, and the philologists and intellectual historians from both'.

- 3 The current situation is summed up by Gabriele Ferrario (2007: 32): 'For many years Western scholars ignored Al-Razi's praise for alchemy, seeing alchemy instead as a pseudo-science, false in its purposes and fundamentally wrong in its methods, closer to magic and superstition than to the "enlightened" sciences. Only in recent years have pioneering studies conducted by historians of science, philologists, and historians of the book demonstrated the importance of alchemical practices and discoveries in creating the foundations of chemistry.' Such studies include William R. Newman's and Lawrence M. Principe's *Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chymistry* (2002) and Newman's, *Atoms and Alchemy: Chymistry and the Experimental Origins of the Scientific Revolution* (2006), which point to the importance, for the development of science, of alchemists' elaboration of atomistic matter theory and the development of careful quantitative and qualitative experimental methods. But historians of science and medicine have paid less attention to esoterica in their own right. The religious and spiritual aspects of alchemy, which may also have had medical and metallurgical contexts, are generally left to cultural and literary studies, for example Arthur Versluis's work on early American esoteric traditions (see www.esoteric.msu.edu/Versluis.html), and Linden 1996.
- 4 However, the significant place of medical astrology in late medieval and Renaissance medical practice and education is now acknowledged by such studies as French 1994, and Lemay 1976 (esp. pp. 199–206).
- 5 This line of argument was pioneered by Paulo Rossi (1957), and articulated by Frances A. Yates (1964). H. Floris Cohen (1994: 169–83) describes the introduction of occult sciences into the grand narrative of the rise of Western science as a consequence of Yates's *Giordano Bruno*. But, to some extent her argument that natural magic invigorated experiment and technological application applies to the arts generically and especially to alchemy, as deftly elucidated in Newman 2004.

a process that is ongoing, but is more often concerned with Christian denominations and precepts than with esoteric belief systems. To some extent this dialogue has been reactive and apologetic: reactive against the extreme post-Enlightenment biases that urged intellectuals and educators to exclude religion from science, and apologetic in attempting to defuse the dichotomization of faith and reason that was and is threatening organized religions. The very studies that illustrate the insights that the history of religion can bring to the history of science often can read as very presentist defenses of the legitimacy of modern religion in serious natural philosophy in our own time, rather than as a part of scientific and medical historical development.⁶

But ignoring such concerns, it is plain that religious history has had a beneficial effect on the conceptualization of the history of science and the

6 One might consider the work of Robert K. Merton (1938) and R. Hooykaas (1972) as early attempts to bring religion into the scope of the history of science, but I have in mind the organized reaction against the perception that science and religion have always been essentially opposed, which is evident in Lindberg & Numbers 1986 and 2003. Both of these collections of essays assume that religion or theology—or specifically Christianity—have been portrayed as in conflict with ‘science’ and set about problematizing this polarization. But the dialectic between the ‘poles’ is implicit, as is also evident in the recent overview, Olson 2004: 218–19: ‘This book began with a discussion of Galilean astronomy and Christianity and ended with a discussion of Christianity and Darwinian evolution. These two cases have long stood as the most notorious episodes in the supposed ongoing conflict between science and religion; but even in these cases it should have become clear that the stories are vastly more complicated than Draper, White, and their followers would have us believe. It is true that in each case there were loud religious voices opposing new scientific developments; but it is also true that there were other religious voices supporting them for a variety of reasons.’ Although not apologetic by intention, the companion volume by Edward Grant (2004: 248), develops the theme that natural philosophy prospered in the Latin West, in comparison with medieval Byzantium and Islam, in part because Western clerics embraced natural philosophy with zeal, and in part because an early and enduring tradition of ‘separation of church and state, and the analogous disciplinary distinction between theology and natural philosophy, made possible the independent development of each of these two fundamental disciplines’. A fundamental supposition for many of these scholars is that past investigations of nature may have been motivated by religious zeal and guided by particular faiths, but that religion and science were intrinsically distinct. This assumption is adequate for disciplinary histories, but hampers study of the role of spiritualists and mystics, for whom this distinction often was without meaning.

acknowledgment of its esoteric heritages. Consider the effect of Frances Yates's argument for the importance of the Hermetic religion in the rise of experimentalism and the organization of the scientific enterprise. No matter how one regards her scholarship and what has been called *The Yates Thesis*, which identified magic as an essential component of the scientific revolution, one must acknowledge that this work has become emblematic of a *serious* consideration of esoteric thought and associated practices as constituent elements of the social and intellectual climate that produced the new science. While attitudes vary, historians of science no longer reject consideration of esoterica categorically, as was the case during much of the twentieth century.

Perhaps there *should* be a durable reluctance to efface the boundaries between the sciences and pseudo-sciences. But I see only benefit from integrating the pseudo-sciences into the reconstructed grand narratives, as *belief systems* rather than merely as technologies. We can acknowledge the legitimacy and usefulness of the history of esotericism for illuminating past science and medicine, without threatening the disciplinary identities of the history of science and history of medicine. This will be more successful if esoteric studies are given solid scholarly credentials, disarming the perception that the history of Western esotericism is pursued mainly by those who have a personal stake in it. There has of course been progress in this programme in the past couple of decades; for example, the establishment of the academic unit for Hermetic Philosophy and Related Currents (GHF) in Amsterdam under the direction of Wouter Hanegraaff, the foundation of the Association for the Study of Esotericism (ASE) and the European Society for the Study of Western Esotericism (ESSWE), the publication of a journal, *Aries*, and an on-line journal devoted to the subject, *Esoterica*, and there are now academic conferences focused on Western Esotericism. Moreover, there is a newly formed Cambridge Centre for the Study of Western Esotericism as well, although the Centre's web-presence suggests that it is oriented toward today's esoteric practices, and that is less helpful. Most of these institutions and events consciously take a multidisciplinary approach, blending historical studies with modern cultural studies and even contemporary occultism, and while this eclecticism is in itself laudable, it raises some red flags for academic historians of science and medicine, who have struggled to keep presentist concerns from unduly biasing their studies of the past. There is a dual risk, as I perceive it, of imposing modern, living esoteric beliefs onto the past, and also of exaggerating the contributions of the pseudo-sciences to the development of Western science and medicine. If we define them too loosely, we will dull the

insights they can provide into how past cosmological systems were conceptualized or how therapeutic measures were thought to operate on body and soul. These are generalities, but perhaps an example of a historical problem within my own research on Scandinavian Paracelsianism will illustrate how study of Western esotericism can help us understand the historical development of medical science.

Paracelsianism: the Juncture of Esoteric Belief Systems and Medical Scientific Practices

The historical phenomenon of Paracelsianism can be defined as a closely-related set of traditions with roots in the life and work of the German physician Theophrastus Paracelsus (1493–1541). Paracelsianism is a good subject for the present purpose, because it falls within the scope of Western esotericism, and because it has a traditional place within the grand narratives of Western science and medicine and is therefore not completely ‘other’.⁷ Indeed, Paracelsian ideas about the mundane and the divine constitute a conceptual space in which study of nature and religious doctrine overlap and intermingle.

Paracelsus was contemporary with Martin Luther and, despite his claim to having remained a Catholic, he was wrapped up in the political, social, and intellectual ferment of the Reformation and formulated some very innovative and heterodox theological doctrines. He was controversial, unable or unwilling to find long-term employment or patronage in any one spot. His reputation and the sense of the manuscripts and books that are judged to have been written by him reveal a synthetic mind, suspicious of the limitations of traditional learning, and as preoc-

7 Western esotericism was defined to include Paracelsianism for the purposes of the symposium on Western esotericism held at the Donner Institute 15–17 August 2007, from which this volume originates (www.abo.fi/institut/di/Congress2007/Kongress.htm under ‘tema’, accessed August and September 2007), and also by the programme for the University of Amsterdam’s masters degree in mysticism and Western esotericism (www.studeren.uva.nl/ma-mysticism-and-western-esotericism, accessed September 2007). The importance of Paracelsus and his followers has been a part of the grand narrative of the history of medicine at least since Kurt Polycarp Sprengel’s late eighteenth century survey, *Versuch einer pragmatischen Geschichte der Arzneikunde*, but has enjoyed less prominence in history of science surveys.

cupied with theological matters and prophesy as he was with medicine, natural lore, and alchemy.

Paracelsus' teachings gained visibility in the second half of the sixteenth century. Beginning in the 1560s we can see the emergence of a Paracelsian movement or school of thought that no longer depended on the author, but rather was an efflorescence, a development and even application of Paracelsus' ideas. But the problem of defining what ensued is more difficult, owing in part to the very success of Paracelsian medicine, which rendered it diffuse, but also because Paracelsian concepts seemed to blend into Rosicrucian and other esoteric religious theory.

Historians in the twentieth century identified Paracelsus and Paracelsians primarily with chemical philosophy and the use of chemically-prepared drugs in medicine and labeled him the father of iatrochemistry. As a consequence, sixteenth, seventeenth, sometimes even eighteenth-century champions of chemical medicine were promiscuously labeled Paracelsian practitioners by virtue of their use or recommendation of chemical therapies alone. And yet Andreas Libavius, an eager reader of Paracelsus and his interpreters already at the end of the sixteenth century, shrilly and at great length denounced the Paracelsians, their medicine, and their religion while defending alchemy and the use of chemically-prepared drugs. Surely we cannot call Libavius a Paracelsian! Many subsequent physicians incorporated chemical medications into a medicine that had no affinity whatsoever with Paracelsian theory or therapeutic principles. Clearly these were not Paracelsians. Plainly, it is necessary to define 'Paracelsian' in a way that evokes its core ideology and not merely in terms of an apothecary's list, and this is where the history of esotericism comes in.⁸

At the beginning of my research on Scandinavian Paracelsianism I en-counterred Sten Lindroth's (1943) pioneering and still monumental study of Paracelsianism in Sweden, which alerted me to the significance of a religious dimension. I was so impressed by the scope and depth of Lindroth's approach to the subject as to use it as a model for my own. He understood that Paracelsian philosophy and medicine were intimately entwined with esoteric religion and he did not shrink from including this connection in his book. In particular, I began to see how religious change in Denmark and Germany in the early modern period might

8 For discussion of the problem of defining 'Paracelsian' see Pumfrey 1998: 25–6; Shackelford 2002: 36.

affect receptivity to Paracelsian ideas. I also understood that there were many affinities between Rosicrucian ideology and Paracelsian ideas. Indeed, some scholars consider the Rosicrucian documents to embody a particularly radical strand of Paracelsianism, with a decidedly socio-political agenda, and this might help to explain the abrupt change that my research revealed in the fortunes of Paracelsianism at the University of Copenhagen in the second and third decades of the seventeenth century.

Paracelsian Theory on the Threshold of Religious Orthodoxy: Johann Arndt's *Vom wahren Christentum*

In four published articles (Shackelford 1996, 1998, 2002, 2003) I have developed the argument that Danish academic physicians, philosophers, and theologians were acquainted with Paracelsian ideas by the end of the sixteenth century, and that some of them were enthusiastic about the promises that Paracelsian chemical medicine held for therapeutic advance and even for the alignment of natural philosophy with Biblical theology. And yet in the second decade of the next century leading academics were turning their backs on anything that smacked of Paracelsus, and the remaining overt discussion of Paracelsian doctrines became negative. The contrast with the contemporary situation in England, where Paracelsus' books were appearing in English translations and where there were open debates about the validity of Paracelsian medicine, is striking. I have argued that a principal reason for this is that key doctrines underpinning the Paracelsian belief system or worldview, the theoretical basis for Paracelsian medicine, were identified with Rosicrucian and other heresies. Under pressure from increasingly narrowly defined Lutheran orthodoxy, Danish physicians and philosophers, effectively unable to divorce Paracelsian medicine from Paracelsian religion, subsequently ignored or even discouraged development of Paracelsian ideas altogether. Behind their rejection of what had been seen as a promising chemical conceptualization of nature and reform of medicine lay pressures imposed by an increasingly narrowly defined Lutheran orthodoxy and also their own sense about the morally noxious consequences of Paracelsian metaphysics for traditional Christology, Christian anthropology, and soteriology.

The chief architects of the new Lutheran orthodoxy in Denmark were Hans P. Resen, who was appointed principal bishop of the Danish church in 1615, and his successor Jesper Brochmand. Under the supervi-

sion of these theologians and with the support of the kings of Denmark, the demands of religious orthodoxy created a climate that was inimical to Paracelsian medicine, except as a class of chemically-prepared drugs that were incorporated into traditional Galenic medicine, and this can hardly be called Paracelsian. My overarching argument, as I have briefly sketched it here, is a coarse generalization, but it supports my underlying assertion that Paracelsian medical and philosophical ideas were—in notable salient instances—not easily separated from their contexts in the Paracelsian esoteric religious matrix that had shaped them, and that we need to understand these esoteric beliefs in order to understand the fortunes of Paracelsian medicine.⁹

My Danish friend and colleague, Morten Fink-Jensen has posed an important challenge to my general construction of the reception of Paracelsian ideas, by pointing out that Resen himself patronized the translation and publication of Book 4 of Johann Arndt's *Vier Bücher vom wahren Christentum*, which incorporates Paracelsian cosmology. The implication is that if an orthodox Lutheran theologian and church superintendent like Arndt could distinguish acceptable Paracelsian philosophy from dangerous Paracelsian religious ideas, and an orthodox Lutheran theologian like Resen would disseminate it in Danish, then the religious climate in Denmark can have had little effect on the reception of Paracelsian medicine.¹⁰ Obviously this argument undermines my read-

9 I have pointed to specific examples where natural philosophical principles or practices identified with Paracelsians or Rosicrucians were found to be morally objectionable or in conflict with religious doctrine in Shackelford 2003: 242–8.

10 Morten Fink-Jensen (2004: 212–15) summarizes Peder Nielsen Gelstrup's role in translating Book 4 and the patronage extended to him by Hans P. Resen and Chancellor Christian Friis, which he takes as evidence that Resen and other proponents of Lutheran orthodoxy in the Danish church were receptive to Paracelsian thought under Resen's leadership, which began in 1615 (p. 228). He argues that Arndt's brand of natural theology appealed to the orthodox Lutherans and permitted them to tolerate Paracelsian natural philosophy even while they dared not endorse Paracelsian religious ideas, resulting in a greater degree of sanction for Arndt's ideas during Resen's leadership than was permitted in the 1630s under his successor, Jesper Brochmand (pp. 228–9). Bengt Arvidsson (1999: 28) identifies Arndt as a Gnesioluthern (strict orthodox) and notes that he and Rosenkrantz had a common ideological perspective, suggesting that Rosenkrantz was also orthodox. Arvidsson's assessment supports that of Bjørn Kørnerup (1959: 222–6) that Resen, Arndt, and even Rosenkrantz during this period (before 1630) were basically orthodox.

ing of the attitude of orthodox Lutheran theologians toward Paracelsian vital philosophy and urged me to undertake an exploration of Arndt's Paracelsian sympathies and explain their place in his ostensibly orthodox theology. Or was he in fact so orthodox? My investigation of this question was facilitated by a Fulbright fellowship, which enabled me to spend the Spring 2006 semester at the Institute for Classics, Russian, and Religion (IKRR) at the University of Bergen under the auspices of its project 'Vei og Vilstrå' to study orthodoxy and heterodoxy. Some of the results of my research are presented here, albeit in very condensed form.¹¹

The Construction of Johann Arndt's Orthodoxy

Historians of religion are divided on who is orthodox and to what extent the term is useful at all.¹² Johann Wallmann argues that Arndt was an orthodox Lutheran to the day of his death in 1621; that debate about his orthodoxy began almost immediately afterwards; but that it was resolved by the end of the seventeenth century, and that Arndt's *true* orthodoxy again emerged. Wallmann notes that Arndt's *Vom wahren Christentum* has enjoyed the widest circulation of any book in the history of Protestantism, excepting only the Bible, and that Arndt now is regarded as the most influential Lutheran since the Reformation.¹³ Early aspersions cast on Arndt's orthodoxy arose, in Wallmann's opinion, because heterodox separatists, who claimed him as their inspiration, mixed his teachings with those of Caspar Schwenckfeld, Paracelsus,

11 I wish to thank Einar Thomassen and IKRR at the University of Bergen, then under the direction of Knut Jacobsen, for welcoming me as a visiting scholar and facilitating my research.

12 Erb 1979: 3–4: 'Aside from its methodology and its legislative insistence on the acceptance of closely worded doctrinal statements of faith, Orthodoxy is difficult to define.' Erb identifies Arndt and other Pietists as enemies of orthodoxy, but notes that Arndt was defended by some orthodox theologians as well.

13 Johannes Wallmann (2005: 26) concludes that disagreements about Arndt's orthodoxy continued during the seventeenth century, but that the interpretations of Philipp Jakob Spener, Johann Sauber, and other Lutheran theologians eventually triumphed, and 'by the end of the seventeenth century Arndt was no longer met with hostility in the Lutheran Church'.

and Jacob Boehme. Ideas from these authors tainted Arndt's reputation, *not* anything that Arndt had actually written. (Wallmann 2005: 34–5.)¹⁴

R. Po-Chia Hsia takes a different approach, asserting that Arndt dissented from orthodoxy and confessionalism in reaction to late sixteenth-century debate about the Formula of Concord, but that he was saved from being labeled an enthusiast owing to the rigorous defense of his religion by Johann Gerhard, Johann Valentin Andreae, and other orthodox Lutherans.¹⁵ Following Hsia's lead, I will argue here that heterodox elements in Arndt's writings differ from enthusiasts and separatists like Weigel in degree rather than in kind, and that Arndt's thoughts about religion were evolving in a more radical direction in the last two decades of his life, exactly during the period in which they first came to the attention of Scandinavians. Arndt's orthodoxy was in fact constructed late in the century as the Lutheran church was forced to accommodate Pietism. A similar construction of Andreae's orthodoxy must also have occurred. If contemporaries doubted Arndt's orthodoxy, then one cannot argue that his adoption of Paracelsian cosmology in Book Four was a stamp of orthodox approval.

- 14 Wallmann identifies a 'left-wing of the Arndt School', comprising close readers of Arndt who cited him as their inspiration, but who leaned toward separatism. This left-wing was also influenced by heterodox authors such as Caspar Schwenckfeld, Paracelsus, and Jacob Boehme, and Wallmann argues that ideas from these authors are responsible for this left-wing's heterodoxy. But since these authors also frequently mentioned Arndt, Wallmann argues that contemporaries mistakenly associated the orthodox Arndt with their heterodoxies.
- 15 R. Po-Chia Hsia 1992: 23–4: 'The consolidation of orthodoxy in Lutheranism, sealed by the acceptance of the Book of Concord in 1580, signaled the emphasis of doctrinal purity over personal piety. . . . Like the other forerunners of the Pietistic movement, Arndt thought of himself as a true Lutheran, but both he and they came under attack from orthodox Lutheran theologians. Criticized by Lucas Osiander of Tübingen, Arndt was nonetheless defended by another Tübingen professor of Lutheran orthodoxy, Johann Andreae. Others were not as fortunate. Weigel, for example, could not publish his writings during his lifetime. His followers were labeled "separatists" and "radical enthusiasts" (Schwärmer) by orthodox Lutherans.' Arndt's orthodoxy was also defended by his good friend Johann Gerhard, whose orthodoxy is not questioned.

Probing Arndt's Heterodoxy

Arndt's orthodoxy came into question in part because of his free use of mystical and spiritual language and his references to the *Theologia Deutsch* and the medieval German mystic Johann Tauler and in part because of his incorporation of ideas from Paracelsus and Valentin Weigel.¹⁶ To appreciate Arndt's appeal to physicians and others who were concerned with natural philosophy—and this includes theologians—we must regard Arndt's religious views in their chemical-medical context. There are good methodological reasons for doing this, inasmuch as there is a broad textual basis for the interleaving of medicine, philosophy, and theology in this very period, not least by Paracelsus and his followers. For example, the term exaltation can have a chemical meaning as well as a religious meaning, and its use might be intended to suggest a bridge across the scientific barrier separating exoteric and esoteric alchemy. Moreover, Arndt's study of medicine and exposure to Paracelsian ideas during his years at Basel are well known, as is the fact that he later maintained a chemical laboratory at his residence in Celle, where he was a Lutheran Superintendent and a known alchemist, so he was intellectually equipped to draw on contemporary natural philosophy, alchemy, and medicine to shape his religious teachings.¹⁷ He clearly did this when he chose to present 'true Christianity' in four aspects, treated serially in the four books of his *Vom wahren Christentum*. This builds on a Paracelsian conception that God can be understood first through scriptural revelation, second by emulating Christ, third from God's audible voice in the human conscience, and lastly in the phenomena of nature, Book Four. Since this is the way he chose to present his theology, as a mixture of scriptural exegesis, mystical illumination, and natural theology, we can suppose that this is one way his contemporaries read it.

- 16 Paracelsus' heterodox views were accessible to readers by this time in the published *Astronomia Magna* and otherwise circulated mainly in manuscript. See Daniel 2007. On Paracelsus' heterodox Christology and Anthropology, see Daniel 2002. Carlos Gilly (1998: 157–8), has argued that Paracelsus' more radically heterodox views were often labeled Weigelian and were fundamental to the heterodoxies that lay behind the Rosicrucian treatises.
- 17 Repo 1999: 60: 'In Celle hatte Arndt ein bemerkenswertes Laboratorium. Es wird uns berichtet, dass seine alchemistischen Beschäftigungen wiet bekannt waren. Einige Bürger glaubten nämlich, er habe den Stein der Weisen schon gefunden, weil er sich so freigebig zugunsten der Armen seiner Stadt verhielt.'

In the very years that Arndt was formulating *Vom wahren Christentum*, probably in 1604, he also wrote an anonymous commentary on the four illustrations in Heinrich Khunrath's *Amphitheatrum sapientiæ æternæ*, a book widely associated with the nexus of piety and alchemy that lay at the root of Rosicrucian ideology.¹⁸ This commentary appeared anonymously in 1608 attributed to 'an experienced cabalist and philosopher', but by the eighteenth century at the latest it became publicly known that Arndt was the author. Matti Repo (1999: 63) has pointed out the similarity of Arndt's commentary to a contemporary manuscript that is associated with the Paracelsian-Hermetic circle at the court of Landgraf Moritz of Hessen, now known to have been a hotbed of Rosicrucian activity. Both treatises present a threefold hierarchy of magic, cabala, and theology. These three ways of knowing, which Arndt associated with the Trinity, form an epistemology that subsumes celestial influences under nature and makes provision for an inner illumination by the holy spirit.¹⁹

Furthermore, Matti Repo draws a parallel between some of the ideas Arndt expressed in his *Iudicium* and those described in another anonymous tract titled *Astrologia theologizata*, which was published in 1617 and is similar to a tract with a variant title that was published a year later under Weigel's name.²⁰ Although Arndt's *Iudicium* distinguishes natural celestial influences on the Christian from any divine influence, both Weigelian astrological texts present a Paracelsian harmony between the actions of the inner, microcosmic stars within humans and those in the

- 18 The *Amphitheatrum sapientiæ æternæ* (Hamburg, 1595) is famous for its iconographic expression of the juxtaposition of prayer and experiment (*ore et labore*). The four beautiful plates of this now extremely rare volume can be viewed at <http://www.library.wisc.edu/libraries/SpecialCollections/khunrath/index.html>. It was reprinted in 1609 and its illustrations are widely used in modern literature as emblems of the close association between the worship of God through study of both the book of nature and Holy Scripture that characterizes the time. On Khunrath's illustrations as components of a wider dissenting Lutheran iconographic representation of alchemy as a redemptive ritual, see Szulakowska 2006. But also consult reviews by Tara Nummedal (2007) Jole Shackelford (2007) for discussion of the strengths and weaknesses of her analysis.
- 19 On Moritz's court and the University of Marburg as centers of Paracelsian and Rosicrucian activity, see Moran 1991.
- 20 Repo 1999: 65: 'Die beiden *Astrologiæ theologizatæ* sind theologisch verwandt, sowohl miteinander als auch mit den Werken Arndts.'

heavens, the macrocosm. This doctrine of a twofold celestial and terrestrial astronomy was also expressed by Tycho Brahe, Petrus Severinus, and other Paracelsians of the late sixteenth century, and Repo finds it 'shining clearly in the background' of another of Arndt's treatises as well.²¹

The suggestion that Arndt might have been connected with the group of radical Protestants who fashioned the ideology and rhetoric of the Rosicrucian Brotherhood invites exploration, especially since one of them, Johann Valentin Andreae, is also presented as one of Arndt's orthodox Lutheran defenders. But the orthodoxy of Andreae himself is now in question. Recent studies by Roland Edighoffer and Donald Dickson directly implicate Andreae in anti-clerical and spiritual ideas expressed in the Rosicrucian literature.²² Andreae's circle touched, among others, the influential Danish aristocrat and theologian, Holger Rosenkrantz, whose influence on Danish students of theology in the first decades of the seventeenth century is well documented.²³

- 21 Repo 1999: 66: 'Eine ähnliche Sicht von den inneren und äusseren Sternen und von dem himmlischen Einfluss wie sie in der anonymen *Astrologia theologizata* (1617) vorliegt, scheint deutlich im Hintergrund von einigen Textstücken der Werke Arndts zu stehen.' Repo's juxtapositions of these ideas suggests that Arndt might be the author of the 1617 *Astrologia theologizata*, which would bring Arndt's authorship into close contact with Weigelian ideas, but proof is lacking. On inner and outer stars as links between terrestrial astronomy (alchemy) and celestial astronomy in the work of Tycho and Severinus, see Shackelford 2004: pp. 72–5; 168–70.
- 22 Ronald Edighoffer (2005) and Donald R. Dickson (1996a) regard Andreae as author and collaborator of heterodox Rosicrucian treatises rather than as an orthodox Lutheran thinker and writer. In his *The Tessera of Antilia: Utopian Brotherhoods and Secret Societies in the Early Seventeenth Century* (1998: 80–8), Dickson summarizes Andreae's intellectual trek from author of Rosicrucian tracts to defensive rejection of the false Rosicrucians in the wake of public reaction to the early treatises, but finds that despite his public satires, which gave the appearance of denying the Brotherhood, 'Andreae simply continued his utopian projects with many of the same friends who had a hand in hatching the Rosicrucian fable, later giving more formal status to the *Civitas Solis* through his 1619 tract [*Turris Babel*]' (p. 88). These recent interpretations of Andreae provide a corrective to John Warwick Montgomery (1973), who regards him as a fairly orthodox Lutheran pastor rather than as an esoteric.
- 23 On Rosenkrantz and his importance for Danish theology, see Andersen 1896 and Glebe-Møller 1966.

Johann Arndt and Johan Valentine Andreae—Rosicrucian Brothers as Well as Chemical Brothers?

J. V. Andreae shared with Arndt a background in Paracelsian medical alchemy. His father had been both clergyman and alchemist, and after his death J. V. Andreae's mother was appointed court apothecary to Herzog Friederich in Tübingen, so Andreae grew up amid the processes he would describe in *The Chemical Wedding of Christian Rosenkreutz*, a Rosicrucian spiritual and alchemical allegory (Dickson 1996a: 763–4).²⁴ This superficial similarity in their backgrounds and career paths manifests a deeper sympathy between their intellectual developments.

Andreae's authorship of the *The Chemical Wedding* (1616) is well known but has been interpreted as only incidental to the Rosicrucian literature. His role in composing the *Fama fraternitatis* (1614) and *Confessio fraternitatis* (1615), regarded as the manifestos of the would-be Rosicrucian Brotherhood, has only recently come to light.²⁵ Roland Edighoffer (2005: 74) implicates Andreae directly in the composition of the *Confessio*, which he thinks was a collaboration between Andreae and Tobias Hess, and considers him one of several contributors to the *Fama*. Hess's contemporary at Tübingen, Christoph Besold, was another member of Andreae's circle, as was the Paracelsian Benedict Figulus. Well read in Paracelsian and Hermetic literature, Besold is reported to have

- 24 On *The Chemical Wedding of Christian Rosenkreutz* (1616) as an allegorical statement of the power chemistry over nature, see Newman 2004. Edighoffer (2005: 72) notes that 'Andreae found a model' in Arndt's *Von wahren Christentum* and published extracts from it that he had translated into Latin in Strasbourg, ca. 1615. In 1619 Andreae 'applauded Arndt's emphasis on the necessity for Christians to actually lead their lives in accord with the faith they professed' in his book *Mythologia christiana* and dedicated his *Description of the Republic of Christianopolis* to Johann Arndt.
- 25 Dickson (1996a: 762) notes the pioneering work of Brecht (1977) and Edighoffer (1981, 1987) in determining Andreae's involvement with the Rosicrucian tracts. Although published in 1616, the *Chemical Wedding* is thought by Edighoffer (2005: 74) to date to 1603–5, on the basis of Andreae's autobiographical writings, placing it exactly in the period that produced the earliest Rosicrucian treatises. See also Dickson 1996a: 784–5, 787. The dating is based on Andreae's bibliographic diary and autobiography, and Dickson finds no indication that the text was revised after its 1605 draft. See also Kahn 2001: esp. p. 238, which also reflects the scholarship of Carlos Gilly in the matter of the dating of the early Rosicrucian tracts.

abandoned Lutheran orthodoxy after Johann Arndt's *Vom wahren Christentum* changed his basic outlook on religion (Dickson 1996a: 771).

There are differing opinions as to how early the manifestos were drafted and by whom, but Dickson (1996a: 767, 786–8) dates Andreae's collaboration in drafting the *Fama* to 1607 and located it in the student intellectual milieu of the University of Tübingen, which he describes as 'fueled by apocalyptic-chilastic ideas and theosophical-hermetic ideas' during Andreae's student years. If the ideological basis of the Rosicrucian Brotherhood was not wholly Andreae's invention, at least the name Rosenkreutz itself was his creation, and the characteristic Rosicrucian symbolism of the rose and cross were derived from the Andreae family coat of arms, which in turn had been based on Martin Luther's.

Andreae's expression of the desire for a further reformation of society under the leadership of a religious-scientific brotherhood was a serious utopian vision that he expressed as a literary fiction in these and other treatises, but he also sought to organize an actual Christian brotherhood of the elect, which would be administered by a steering committee of twelve select men, who would oversee its renewal of Lutheran society.²⁶ Looking beyond the radical and politically disastrous Rosicrucian manifestos, we can see the idealizations for such a society referred to variously in his correspondence as the *Societas Christiana* or *Civitas Solis* and described in his publications *Christianopolis* (1619), *Christianæ societatis imago* (1619, 1620), and *Christiani amoris dextera porrecta* (1620, 1621), which were widely distributed. According to a letter Andreae wrote to Herzog August of Lüneburg in 1642, he had proposed the brotherhood outlined in these treatises as an alternative to the more radical vision of the Rosicrucian manifestos, owing to the strong, negative reaction the manifestos had generated. Dickson (1996a: 773–5) interprets this letter to mean that Andreae had disavowed the earlier Rosicrucian manifestos as a *ludibrium* and *fictitia*, objects of derision, and that Andreae should therefore be seen as a satirist or social critic rather than a would-be founder of a secret society.

However, Andreae's letter, written more than thirty years after the composition of the Rosicrucian manifestos, can also be interpreted as revealing his persistence in promoting a real brotherhood along the lines laid out in the Rosicrucian writings, but now toned down and publicly

26 Dickson (1996a: 771, n. 35) mentions Hess as one of the 12 members of Andreae's *Societas Christiana* as listed in his letter to Herzog August, 27 June 1642.

distanced from the Rosicrucian Brotherhood as a practical matter. In this he succeeded, as is evident from his long reputation as an orthodox Lutheran. Dickson (1996a: 775) speaks also to this interpretation when he notes that if the men on Andreae's list of members of the *Civitas Solis*—including Hess, Besold, and Adami—can be identified as authors of the Rosicrucian manifestos, then the Rosicrucian fable can be regarded as the first phase of the development of Andreae's model Christian brotherhood.²⁷ Indeed, members of this circle colluded with Andreae in composing the early Rosicrucian literature. Andreae later admitted that he and Besold had advocated the Rosicrucian reforms and proposed a brotherhood to unite 'a certain number of orthodox Lutherans' under the leadership of Herzog August, but that the onset of the Thirty Years War made its realization impossible (Dickson 1996a: 776–7).²⁸ However, a letter written much later to Herzog August (1642) and references in a funeral oration that Andreae wrote show that his plans for a brotherhood had not changed, but were kept private in order to preserve his reputation in orthodox times.

In the best known and rather toned down version of his Christian utopia, *Christianopolis*, Andreae envisioned social reform to be within the Lutheran tradition and along the Pietistic lines suggested by Johann Arndt, to whom he dedicated the work (Dickson 1996a: 781). This dedication should be taken as a token of Arndt's influence not only on Andreae, but on the entire circle of students associated with Hess at Tübingen, and perhaps also of Andreae's expectation that Arndt would approve and support his utopian ideals. Although a network of prudent anonymity obscures the full nature and extent of the Rosicrucian discussions, recent studies suggest that Arndt and Andreae may have been Rosicrucian brothers as well as chemical brothers.

27 Dickson (1996b: 18–19) identifies Johannes Saubert, who studied at Tübingen 1612–14, as a member of the early *Societas Christiana* (1613–19), along with Daniel Schwenter (p. 21), and a founding member of the *Unio Christiana* in 1628.

28 Dickson translates Andreae's 1642 funeral oration for his friend Wilhelm Wense, whom he identifies as a collaborator in his plans for the brotherhood. It is of interest that among those men he listed as agreeing to the plan was Johan Kepler.

True Christianity: Paracelsian Alchemy, Mystical Union, and Spiritual Rebirth

Arndt's reading of the *Theologia Deutsch*, the classic of medieval German mysticism, brought about a reorientation in his thinking in the middle 1590s. Luther had trod this ground before him and had reacted similarly to the German Theology, before the needs of *realpolitik* encouraged the magisterial reforms that shaped Lutheran doctrine and hardened church discipline. It was Luther's 1518 edition that Arndt now re-edited and published in 1597, with an introduction bemoaning the disputes that characterized Lutheran Dogmatics in the late sixteenth century.²⁹ Arndt had himself taken part in doctrinal controversy, but now his writings turned away from disputation and toward practical Christian piety, which would become the hallmark of his mature teaching. His edition of *Theologia Deutsch* was reprinted along with *Imitatio Christi* in 1605, the same year he published the first book of *Vom wahren Christentum*, which reflects the esotericism of these earlier texts. His preface to the 1606, corrected edition of this first book announced his plans to publish four books in all, which he finally did in 1610. In this form, Arndt's work was republished many times before he died in 1621 and would circulate in the seventeenth century (Pleijel 1938: 322).³⁰

29 Oberman 1979: xv–xvi: 'In 1597 Arndt found this precious volume somewhere all dusted over just as Luther had found it some eighty years before. Arndt's writing career and the direction of his thought take a new turn with his re-edition of the "German Theology" in Halberstadt 1597.' Oberman attributes the idea that Arndt's reading of the *Theologia Deutsch* marked a crucial turning point in the development of his Pietistic theology to Wilhelm Koeppe (1912: 24).

30 The editor's introduction to Arndt 1968 (pp. 15–17) relates that book I (1605) was criticized for unorthodoxy, and that Arndt's attempt to have books two through four printed were foiled by censors, in part because of concerns about Arndt's use of Weigel's ideas about prayer. He was finally able to publish all four after he moved to Eisleben. Arndt's ideas evoked opposition soon after they were published between 1605 and 1610, and *Vom wahren Christentum* continued to be openly criticized by contemporary German theologians in the decade following. In response, he defended these ideas in several short tracts and letters, which he organized as a fifth and sixth book of his masterwork. Cf. Erb 1979: 5. For details of the controversies aroused by Arndt's book, Erb refers to Wilhelm Koeppe (1959: 67–143). The sixth book, which Arndt dedicated in 1620, comprises three parts, the first of which contains short defences of the chapters of the first three books, implying that criticisms that had been leveled against him mainly concerned the contents of these books, rather than Book Four. Arndt 1979: 275.

German theologians openly criticized Arndt's ideas soon after they were published. He responded in several short tracts and letters defending *the first three books*, implying that the objections to his theology mainly concerned the contents of these, rather than Book Four. Whatever Danish orthodox censors found objectionable or were afraid would arouse controversy must mainly have been in the first three books, because publication of these was long delayed. What was it that seemed so heterodox, and how did Book Four make it to the press?

In the first paragraph of the introduction to Book One, Arndt (1979: 21) announced the main message of his spiritual teaching: 'If we are to become new creatures by faith, we must live in accordance with the new birth. In a word, Adam must die, and Christ must live, in us. It is not enough to know God's word; one must also practice it in a living, active manner.' Arndt's plea for the true Christian to live a Christian life, to imitate Christ, followed upon the venerable German theological tradition of *imitatio Christi*, but, as is evident even in this passage, it was framed in the Gnostic language of *unio mystica*, the mysterious union of the believer with God by starving the worldly flesh and fanning the divine spark within. Arndt frequently stated this core idea—that before union with Christ can be achieved, the Adamic man must perish—elsewhere in *Vom wahren Christentum*, and if Arndt were interpreted by contemporaries to be teaching divine transformation, his orthodoxy would be at risk.

Esoteric and Exoteric Alchemy: Gnostic Union in *Vom wahren Christentum*

One of the touchstones of orthodoxy is the nature of the relationship between Christian believers as human beings and the divine. The main Christian confessions are unanimous in condemning the actual attainment of human unity with God in this life, which runs counter to traditional interpretations of salvation and carries the dangerous consequence of antinomianism—the elevation of the divinized individual above all temporal law. Such exaltation carries with it a threat to social and political order and has been opposed by the dominant organized forms of Christianity in the West. For Arndt, mystical union constituted a spiritual rebirth, which enables the believer to attain power over both terrestrial and celestial nature, an idea that is common to Paracelsian notions about the powers of the illuminated adept. This conception of the adept's or magician's ability to transcend the fallen condition of man

and wield divine creative powers is itself a kind of exaltation and constitutes a problem for orthodox Lutherans.

Arndt was schooled in Paracelsian medicine and rumored to be an adept, one who had prepared the Philosophers's Stone. This accomplishment was commonly regarded as an exemplary indication of the chemical practitioner's purity and piety, rewarded by grace. Therefore, when he likens rebirth to metallic transmutation, we must suppose that he was well informed about the theory and practice behind this analogy and also cognizant of the long history of the association of *in vitro* exoteric processes with esoteric *in vivo* transmutations of the soul. Matti Repo notes that Arndt made explicit comparison of rebirth to metallic transmutation both in a letter to Erasmus Wolfart in 1599 and in his anonymous commentary on Khunrath's illustrations.³¹ Arndt's phrasing in his letter to Wolfart describes Christ as projected onto the base Christian, transforming him to divinity:

Besehet die Wiedergeburt der *Metallen*; also müssen alle natürliche Menschen wiedergeboren werden, das ist, mit einem Himmlischen geiste *tingiret*, erneuert, gereinigt und verherrlicht, immer mehr und mehr von Tage zu Tage, von einer Klarheit in die andere, als vom Geiste des Herren, wie S. Paulus herrlich redet, das wird eben so wol wesentlich Fleisch und Blut in dem Menschen, gleich wie die *Tinctur* ein neu Wesen giebt, nicht eine neue Eigenschaft allein: Ich muß so wol Christi Fleisch und Blut in mir haben, als Adams Fleisch und Blut, das heisset ein neues Geschöpfte wesentlicher weise; und nicht allein werden wir des wesentlichen Fleisches *Christi* theilhaftig, son-

31 Repo 1999: 67–8: 'In einem anonymen Brief an *Erasmus Wolfart* aus dem Jahr 1599 vergleicht er die geistliche Wiedergeburt eines Menschen mit der erwarteten Verwandlung der Metalle in alchemistischen Prozessen. . . . Arndt sagt darin, daß der Heilige Geist einen Menschen *tingiret*, d.h. tauft und ihm ein neues Wesen schenkt. Der Mensch wird erneuert gleich wie unedles Metall, das in eine entsprechende alchemistische Tinktur getaucht wird, ein ganz anderes, edles Metall wird. In der Wiedergeburt wird ein Mensch der göttlichen Natur Christi teilhaftig (vgl. 2. Petr. 1, 4). Das nennt Arndt "das größte Geheimnis". Auch im Kommentar zum *Amphitheatro* Khunraths bezeichnet Arndt die alchemistischen Verwandlungen als "großes Geheimnis". Diesmal schreibt er von einem 'astralen Feuer', das die Materie des philosophischen Steins verwandeln kann. Eine *transmutation* findet statt, und der Stein bekommt ein neues Wesen.' Repo cites Arndt 1676: 13 and Arndt 1608: 121.

dern auch durch ihn der Göttlichen Nature, wie S. Petrus spricht: Daß uns also *Christus* seine Menschliche und Göttliche Natur mittheilet; Dieß ist das gröste Geheimnüß. (Arndt 1676: 13, quoted by Repo 1999: 68, n. 34.)

This strikes me as more than analogy. It is a close identification of material transmutation and Christian rebirth as twin aspects of what for the Christian alchemist was the *mysterium magnum*, referred to in this letter as 'das gröste Geheimnüß'.

Arndt's repeated call for the true Christian to mortify the flesh and deny his Adamic self, so that his Christian identity as image of God can emerge unfettered, besides seeming dangerously Gnostic, finds particular resonance in the esoteric alchemical tradition surrounding him. In particular, the heterodox Lutheran minister Valentin Weigel compared the 'killing' of the impure metal in the alchemical work to the killing of the Adamic self in the great work of spiritual rebirth (Repo 1999: 69–70 refers to Weigel 1967: 73). It is no wonder that Arndt's critics saw him as a Weigelian. Even if we assume that Arndt truly succeeded in keeping the ideas that he revealed to Wolfart and in the anonymous commentary on Khunrath's illustrations from public scrutiny in the early part of the century, it must be admitted that his Gnostic dualism and teaching of rebirth, when viewed in the context of his known background in Paracelsian medicine and his reputed expertise in transmutational alchemy, would be cause enough to suspect him of heterodoxy.

Arndt's Reception in Denmark

When the Danish translation of Book Four of Arndt's *Von wahren Christentum* was translated into Danish by Peder Nielsen Gelstrup and published in 1618 under the title *Liber Naturæ, eller Natvrspeyel*, it was dedicated to Christian IV's lover, Kirsten Munk, as was the Danish edition of *Paradiesgärtlein* seven years later.³² This suggests that she and other

32 Arvidsson 1999: 29: Peder Nielsen Gelstrup lived with Resen while he was a student and, with Resen's backing, he studied abroad and returned to a professorship in Latin, then Greek and then Logic at the University of Copenhagen, beginning 1614. This Danish translation, *Liber Naturæ, eller Natvrspeyel*, was the first edition of Arndt published in Scandinavia.

members of the Danish nobility, possibly Christian IV himself, were interested in Arndt's theology and were taking an active role in making it more accessible to the Danish reading public.³³ And yet, more than seventy years would pass between Gelstrup's edition of Book Four and the first Danish edition of books one through three, which first appeared in print in Samuel Jenssøn Ild's 1690 edition.³⁴ A similar situation existed in Sweden, where Arndt's book was read avidly soon after it came out in German, especially among the upper class, but was not available in a printed Swedish edition until 1647, when it then proved very popular among Pietists.³⁵ Given the trend toward piety among the laity, and the eventual, overwhelming popularity of Arndt's books among Scandinavians, it is reasonable to suppose that there was a demand for Arndt's Pietistic teaching. Why, then, did it take so long to publish all four books in Danish, when there is evidence that manuscript translations were available already in the first years of Bishop Resen's leadership?

- 33 Schröder 1959: 423 mentions that books one through three were translated into Danish, a manuscript copy of which survives in the handwriting of a Danish Noblewoman. Three such manuscripts survive in Karen Brahe's Library (A VI 15, 16, 17), according to Anne Riising (1956: 41–2). These translations are all credited to the noblewoman Karen Bille and presumably stem from a common original. Two are dated 1657 and the third identified as a copy made by Birgitte Friis (another noblewoman) in 1667. The collection as a whole bears witness to the role of these women in collecting, copying, translating, and circulating books, manuscripts, and letters that were unavailable in print. Valberg Lindgårde (2002: 272) also notes the important role played by Swedish noble women in the translation of spiritual literature.
- 34 Jenssøn Ild chose Spener's edition as the basis for the new Danish edition rather than the earlier manuscript translations, and this edition played up Arndt's orthodoxy while seeking to distance him from the complaint that he was heterodox, even Weigelian. According to Arvidsson (1999: 31) all four books were translated into Danish 80 years previously and circulated among Resen's friends in manuscript. Arvidsson (1990: 9, n. 3) says that the early existence of the manuscripts is mentioned by Ludvig Winslow in his introduction to his 1706 edition of Daniel Dyke's *Nosce te ipsum*, and that Karen Bille had translated all four books into Danish, but that they were never published.
- 35 Montgomery 2002: 64: 'I Sverige blev Johann Arndt långt mer läst än andra uppbyggelseförfattare. . . . Arndt lästes och älskades redan på 1610-talet, inte minst i högadliga kretsar.' The first printed Swedish translation of *Vom wahren Christentum* was the 1647 edition of Stephan Muræus, which he dedicated to Queen Christina. See Pleijel 1938: 325–6.

The reluctance of the orthodox Lutheran church authorities suggests that they were concerned about the effect the German Pietist's esoteric ideas might have on the laity, concerns that in Denmark were eventually mitigated by Philipp Jakob Spener's legitimization of piety within orthodoxy. If Johann Arndt's theology was suspected of heterodoxy in the initial decades after its publication in 1610, then the argument that his profession of a Paracelsian cosmology *de facto* legitimized Paracelsianism in the eyes of Denmark's orthodox Lutherans is considerably weakened. But how, then, can we explain the anomalous Danish publication of Book Four?

Book Four is a kind of hexameron, focusing on the natural world as God's creation and reflecting the 'Mosaic physics' that was popular at that time. Bengt Arvidsson thinks that Arndt's work was of interest in Scandinavia because it addressed both theological and natural-philosophical issues. Certainly it would have appealed to Resen's colleague and behind-the-scenes opponent Kort Aslaksson for this reason, and clearly to Holger Rosenkrantz, too.³⁶ Rosenkrantz knew Arndt personally. He met him in Celle in 1616 and they talked long into the night on religious matters. Since Arndt was a member of the Lutheran priesthood, the fact that Rosenkrantz would personally meet with him and engage him in discussion of theology is not surprising. Rosenkrantz, too, had studied theology among orthodox German Lutheran professors early on and was already well known for his erudition. What is less clear is Rosenkrantz's sympathy for the heterodox aspects of Arndt's theology, which were inspirational to Andreae and others connected with Marburg and the Rosicrucian debut.

Rosenkrantz was implicated in the controversy after a young German physician dedicated his book defending Arndt's theology to him.³⁷ This was enough to cause Rosenkrantz to be suspected of heterodoxy by his former mentor and friend, the German theologian Daniel Cramer. To

36 Arvidsson 1999: 30: 'Ich glaube, dass wir diese erste Ausgabe Arndts in Skandinavien von einem gemeinsamen theologischen und naturwissenschaftlichen Gesichtspunkt aus sehen müssen.' Arndt's contemporary Cort Aslaksson, junior to Resen on the theology faculty at the University of Copenhagen, also adopted an account of Genesis that formed the basis for his understanding of a physics that was grounded in and compatible with Holy Scripture. See Shackelford 1998: 291–312.

37 See Glebe-Møller 1963–5: 306–18, who identifies Breler as a young physician.

defend himself and clear his name, Rosenkrantz wrote a long apologetic letter to Cramer in 1622/3, in which he dismissed the charges that he was a Weigelian or Rosicrucian (Glebe-Møller 1963–5: 308–9). However, Jens Glebe-Møller (1963–5: 312) has studied this letter and concluded that Rosenkrantz was not forthcoming to Cramer with all the details of his support for Arndt's theology, which may indeed have had a decisive effect on Rosenkrantz' own spiritual 'awakening' around 1598–9. It is easy to see why Arndt's religious writing might appeal to Rosenkrantz, since the two men were in some sense on a parallel spiritual journey. But here Glebe-Møller (1963–5: 310) sees a distinct and crucial difference between Rosenkrantz and Arndt: Rosenkrantz believed doctrine could be reformed through reading of Scripture, while Arndt was skeptical of doctrinal policing by any organized authority.³⁸

Rosenkrantz's communication with Arndt and perhaps Andreae and other would-be members of a Rosicrucian-style Christian brotherhood—including theologian Johann Gerhard and physician Daniel Sennert—raises some interesting questions.³⁹ Did he maintain contact with the radicals from Tübingen and Marburg in the years after most of them had outwardly conformed to orthodoxy, as had Arndt and Andreae? In this regard, it is interesting that when Joachim Morsius, a Rosicrucian publicist who was excited about Andreae's plan to form a brotherhood, distributed twelve copies of the printed tracts in which Andreae outlined his plans to twelve men that he or Andreae thought would be interested, Holger Rosenkrantz was one! (Glebe-Møller 1963–5: 314, 317.)⁴⁰

38 Therefore, despite the fact that Rosenkrantz was not wholly open about his interpretations of Arndt's theology and his dealings with Beler and others who found Lutheran orthodoxy to be stifling, Møller sees Rosenkrantz as fundamentally opposed to the mysticism of the Weigelians and Rosicrucians and regards him as a traditional scriptural theologian.

39 Glebe-Møller 1963–5: 314: 'Men Andreae, som iøvrigt var ven og beundrer af Arndt, nøjedes ikke med at holde offentligheden for nar. Han søgte selv flere gange at danne et *kristent* broderskab, et *societas christiana*, som skulle råde bod på tidens brøst, en art kristen udformning af rosencreutzernes foregivne broderskab. . . . Blandt de mænd, som var udset til at deltage i broderskabet træffer vi på Arndt, Johan Gerhard og medicineren Daniel Sennert – alle tre mænd, med hvem Rosenkrantz stod i forbindelse.'

40 Andreae probably wrote these treatises, *Christianæ Societatis Imago* and *Christiani Amoris Dextera porrecta*, sometime around 1620; Glebe-Møller 1963–5: 317: 'Illustrius quondam Senator Regni Danici ac Regis Consiliarius, Olegerus Rosencrantzius, qui quanti hoc sanctum institutum fecerit, peculiari libro testa-

Glebe-Møller (1963–5: 318) speculates that this may have happened as late as 1632, when Rosenkrantz signed Morsius' travel album. By this time Rosenkrantz's orthodoxy was itself finally coming under scrutiny by Resen's successor, the even more orthodox Jesper Brochmand.

Concluding Remarks

The most recent historical literature on Johann Arndt and Johan Valentin Andreae persuasively argues that Arndt's thought took a decidedly Pietistic turn just before the turn of the century, about the same time that Holger Rosenkrantz quietly began to lean away from Lutheran orthodoxy and embrace a more personal and mystical piety. By 1605, when Arndt was beginning to write and publish *Vom wahren Christentum*, he was intimately involved with an informal group of like-minded Lutherans, including Andreae, who were dissatisfied with the rigidity of orthodoxy. This was a group that sought a further reformation along mystical, spiritual lines, guided by an esoteric epistemology of personal illumination for the pure and pious, what the alchemists had called the gift of God. These dissenters variously embraced elements of Paracelsian religion and chemical cosmology and expressed it in a call for a general reformation along the lines sketched out in the Rosicrucian literature. Elements of Arndt's influential work reflect his engagement both with German mysticism and with Paracelsian cosmological concepts that, for many Paracelsians, were an integral part of Paracelsian religion.

Despite the efforts of Andreae and Arndt to maintain a careful distance from the enthusiasms of their 'Weigelian', Paracelsian, and Rosicrucian fellows, both were tainted by their sympathies for a further reformation. Andreae had to back pedal publicly, deploring the extremes of his youth and satirizing the Rosicrucian dreams he previously professed in relative secrecy; Arndt also succeeded in maintaining his place within the Lutheran church, although not without controversy and the protection of aristocratic friends. Although he escaped serious censure and managed to print his books in German, the orthodox Lutheran authorities

tus, cujus procul dubio apud filios et Henricum Ernesti Ms. exemplar extabit.' Møller notes that Rosenkrantz was pleased by these plans and supposedly said so in a manuscript book that should have been in the possession of one of his sons or Henrik Ernst (a disciple who was professor at Sorø), but which is not known today.

of Scandinavia were reluctant to publish them in Danish and Swedish translations, which they had the power to control, and this points to the perceived dangers of Arndt's esoteric religious doctrines, which were part and parcel of his Paracelsian vision of the macrocosm.

If this assessment of the situation is at all accurate, then Danish academic and aristocratic support for translation of Arndt's *Vier bücher vom wahren Christentum* and the publication of Book Four in 1618, the year before Ole Worm publicly condemned the Rosicrucians in speech at the University of Copenhagen, reveals the very moment when strict Lutheran orthodoxy was being imposed on the freer exploration of faith that characterized Philippist leadership during the first fifteen years or so of the new century. Afterwards, further spread of Arndt's Pietism in Scandinavia was publicly discouraged during a period of orthodox entrenchment, during which Paracelsian religion and with it Paracelsian cosmology were rejected in Copenhagen, and Holger Rosenkrantz's Arndtian religious views parted ways from the orthodoxy of Resen and Brochmand. Christianopolis would have to wait.

References

Andersen, J. Oskar

1896 *Holger Rosenkrantz den Lærde. En biografisk Skildring med Bidrag og Belysning af danske Kirke- og Studieforhold i det syttende Aarhundredes første Halvdel.* Copenhagen: August Bangs Boghandels Forlag.

Arndt, Johann

1608 *Iudicii über die 4 Figuren dess grossen Amphitheatri D. Henrici Khunradi.* In: Heinrich Khunrath, *De igno magorum philosophorumque secreto externo & visibili.*

1676 *Das große Geheimniß der Menschwerdung des ewigen Worts.* In: *Send-schreiben an seinen guten Freund Erasmus Wolfartum . . . Erkläret und verfasst von Herrn Johan Arndt.*

1968 *Den Sanne Kristendom.* Oslo: Lutherstiftelsen. (Hovedverker av Den Kristne Litteratur, 5)

1979 *True Christianity.* Ed. and trans. Peter Erb. New York: Paulist Press.

Arvidsson, Bengt

1990 *Naturlig teologi och naturteologi: Naturen som bild i dansk fromhetstradition omkring år 1600.* Lund: Lund University Press.

1999 *Wissenschaft und Frömmigkeit Johann Arndt in der dänischen Geistesgeschichte der ersten Hälfte des 17. Jahrhunderts.* In: Anders Jarlert (ed.), *Johann Arndt. Rezeption und Reaktion im Nordisch-Baltischen Raum;* pp. 27–33. Lund: Lund University Press.

Brecht, Martin

- 1972 Johann Valentin Andreae. Weg und Programm eines Reformes zwischen Reformation und Moderne. Martin Brecht (ed.), *Theologen und Theologie an der Universität Tübingen: Beiträge zur Geschichte der Evangelisch-Theologischen Fakultät*. Tübingen: Mohr.

[Breler, Melchior]

- 1621 *Mysterium iniquitatis pseudoevangelicæ: Hoc est: Dissertatio apologetica pro doctrina Beati Joannis Arnd, . . . adversus centauros quosdam psuedoevangelicos et sophisticam illorum theologiam*. Goslar.

Brieger, Gert

- 1993 The Historiography of Medicine. In: W. F. Bynum & Roy Porter (eds), *Companion Encyclopedia of the History of Medicine*, Vol. 1; pp. 24–44. London: Routledge.

Butterfield, Herbert

- 1965 *The Origins of Modern Science: 1300–1800*. (1957; revised edn New York: Free Press, 1965.)

Cohen, H. Floris

- 1994 *The Scientific Revolution: A Historiographical Inquiry*. Chicago: University of Chicago Press.

Daniel, Dane T.

- 2002 Paracelsus on Baptism and the Acquiring of the Eternal Body. In: Gerhild S. Williams & Charles Gunnoe, Jr (eds), *Paracelsian Moments: Science, Medicine, and Astrology in Early Modern Perspective*; pp. 117–34. Kirksville, IA: Truman State University Press.
- 2007 Coping with Heresy: Suchten, Toxites, and the Early Reception of Paracelsus's Theology. In: Lawrence M. Principe (ed.), *Chymists and Chymistry: Studies in the History of Alchemy and Early Modern Chemistry*; pp. 53–62. Sagamore Beach, Mass: Chemical Heritage Foundation and Science History Publications.

Dickson, Donald R.

- 1996a Johann Valentin Andreae's Utopian Brotherhoods. *Renaissance Quarterly* 47: 760–802.
- 1996b Johannes Saubert, Johann Valentin Andreae and the *Unio Christiana*. *German Life and Letters* 49: 18–31.
- 1998 *The Tessera of Antilia: Utopian Brotherhoods and Secret Societies in the Early Seventeenth Century*. Leiden: Brill.

Edighoffer, Roland

- 1967 *Rose-Croix et Société Idéale selon Johann Valentin Andreae*. Paris: Arma Artis.
- 1981 Johann Valentin Andreae. Vom Rosenkreutz zur Pantopie. *Daphnis: Zeitschrift für mittlere deutsche Literatur* 10: 211–39.
- 2005 Andreae, Johan Valentin. In: Wouter J. Hanegraaff (ed.), *Dictionary of Gnosis and Western Esotericism*. Vol. 1; pp. 72–5. Leiden: Brill.

Erb, Peter

1979 Introduction to Johan Arndt, *True Christianity*. Trans. Peter Erb. New York: Paulist Press.

Ferrario, Gabriele

2007 Al-Kimya: Notes on Arabic Alchemy. *Chemical Heritage* 25 (3): 32–7.

Fink-Jensen, Morten

2004 *Fornuften under Troens Lydighed: Naturfilosofi, Medicin og Teologi i Danmark 1536–1636*. Copenhagen: Museum Tusulanum Forlag.

French, Roger

1994 Astrology in Medical Practice. In: Luis García-Ballester *et al.* (eds), *Practical Medicine from Salerno to the Black Death*; pp. 30–59. Cambridge: Cambridge University Press.

Gilly, Carlos

1998 ‘*Theophrastia Sancta*’ – Paracelsianism as a Religion, in Conflict with the Established Churches. In: Ole Grell (ed.), *Paracelsus. The Man and His Reputation, His Ideas and Their Transformation*; pp. 151–85. Leiden: Brill.

Glebe-Møller, Jens

1963–5 Holger Rosenkrantz, Arndt og Andreä. Uortodokse strømninger I ortodoksens tid. *Kirkehistoriske Samlinger* 1963–5: 306–18.

1966 *Doctrina secundum pietatem. Holger Rosenkrantz den Lærdes teologi*. Copenhagen: Gyldendal.

Grant, Edward

2004 *Science and Religion, 400 B.C. to A.D. 1550: From Aristotle to Copernicus*. Baltimore, MD: Johns Hopkins University Press.

Hall, A. R.

1954 *The Scientific Revolution 1500–1800: The Foundation of the Modern Scientific Attitude*. London: Longmans, Green and Co.

Hooykaas, R.

1972 *Religion and the Rise of Modern Science*. Grand Rapids, Michigan: William B. Eerdmans.

Hsia, R. Po-Chia

1992 *Social Discipline in the Reformation: Central Europe 1550–1750*. London: Routledge.

Kahn, Didier

2001 The Rosicrucian Hoax in France (1623–24). In: William R. Newman & Anthony Grafton (eds), *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*; pp. 235–344. Cambridge, MA: MIT Press.

Koepp, Wilhelm

1912 *Johann Arndt. Eine Untersuchung über die Mystik im Luthertum*. Berlin.

1959 *Johann Arndt und sein "Wahres Christentum"*. Berlin.

Kornerup, Bjørn

1959 Det Lærde Tidsrum. In: Hal Koch & Bjørn Kornerup (eds), *Den Danske Kirkes Historie*, Vol. 4; pp. 11–379. Copenhagen: Gyldendal.

Lemay, Richard

1976 *The Teaching of Astronomy in Medieval Universities, Principally at Paris in the Fourteenth Century. Manuscripta* 20: 197–217.

Lindberg, David

1995 *Medieval Science and Its Religious Context. Osiris* 2 (10): 61–79.

Lindberg, David C. & Ronald L. Numbers (eds)

1986 *God and Nature: Historical Essays on the Encounter Between Christianity and Science*. Berkeley: University of California Press.

2003 *When Science and Christianity Meet*. Chicago: University of Chicago Press.

Linden, Stanton J.

1996 *Darke Hieroglyphicks: Alchemy in English Literature from Chaucer to the Restoration*. Lexington, Kentucky: The University Press of Kentucky. (Studies in the English Renaissance)

Lindgärde, Valberg

2002 *Fromhetslitteraturen under 1600-talet*. In: Ingun Montgomery (ed.), *Sveriges kyrkohistoria*. Vol. 4; pp. 270–9. Stockholm: Verbum.

Lindroth, Sten

1943 *Paracelsismen i Sverige till 1600-tallets mitt*. Uppsala: Almqvist & Wiksell.

Merton, Robert K.

1938 *Science, Technology and Society in Seventeenth Century England*. (New York: Harper and Row, 1970.)

Montgomery, Ingun (ed.)

2002 *Sveriges kyrkohistoria*. Vol. 4. Stockholm: Verbum.

Montgomery, John Warwick

1973 *Cross and Crucible: Johan Valentin Andreae, Phoenix of the theologians*. Hague: Martinus Nijhoff.

Moran, Bruce T.

1991 *The Alchemical World of the German Court: Occult Philosophy and Chemical Medicine in the Circle of Moritz of Hessen (1572–1632)*. Stuttgart: Franz Steiner.

Newman, William R.

2004 *Promethean Ambitions: Alchemy and the Quest to Perfect Nature*. Chicago: University of Chicago Press.

2006 *Atoms and Alchemy: Chymistry and the Experimental Origins of the Scientific Revolution*. Chicago: University of Chicago Press.

Newman, William R. & Lawrence M. Principe

2002 *Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chymistry*. Chicago: University of Chicago Press.

Nummedal, Tara

2007 *Review of Urszula Szulakowska's The Sacrificial Body and the Day of Doom: Alchemy and Apocalyptic Discourse in the Protestant Reformation. Renaissance Quarterly* 60: 998–1000.

Oberman, Heiko

1979 *Preface to Johann Arndt, True Christianity*. Trans. Peter Erb. New York: Paulist Press.

Olson, Richard G.

2004 *Science and Religion, 1450–1900: From Copernicus to Darwin*. Baltimore, MD: Johns Hopkins University Press.

Pleijel, Hilding

1938 Johann Arndt och Svenskt Fromhetsliv. *Svensk Teologisk Kvartalskrift* 1938: 319–32.

Pumfrey, Stephen

1998 The Spagyric Art; Or, The Impossible Work of Separating Pure from Impure Paracelsianism: a Historiographical Analysis. In: Ole Grell (ed.), *Paracelsus. The Man and His Reputation, His Ideas and Their Transformation*; pp. 21–51. Leiden: Brill.

Repo, Matti

1999 Astrologische Alchemie als Vorbild der Neuen Geburt bei Johann Arndt: Ein Beitrag zu den frühesten Einflüssen Arndts im Schwedischen Königreich. In: Anders Jarlert (ed.), *Johann Arndt – Rezeption und Reaktion im Nordisch-Baltischen Raum*; pp. 57–83. Lund: Lund University Press. (Bibliotheca Historico-Ecclesiastica Lundensis, 41)

Riising, Anne (ed.)

1956 *Katalog over Karen Brahes Bibliothek i Landsarkivet for Fyn. Håndskriftsamlingen*. Copenhagen: Munksgaard.

Rossi, Paulo

1957 *Francesco Bacone: dalla magia alla scienza*. Bari: Laterza. (English trans. by Sacha Rabinovich as *Francis Bacon: From Magic to Science*. London: Routledge and Kegan Paul, 1968.)

Schröder, Urban

1959 Enevældens Første Aar 1670–1700. In: Hal Koch & Bjørn Kornerup (eds), *Den Danske Kirkes Historie*, vol. 4; pp. 381–441. Copenhagen: Gyldendal.

Shackelford, Jole

1996 Rosicrucianism, Lutheran Orthodoxy, and the Rejection of Paracelsianism in Early Seventeenth-Century Denmark. *Bulletin of the History of Medicine* 70: 181–204.

1998 Unification and the Chemistry of the Reformation. In: Max Reinhart (ed.), *Infinite Boundaries: Order, Disorder, and Reorder in Early Modern German Culture*; pp. 291–312. Kirksville, MO: Sixteenth Century Journal Publishers, Inc.

2002 To be or not to be a Paracelsian: Something Spagyric in the State of Denmark. In: Gerhild Williams & Charles Gunnoe, Jr (eds), *The Paracelsian Moment: Science, Medicine, and Astrology in Early Modern Europe*; pp. 35–69. Kirksville, MO: Truman State University Press. (Sixteenth Century Essays and Studies, 64)

2003 Paracelsianism and the Orthodox Lutheran Rejection of Vital Philosophy in Early Seventeenth-Century Denmark. *Early Science and Medicine* 8: 210–52.

2004 *A Philosophical Path for Paracelsian Medicine. The Ideas, Intellectual Context, and Influence of Petrus Severinus (1540/2–1602)*. Copenhagen: Museum Tusulanum Press.

2007 Review of Urszula Szulakowska's *The Sacrificial Body and the Day of Doom: Alchemy and Apocalyptic Discourse in the Protestant Reformation*. *Early Science and Medicine* 12: 450–2.

Singer, Charles

1959 *A Short History of Scientific Ideas to 1900*. Oxford: Clarendon Press.

Sivin, Nathan

1990 Research on the History of Chinese Alchemy. In: Z. R. W. M. von Martels (ed.), *Alchemy Revisited: Proceedings of the International Conference on the History of Alchemy at the University of Groningen 17–19 April 1989*; pp. 3–20. Leiden: Brill.

Szulakowska, Urszula

2006 *The Sacrificial Body and the Day of Doom: Alchemy and Apocalyptic Discourse in the Protestant Reformation*. Leiden: Brill.

Thorndike, Lynn

1923 *A History of Magic and Experimental Science*. Vols I–II. London: Mac-Millan.

Wallmann, Johannes

2005 Johann Arndt (1555–1621). In: Carter Lindberg (ed.), *The Pietist Theologians: An Introduction to Theology in the Seventeenth and Eighteenth Centuries*; pp. 21–37. Oxford: Blackwell.

Weigel, Valentin

1967 *Sämtliche Schriften*, vol. 4: *Dialogus de Christianismo*. Hrsg. Alfred Eherentreich. Stuttgart–Bad Cannstatt.

Yates, Frances A.

1964 *Giordano Bruno and the Hermetic Tradition*. Chicago: University of Chicago Press.