

The Interplay among Alchemy, Theology and Philosophy in the Late Middle Ages: The Cases of Roger Bacon and John of Rupescissa

Athanasios Rinotas
KU Leuven
FWO Fellow
<http://orcid.org/0000-0002-5988-9487>
thrinotas@yahoo.gr

Recibido: 28-03-2017; Revisado: 05-07-2017; Aceptado: 05-07-2017

Abstract

During the Late Middle Ages, alchemy attracted the interest of many eminent scholars, yet alchemy's constant failure to produce the philosopher's stone veiled the art with a cloak of scorn. In this article, I examine the cases of Roger Bacon and of John of Rupescissa, both of whom entwined alchemy with philosophy and theology, portraying the hermetic art as a salutary practice for humanity and the Church. Therefore, my scrutiny of their works aims to demonstrate alchemy's desire, albeit somewhat implicit, for recognition and legitimization.

Keywords: Alchemy, Aristotelianism, Theology, Roger Bacon, John of Rupescissa.

1. INTRODUCTION

In modern times, alchemy is a vague or even an obscure term which has many magical and mystical connotations. Such an attitude is not surprising, since in the mid 50's of the nineteenth century two works that were to have a profound impact on alchemy appeared. In particular, Mary Ann Atwood published, in England, *A Suggestive Inquiry into the Hermetic Mystery* and likewise Ethan Allen Hitchcock in the USA published his *Remarks upon Alchemy and Alchemists*, both of which had a mystical character and were largely responsible for connecting alchemy with religious mysticism (PRINCIPE and NEWMAN, 2001: 389-395). Furthermore, in the early years of the twentieth century Carl Jung dealt with alchemy and regarded it not as being a chemical or experimental operation, but rather as a psychological process articulated in a pseudo chemical language (PRINCIPE and NEWMAN, 2001: 401-408). As a result, the aforementioned approaches resulted in rendering alchemy a marginal field of research with an underestimated scientific validity.

Thankfully, the present attitude towards alchemy has changed significantly, mostly due to the fact that interdisciplinary research has shed new light on the hermetic art and new aspects and topics for scholarly work have emerged (Beretta, 1998: 178-181; NEWMAN AND PRINCIPE, 1998: 32-65; PRINCIPE and NEWMAN, 2001: 385-431; NUMMEDAL, 2011: 330-337; NEWMAN, 2011: 313-321). For example, alchemy is now investigated under the light of the history of sciences, intellectual history, the history of philosophy and religious studies, which, all together, constitute a concrete and rigorous academic field of research

In this paper I explicate the interplay among alchemy, theology and philosophy in the period of the Late Middle Ages with a special emphasis on the works of Roger Bacon (*ca.* 1214- 1292) (SINGER, 1932: 80-86) and John of Rupescissa (*ca.* 1310-1365). I argue that both scholars used theology and philosophy as a means for legitimising alchemy during their respective periods and therefore I have divided my paper into three parts. In the first one, I begin with an introductory presentation of medieval alchemy, afterwards I detail the relation between theology and alchemy in the works of the two scholars and at the end I draw attention to the philosophical-alchemical aspects of their works. During the analysis I show how the two scholars communicate and by extension set the scene for understanding their common ground as also their differences.

2. THE ART OF ALCHEMY IN THE MIDDLE AGES

Through its history alchemy had two main goals: a) the transmutation of base metals into gold and b) the preparation of the *elixir vitae*, which is a chemical catalyst which could bring about significant positive effects on the prolongation of life (BRABNER, 2005: 19). These goals alone sufficed enough for medieval society to grow fearful and sceptical towards alchemy, since both an economical disruption and a religious anomaly were likely to occur in the event of the accomplishment of these goals. Nonetheless, alchemy's allure never died, something which is implicitly confirmed by the origins of the word. Its origins may be reduced to three diverse linguistic regions, the Egyptian, the Greek and the Arabic. According to the Egyptian version, alchemy derives from the root *km* or *kmt*, which means black or black soil and alludes to the ancient names of Egypt, whereas the Greek version connects alchemy with the verb *χέω*, which means in turn to pour and has to do with thawing procedures for metals (BRABNER, 2005: 19). From the aforementioned Greek verb also derives the word *χημεία*, which seemed to be adopted by the Arabs in order to articulate alchemy in an Arabic fashion (*al kimiya*). However, one may find some para-etymologies of the term which often are attributed to fictional names and authorities. As a consequence, alchemy is supposed to owe its name to some *Shem* or *Chem*, the son of Noah (MERCER, 1921: 12) or according to Zosimos of Panopolis' view the word came from the mythical *Χύμης*, who also gave his name to the art (PRINCIPE, 2013: 23).

If one tries to find trace of any genuine alchemical texts of the Middle Ages one will be disappointed, since the art became known to medieval scholars only

after the influx of the Arabic translations. Yet, some modern academic scholars have come up with several medieval texts which contain alchemical characteristics and, thus, could be regarded as the bellwether of medieval alchemy. Such texts are the *Compositiones ad tinguenda musiva* (8th-9th centuries), the *Mappae clavicula* (9th-10th centuries), the *Schedula diversarum atrium* (11th century) and the *De coloribus et artibus Romanorum* (11th century) (HAAGE, 2006: 22-23). All these texts dealt mostly with glass manufacturing, metal operations and the production of dyes. The first alchemical text which was translated from Arabic into Latin by Robert of Chester was the *De compositione alchimiae* in 1144, in which Khalid Ibn Yazid is introduced into the secrets of alchemy by the Byzantine monk Morienus (MOUREAU, 2011: 56). Noteworthy is the fact that Robert of Chester clearly states his motive behind this translation according to which his main aim was to acquaint the medieval world with this novelty of alchemy.

As much as alchemical texts were disseminated, alchemy never succeeded in becoming a taught subject in medieval universities. On the one hand, its practical character was the main factor responsible for alchemy being regarded as an inferior type of knowledge and its magical connotations fostered a dynamic polemic against it. Surprisingly though, alchemy became the topic of a fervent debate during the thirteenth century which proved in a way that alchemy and its notion of transmutation were indeed concerns of medieval scholars (NEWMAN, 1989: 423-445 and NEWMAN, 2004: 34-76). Particularly, the debate tried to deal with the possibility of transmutation in a scholastic way by commenting on the *De congelatione et conglutinatione lapidum*, a text which was initially regarded to be Aristotelian and rigidly articulated that transmutation was not possible because nature is superior to art and also because the alchemist cannot manipulate the hidden ingredients of the components since he is not aware of their true structure

The aforementioned debate manifested *prima facie* the attitude of the scholars towards alchemy, which in most cases was not in favour of the hermetic art. However, one may discern some eminent medieval scholars whose approach was far from condemning alchemy and closer to justifying the legitimacy of it. Towards this end, one may discern Albertus Magnus' (ca. 1193-1280) effort to argue for the possibility of transmutation in his *De mineralibus*, according to which a transmutation is possible by removing the 'specific form' of a metal and replacing it by inducing another "specific form".¹ In addition, Michael Scot (1175-1232) was in favour of alchemy also and he is thought to have written the *Ars alchemie*, a treatise on alchemy, which aims at reconciling the contradictions met in the Arabic texts and therefore making them more accessible and plausible to a Latin speaking audience (VINCIGUERRA, 2009: 57-67).

Yet, despite the evidence above, one may argue that these alchemical references are of an independent and scant character and they are barely - if not at all - connected with the rest of the work of the medieval scholars. Reflecting

¹ Magnus (1890), lib. III, caput 9, tr.1: "*Haec enim est sententia Avicennae, quam dicit esse Hastem philosophi praecipui in naturis et in mathematicis: tamen Avicenna in Alchimia sua dicit, quod contradictionem eorum qui in alchimis de permutatione metallorum contradixerunt, invenit: propter quod et ipse subjungit, quod non permutantur species, nisi forte in primam materiam et in materiam metallorum reducantur, et sic juvamine artis deducantur in speciem metalli quod voluerunt*".

upon this argument one may admit that there is a great deal of validity to it, but still this is not a universal rule. The situation radically changes when it comes to the cases of Roger Bacon and John of Rupescissa, since both scholars integrated alchemy into theology and philosophy and thus entrenched, even implicitly, two pillars of legitimisation into alchemy. Following this line of thinking, in the next chapters I present the aforementioned integration and its function as a means for alchemy's legitimisation.

3. THEOLOGY AND ALCHEMY IN THE WORKS OF ROGER BACON AND JOHN OF RUPESCISSE

Starting with Roger Bacon, one may claim that his place is pivotal in the history of alchemy, since he is the first who integrated alchemy into theology in a serious way.² In particular, his alchemy was a part of *scientia experimentalis*, which promulgated that true knowledge may be acquired by experience aided by divine illumination. Consequently, this new kind of *scientia* comprised other sciences as well, such as astrology, optics and of course alchemy. So, in the *Opus tertium* Bacon suggests that the Church should avail itself of these new sciences so as to be able to meet the threat of the Antichrist,³ whilst congruently in the *Opus maius* Bacon poses a warning to the Church lest they do not act first, since these new sciences are highly likely to be adopted by the Antichrist.⁴ But was Bacon allowed to make such a connection in the first place? In response, I will argue that Bacon took advantage of the intellectual environment of his times in order to entrench a sound pillar of legitimisation for his alchemy.

During Bacon's times, there was much fervent literature about the advent of the Antichrist. Consequently, if one is to distinguish a source which had a significant impact on Bacon's thought on the matter, then it should be the personage of Joachim de Fiore (ca. 1135-1202). In the first place, it should be noted that Bacon had joined the Franciscan order at around 1256 (HACKETT, 1997: 16-17) and it was probably during this period that he came across the doctrines of Joachim. Joachim had an innovative approach to the subject, since he rejected the traditional trend which held the Church as a passive factor during the

2 In terms of historiography of alchemy, it is worth noticing Brehm's approach on Bacon's alchemy: "Bacon's theoretical ideas are equally unimpressive. His writings contain a great deal of unfounded criticism of other alchemists, much discussion of the importance of maintaining secrecy and vague references to how very useful the Art is to theology, to medicine, to the state, and- he emphasizes for Clement IV- to the papacy" (BREHM, 1976: 54). Brehm follows the scholarship of Eliade and Jung who both see and conceive of alchemy as a mystical-theosophical system. On the other hand, Newman's evaluation on Bacon's alchemy portrays the modern approach upon the matter: "The degree to which Roger Bacon promoted the discipline of alchemy was perhaps better known to his contemporaries than to modern scholars[...] Bacon proposes a role for alchemy here that makes it the centrepiece of a reformed natural philosophy" (NEWMAN, 1994: 461 and 464).

3 Part of the *Opus tertium* of ROGER BACON (1912: 17): "...ita quod ecclesia possit in omnibus suis tribulationibus recurrere ad ista, ut tandem finaliter obviaretur Antichristo et suis...".

4 BACON (1897: 221): "Et jam ex istis scientiis tribus patet mirabilis utilitas in hoc mundo pro ecclesia Dei contra inimicos fidei, destruendos magis per opera sapientiae quam per arma bellica pugnatorum; quibus Antichristus copiose et efficaciter utetur, ut omnem hujus mundi potentiam conterat et confundat".

Antichrist's advent and additionally he portrayed the Pope as the decisive factor in the Antichrist's defeat (MATUS, 2012: 196-197). As a result, Joachim introduced a new perspective on the theme and vividly articulated what the posture of the Church should be. Now, with this evidence, it is easy to infer that Bacon places his *scientia experimentalis*, and therefore alchemy, in this intellectual environment and envisions Pope Clement IV as the bellwether of Christianity and its war against the imminent threat of the Antichrist.

Yet, Bacon goes one step further and adduces evidence for why the Church should adopt alchemy as a weapon for this cause. Particularly, alchemy also shared common ground with astrology, since the manufacture of the elixir required the influence of the stars and the planets in order to become a "body of equal complexion". So, the person who took the elixir could not only adjust his humors and stabilize his complexion, but he experienced improvement on a moral level as well (MATUS, 2013: 329-330). That is, he could do useful things for both himself and others. Accordingly, we are now in place to discern that astral alchemy is implied as an antidote against the corruptive influence of the Antichrist, since the Christians could use the elixir in order to maintain and preserve their moral virtues and integrity. On the contrary, one may assume that if this "weapon" would fall into the hands of the Antichrist, he would use it in order to destabilize the human complexion and lead it more easily to sin.

A similar line of thinking on the subject seems to be followed by John of Rupescissa as well. It is quite odd that John does not recognize himself in his works neither as an alchemist nor as a prophet, despite the fact that we have an abundance of evidence that connects him with both practices (MATUS, 2017: 62). John joined the Franciscan Order in 1332 and five years later he began his studies in the university of Toulouse (NEWMAN, 2013: 400). Yet, the years to come were not as peaceful as the previous ones and in 1344 John was incarcerated until the end of his life. The reasons for his initial imprisonment are not clear to us, whereas his long incarceration was mostly precipitated by his prophecies and the Chiliastic views that he displayed during that period.

John of Rupescissa's prophecies should not be regarded as an arbitrary act of an insane man, but should be confronted in relation to the intellectual environment in which they appear. By John's time Europe was under great turmoil, due to the occurrence of a series of events, including the Great Famine, the Black Death and the Hundred Years War, which played a crucial role in the development of a pessimistic view for the future of the humanity. Acting in such an environment, John prophesied and promulgated that the Antichrist was expected to come in the years among 1365-1370. Furthermore, two Antichrists were to appear, an Eastern one, who would mislead the Jews into taking him as the messiah, and a Western one, who would be regarded as the great one. The advent of the Antichrist would be followed by earthquakes, tempests and all kinds of disasters, which all would last 45 years. During that period, a Franciscan friar would emerge as the "Angelic Pope", who would become the leader of the Church and would help the king of France to be elected as the "Holy Roman Emperor". After the defeat of the Antichrist both would contribute to the reconstruction of the world and the millennium would follow till the End of Times (DE VUN, 2009: 36-37).

John, like Roger, made use of the Joachite tradition and that of John Olivi (1248-1298) so as to formulate his prophetic agenda. To this point, it is worth mentioning that John Olivi's doctrine on matter served the purposes of alchemy in a convenient way. Specifically, Olivi speaks of a "protean stuff of creation" quite often, which is not necessarily identified with prime matter. As a matter of fact, he conceives of it as a confused and mixed matter of elements which could provide the alchemists with the desired kind of matter that could be purged and manipulated in such a way so as to re-produce new stuff (MATUS, 2017: 37). Turning back to Joachim, he adopted Joachim's perception of history as a sequence of concordances between events of the Old and the New Testament and congruently he tried to decode the patterns of twos, threes and sevens that permeated this sequence so as to "unlock" the possibility of prophecy (MC GINN, 1979: 128-129). Additionally, John was a fervent adherent of the Franciscan Spirituals and therefore adopted successively the tripartite division of history by Joachim in order to claim that in the last state, that of the Holy Spirit, the Spirituals would have an eminent place in the fight against the Antichrist. This eminence derives from Joachim's position that holds that during the third state two Orders will appear as opposition against the Antichrist, one of contemplatives and one of preachers and thus John envisioned the Spirituals taking the place of the preachers (DE VUN, 2009: 17). Congruently, John seemed to have drawn some material from Olivi, since he had stressed the advent of two Antichrists too, of whom the one would be a 'mystical' and therefore identified as pseudo Pope and a corrupted prelate, while the second one would be the 'proper' Antichrist (WHALEN, 2009: 210). To sum up, I think that Matus's characterisation on John as an "exemplar of radical Joachite Franciscanism" reflects perfectly John's stance on the matter in a quite eloquent way provided that he was more in favour of the Olivian Joachism (MATUS, 2017: 93).

Now, given the background of John's prophetic agenda it is easier to conceptualise the position of alchemy in his work. In turn, one may discern two alchemical works which are attributed to John of Rupescissa, the *Liber lucis* and the *Liber de quinta essentia*, which mostly contain recipes for the preparation of medicines that could contribute to the prolongation of life (THORNDIKE, 1934: 357-369; HALLEUX, 1981: 250-267). In all probability, John wrote his alchemical works when he was restricted to stay at home surveillance at Avignon and after he was declared a *phantasticus* by the court (MATUS, 2017: 63). Navigating through the texts and firstly through *Liber lucis*, it is easy for one to find references that connect alchemy to the fight against the Antichrist. In particular, John explicates why he revealed the secrets of alchemy by saying:

"I do not reveal the secret (i.e the alchemical elixir) to wicked men or to the sons of men but to the sacred body of Jesus Christ, that is, the Roman Church, which does not have the stain of mortal sin, nor does it wear the foreign color of heresy of errors. For I have revealed this only for the Saints as remedies for tribulations in the coming times of Antichrist" (De Vun, 2009: 59).⁵

⁵ The translation is taken from De Vun's book.

From the text above it becomes clear that the *secret* of the elixir may be used as *remedy for tribulations in the coming times of the Antichrist* and this remedy seems to have much in common with that of Bacon's. It goes without saying that John's elixir could significantly contribute to the healing of all injuries and maladies caused by the Antichrist but what is more important is its contribution to a moral and mental level as well. John's elixir should be taken as a substance which could lead one to knowledge of God and therefore his just knowledge could serve as the ultimate weapon against Antichrist's tricks (MATUS, 2017: 96-97 and 124). Likewise in his *De quinta essentia* John affirms that the study of alchemy would be beneficial for the Church because it could prolong the lives of the evangelical men, something which would mean that longer lived preachers would be more formidable allies for the Church and adversaries of the Antichrist (DE VUN, 2009: 61).

Yet, apart from these explicit references to alchemy, one may observe an implicit interplay between alchemy and theology in terms of expression. Particularly, John quotes quite often passages from Pseudo Arnald of Villanova, in which the Philosopher's stone and its stages of preparation are paralleled with the Christ and the tortures he underwent. For example, John likens the third stage of the distillation of the Philosopher's stone with Christ's crucifixion, whereas in another instance he sees the removal of the Philosopher's stone from the vessel as the 'resurrection of Christ from his grave' (NUMMEDAL, 2013: 314-315).

Apparently, both thinkers saw alchemy as an answer to the Church's problems that were to come and as a result alchemy seemed likely to gain legitimacy, even implicitly, by providing "medical" care to those who would suffer impotence due to the conflict with the Antichrist. Still, alchemy apart from availing itself of the current intellectual environment made a step further for its legitimisation by entrenching its 'pillars' on a solid Aristotelian philosophical background, to which we now turn.

4. PHILOSOPHY AND ALCHEMY IN THE WORKS OF ROGER BACON AND JOHN OF RUPESCISSA

With respect to Roger Bacon's case, philosophy was used as the basis for his alchemical theory. The Franciscan friar distinguished two branches of alchemy, speculative and practical, where the former, as he informed us in the *Opus tertium*, had a solid philosophical background.⁶ Actually, speculative alchemy provided knowledge of the components of matter, which in turn consisted of the four Aristotelian elements, that is earth, water, air and fire. Consequently, the four elements conjoined and thus created the four simple humors, blood, phlegm, cholera and melancholy. These four simple humors are composed of the elements, but one element becomes the dominant and due to it the humor is created. Afterwards, another four compound humors are created by the four

⁶ BACON (1859: 40): "...et haec scientia est alkimia speculativa, quae speculatur de omnibus inanimatis et tota generatione rerum ab elementis".

simple ones and these new compound humors have the same name as the simple ones. The mechanism of creation remains the same, as the four simple humors exist in the compound humor and only one is the dominant, which also gives the name to the compound humor (NEWMAN, 1997: 319-320). Judging from the above, one may assume that we have an elemental alchemy with Aristotelian and Galenic-Hippocratic influences, but still the building blocks of this theory must be attributed to the Stagirite.⁷

Actually, Bacon does not only imply that his alchemy is of Aristotelian origins but he actually deals thoroughly with this subject in his *Opus minus*. In my opinion it is in this book that Bacon divulges the 'scientific' character of the art and therefore tries to give more validity to it by discussing the subject in parallel to the Aristotelian texts. In particular, Bacon first adduces a sketchy description of his speculative alchemy, in which he emphasizes the arcane nature of the art and its remoteness to the unwise, whereas afterwards he criticizes the mistaken approach towards elemental alchemy made by many (BACON, 1859: 359-360). Consequently, he describes the Aristotelian elemental theory to a wide extent, in which he shows how the qualities operate among them, how the contrary qualities are conjoined and under what terms and finally how the qualities are related to the hylomorphic schema of Aristotelian philosophy (BACON, 1859: 363-367). I think that the chosen structure of this presentation was not made at random by Bacon and his ultimate aim was to place the two systems side by side so as to project the compatibility between them. In addition, what we also have to bear in mind is that Bacon posited the aforementioned presentation after the juxtaposition of the errors made by the Church, among which he expressed his criticism on the way the Church treated the new sciences. So, in this light, it seems that Bacon wanted to draw some attention to the errors concerning his speculative alchemy, which was of a more theoretical nature and therefore was more open to the learned men of his time.

But still one may ask on what grounds Bacon placed such an authority as that of Aristotle on the arcane art of alchemy. The answer to this question becomes crystal clear as the influence of The Pseudo-Aristotelian *Secretum secretorum* is adduced. The kind of knowledge that was encompassed in that book was characterised by a great deal of mysticism and occult lore, which pertained entirely to astrology and alchemy. For example, in the third chapter of the *Secretum*, one may read about extraordinary marvels and effects deriving from the properties of stones, according to which the bearer of a certain stone could make an opposing army abandon the battlefield and in another instance one may read about stones of diverse colours which induce various effects on horses (BACON, 1920: 118). Congruently, there are an abundance of astrological references, which suggest that celestial influences may have significant impact either on sub-lunar entities like stones and plants or even on humans, whose elemental complexion could be adjusted by the celestial bodies for the sake of balanced health. This

⁷ Bacon's alchemy is influenced by *Lumen luminum*, a book which was attributed to Aristotle and Rhazis. In that book one may encounter the original alchemical theory that mixes the Aristotelian elements with the Galenic humours (NEWMAN, 1994: 464).

last sort of influence was commented on by Theodore Crowley, who lent a hue of suspicion to Bacon's astrology. Namely, Crowley imagined that this exposure of humanity to favourable constellations for the sake of health would not appeal to most members of the Church; for it provoked basic ecclesiastical tenets as it contained the potential for allusions to magic (CROWLEY, 1950: 53). The case, on the other hand, is quite different with alchemy. In the *Secretum* Bacon found the most vociferous attestation for Aristotle's involvement in alchemy, an art which was passed on to Alexander in an arcane script and was supplemented in the end by the notorious words of the *Tabula Smaragdina*:

"I am going to impart to thee here a mighty secret; may God help thee to guard it and improve thee by the knowledge of it, if it be His will.

Take the animal, vegetable and mineral stone. The stone which is neither a stone, nor has the nature of a stone, although it is created resembling some stones of mountains and mines, for it also resembles vegetables and animals. And it exists in every place and time, and with every man. And it has all colours and in it there are present all the elements...and truly has our ancestor Hermes Trismegistus said: There is no doubt that the lower from the higher and the higher from the lower produces wonders from one single operation..." (BACON, 1920: 261-262).⁸

Passing to John of Rupescissa's case, we come across the notion of *quinta essentia*, which seems to permeate all of his *De quinta essentia*. John was chasing after the quintessential substance which was supposed to be able to cure all diseases and to prolong life by adjusting the human humours and qualities of the human body. This quintessence was a product of successive distillations of wine (mainly), that is pure alcohol 'empty' of any traces of terrestrial elements. Still, as John suggested, one could distil quintessence from organic or inorganic matter like plants, animals and stones (DE VUN, 2009: 70). However, the problem that John had to deal with was the discovery of a substance which could not be corrupted and, yet, was to be found within the realms of the sub-lunar world. Such a substance was only to be found in the stars- known as the fifth element- and John believed that his *aqua ardens* (elixir) could encompass all the qualities he needed so as overcome the impasse above (HALLEUX, 1981: 251-252).

It goes without saying that John borrowed the Aristotelian notion of 'fifth element', of which the heavens were supposed to be made and applied it to his alchemical product. So, according to Aristotle the fifth element was incorruptible, unchangeable and eternal, all qualities which were depicted in his version of quintessence. Therefore, John said:

"To this we faithfully respond that it is proper to investigate this thing that is situated with respect to the four qualities of which our body is made up just as heaven is situated with respect to the four elements. Philosophers have called heaven the fifth element with respect to the four elements because it is in itself incorruptible and does

⁸ Translation taken from Steele's book.

not receive alien impressions unless it is done by the Will of God. Thus, this thing we seek is the same with respect to the four qualities of our body: quintessence is made incorruptible in itself, not hot and dry like fire, nor cold and wet like water, nor hot and wet like air, nor cold and dry like earth. Instead it is a fifth element, strong against all opposing things, and incorruptible like heaven, which when it is necessary, sometimes pour in a wet quality, sometimes hot, sometimes cold and sometimes dry" (DE VUN, 2009: 66).⁹

In this passage, in which John describes what quintessence actually is, one may detect very interesting philosophical issues. At first it is very obvious that John does not really want to identify his quintessence with the Aristotelian fifth element or *ether*. What he actually tries to do is to give an account of how quintessence works by using Aristotelian vocabulary so as to explicate quintessence's profound difference in comparison to the terrestrial elements. Even in the end, when he says that quintessence is the fifth element he does not refer to the Aristotelian one, but to one distinguished from the four known ones. Nonetheless, John appears or at least implicitly claims to have a philosophical consciousness and there is some evidence for one to support such a position.

At first, it should be noticed that, in the academic literature, John is referred to as either a prophet or a bellwether of medical chemistry (MULTHAUF, 1954: 359-367). Still, in his own works he repeatedly avoids the term 'alchemy' or when he refers to it he does so in a pejorative way (DE VUN, 2009: 63). Instead he prefers the term 'philosophy' and congruently he also sees himself as a philosopher. To me it seems that John actually realised that his alchemy was truly a part of some natural procedure and that it belonged to the science of philosophy. Besides, alchemy dealt with practical operations, something which means that its results were literally tangible and could therefore be verified by examination.

Furthermore, John adduces the qualities of his quintessence according to which quintessence has the ability to confer an "equal complexion" onto the bodies that do not have balanced qualities, whereas additionally it keeps human humidity abound and it inflames the weak natural flame (DE VUN, 2009: 69-70). From this account it becomes obvious that John's alchemy shares some common ground with that of Roger's since both envisioned alchemy as a means to preserve human health by acquiring the desired equal complexion. Yet, commensurate with this is the point that John's quintessence and alchemy differed radically, since quintessence existed in everything and in a way unified the world. This reminds us of the stoic *pneuma*, an idea that is not to be taken lightly, since there is recent scholarship that connects the Aristotelian "fifth element" with the notion of *pneuma* (TAYLOR, 1953: 247-265; PEREIRA, 2000: 131-144). In any case, John managed to unify the cosmos with the existence of a quintessence which may be found anywhere and in anything and by doing so he brought down the traditional Aristotelian doctrine which rigidly stated that the elements are to be found in specific regions only.

⁹ Translation taken from De Vun's book.

5. CONCLUSIONS

Medieval alchemy is not to be regarded as a monolithic and barren practice, but on the contrary it should be judged in reference to society and its intellectual environment. This statement is exemplified by the cases of Roger Bacon and John of Rupescissa whose works signify a strong and vivid interplay among alchemy, theology and philosophy. In particular, both thinkers were members of the Franciscan order and therefore connected alchemy with the imminent advent of the Antichrist, a tradition that owes much of its narrative to Joachim de Fiore and John Olivi. Following this line of thinking, Roger saw the Pope as the key factor for the victory of the Church and thought alchemy could provide an arsenal for this cause worthy of consideration. Additionally, John deemed alchemy to be a weapon which could lead to the dominance of the “true Franciscans” and their victory against the Antichrist. More striking though is the case of John, who did not act as a philosopher, like Roger, but rather like a prophet, which resulted in his long-term incarceration. Apart from the theological undertones, both thinkers entrenched their alchemy in a philosophical mindset and especially upon traditional Aristotelian doctrines. Roger combined the Aristotelian elemental theory with that of Galen, whereas John inserted the innovation of the “fifth element” into the realms of the sub-lunar world. As a result, both presented an alchemical system whose rudiments were attributed to the chief authority of their days. As a last remark and by gathering the information from above it would not be so reckless for one to claim that the interplay among the three disciplines portrays a wish on the part of the practitioners of alchemy for legitimisation, even if only implicitly.

6. REFERENCES

- BACON, R. (1859): *Opera quaedam hactenus inedita Rogeri Baconi, vol.I*, J. BREWER (ed.), London.
- BACON, R. (1897): *The ‘Opus Majus’*, vols. I-II, J. H. BRIDGES (ed.), Oxford.
- BACON, R. (1912): *Part of the Opus tertium of Roger Bacon*, A. G. LITTLE (ed.), Aberdeen.
- BACON, R. (1920): *Opera hactenus inedita Rogeri Baconi, Fasc.V: Secretum secretorum cum glossis et notulis Fratris Rogeri*, Clarendon Press, R. STEELE (ed.), Oxford.
- BERETTA, M. (1998): “Historiographie”, in C. PRIESNER and K. FIGALA (eds.), *Alchemie: Lexicon einer hermetischen Wissenschaft*, Verlag C. H. Beck, München: 178-181.
- BRABNER, T. (2005): “Alchemy”, in T. GLICK, S. J. LIVESSEY and F. WALLIS (eds.), *Medieval Science, Technology and Medicine: An Encyclopedia*, Routledge, New York- London: 19-22.
- BREHM, E. (1976): “Roger Bacon’s Place in the History of Alchemy”, *Ambix* 23: 53-58.
- CROWLEY, T. (1950): *Roger Bacon, The Problem of the Soul in his Philosophical Commentaries*, Louvain.
- DE VUN, L. (2009): *Prophesy, Alchemy, and the End of Time: John of Rupescissa in the Late Middle Ages*, Columbia University Press, New York.

- HAAGE, D. B. (2006): "Alchemy II: Antiquity- 12th Century", in W. J. HANEGRAFF (ed.), *Dictionary of Gnosis and Western Esotericism*, Brill, Leiden: 16-34.
- HACKETT, J. (1997): "Roger Bacon: His life, career and works", in J. HACKETT, (ed.), *Roger Bacon and the Sciences: Commemorative Essays*, Brill, Leiden: 9-24.
- HALLEUX, R. (1981): "Les ouvrages alchimiques de Jean de Rupescissa", *Histoire Littéraire de la France* 41: 241-284.
- MAGNUS, A. (1890): *De mineralibus*, A. BORNET (ed.), Paris.
- MATUS, Z. (2012): "Reconsidering Roger Bacon's Apocalypticism in Light of His Alchemical and Scientific Thought", *Harvard Theological Review* 105: 189-222.
- MATUS, Z. (2013): "Resurrected bodies and Roger Bacon's elixir", *Ambix* 60: 323-340.
- MATUS, Z. (2017): *Franciscans and the Elixir of Life: Religion and Science in the Later Middle Ages*, University of Pennsylvania Press, Philadelphia.
- MC GINN, B. (1979): *Visions of the End: Apocalyptic traditions in the Middle Ages*, Columbia University Press, New York.
- MERCER, J. E. (1921): *Alchemy: Its Science and Romance*, The MacMillan Company, New York.
- MOUREAU, S. (2011): "Alchemy in the Latin World", in H. LAGERLUND (ed.), *Encyclopedia of Medieval Philosophy: Philosophy between 500-1500*, Springer, Dordrecht, Heidelberg, London, New York: 56-60.
- MULTHAUF, R. (1954): "John of Rupescissa and the Origin of Medical Chemistry", *Isis* 45 (4): 359-367.
- NEWMAN, W. (1989): "Technology and Alchemical Debate in the Late Middle Ages", *Isis* 80 (3): 423-445.
- NEWMAN, W. (1994): "The Alchemy of Roger Bacon and the *Tres Epistolae* Attributed to Him", in *Comprendre et maîtriser la nature au moyen âge: Mélanges d'histoire des sciences offerts à Guy Beaujouan*, Librairie Droz S.A., Genève.
- NEWMAN, W. (1997): "An Overview of Roger Bacon's Alchemy", in J. HACKETT (ed.), *Roger Bacon and the Sciences: Commemorative Essays*, Brill, Leiden: 317-336.
- NEWMAN, W.; PRINCIPE, L. (1998): "Alchemy vs Chemistry: The Etymological Origins of a Historiographic Mistake", *Early Science and Medicine* 3 (1): 32-65.
- NEWMAN, W. (2004): *Promethean Ambitions: Alchemy and the Quest to Perfect Nature*, The University of Chicago Press, Chicago and London.
- NEWMAN, W. (2011): "What Have We Learned from the Recent Historiography of Alchemy?", *Isis* 102 (2): 313-321.
- NEWMAN, W. (2013): "Medieval Alchemy", in D. C. LINDBERG and M. H. SHANK (eds.), *The Cambridge History of Science Volume 2: Medieval Science*, The Cambridge University Press, New York: 385-403.
- NUMMEDAL, T. (2011): "Words and Works in the History of Alchemy", *Isis* 102 (2): 330-337.
- NUMMEDAL, T. (2013): "Alchemy and Religion in Christian Europe", *Ambix* 60 (4): 311-322.
- PEREIRA, M. (2000): "Heavens on Earth. From the Tabula Smaragdina to the Alchemical Fifth Essence", *Early Science and Medicine* 5 (2): 131-144.

- PRINCIPE, L.; NEWMAN, W. (2001): "Some Problems with the Historiography of Alchemy", in NEWMAN, W. R.; GRAFTON, A. (eds.), *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*, The MIT Press, Massachusetts: 385-431.
- PRINCIPE, L. (2013): *The Secrets of Alchemy*, The University of Chicago Press, Chicago.
- SINGER, D. (1932): "Alchemical Writings Attributed to Roger Bacon", *Speculum* 7: 80-86.
- TAYLOR, S. (1953): "The Idea of the Quintessence", in E. A. UNDERWOOD (ed.), *Science, Medicine and History: Essays on the Evolution of Scientific Thought and Medical Practice Written in Honour of Charles Singer*, Oxford University Press, London: 247-265.
- THORNDIKE, L. (1934): *A History of Magic and Experimental Science, vol.III*, Columbia University Press, New York.
- VINCIGUERRA, A. (2009): "The *Ars alchemie*: The First Latin Text on Practical Alchemy", *Ambix* 56 (1): 57-67.
- WHALEN, E. B. (2009): *Dominion of God: Christendom and Apocalypse in the Middle Ages*, Harvard University Press, Massachusetts.