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***Lullian Alchemy: Aspects and Problems of the corpus of Alchemical Works Attributed to Ramon Llull (XIV-XVII centuries)***

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LULLIAN ALCHEMY: ASPECTS AND PROBLEMS  
OF THE CORPUS OF ALCHEMICAL WORKS  
ATTRIBUTED TO RAMON LLULL  
(XIV-XVII CENTURIES)\*

MICHELA PEREIRA

Various hypotheses on the origin of the alchemical works attributed to Ramon Llull have been put forward beginning with the resumption in the nineteenth century of learned studies on the Majorcan author: they range from the idea of a witting forger, adopted by Littré and Haureau, to the possibility that the alchemical works may have originated in spiritual circles,<sup>1</sup> suggested by the two Carreras y Artau and taken up again recently by Garcia Fonti. Every attempt, however, has encountered the difficulties that arise from the size of the *corpus* of pseudoLullian alchemical writings, and from the tangled state of their chronology and their reciprocal relationship: armed with a first-hand knowledge of numerous texts in this tradition, as well as vast experience in the field of the history of science and of mediaeval

\* This paper was conceived as a contribution to the Convegno Internazionale «Ramon Llull, il lullismo internazionale, l'Italia» (Naples, 30-3/1-4 1989), in whose *Atti* is to be printed the original Italian version — Translation by M.T. Fanton, revised by the author.

<sup>1</sup> The first catalogue of the pseudoLullian alchemical *corpus* produced by modern scholarship is that contained in vol. 29 of the *Histoire Littéraire de la France*, pp. 64-65 and 271 ss., compiled by B. Haureau and M. Littré in 1885: the authors only distinguish between the works published and unpublished, and their critical attention was reserved exclusively to the task of removing the «stain» of alchemy from Llull. More articulate critical reflection can be found in T. and J. Carreras y Artau, *Historia de la Filosofía Española, Filosofía cristiana de los siglos XIII al XV* (Madrid, 1939-43), vol. II, ch. 4; J. Garcia Font, *Historia de la Alquimia en España* (Madrid, 1976), pp. 128-130 sums up and substantially brings up to date the affirmations of the two Carreras y Artau.

occult sciences, L. Thorndike attempted, in the fourth volume of his *History of Magic and Experimental Science*, a systematic presentation of pseudoLullian alchemy, and was the first to maintain that it is impossible to place all the texts which go to make it up on the same plane, reaching the conclusion of an «original nucleus» of works, upon which the *corpus* grew up in successive phases.<sup>2</sup>

Re-examining the pseudoLullian alchemical tradition, starting from some suggestions contained in the studies of Frances A. Yates,<sup>3</sup> I realized that the direction taken by Thorndike could be very fruitful, and I undertook a comprehensive examination of this tradition, to which I have dedicated some studies upon single aspects and a complete review of the alchemical works ascribed to Ramon Lull in the manuscript and printed evidence of the XIV-XVII centuries.<sup>4</sup>

The aspects I have taken into consideration may be outlined as follows: 1) the reconstruction from clues of the first century of the pseudoLullian alchemical tradition, which re-

<sup>2</sup> L. Thorndike, *A History of Magic and Experimental Science* (New York, 1923-58), vol. IV, ch. 38; his conclusions are taken up by R. Halleux, *Les textes alchimiques* (Turnhout, 1979), pp. 107-108.

<sup>3</sup> F.A. Yates, *The Art of Ramon Lull: An Approach to it through Lull's Theory of Elements*, «Journal of the Warburg and Courtauld Institutes» XVII (1954), repr. in Yates, *Lull and Bruno. Collected Essays*, I, pp. 9-77; in part v.p. 37, where she expresses herself thus regarding Felix: «This book, by the way, contains a chapter on alchemy in which Lull states his disbelief in the possibility of the transmutation of metals and seems to be "against" alchemy. Together with the misreading of the preface to the *Tractatus novus de astronomia* as "against" astrology, this passage has done much to throw people off the scent as to the true nature of the Lullian system» (my italics). This is stretching things a bit far, though it is a fertile intuition which has led me to reconsider the problem without negative prejudices, after having verified that, at least as regards the *Tractatus novus de astronomia*, it was right.

<sup>4</sup> May I refer to this latest work, *The alchemical corpus attributed to Raymond Lull*, («The Warburg Institute Surveys and Texts», 18, London 1989), for greater detail about the questions dealt with in this paper.



veals the role of the *Liber de secretis naturae seu de quinta essentia* in the diffusion or the first explicit formulation of the attribution of some alchemical works to Lull; 2) the diffusion of the *corpus* beginning from the xvth century, in the concrete terms of an analysis of the most ancient manuscripts, of the lists of alchemical works in the alchemical bibliographies and in those of the authentic Lullian tradition up to 1600: this part of the work led me to consider the construction of the pseudoLullian *corpus* as a series of successive layers, where the increase in the number of writings corresponds to a substantial re-presentation of the themes worked out in the first nucleus; 3) the observation of the gradual appearance of the legend of Lull as an alchemist, which does not occur before the formation of the *corpus* (as the two Carreras y Artau maintained, on the basis of the misleading evidence of Pierre Brantôme), but, on the contrary, only appears in its fullest expression at the very beginning of the xvth century.<sup>5</sup>

All this has allowed me not only to corroborate Thorndike's theory of a nucleus of alchemical works, but also to make clearer, in some measure, the outlines of the hypothesis.

The first element that must be underlined is the substantial diversity of form of the two fundamental works of the *corpus*, the *Testamentum* and the *Liber de secretis naturae seu de quinta essentia*. The first of these works appears to be the work of an alchemist who assumes, within the sphere of his own theoretical instrumentation, some elements of the Lullian *ars*, used mainly as a mnemonic art for memorizing alchemical principles and procedures. The *Liber de secretis naturae* on the other hand manages really to insert alchemy into the Lul-

<sup>5</sup> T. and J. Carreras y Artau, *Dues notes sobre el Lul·lisme trecentista...* 2) *Antiquitat de la llegenda*, «Estudios Lulianos» 16 (1972), pp. 235-9; the text of the legend in its most widespread form, probably compiled in the xvth century, is published in my article: *La leggenda di Lullo alchimista*, «Estudios Lulianos» 27, pp. 145-163.

lian system, demonstrating its coherence with the natural philosophy worked out by Lull in his authentic works, utilizing the combinatory figures (tree, rotating forms, tables) in a heuristic role, and explicitly ascribing to Lull the composition of a certain number of alchemical works, amongst which it is indeed the *Testamentum* that takes pride of place.

If, then, we consider all the quotations from « Lullian » alchemical works contained in the *Liber de secretis naturae* (which we can date with certainty as belonging to the second half of the xvth century),<sup>6</sup> comparing them with the composition of the collected manuscripts of the xvth century and with the contents of the lists of alchemical texts attributed to Llull, we find that the *Testamentum* still has a central role, and that the works cited by its author as being his, that is, the *Liber lapidarii* and the *Liber de intentione alchimistarum*, are present in practically all the evidence, from the most ancient to the most recent. Side by side with them is the *Codicillus*, which, however, occupies a slightly more uncertain position, even though its authority was recognized very early on.

The centrality of the *Testamentum* in pseudoLullian alchemy is certainly not new: nevertheless, the difference between its structure and that of the *Liber de secretis naturae* has not generally been explicitly recognized;<sup>7</sup> moreover the affirmation of its chronological precedence is not in fact obvious, at

<sup>6</sup> The date of composition of the pseudoLullian work is delimited by that of the *Liber de consideratione quintae essentiae* by Rupescissa, which is used abundantly, and which was written, according to Halleux, around 1351-2 and, as *terminus ante quem*, from the oldest known manuscript, that goes back to the last years of the XIVth century of the very first years of the xvth. Cf. R. Halleux, *Les Ouvrages alchimiques de Jean de Rupescissa*, in *Histoire Littéraire de la France*, vol. XLI (Paris, 1981), pp. 241-84; D.W. Singer, *Catalogue of Latin and Vernacular Alchemical Manuscripts in Great Britain and Ireland, Dating from before the Sixteenth Century* (Bruxelles, 1928-31), vol. II, pp. 255-6.

<sup>7</sup> See, however, M. Cruz Hernandez, *El pensamiento de Ramon Llull* (Valencia, 1977), pp. 313-4.



least if we begin with, the dates contained in the colophons of the two works, which seem to indicate the opposite (1319 is the date borne by many manuscripts for the *Liber de secretis naturae*, 1332 is the date of the *Testamentum* according to all manuscript and printed tradition).<sup>8</sup> However, one unequivocal fact emerges from the manuscripts, and this is the absence of quotations from the *Liber de secretis* in the *Testamentum*, while the latter is abundantly quoted in the former. Moreover, while the *Testamentum* does not mention the Rupescissian alchemical practice of the quintessence of wine (even though the term «quinta essentia» appears, but with a different meaning, connected with Baconian usage), the *Liber de secretis naturae* in the part defined as «Opus minus», and linked to the «Figure S», describes in terms of Lullian combination the very «practice» of the *Testamentum*, based on the transformation of metals and minerals, while in the «Opus maius» and in the figure of the «Arbor philosophicelis» it uses the instrumentation of the *ars* to present the Rupescissian «practice» of the distillation of alcohol from wine and other organic substances. We may therefore reasonably consider that at the time of the composition of the *Liber de secretis naturae*, the *Testamentum* was already circulating as an authoritative work of alchemy.

How then do we explain this inversion of the dates? My hypothesis is that the date of the *Testamentum* corresponds, roughly at least, with the period it was written, whilst that attached to the *Liber de secretis naturae* seems to be the work of a perhaps not over-precise forger (seeing that 1319 is the year following the death of Lull), or perhaps it is consciously ambiguous. In fact, examining all the works in the pseudoLullian alchemical *corpus* which have dates, I have observed that

<sup>8</sup> The colophon of the *Testamentum* was printed at the end of the *Testamentum novissimum*, whose «secunda pars» is in reality the fourth part of the real *Testamentum*, the *Practica de furnis*; to be seen ad es. in J. J. Manget, *Bibliotheca Chemica Curiosa* (Geneva, 1702), vol. I, p. 822.

every time a work presents either an explicit date of composition, or an equally explicit attribution to Lull, we are unequivocally faced with an episode of the type R. Halleux has defined «pseudoépigraphie intentionnelle».<sup>9</sup> This is particularly evident in a group of late works, testified to only in a very small number of manuscripts of the XVI-XVIII centuries, which contain in every detailed colophons dates close to that of the *Testamentum*, together with clear references to the legend of Lull the alchemist.<sup>10</sup> But the *Liber de secretis naturae* too, with the mise-en-scène of Ramon who, in conversation with a monk, demonstrates the compatibility of alchemy with his own natural philosophy, must be considered the fruit of a conscious pseudo-epigraphic attribution, motivated perhaps by the previous existence of alchemical works known under the name of Lull, which appear to contrast with his declarations against alchemy — if indeed it is not the *Liber de secretis naturae* itself which for the first time proposes Lull as the author of these texts. Apart from these examples, there is only one other work which presents explicitly Lullian characters in the proemius, as well as an explicit attribution to Lull in the colophon, and a dating which, this time, is coherent with the dates of his life (1309): it is the *Liber de investigatione secreti occulti*, which in any case, since it quotes the *Codicillus*, is certainly a work written later than the attribution to Ramon of the first group of alchemical works.

The *Testamentum* on the other hand, contrary to all the other dated works, does not contain within it any indication of pseudo-epigraphic attribution: although its author is still to

<sup>9</sup> Cf. R. Halleux, *Les Textes*, cit., pp. 97-100; Idem, *Le Mythe de Nicolas Flamel ou les mécanismes de la pseudépigraphie alchimique*, «Archives Internationales d'Histoire des Sciences» 33 (1983), pp. 234-55.

<sup>10</sup> I presented this little group of works in *Stratificazione dei testi nel corpus alchemico pseudolulliano*, in *Le edizioni dei testi filosofici e scientifici del '500 e del '600* (Milano, 1986), pp. 91-97.



this day unknown, the manner in which he quotes as his own works other alchemical texts is completely different from the way he quotes some Lullian texts (the *Arbor philosophiae desideratae*, the *Liber principiorum medicinae*, and, perhaps, the *Ars magna generalis ultima*); the use of Lullian type figures and alphabets (which are not, however, identical to those in the authentic works) does not necessarily imply an expropriation of identity, as already pointed out by D. Waley Singer.<sup>11</sup> Moreover, figures and alphabets are used exclusively as reminders, not in a creative way, as they are in the authentic works and, in the field of alchemy, in the *Liber de secretis naturae*.

In my opinion, the *Testamentum* really could belong to the first half of the XIVth century. It contains nothing that contradicts the date, 1332, seen in the colophon: it contains few quotations from works of alchemy, the latest being the *Rosarium* attributed to Arnald of Villanova which, whatever the accepted solution regarding the problem of its authenticity, goes back in any case to the first years of the XIVth century.<sup>12</sup> The work contains no internal traces of the legend of Lull the alchemist, nor any indication that there were already any works of alchemy being circulated under his name. The alchemical themes developed in the practical part of the work

<sup>11</sup> D. Waley Singer, *The alchemical Testamentum attributed to Raimond Lull*, «Archeion» 9 (1928-29), p. 45: «It may be questioned, however, whether this very close similitary in the form of treatises dealing with such widely dissimilar themes does not suggest dual rather than single authorship»: the authoress was comparing alphabets and figures from the *Testamentum* with those in the *ars*, setting out from a «possibilist» position as regards the Lullian paternity of the alchemical writings.

<sup>12</sup> Cf. M. Berthéloth, *Sur quelques écrits alchimiques, en langue provençale, se rattachant à l'école de Raymond Lulle*, in *La Chimie au Moyen Age* (Paris, 1893; reprint Amsterdam, 1986), vol. I, p. 354; J. Payen, 'Flos florum' et 'Semita semitae', *Deux traités d'alchimie attribués à Arnaud de Villeneuve*, «Revue d'histoire des sciences» 12 (1959), pp. 289-300 declares himself against the attribution of the *Rosarium* to Arnald, but places this work in the XIVth century.



correspond to the level of evolution reached by alchemy between the end of the XIIIth and the beginning of the XIVth centuries<sup>13</sup> and there do not seem to be any signs of the polemic about forgers following the decretal «Spondent quas non exhibent» (1317) of John XXIII, in spite of the fact that throughout the whole text there runs a vein of criticism of the false alchemists, or «sophistae».<sup>14</sup> The wideranging discussion of the principles of natural philosophy, to which the author of the *Testamentum* attempts to recall the working procedures and the theoretical structures of the alchemical *opus*, keeps within the conceptual sphere current in the scholarly world of the XIVth century, in particular as regards theories on matter, the elements, the characteristics of the *mixtum*; the use of concepts drawn from theoretical medicine, such as the *humidum radicale*, the *virtus generativa* and other similar concepts, take us into the midst of the discussions taking place at Montpellier in the early days of the century.

However, manuscripts of this work previous to the XVth century do not exist: which fact led Pere Bohigas to affirm, in 1926, that, in concrete terms, the only date of which we can be certain with regard to the *Testamentum* is 1443. This date appears in the note added to the colophon of the Oxford manuscript, Corpus Christi College, 244, which is singular in that it has the text in Catalan and in Latin, alternating the chapters in each of the two languages, and occasionally adding short passages, titles or annotations in Old French. The reason

<sup>13</sup> Cf. R. Multhauf, *The Origins of Chemistry* (London, 1966), pp. 192-197.

<sup>14</sup> On the polemics against the forgers in the alchemy of the XIVth century vide C. Crisciani, *La «Quaestio de alchimia fra Duecento e Trecento»*, «Medioevo» 2 (1976), pp. 119-168; W.H.L. Ogrinc, *Western Society and Alchemy from 1200 to 1500*, «Journal of Mediaeval History», 6 (1980), pp. 103-32; B. Obrist, *Die Alchemie in der mittelalterlichen Gesellschaft*, in *Die Alchimie in der europäischen Kultur- und Wissenschaftsgeschichte*, hrsg. Ch. Meinel (Wiesbaden, 1986), pp. 33-59.

for this bilingual or trilingual composition is explained in a note in the copyist's hand, thus:

Translatus fuit presens Testamentum de lingua cathalonica in latinam anno gratie 1443 sexto Junii per Lambertum (here a blank space) apud Londinium in prioratu Sancti Bartholomei. Et quoniam predicta translacio mihi Johanni Kirkeby in multis non placuit, conscripsi manu mea proprie capitulatim Testamentum in utraque lingua ad maiorem luce veritatis percipiendam et finivi anno gratie 1455 secundum computacionem Romane ecclesie mensis Marcii die VII incompleto hora quasi undecima ante meridiem (f.81r).

This note, for which we are indebted to an evidently scrupulous copyist (we are also indebted to him for the annotation of the two versions of the «Tertia distinctio» of the *Liber de secretis naturae*, in another part of the same manuscript)<sup>15</sup> explains fairly clearly why we do not possess Latin manuscripts of the *Testamentum* previous to the xvth century: before «Lambert's» translation, this text existed only in the «cathalonica» language, or perhaps also in a French version, of which, however, we do not, as in the case of the Latin, possess manuscripts predating the xvth century. The precedence of the Catalan version over the others seems at any event to be absolute.<sup>16</sup>

<sup>15</sup> At f. 107r; on the problem of the double version vide also my contribution: *Sulla tradizione testuale del Liber de secretis naturae attribuito a Raimondo Lullo: le due redazioni della Tertia Distinctio*, «Archives Internationales d'Histoire des Sciences» 36 (1986), pp. 1-16.

<sup>16</sup> The problem is tackled by Pere Bohigas, *El repertori de Manuscrits Catalans. Missió a Anglaterra*, «Estudis Universitaris Catalans», 11 (1926), reprinted in *Sobre Manuscrits i Biblioteques* (Montserrat, 1985), pp. 28-36, beginning from the Oxford manuscript, Corpus Christi College, 244 itself, which had been described by J. Batista y Roca, *Catàlech de les obres lulianes en Oxford* (Barcelona, 1916), pp. 44-47. Bohigas indicates three manuscripts of the French text, Paris, Bibliothèque Nationale, fr. 2019 (xvth century), 14802 and 19969 (xvth century), but concludes that «s'imposa l'admissió de la redacció catalana com original» (p. 34). The Catalan text of the *Testamentum* was referred to by Ivo Salzinger, the publisher of the *Opera omnia* of Lull in 1700 and the supporter of



Marcelin Berthelot<sup>17</sup> made reference to a text of this sort last century, when, considering the pseudoLullian works of alchemy, he reconstructed their origin, affirming that: 1) the alchemical writings are not authentic works by Lull; 2) these writings were composed by «persons who counted themselves to be his disciples»; 3) the authors of these writings were of Spanish origin or came from the south of France; 4) some of these works were written first «en provençal ou en Catalan». Berthelot gave three examples of alchemical works composed in Provençal or in Catalan, one of which was, in fact, the *Testamentum* (the other two are a text attributed to Jean de Meung and the *Rosarius alkymicus Montispessulani* which, in spite of its Latin title is written «en provençal»).<sup>18</sup> At that time, however, Berthelot had knowledge only of Latin manuscripts of the *Testamentum*: the certainty of the existence of an anterior version in the Catalan language came to him only by way of some internal quotations in Catalan in the Latin text itself and from someothers contained in the *Compendium animae transmutationis metallorum*.<sup>19</sup> Even

the authenticity of the alchemical writings, in his essay *Perspicillia lulliana philosophica* (in R. Lulli Opera, vol. I, pp. 213-252): «Notum est versatis in lectione et intelligentiae librorum illuminati doctoris tam de arte generali, quam de philosophia, medicina et alchimia exaratorum, quod quam plurimi illorum sint scripti lingua vernacula, h.e. catalana seu lemovicensi...; ex Libris vero Chemicis sunt theorica antiqui Testamenti, cuius exemplar eximium... fidem facere potest, nam etsi latinum sit, eius tamen differentia cum aliis exemplaribus impressiss... et convenientia stili ad unguem cum stilo lemovicensi in latina versione retento satis indicant, ipsum opus primitus dicta lingua vernacula compositum» (pp. 223-224).

<sup>17</sup> In the above article, n. 12.

<sup>18</sup> Berthelot, *Sur quelques écrits*, p. 631; J. Payen had prepared a doctoral thesis on the *Rosarius* in Provençal; his unpublished work is quoted by Halleux, *Les textes*, p. 106 n. 149. The Latin text of this work (inc.: Primum vel primum ergo regimen lapidis est dissolvere siccum grossum in argentum vivum...) is attributed to Lull, with the title *Testamentum abbreviatum*, in the manuscripts: Oxford, Corpus Christi College, 238 and Paris, Bibliothèque Nationale, nouv. acq. Lat. 1293.

<sup>19</sup> Berthelot, *Sur quelques écrits*, pp. 629-630; also Bohigas, in the work

today I do not know of any manuscripts in Catalan; Bohigas has produced evidence only of the existence of manuscripts in French, maintaining the while, as we saw above, that the work must have been written originally in Catalan. The bilingual Oxford manuscript, Corpus Christi College 244, described by Batista y Roca in 1916 and not studied, as far as I know since Bohigas's contribution, takes on, therefore, fundamental importance in the reconstruction of the history of the text of what is certainly the central work of the «nucleus» upon which the whole edifice of pseudoLullian alchemy was later built.

Along with the *Testamentum*, has I mentioned above, forming part of this first level of the alchemical *corpus* later attributed to Llull, are the texts which have been cited as the work of the same author: they are, first of all, the *Liber de intentione alchimistarum* and the *Liber lapidarii*. The first of these works has no specifically Lullian characteristics, even though, perhaps because of the many references to it in the *Testamentum*, it has been unanimously accepted in the alchemical tradition as work by Lull. In it the author recounts his own research into the true working procedure of alchemy, a research involving many long and tiring journeys; the text we know is in Latin, the sixteenthcentury publisher Guglielmo Gratarolo speaks of it as a text «ex Gallico in Latinum versus».<sup>20</sup> Thorndike, speaking of the *Liber lapidarii*, which develops a peculiar aspect of pseudoLullian alchemy, the creation of artificial precious stones, maintains that «the version which seems most common in the manuscripts of the xvth

quoted in n. 16, had underlined the importance of the quotations from the *Testamentum* in Catalan in other works of the pseudoLullian *corpus*.

<sup>20</sup> The text of the *Liber de intentione alchimistarum* is published in a collection edited by Guglielmo Gratarolo, *Verae alchemiae artisq[ue] metallica[e] citra aenigmata doctrina* (Basel, 1561), pp. 139-155. The note immediately follows the title, on p. 139.



century does not purport to emanate directly from the mouth of Lull, but of someone who speaks of himself as the translator from Catalan into Latin»: <sup>21</sup> the text is one of the most problematical of the *corpus*, and the printed edition seems shorter and much modified in comparison with the text seen in the the oldest manuscripts. <sup>22</sup> For the moment it is only a question of clues, but investigation in this direction might reveal interesting aspects of the activity of the alchemists in XIVth century Catalonia, which has already been in some measure documented. <sup>23</sup>

The *Codicillus*, perhaps the most famous of the pseudo-Lullian alchemical works, sets a separate problem. Its author, who quotes the *Testamentum* and the *Liber de intentione alchimistarum* as his own work, but makes no mention of the *Liber lapidarii* nor of the entire practical part dealing with the artificial gems, confronts the difficult subject of fitting in the theory of alchemy in terms coherent with the doctrines presented in the *Testamentum*, but broadens and deepens to a much greater extent the hermetic themes (the relationship between microcosm and macrocosm, the centrality of the bond — *amor* — that holds nature together) and the spiritual themes (the idea of the *reformatio materiae*, the spiritual character of the true alchemist, who receives illumination from God, the comparison of the *lapis* of the alchemists with Christ's

<sup>21</sup> Thorndike, *A History*, IV, p. 45.

<sup>22</sup> The text is printed in the collection *Ars aurifera quam chemian vocant...* (Basel, 1610), vol. II, pp. 98-120.

<sup>23</sup> Cf. J.R. De Luanco, *La alquimia en España* (Barcelona, 1889-97), the results of which are synthesized and brought up to date by Garcia Font, *Historia*, in particular in ch. 6 («La alquimia en la Corona de Aragón»); also G. Beaujouan, *La Science en Espagne au xive et xve siècle* (Paris, 1967). The activity of alchemists in Catalonia is documented by A. Rubió y Lluch, *Documents per l'història de la cultura catalana mig-eva* (Barcelona, 1908-21), vol. I, p. 239 (Mestre Angel de Francavila de Tortosa) and p. 319 (Bernardus and Johannes de Ulzinellis; Gabriel Mayol).

work of salvation). In contrast with the works examined up to here, there are no indications that the *Codicilius* was written in another language than Latin. However, some of the autobiographical notes contained in the text<sup>24</sup> agree with the autobiographical passages seen here and there in the *Testamentum*, and in both works there is reference to the teaching of Arnald, which was to become one of basic motives for the legend of Lull as alchemist.

On the basis of the considerations set out, it is now possible to try to outline the fundamental aspects of the most ancient and important works of alchemy, which, from the end of the xivth century we find explicitly attributed to Ramon Lull: 1) the most ancient layer of the *corpus*, formed in the first half of the xivth century, is made up of the *Testamentum*, the *Liber lapidarii*, the *Liber intentione alchimistarum*, to which must also be added, though bearing in mind its differences, the *Codicilius*; 2) the first three texts, which seem to have been originally written in Catalan, or at least in a Romance language, can be considered, with a good margin of certainty, the work of one and the same author, and they develop a critical research into alchemy according to the pattern of the four *regimina* (dissolving, coagulating, reducing, fixing), including within it transmutatory alchemy, medical alchemy and the making of artificial gems; 3) the *Codicillus*, if not a later work by the same author, developing themes and subjects in different parts, can be considered the work of a disciple or of a *socius*, who shares the same theoretical basis and the same working procedure; 4) the author of these works, perhaps an alchemist of Catalan origin, is well versed in the field of natural philosophy and medicine, is extremely well-informed about alchemical literature and its working techniques and is in tune with the theory and practice set out in the *Rosarium* attribut-

<sup>24</sup> See in particular ch. 63, in Manget, *Bibliotheca Chemica*, I, p. 908, where the author says he is now «adstrictus vinculis» and obliged to write «aliena lingua».



ed to Arnald of Vilanova; 5) all these texts, with the exception of the *Liber de intentione*, use Lullian figures and alphabets, as well as concepts from the philosophy of Lull (for example the correlatives), without, however acknowledging Lull's authorship of them; that is, they correspond to point 2) of Berthelot's assertions mentioned above (the authors considered themselves to be Lull's disciples), demonstrating that the Lullian *ars* had very early on found favour amongst the alchemists, a sphere certainly marginal with respect to the established scholarly culture, but which was not without importance or public in the society of the xivth century; however, no internal aspect of the *Testamentum* permits us to assert that its author intentionally wished to pass off his work as an authentic Lullian text: one can only begin to speak of pseudoLullian alchemy in the proper sense of the term therefore with the *Liber de secretis naturae seu de quinta essentia* at the end of the xivth century.

So I believe that one may considerer to have done with, once and for all, the false problem which reduces the *Testamentum* to the work of a «forger», and that this work should be studied for its own sake, because of the importance it holds in the sphere of the history of science and of philosophy in the late Middle Ages, as well as for all it can tell us about little-explored aspects of xivth century Catalan scientific culture.

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