Pierre De La Ramée (Petrus Ramus): A Logician Pontonneer between the Middle Ages and the Renaissance

Ruxandra Irina Vulcan

(University Paris-IV Sorbonne, France)

Abstract: The meaning of Ramus, a major logician of the XVIth century, changes according to the point of view: insignificant in relation to the contemporary formal logics, but linchpin between the Middle Ages and the Modernity; it is the methodical argumentation, gathering logics with rhetorics, which gives his Pontoneer's signification. The presentation proposes then to explain the main shifts and adaptations of the ramist system. The new interest for Aristotle's *Topics* consisted in thinking of the probable against that of certainties, truth and arguments of authorities; favorable for diversity and novelties, the *loci* allow an analytical access to experience, well necessary during the period of discoveries. La Ramée makes yet of those *inventio*, fruit of the new humanist rhetorics, his logical battle horse. Used as argumenta, he transforms them in tools of the *iudicium*; he bounds so the *Topics* to the *Organon*'s *Analytics* in a global logic, unifying both the "natural logic" with syllogistics, induction with deduction, dialectical *ars disserendi* with rhetorical figures and colours. Without interdisciplinar barriers more, the ramism unifies knowledge in a pacifist encyclopedism, especially thanks wellknown students of the Academy of Herborn, Alsted, Althusius and Comenius.

Key words: logical method, invention-disposition from rhetorics to dialectics, order of knowledge (cognitive "golden chain"), dichotomies according the degree of generality, syllogistics

1. Introduction

The present communication proposes to show the development of Ramus'logics through the century, his battles, his death, but also his wide influence on methodology in Europe and beyond.

As the main logician of the Renaissance, Pierre de La Ramée has known how to take logics out of the scolastical formalism to open the way, under the influence of the humanism, towards the natural thinking through his method, than, under that of the continous controversies, towards an universal *mathesis*. This thesis is based on the different works of this main logician of the XVIth century (especially on his *Dialectique* in 1555), mentioned in the present study; its aim consists in showing that this methodological exploit, according to the demonstration, has taken place in three stages.

2. Methodology

To show with more evidence the cognitive reconfigurations, the logical terminology which James Trafford

---

Ruxandra Irina Vulcan, Academic Searcher *HDR* at the *STIH* ("Sense, Text, Informatics, History") of the University Paris-IV Sorbonne; research areas/interests: renaissance, literature, philosophy, religion, epistemology. E-mail: irivulcana@gmail.com.

employed in a little different context at the Congress *Unilog 2015* (James Trafford, 2015), is very useful through its concision, as terms like "conjunction" and "disjunction" for highlighting the major cognitive historical shiftings of Ramus' thinking.

3. Results

3.1 First Stage of Disjunction

The first stage consists in the disjunction from the aristotelian scolastic logics — so refined it was — whose aim was the education of clergy men (Cambridge, 1988). Four consistent elements had no more validity: 1) the argumentation with authorities inside the doctrine; 2) the syllogistical education prefering the subtilities of the *Insolubilia* to the discovery of the reality; 3) the lack of personal judgment (then the logical space of the disputation in *pro et contra* allowed only three operations: the assertion, the negation and the doubt (Francis Jacques, 1985), and 4) at least, the specialized language of the terminist logic (dealing with terms, with words without control of facts or hypotheses).

So, this whole connexion to the world doesn't fit more at the Renaissance, which aimed another consistency in the relationships between language and world. First of all, that one consisting in a new secular pragmatical function for a civilian life and in the new horizon of the main discoveries of the time. Therefore as consequences, there are on one side, the necessity of semantics in direct contact with the reality, without intermediate significations of doctrines; then on the other side, the necessity of an open mind, capable of answering the new empirical, mechanical and civilian questions and needs (Cesare Vasoli, 1968, , pp. 333-601)[1].

In the movement of the humanism, La Ramée launches into the maximal disjunction from the "fabricated", "non natural" aristotelian scolastic logics, from the "corrupted" and "incomplete" aristotelian tradition, as he formulated it in the *Aristotelicae animadversiones* of 1543. He opposes to the "author tenebrarum" (Cesare Vasoli, 1968, p. 368) a natural and productive thinking thanks the "conjunction of the philosophy with the eloquence" in his *Oratio de studiis philosophiae et eloquentiae conjungendis*, 1546 (Cesare Vasoli, 1968, p. 426).

3.2 Second Stage of Conjunction

The second stage consists in the "method" (presented in the *Dialecticae institutiones*, 1543), in the famous *Dialectique* of 1555 and in its latin translation, the *Dialectica* of 1556.

This last programmatical conjunction of philosophy and eloquence results from strong methodological integrations of rhetorics, dialectics and logics; the first with the rhetorics is a maximal conjunction because of two key concepts: the invention and the disposition; the second in the logical and dialectical viewpoint, because of the jugement, concerning the inferences.

First of all, the "invention" is already the join signature between rhetorics and dialectics as a "weak" integration of Aristotle's *Topica* (Aristotle, 1976). Even if La Ramée gave a new importance to this text, it is not for favoring the antique author, but as an oblique attack to the medieval aristotelism, because this text was forgotten during the Middle Ages (Cambridge, 1988, p. 143) — what corresponds exactly to Ramus' reproach for a "corrupted" and "incomplete" transmission of the *Organon*. The *Topica*, rediscovered in the XVth century by the humanism, is used as the lever for the maximal disjunction from the scholasticism (Cambridge, 1988, p. 152).

---

[1] This excellent study gives all the general as well as specific informations, especially in the very detailled study about the development of Peter Ramus in "Parte quinta, Intorno a Pietro Ramo e alle dispute logiche del maturo cinquecento" in three chapter.

Indeed, the "places of invention", the so named *loci*, offer a semantical analysis of notions and of the reality. Their probable meaning makes their novelty. To attain the truth is no more the fact only of "disputations by authorities", in a formalized communicational frame, but of a problematical investigation including few degrees of certainty: from the less certain to the more certain till to the true one (Rudolf Agricola, 1529; Ruxandra Vulcan, 1997). The Renaissance rediscovers so the heuristics from the *dialegesthai* (the socratical questioning of the *logos* Ruxandra Vulcan, 1997)) in its part of *inventio*. This new argumentativ as well as problematical stake, opens the research for all the domains without normative nor speculativ restrictions, a way which La Ramée will renew and systematize. Thus, the notion of problem goes before the jugement and that of the *Topica*, before the *Analytica*, just opposite to Aristotle, according to whom the *Topica* remains a particular case of the *Analytica*[2]. Next, this shift implicates the use of natural language as speech against the "scolastical barbarity" as in the ciceronian movement, then in the scientific "critique" (Voir Jean Jehasse, 2002).

La Ramée stresses this integration under the influence of Plato, wellknown in the humanism, and himself a convinced Platonist (Voir Pierre La Ramée, 1996, p. 8), as a main conjunction. That fact is so important because it means a main philosophical turning point, then Platon opens the world of ideas and gives access to the first principles. So he links the infinite, the *apeiron*, with the finite, the one with the multiple. And yet, their inferential links can be taken into consideration in two ways: the induction and the deduction. It's just what La Ramée works out in his method, that of "prudence" (precaution) and that of "nature". proceeding both from the more known to the less one. His aim was to come out of the Aristotle's confusion, who had distributed the theory of reasoning in three different theories, the *Topica*, the *Analytica* and the *Sophistical Refutations*. Pierre de la Ramée unifies them in a unique method, simplified and universal, including all kind of argumentation, probable and subjectiv as well as true and demonstrated.

As platonist, Ramus refers to the allegory of the cave (*Republique* VII) and asserts that man has confused pre-notions, but can, by induction, reach to the principles of reason. Thus, the arts and disciplines are invented by induction from singular things, coming up to the general ideas, the universal; then, by the contrary way, coming down from the one to the multiple through degrees from genre to particular and to singular. As the light of the method is natural for La Ramée, it is enough to follow the order of the parts "without invention, then all is founded and each enunciation" is proved by the way of distribution and collocation (in *Aristotelicae Animadversiones*), a way opposite to Galien and to Aristotles (Voir Pierre La Ramée, 1996, p. 8)). In this "golden chain", it is sufficient to place the precepts according tob the definition and the divisions, consistent in their degree of generality (Voir Pierre La Ramée, 1996, pp. 374, 561). The "disposition" is the key notion of the system. The formal order of notions matters more than the existential moment, then truth is given *a priori*, from the beginning of the system.

So logics combines once more rhetorics with dialectics because of its principle of disposition — therefore it is the second methodical join signature. The disposition has also validity at once for the "method of nature" and for the "method of prudence", than the rules of thinking are valid as well for the "good sense" as for the reason and the sciences. This point was very polemical for true Aristotelians and for some doctors[3].

At least, La Ramée makes another conjunction, very important for his meaning as "pontoneer" between the

---

[2] Wilhelm Risse (1964) explains how the *Topica* came before the jugment, in *Die Logik der Neuzeit*, in *Geschichte der Logik*, Stuttgart, Bad Cannstatt, Frierich Fromman Verlag, vol. 1.
[3] With Jacques Charpentier, Jakob Schegk and Bartholomée Viotti because of the unified method, *ibid*., p. 519. See the discussion, below.

Middle Ages and the Renaissance: it is about the aristotelian syllogistics with the deductive method (the method of nature). It is evident that he didn't want to integrate what he called the "monsters, dragons and hydras" (Voir Pierre La Ramée, 1996, p. 361), disseminated in the *Organon* without transforming them into a fruitfull, productive knowledge. So he distributed the syllogism in two kinds, the "simple" ones and the "composed" ones.

In general lignes, the *simple* syllogisms includes six ways, according to the quantifiers (the general, the particular and the singular) and to the negation. The composed syllogisms contain the conjunction, the disjunction, the relative enonciation at the conditional for the necessary and probable arguments. Their ways are plural, consistent with the arguments, with the quantifiers and with the negation. The conditional syllogisms include only four ways and the disjunctive ones, only two. All of them aim to assert the truth at once in a necessary and demonstrated manner and in a contingent ones, modelized as a problem of opinions.

In this way, La Ramée builds a construction of proved informations from which dichotomies are deduced, according to their degree of generality. This procedure leads to pyramides of notions in diagrams (Voir Pierre La Ramée, 1996, p. 587). They are intended for making easy their comprehension, consistent with the order of knowledge.

3.3 Third Stage: The Universal "Mathesis" (Dialectique from 1566 to 1572)

As unique way, his method can be extended to all knowledge, in a universal manner, although it tells the disciplines through their differences into corpus of notions. In this way, La Ramée proceeds by expanding his method from the first conjunction of philosophy and eloquence to all the other faculties and disciplines: rights, medecine, theology. However, this method, as it was overthrowing the university's *Decrets*, the king François Ist forbade him to teach as well as to publish in 1544. Nevertheless he continued with his methodical expansion to mathematics. After the death of the king en 1547, Henri II gave him his pardon and he could become the protection of the court. Then, he expanded his method to all new disciplines, following the progress of sciences (optics, acoustics, astronomy and physics), mecanics, technics and arts (Voir Pierre La Ramée, 1996, p. 588).

4. Discussion

The advantages of his method consist in a simple axiomatic way, combined with mathematics and joined to an heuristical, empirical opening towards all the new research fields towards logical coherence. Hence, La Ramée gave the main contribution to the scientific movement of the Renaissance, but not without resistance since the beginning against Gouveia and Jacques Charpentier and later, during the religious wars, in the years 1560–1564 with opponents coming not inside the University of Paris, but from other environments and faculties, as the medicine one, who were more aristotelians and followers of Galen: Bartholomée Viotti, professor at the faculty of Medicine in Turin, Jakob Schegk, professor of logics and medicine at the University of Tübingen and Jacques Charpentier, medico-philosopher at the Collège de Bourgogne — who won the chair of mathematics at the Collège royal in 1567; at least, in England, at Oxford, by Everard Digby against the brilliant ramist follower, William Temple from Cambridge. The main objections concern the unification of the "methodus inveniendi" with the "methodus dicendi", the collecting of knowledge and the dimonstrative procedures (Cesare Vasoli, 1996, pp. 512–602).

And yet, the history intervened: La Ramee, as many of the "novatores", had protestant sympathies, just before the religious wars, what will be fatal for him. He lost at once the protection of the court, his positions in the Collège royal and in the collège de Presles. Dismissed, he travelled in Europe and came back to Paris to be

assassinated in the St-Barthélémy, in 1572. However, the Ramism became an european phenomenon. His universal method spread out mostly through the protestant academies, as the wellknown one in Herborn (Daniel Larangé, 2017, pp. 202–228). H. Gutberleth, for example, published expositions of his method in his Discursus logicus, ad methodicam Rameae dialecticae […], (1614), in […] De doctrina syllogistica, (Herbornae, Corvinus, 1609) as well as in Synopsis Aristotelico-Rameae logices, in 1614[4]. At least, the Ramism leads to monumental encyclopedic fulfillments — still in latin — as Johann Heinrich Alsted's Encyclopædia in 7 vol. (1630), his Scientiarum omnium encyclopaediae (1649), his Panacea philosophica (1610) or his Logicae systema harmonicum (1614). He systematized also two domains: theology and music; the first in his [...] Encyclopaedia biblica [...] in 1625 and in his Theologia prophetica (1622) (e.a.)[5]; the second, in his Elementale musicum, in 1611 and his Templum musicum, a musical synopsis in 1664[6]. Other wellknown Ramists systematized other domains, as politics: Johannes Althusius, Politica, methodice digesta et exemplis sacris et profanis illustrata [...], (1603)[7] or in physics and ethics, as Heinrich Gutberleth, in Physicae (1613) and Ethicae liber unus, (1630)[8]. Also Bartholomaeus Keckermann insists on the universality of the method in his Systema systematum (1613)[9]. This general evolution leads to a new pansophisme, represented by Jan Amos Comenius, for example in De irenico irenicorum, (1660)[10].

---

[4] Gutberleth Heinrich (1614), *Discursus logicus, ad methodicam Rameae dialecticae praeceptorum tractatio adornatus, et maximam partem ad paedagogicam institutionum in Schola Herbornensi accomodatus*, Herbornae Nassoviorum, Corvinus. *Disputatio logica de doctrina syllogistica*, Herbornae, Corvinus, 1609. *Synopsis Aristotelico-Rameae logices, per praecepta methodica, Canones selectos, Commentarios breves*, Herbonae Nassoviorum, Corvinus. *Discursus logicus, ad methodicam Rameae dialecticae praeceptorum tractationem adornatus, et maximam partem ad paedagogicam institutionum in Schola Herbornensi accomodatus*, Herbornae Nassoviorum, Corvinus.

[5] Alsted Johann Heinrich (1630), *Encyclopædia septem tomis distincta... Præceptorum, regularum & Commentariorum perpetua. Insertis passim tabulis, compendiis, lemmatibus, marginalibus, lexicis, controversiis, figuris, florilegiis, locis communibus & indicibus; ita quidem ut hoc volumen, fecunda cura limatum & actum, possit esse instar bibliotheca instructissima*, Herbornæ Nassoviorum, Corvinus.

[6] Id., 1) Theology: id., (1622) *Theologia Casuum, Exhibens Anatomen Conscientiae et Scholam tentationum, In Quibus universiae quaestiones ad conscientiam recte aut praue factorum pertinentes breuiter & dilucide tractantur*, Hanovae. *Theologia prophetica: exhibens I Rhetoricam ecclesiasticam, in qua proponitur ars concionandi, & Illustrator promptuario concionum locupletissimo, II. Politiam ecclesiasticam: accedit Theologia acroamatica*, Hanoviae, C. Eifridi, (1625). *Triumphus bibliorum sacrorum seu Encyclopaedia biblica exhibens*, Francofurti, apud Bartholomaeum Schmidt. (1630). *Diatribe de mille annis apocalypticis, non illis Chiliastarum et Phantastarum, sed beatorum Danielis et Johannis*, Francofurti. 2) Music: (1611) *Elementale musicum*, Fancofurti, J. Bringer; (1664)*, Templum musicum, or The musical synopsis of the learned and famous Johannes-Henricus-Alstedius: being a compendium of the rudiments both of the mathematical and practical part of musick, of which subject not any book is extant in our English tongue*, ed. John Birchensha, London, by Will. Godbid for Peter Ding.

[7] Althusius Johannes (1603), *Politica, methodice digesta et exemplis sacris et profanis illustrata: cui in fine adjuncta est oratio panegyrica de utilitate, necessitate et antiquitate scholarum*, Herbornae Nassoviorum, Corvinus.

[8] Gutberleth Heinrich (1630), *Ethicae liber unus, succincta methodo conscriptus, sententiis elegantioribus et historiis breviter illustratus*, Herbornae Nassoviorum, Corvinus. (1613) *Physicae, hoc est naturalis philosophiae compendiosa institutio : accurata methodo conscripta, 3 libris distincta & brevibus iisq[ue] perspicuis scholiis illustrata*, Herbornae Nassoviorum, Ex officina Christophori Corvini.

[9] Keckermann, Bartholomäus (1613), *Systema systematum clarissimi viri Bartholomaei Keckermanni, omnis huius autoris scripta philosophica uno volumine comprehensa lectori exhibens : idque duobus tomis : Cum indici triplici, librorum, capitum, rerum et verborum*, Hanoviae, Antonius.

[10] Comenius I. A. (1660), *De irenico irenicorum ; hoc est: Conditionibus pacis a Socini secta reliquo Christiano orbi oblatis, ad omnes Christianos facta admonitio*, Amsterodami, Apud Henricum Betkium. (1661) *De iterato Sociniano Irenico iterata ad christianos Admonitio. Sive Pseudo-Irenici, veri autem christomastigis, Danielis Zwickeri, superbus de Christo aeternitatis throno dejecto triumphus, virtute Dei dissipatus et dissipandus*, Amstelredami. (1667) *Angelus pacis ad legatos pacis Anglos & Belgas Bredam missus: Indeque ad omnes Christianos per Europam, et mox ad omnes populos per orbem totum mittendus: Ut se sistant, belligerare desistant, pacisque principi, Christo, pacem gentibus jam loquuturo, locum faciant*, Amsterdam, Christoffel Cunradus. (1966) *De rerum humanarum emendatione consultio catholica*, Pragae, Academia.

5. Conclusion

Ramus' *Dialectique* as "work in progress" from rhetorics to logics and to universal *mathesis* lets see the hudge changes in the "style of scientifical reasoning" from the XVth to the XVIIth century. At least, his influence is determinant for all the scientifical development afterwards; in this sense, he is surely the direct predecessor of Descartes for the mathematization of knowledge and is also very near to Pascal's "esprit de géométrie" and "esprit de finesse" with his two kinds of method. Even so he put aside rhetorics, he maintained the natural speech in this kind of "natural logic", built under the continuous pressure of the century, as a main contribution to the "rationalist" philosophy of the post-Renaissance[11].

Reference

James Trafford (2015). "Abstract duality and co-constructive logic", at *UniLog*, in: *Handbook of the 5th Congress on Universal Logic*, Istanbul, 20-30 June, 2015, p. 151.

Cambridge History of Renaissance Philosophy (1988), Cambridge, Cambridge UP, chapter "Traditional Logic", pp. 43–172.

Francis Jacques (1985). *L'espace logique de l'interlocution*, Dialogiques II, Paris, PUF.

Cesare Vasoli (1968). "La dialettica e la retorica dell'umanesimo", in: *"Invenzione" e "Metodo" nella cultura del XV e XVI secolo*, Milan, Feltrinelli. This excellent study gives all the general as well as specific informations, especially in the very detailed study about the development of Peter Ramus in "Parte quinta, 'Intorno a Pietro Ramo e alle dispute logiche del maturo cinquecento" in three chapter, pp. 333–601.

Aristotle (1976). *Topica*, E. S. Forster (Ed.), *Hugh Tredennick*, London, W. Heinemann, Cambridge Mass., Harvard UP, Vol. 2, Coll. Loeb Classical Library, p. 391.

Rudolf Agricola (1529). *De Inventione dialectica*, cum scholiis M. Phrissenii, Paris, S. Coline, li. I.

Ruxandra Vulcan (1997). *Savoir et rhétorique dans les dialogues français entre 1515 et 1550*, Hambourg, Lit-Verlag, "ars rhetorica 7", pp. 7, 13, 29, 196, 233, 235.

Wilhelm Risse (1964). "Explains how the *Topica* came before the jugment", in: *Die Logik der Neuzeit*, *Geschichte der Logik*, Stuttgart, Bad Cannstatt, Frierich Fromman Verlag, Vol. 1.

Voir Jean Jehasse (2002). *La renaissance de la critique: l'essor de l'humanisme érudit de 1560–1614*, Paris, Champion.

Voir Pierre La Ramée (1996). *Dialectique 1555*, Nelly Bruyère (Ed.), Paris, Vrin, p. 8.

Daniel Larangé (2017). "L'école supérieure de Herborn. Fédéralisme, encyclopédisme, millénarisme", in: *La naissance des académies protestantes (Lausanne 1537, Strasbourg 1538 – Genève 1559) et la diffusion du modèle*, dir. Monique Venuat and R. Vulcan, Clermont-Ferrand, PUBP, pp. 202–228.

---

[11] As Frederick Copleston (1972) used this expression, he did not refer precisely to Ramus, absent from his *History of Philosophy, Ockham to Suarez*, London, Search Press, Mahwah, New York: Paulist Press, vol. 3.