

Johannes Jessenius and (or) Daniel Sennert on Sympathy*

TOMÁŠ NEJESCHLEBA

*Centre for Renaissance Texts, Department of Philosophy,
Faculty of Arts, Palacky University Olomouc, Czech Republic*

UDK 1 Jessenius, J.
1 Sennert, D.
113/119

Preliminary communication
Received: 18. 10. 2015.
Accepted: 25. 11. 2015.

Summary

Johannes Jessenius published the treatise on Causes of Sympathy and Antipathy in 1599 which was defended by his student and disciple Daniel Sennert. This disquisition provides interesting material with respect to the concept of natural philosophy and its development in both Jessenius and Sennert. Although Jessenius proclaims that he deals with the question of sympathy and antipathy generally in the Aristotelian manner, he simultaneously indicates the inspiration and main source of his disquisition, these having been lectures held by the Paracelsian Tycho de Brahe. Jessenius, with the help of a distinction between occult and manifest qualities, connected in his disquisition the principles of Aristotelian naturalism with the Paracelsian notion of correspondences between the higher and lower world. Sennert in his later works finds the theory of sympathy, based on analogies or on the doctrine of occult qualities, incompatible with Aristotelian scientific methodology and thereby implicitly demonstrates the inconsistencies in Jessenius's disquisition.

Key words: Renaissance philosophy, Renaissance natural philosophy, sympathy and antipathy, occult qualities, Johannes Jessenius, Daniel Sennert

When Daniel Sennert became Professor of Anatomy in Wittenberg in the year 1602, it came about on the basis of the recommendation of his predecessor Johannes Jessenius, who wrote a letter to the Saxon Duke Christian in which he praised the erudition and modesty of his assiduous student.¹ Jessenius, ac-

* This article is a result of research funded by the Czech Science Foundation as the project GA ČR 14-37038G "Between the Renaissance and the Baroque: Philosophy and Knowledge in the Czech Lands within the Wider European Context."

¹ Danielis Sennerti *Operum in quinque tomos divisorum*, tomus primus (Lugduni: Iohannis Antonii Huguetan et Marci Antonii Ravaud, 1666), "Iudicia Virorum Clarissimorum," f. A6v:



ording to his own words, recommended his compatriot Sennert (both Jessenius and Sennert were natives of Wroclaw) whom he knew over the entire course of his studies and who was the best for the position out of the hundreds of candidates. Daniel Sennert also expressed admiration for his professor. He was the author of certain verses introducing two publications of his teacher from the year 1601. The verses commend Jessenius for his merit in learned medicine in Germany, specifically that he revitalised surgery and introduced the Paduan Aristotelian method of diagnosis² into medical discussions. Both of these books were published before Sennert obtained his doctoral degree in medicine and acquired the post at the university in Wittenberg. Naturally, the question arises as to whether Jessenius actually influenced his later more famous student and what sense and what depth the influence consisted of.

I have no evidence as to whether these two thinkers were actually in touch during the time after Sennert had completed his studies. There is no preserved correspondence, if there was any at all. Sennert does not even mention or quote Jessenius in his own works. One can find the only reference to the name Jessenius in “Judicia virorum clarissimorum,” in which an unknown editor prefaced Sennert’s *Opera omnia* and which begins with Jessenius’s recommendation of Sennert mentioned above.³ Nevertheless, a comparison of the works of these two thinkers is not merely research consisting of an analysis of separate and unrelated texts. In fact there are certain other documents connecting them, i.e. certain disputations written (or at least published) by Jessenius, but defended in the course of the university curriculum by Sennert. In September 1596, Daniel Sennert under the chairmanship of Jessenius may have defended a medical

“Ne aliis in Academia Wittebergensi antecessoribus quicquam concessisse videar, qui abiturii successores suos nominare feliciter solebant. Vestrae ego Celsit.[atis] Illustr.[issimae] virum doctum, modestum, et toto hoc tempore auditorem, et spectatorem meum assiduum, in Academia nostrate promotum, appello, Doctorem Danielem Sennertum, qui e centum aliis cum laude et utilitate (quod Deum testor) meam functionem, quae non cuiusvis est, obire posset.

Dresdae 16. Junii 1602. D. Iohan.[nes] Jessenius, D.[octor] M.[edicinae] necnon Medicinae in Academia Witteberg Profess.[or] Emeritus.”

² Sennert’s verses are to be found in Jessenius’s edition of the method of diagnosis of diseases written by Emilius Campolongus based on the doctrine of Hieronymus Capivaccius, both teachers at Padua University: *ΣΗΜΕΙΩΤΙΚΗ, Seu, Nova Cognoscendi Morbos Methodus*, ad Analyseos Capivaccianae normam ab Aemylio Campolongo, Professore Patavino expressa: Nunc Primum vero, per Johannem Jessenium a Jessen, recta discentium et medentium usui, publicata (Witebergae: Typis Laurentii Sauberlichii, 1601), pp. 10–11; and in Jessenius’s famous medical treatise *Institutiones Chirurgicae*, quibus universa manu medenti ratio ostenditur. (Witebergae: Excudebat Laurentius Seuberlich, Impensis Samuelis Selfisch, 1601), ff. A6r–A7v.

³ Cf. note 1.

disputation on the preservation and cure of diseases caused by noxious air.⁴ He consequently defended his disquisition on the causes of sympathy and antipathy in natural things in June 1599.⁵

As is well known, the extent of the participation of students on texts they had to defend would vary. In the majority of the cases the author of the disputation (or dissertation, which was a kind of university disputation, for instance the so-called “inaugural dissertation”) was in all probability the professor who presided over the defence, while the student defending the thesis might for example seek out citations from authorities and sometimes might even write certain parts of the text.⁶ Nevertheless, one cannot usually determine what it actually consisted of and this is also the case with the texts which will be considered here. It is apparent, however, that an analysis of these texts written by a teacher and a comparison with the ideas of a student expressed in his own works could indicate how and in what sense the teacher formed the thinking of the student.

The disquisition on the causes of sympathy and antipathy written by Jessenius and defended by Sennert is more important for our investigation than the

⁴ *De morbi, quem aer tota substantia noxius peragit, praeservatione et curatione*. Disputatio IV. quam peculiari collegio Praeside Johanne Jessenio a Jessen, Doctore et Professore ad Cal. [endas] Septembris adornat Daniel Sennert, Vratislaviensis Sil. (Witebergae: Excudebat Johannes Dörfer, typis Cratonianis, 1596).

The dating of this print does not fit with the generally accepted chronology of Sennert's life, wherein he only began to study medicine in the year 1598. For the chronology see Wolfgang U. Eckart, *Grundlagen des medizinisch-wissenschaftlichen Erkennens bei Daniel Sennert (1572–1637) untersucht an seiner Schrift De Chymicorum... liber Wittenberg 1629*, unpublished Dissertation (Münster, 1978), p. 13.

According to Ch. Lüthy, Sennert was inscribed at the University in Wittenberg in 1593. See Christoph Lüthy and William R. Newman, “Daniel Sennert's Earliest Writings (1599 – 1600) and their Debt to Giordano Bruno,” *Bruniana et campanelliana* 6 (2000), pp. 261–279. Lüthy and Newman did not read Sennert's first text directly, but knew it from the description in Friedel Pick, *Johannes Jessenius de Magna Jessen. Arzt und Rektor in Wittenberg und Prag hingerichtet am 21. Juni 1621*. (Leipzig: Barth, 1926), p. 37. Pick actually only mentions this dissertation, the description of it is missing.

⁵ Iohan. [nis] Essenii a Jessen *De sympathiae et antipathiae rerum naturalium caussis* disquisitio singularis. Quam in publico pro virili ad Cal.[endas] Iunii defendere conabitur M. Daniel Sennertus Vratislaviensis (Witebergae: Imprimebatur Typis Meissnerianis, 1599). As noted by Lüthy and Newman, it was not a dissertation, but an exercise defended on a particular occasion, see Lüthy and Newman, “Daniel Sennert's Earliest Writings,” p. 264.

⁶ Werner Allweiss, “Von der Disputationen zur Dissertationen. Das Promotionswesen in Deutschland vom Mittelalter bis zum 19. Jahrhundert,” in Rudolf Jung und Paul Kaegbein (Hrsg.), *Dissertationen in Wissenschaft und Bibliotheken* (München: Saur, 1979), pp. 21–23. Cf. Siegfried Wollgast, “Zur Geschichte des Promotionswesens in Deutschland im Mittelalter und in der frühen Neuzeit,” *Sitzungsberichte der Leibniz-Sozietät* 32/5 (1999), pp. 5–41.

medical one. Jessenius is not viewed as an original thinker in connection with the history of medicine. His merit lies first and foremost in having introduced the tradition of Paduan learned medicine into the German medical context rather than in the development of certain specific ideas. Thus, Jessenius in the majority of his philosophical works follows the Aristotelian philosophy, with certain Platonic elements derived from the works of his teacher Francesco Piccolomini. A number of his philosophical treatises, however, surprisingly reject the peripatetic way of thinking, in particular his abridged transcript of Petrić's monumental work *Nova de universis philosophia*.⁷ Similarly, although Sennert evaluated the therapeutic of Paracelsian medicine, he remained loyal to the Aristotelian methodology based on experience, reasoning and valid proofs and rejected the theoretical principles of "chymics" as unscientific as they mixed the profane and divine and invoked an invisible realm.⁸

Sennert, in contrast, also adopted certain concepts of Petrić's philosophy⁹ in his natural philosophy, more precisely connected with elements, space and light. His most important contribution consists, however, of a specific transformation of the principles of peripatetic philosophy.¹⁰ Sennert's references to the anti-Aristotelian thinker Petrić in the realm of his Aristotelian philosophy can be ascribed to his eclecticism,¹¹ or can be placed into the context of seeking for a philosophy of concord, which can be found in his teacher Jessenius.¹²

Thus the disquisition on sympathy and antipathy provides interesting material with respect to the concept of natural philosophy and its development in both Jessenius and Sennert. This theme ranks amongst the natural philosophical

⁷ Cf. Tomáš Nejeschleba, "Johannes Jessenius Between Plagiarism and an Adequate Understanding of Patrizi's Philosophy," in Paul Richard Blum and Tomáš Nejeschleba (eds), *Francesco Patrizi. Philosopher of the Renaissance* (Olomouc: Univerzita Palackého v Olomouci, 2014), pp. 360–371.

⁸ Cf. Brian Vickers, "Analogy Versus Identity: the Rejection of Occult Symbolism, 1580–1680," in Brian Vickers (ed.), *Occult and Scientific Mentalities in the Renaissance* (Cambridge: Cambridge University Press, 1984), pp. 137–138.

⁹ Giancarlo Zanier, "Petrićeva prisutnost u prirodnoj filozofii Daniela Sennerta," *Prilozi za istraživanje hrvatske filozofske baštine* 28 (2002), pp. 15–27; Giancarlo Zanier, "La presenza di Patrizi nella filosofia naturale di Daniel Sennert," *Bruniana e Campanelliana* 10/2 (2004), pp. 347–359. Cf. Lüthy and Newman, "Daniel Sennert's Earliest Writings," p. 269.

¹⁰ Cf. Emily Michel, "Daniel Sennert on Matter and Form: at the Juncture of the Old and the New," *Early Science and Medicine* 2 (1997), pp. 272–299. The significance of Sennert in the history of ideas was recently emphasised by Hiro Hirai, *Medical Humanism and Natural Philosophy. Renaissance Debates on Matter, Life and the Soul* (Leiden: Brill, 2011), in the chapter "Daniel Sennert on Living Atoms, Hylomorphism and Spontaneous Generation," pp. 151–172.

¹¹ Zanier, "La presenza di Patrizi," p. 359.

¹² Nejeschleba, "Johannes Jessenius," p. 367.

problem areas as a point in which Renaissance thinkers would proclaim their philosophical inclinations. In other words, this topic concerns phenomena, which were explained entirely differently in the Aristotelian tradition as opposed to the Neoplatonic or Paracelsian. In the first part of the paper I will analyse in brief Jessenius's disquisition on sympathy and antipathy, its sources and results. In the second part I will compare it with passages from Sennert's own works concerned with the same topic.

Jessenius's disquisition on sympathy and antipathy

At the beginning of his disquisition, Jessenius proclaims that he will deal with the question of sympathy and antipathy generally in the Aristotelian manner with, however, an interest in pointing out its weaknesses as well. He firstly mentions the ancient ways of inquiry into the principles of sympathy and antipathy in nature, ridiculing sceptics and actually all classical concepts. Jessenius consequently refers to a number of modern thinkers, concretely to Jean Fernel, Girolamo Fracastoro, Julius Scaliger, Nicolaus Biesius and Andreas Caesalpinus, most of them being authors influenced by Paduan Aristotelianism. Jessenius does not actually criticise these thinkers at all, although he does proclaim his own distance from them. He does not voice any arguments against their concepts, but instead, in the case of Fracastoro for example, only maintains that he followed good ideas but misinterpreted them. Jessenius, however, does not state in what sense Fracastoro's approach is insufficient. Jessenius concedes that he does not know any other authors dealing with this problem area. He is obviously not aware of the works of his Wittenberg predecessors, namely Philipp Melanchthon and Caspar Peucer. The tradition of discussing the topic of sympathy and antipathy at the university in Wittenberg had been established earlier by these reformers,¹³ but there is an apparent discontinuity between Wittenberg University in the third quarter of the 16th century and the University at the end of the century due to the attacks of Wittenberg Lutheran

¹³ Philipp Melanchthon, *Oratio de consideranda Sympathia et Antipathia in rerum natura, recitata a Jacobo Milichio, cum decerneretur gradus Doctori (Medic.) Vito Ortel Winshemio, in Corpus reformatorum* 11 (1843), pp. 924–931; Philipp Melanchthon, *Oratio de medicinae usu, item rerum sympathia et antipathia; recitata a D. Iohanne Hermanno*, in: *Corpus reformatorum* 12 (1844), pp. 221–225; *Oratio de sympathia et antipathia rerum in natura recitata a viro clarissimo doctore Casparo Peucero...* (Witebergae, 1574). Cf. Wolf-Dieter Müller-Jahncke, *Astrologisch-magische Theorie und Praxis in der Heilkunde der frühen Neuzeit* (Stuttgart: Steiner, 1985), pp. 242–243. Cf. Tomáš Nejeschleba, "The Theory of Sympathy and Antipathy in Wittenberg in the 16th Century," in György Endre Szönyi (ed.), *Centers and Peripheries in European Renaissance Culture* (Szeged: JATEPress, 2012), pp. 135–144.

orthodoxy against Melanchthonian crypto Calvinism.¹⁴ This discontinuity also persists in the work of Daniel Sennert who only quotes the authors mentioned in Jessenius's disquisition (excluding certain Paracelsians against whom the works of Sennert are directed) as shall be seen later.

Jessenius's own approach indeed has a peripatetic character. The principles of sympathy and antipathy can only be found in one of ten Aristotelian categories from which the category of quality finally remains the only one proper candidate. The similarities and dissimilarities of qualities of in reality separated subjects are considered as causes of sympathy and antipathy, as all natural things are similar or dissimilar on the basis of their qualities.¹⁵ This approach is derived from the naturalistic interpretation of the theory of sympathy constructed by Girolamo Fracastoro. Jessenius, however, does not go as far as Fracastoro and does not assert that there must be contact between the forms of all things so as to provide a transmission of subtle particles of qualities which are called *simulacra*. In order to consider his attitude properly one must first answer the question as to what Jessenius means by the term 'quality.'

Medieval Peripatetic oriented literature had distinguished between the qualities of the elements, in other words, hot, cold, moist and dry, which are the qualities tangible with the senses and thus manifest, and the qualities which play a role merely by the investigation of phenomena, these causes being the occult qualities, irreducible to manifest qualities. Classical sources already stated that, for instance the effects of poisons or astral influences, could be accounted for by the virtues of sympathy and antipathy. The effects of occult qualities are consequently the subject of experience, although these qualities as their causes are not, for they are hidden, in contrast to manifest qualities. Within the framework of the Peripatetic tradition, the occult qualities are not only unrecognizable through the senses, but they are also unachievable as causes, although only indirectly through their effects. Genuine science, however, according to Aristotelians, deals with causes. Occult qualities consequently lay beyond the realm of science.¹⁶

¹⁴ See Heinz Kathe, *Die Wittenberger Philosophische Fakultät 1502–1817* (Köln: Böhlau Verlag, 2002), pp. 135–136.

¹⁵ Jessenius, *De sympathiae et antipathiae*, f. A4v: "Ergo restabit sola qualitas genus proximum sympathiae et antipathiae constituendum, quod sane genus tam occultas, quam manifestas specie differentes qualitates complectitur, quarum aliae similes, aliae diversae, quaedam omnino contrariae."

¹⁶ See Paul Richard Blum, "Qualitates occultae: Zur philosophischen Vorgeschichte eines Schlüsselbegriffs zwischen Okkultismus und Wissenschaft," in August Buck (Hrsg.), *Die okkulte Wissenschaften in der Renaissance* (Wiesbaden: publisher, 1992), p. 45; cf. Wouter J. Hanegraaff, "The Notion of 'Occult Sciences' in the Wake of the Enlightenment," in Monika Neugebauer-

Despite the fact that Jessenius distinguishes between these two sorts of qualities and even indicates that the influence of occult qualities is more important, he did not finally employ this distinction in his own explication. Certainly, not all cases of sympathy and antipathy in nature are to be attributed to the concord or discord of elementary qualities, but many of them have their origin in astral influences and a number of them are also generated by a mixture of the elements.¹⁷ Jessenius does not assign, however, the astral influences to the activity of the celestial soul as was the case with his Wittenberg predecessor Caspar Peucer, who was influenced by Marsilio Ficino. The similarities and dissimilarities of mixtures (temperament – sanguine, choleric, phlegmatic and melancholic) depended on similarities in the qualities of the humours. The similarities between the heavenly bodies that produce mutual sympathetic or antipathetic relationships and the relationships between these bodies with the lower spheres are once again based on the qualities of hot and cold, wet and dry.¹⁸ Jessenius is not apparently consistent in this point when he initially draws a distinction between the occult and manifest and simultaneously actually reduced occult qualities to the manifest.

It is apparent that Jessenius' text reveals the pitfalls of the doctrine on sympathy and antipathy. There are two possibilities: either to adopt the Aristotelian model of reducing sympathy and antipathy to the relationship of a similarity and dissimilarity between primary, or perceivable qualities or to turn attention to the occult explanation which involved postulating something which could not be perceived through the senses. As such, the choice was between dismissing the topic of discussion as part of Aristotelian science (if the author wished to remain an Aristotelian thinker) or rejecting the Aristotelian concept of science as it existed. Jessenius somehow straddled both camps. He intended to remain

Wölk, Renko Geffarth und Markus Meumann (Hrsg.), *Aufklärung und Esoterik: Wege in die Moderne* (Berlin / Boston: Walter de Gruyter, 2013), p. 78.

¹⁷ Jessenius, *De sympathiae et antipathiae*, f. B3r: “Quia autem praeter qualitates sensibiles virtutes caeli elementis insunt, multae rerum naturalium amicitiae et inimicitiae non tamen a qualitatibus elementorum, quam ex corporum caelestium influxu ortum habiturae. <...> Sunt tamen et aliae sympathiae et antipathiae compositorum causae, elementorum nempe innisto existentes virtutes: <...>.”

¹⁸ Jessenius, *De sympathiae et antipathiae*, ff. B1r–B2r: “Quae enim elementis insunt qualitates, coelo quoque inesse deprehenduntur, quamquam nota nobiliori <...> Caliditas, namque frigiditas, humiditas, siccitas, quandoquidem formaliter elementis insunt, vicissitudini obnoxiae, qualitatesque corruptrices a Peripateticis dictae, quae quoniam virtualiter duntaxat coelestibus inhaerent, perfectivae nuncupatae. Ergo cum eadem, quae in superioribus, etiam in postremis his, et vice versa, existunt: ex horum congruentia sympathiam, ex dissonantia antipathiam Universi provenire necesse est.”

an Aristotelian, while simultaneously addressing phenomena outside the realm of Aristotelianism. This created an inner conflict: he needed to distinguish between apparent and hidden qualities, although the occult ones were finally seen as apparent.¹⁹

The aim of Jessenius' treatise was to justify and provide theoretical foundations for astrology. This is why he focused on the qualities which originated from astral bodies although it seems that astrological medicine was not an area he was focused on. He was also not interested in developing astrological medicine from the theological point of view which was characteristic for the previous generation of Wittenberg thinkers. At the end of the text he indicates the inspiration and the main source of his disquisition, these having been lectures held by Tycho de Brahe during his stay in Wittenberg in 1599. The subject of these lectures is not exactly known but at least part of it, as Jessenius's disquisition indicates, was the topic of astrological influences and more generally correspondences between the higher and lower world.²⁰ When Jessenius speaks about the sublunary world bounded by the higher rules from which the substances of the lower world draw their power through their participation in the virtues of celestial bodies, this idea beyond all doubts stems from the Danish astronomer and astrologer.²¹

Tycho de Brahe lived in Wittenberg in Jessenius's house (the former *Leucorea* of Philipp Melanchthon) for a half year. Jessenius made friends with him and finally decided to follow him to Prague of Emperor Rudolf II. The intellectual orientation of both thinkers was completely different, however. Jessenius was educated in Paduan Aristotelianism under the terms of which astrology was either refuted or at least not specified. The natural philosophy of Tycho de Brahe, on the other hand, was highly influenced by a Paracelsian cosmology which empowered him to develop his notion of astrological causality and his research programme.²² Jessenius's earlier acquaintance with non-

¹⁹ I argue against William R. Newman, who states that Sennert in this work "invoke the occult qualities of the scholastics," see William R. Newman, "Elective Affinity before Geoffroy: Daniel Sennert's Atomistic Explanation of Vinous and Acetous Fermentation," in Gideon Manning (ed.), *Matter and Form in Early Modern Science and Philosophy* (Leiden / Boston: Brill, 2012), p. 109. In addition, the author of the text is not Sennert, but Jessenius.

²⁰ Jessenius, *De sympathiae et antipathiae*, f. B4r: "Interea haec, quae ex illustris viri Tychonis Brahei domestica semestris conversatione feliciter consecutus, tibi candide impertio, ingenue, lector, excipe, bonique consule."

²¹ Jessenius, *De sympathiae et antipathiae*, f. B2r: "Mundus vero hic inferior ideo continuus superioribus lationibus, ut inde principium motus, virtutemque omnem hauriat, sine cuius gubernatione superesse diu nequieret."

²² Cf. Jole Richard Shackelford, "Providence, Power, and Cosmic Causality in Early Modern Astronomy: The Case of Tycho Brahe and Petrus Severinus," in John Robert Christianson,

Aristotelian thought, namely with the philosophy of Frane Petrić, could have enabled him to find a common language with the Danish scholar. This is only speculation, however, concerning the motives behind his attitude. There is no textual evidence that Jessenius used Petrić's ideas in his later work. His thinking was also too unsystematic to treat the topic of sympathy more consistently as he connected the principles of Aristotelian naturalism with the Paracelsian notion of correspondences between the higher and lower world quite naively.

One can assume that Jessenius's student Daniel Sennert heard the lectures of Tycho de Brahe as well²³ but the question is, how great an impact Sennert had on Tycho with respect to the issue of occult qualities and sympathy and antipathy.

Sennert on sympathy and antipathy

In his early natural philosophical work, *Epitome naturalis scientiae* (1618),²⁴ Sennert deals only with manifest qualities, respectively with the qualities of elements²⁵ and the issue of occult qualities and sympathy and antipathy is left aside. Already, however, in the year 1619 in his renowned book *De chymicorum cum Aristotelicis et Galenicis consensu ac dissensu liber*²⁶ Sennert applies himself to the issue and it is apparent that he does it within the context of his critique of Paracelsism. The theme of sympathy emerges in the chapter discussing one of the fundamental principles of Paracelsism, that is the doctrine of analogy between the major and minor world. While Jessenius adopted this teaching in

Alena Hadravová, Petr Hadrava and Martin Šolc (eds), *Tycho Brahe and Prague: Crossroads of European Science* (Frankfurt a. M.: Verlag Harri Deutsch, 2002), pp. 46–69.

²³ Cf. Lüthy and Newman, "Daniel Sennert's Earliest Writings," pp. 267–268, where the possible influence of Tycho on Sennert is discussed, particularly considering the demonstrative argument.

²⁴ Daniel Sennert, *Epitome naturalis scientiae* (Witebergae: Impensis Gaspari Heiden Bibliopolii, ex officina typographica Nicolai Balii, 1618), the second edition comes from the year 1624 (Witebergae: Impensis Gaspari Heiden Bibliopolii, ex officina typographica Jobi Wilhelmi Fincelii, 1624). Unfortunately, I did not have an access to the earliest version of *Epitome*, which was a collection of 26 disputations defended in Wittenberg under Sennert's chairmanship between 1599 and 1600 and which Sennert later rewrote and published in 1618. See Lüthy and Newman, "Daniel Sennert's Earliest Writings," p. 267. The earliest edition, which was formerly located in Herzog August Library in Wolfenbüttel, is in private property and has been recently moved to Hundisburg Castle. I can currently only assume that Sennert's general convictions had not changed, see Lüthy and Newman, "Daniel Sennert's Earliest Writings," p. 267, although a detailed analysis of possible changes is still needed.

²⁵ Sennert, *Epitome naturalis scientiae*, liber III, 195ff. (De elementis).

²⁶ Daniel Sennert, *De chymicorum cum Aristotelicis et Galenicis consensu ac dissensu liber* (Wittebergae: Apud Zachariam Schurerum, 1619).

a non-problematic fashion, Sennert conscientiously analyses the conviction of “chymics” wherein there is a great deal of occult properties in man which have an admirable consent or dissent with the major world with the example of genus, species and also individuals. Although he does not deny that there is a conjunction between stars and individual bodies as astrologers assert, he does not want to speak about stars because they are too remote and their effects hidden.²⁷ According to Sennert, it is also very difficult to find the causes of the phenomenon of sympathy between sublunary bodies. Science being the knowledge of causes, as Aristotle asserts, means that one cannot speak about science in the case of chymics at all.²⁸ The doctrine of these Paracelsians is only based on conjecture concerning similarities and analogies and thus their methodology does not afford the fundamentals for genuine science. Sennert consequently finds the theory of sympathy based on analogies or on the doctrine of occult qualities incompatible with Aristotelian scientific methodology and thus implicitly demonstrates inconsistencies in Jessenius’s disquisition. It is characteristic that while Jessenius derives his notion of sympathy from Tycho de Brahe, his student Sennert turns against Petrus Severinus, a friend of Brahe, in his critique and rejects his doctrine on innate heat or the spirit.²⁹

Sennert appears from this point of view as a genuine Aristotelian and a student of the Paduan thinkers who he knew through the readings of their books and also through his teacher Jessenius (Jessenius studied in Padua; Sennert only obtained his education in Germany, mostly in Wittenberg). He cites Aristotelian thinkers in the already mentioned disquisition of Jessenius, first of all referring to Scaliger, and adding additional authors, amongst others, Jacoppo Zabarella and Jessenius’s teacher Francesco Piccolomini. Sennert does not accept the attempt of Jessenius to reconcile Peripatetic philosophy with the astrology of Tycho de Brahe which was coloured by Paracelsism. He approaches the problem more systematically than his teacher and his own critique of the theory of sympathy on Aristotelian grounds is developed further in the chapter of the book *De chymicorum... dealing with occult qualities*.³⁰

²⁷ D. Sennert, *De chymicorum*, VI, p. 134: “<...> multarum rerum cum partibus corporis nostri Sympathia et Antipathia testatur. Non jam dicam de stellis, quae a nobis remotiores, quarumque effectus occultiores sunt. Peculiares tamen de stellis cum privatis et peculiaribus corporis nostri partibus cognationem habere, quod Astrologi affirmant, non negaverim. Sublunaria notiora sunt.”

²⁸ D. Sennert, *De chymicorum*, p. 138: “Opinari et similia adducere, scientiam non parit; sed scire est rem per causam cognoscere. Et cum eos, qui apodictica argumenta se habere putant, et demonstrationibus nituntur uti, saepe falli contingat: quid accidet iis, qui comparationibus et symbolismis solum utuntur?”

²⁹ D. Sennert, *De chymicorum*, cap. VI, p. 135.

³⁰ D. Sennert, *De chymicorum*, cap. VIII, pp. 170–178.

Sennert elaborated the theory of occult qualities in his late book *Hypomnemata physica* published in 1636, one year before his death.³¹ The book contains the celebrated and later often repeated distinction between manifest and occult qualities as between sensible qualities and qualities which are irreducible or non deducible to these primary qualities.³² Sennert did not deny the existence of occult qualities, but he does resolutely reject theories finding their causes in the qualities of stars. This radical attitude opposes not only the Paracelsian doctrine, but also the notion expressed in Jessenius's disquisition which took note of astrology. Sennert asserts that the origin of these occult qualities consists only in the form of things. This solution is again an Aristotelian one: the subject of all qualities, both manifest and occult, is a form.³³ Sennert finally distinguishes between several types of classification of occult qualities, the phenomena of sympathy and antipathy represents one of these types in which these qualities manifest their effects.³⁴ These systematics are not important, however, for our present purposes. What is worth noticing is his general aim at presenting a theory of occult qualities on purely naturalistic grounds, excluding all types of occult reasoning. Whereas the occult qualities were mostly conceived as non-describable within the context of Peripatetic philosophy, Sennert attempts to attribute a meaning to them within the framework of this Aristotelian philosophical tradition.

Daniel Sennert follows and develops, from a certain point of view, inclinations presented in Jessenius's disquisition which he had to defend as a student. Similarly as his teacher, he explains the causes of sympathy and antipathy with a reference to the theory of qualities, thereby remaining loyal to the framework of Aristotelian philosophy which he wants to (or is compelled to) supplement with certain aspects foreign to Aristotelianism, particularly the concept of occult qualities in general. In this regard Sennert presents himself as a disciple of Jessenius. The final form of Sennert's solution is quite different than that of Jessenius. While he, on the one hand, denies Paracelsian and Neoplatonic

³¹ Daniel Sennert, *Hypomnemata physica* (Francofurti: Sumptibus Clementis Schleichii et consortium, typis Caspari Rotelii, 1636). See chap. IV of the first hypomnema entitled "De Rerum Naturalium Consensu et Dissensu," pp. 32–37, and the second hypomnema, "De occultis qualitatibus," containing four chapters, pp. 43–85.

³² Cfr. Keith Hutchison, "What Happened to Occult Qualities in the Scientific Revolution?" in Peter Dear (ed.), *The Scientific Enterprise in Early Modern Europe* (Chicago: University of Chicago Press, 1997), pp. 86–106, on p. 87.

³³ Wolfgang U. Eckart, "Antiparacelsismus, okkulte Qualitäten und medizinisch-wissenschaftliches Erkennen im Werk Daniel Sennerts (1572–1637)," in August Buck (Hrsg.), *Die okkulte Wissenschaften in der Renaissance* (Wiesbaden: Otto Harrassowitz, 1992), pp. 139–157, on p. 148.

³⁴ There is a twofold classification, based on the origin and according to the mode of the existence of the occult quality in the thing. Cfr. Eckart, "Antiparacelsismus," pp. 150–151.

views on the problem of sympathy, it is the discussion with Paracelsism which, on the other hand, provides him with a framework. With respect to this he consequently deals with occult qualities and attempts to formulate a topic from this theme which can have its place within the Aristotelian context as well. It is appropriate to remark that the influence of Paracelsism on Sennert was not only in a negative sense. Its positive impact, which led to the supplementing of the Aristotelian doctrine with elements of atomism, in all probability had no connection with the influence of Jessenius on Sennert.

Influence of Jessenius on Sennert?

One can thus come to the conclusion that the influence of Jessenius on Sennert was not only in terms of anatomy and surgery, but also in natural philosophy although only in an improper sense, meaning with respect to certain inherited philosophical orientations but not with respect to certain specific doctrines. One might also ask if Jessenius influenced Sennert regarding the reception of the philosophy of Frane Petrić. This cannot be ruled out and is also possible. There is no textual evidence that Sennert takes the elements of Petrić's philosophy, he did incorporate into his system, from Jessenius's excerpt from Petrić. The topic of sympathy and antipathy which connects Jessenius and Sennert considering natural philosophy does not reveal that it was treated on the basis of the philosophy of Frane Petrić.

Johannes Jessenius i (ili) Daniel Sennert o simpatiji

Sažetak

Godine 1599. objavio je Johannes Jessenius raspravu o uzrocima simpatije i antipatije, koju je branio njegov student i učenik Daniel Sennert. Ta rasprava priskrbljuje zanimljivu građu iz perspektive razvoja prirodnofilozofskih gledišta kako Jesseniusa tako i Sennerta. Premda Jessenius izriče da se pitanjem simpatije i antipatije bavi općenito na Aristotelov način, on istodobno upućuje na nadahnuće i glavni izvor svoga istraživanja: predavanja paracelsusovca Tycha de Brahea. S pomoću razlikovanja između skrivenih i očiglednih kakvoća, Jessenius je u svom istraživanju povezoao principe Aristotelova naturalizma s Paracelsusovim poimanjem korespondencije između višeg i nižeg svijeta. Sennert pak u svojim kasnijim djelima ustanovljuje da je teorija simpatije, koje se temelji na analogijama ili na nauku o tajnim kakvoćama, nespojiva s Aristotelovom znanstvenom metodologijom i pritom implicitno dokazuje da je Jesseniusovo istraživanje nekonzistentno.

Cljučne riječi: renesansna filozofija, renesansna prirodna filozofija, simpatija i antipatija, tajne kakvoće, Johannes Jessenius, Daniel Sennert