

Natural science in polemics between Jews and Christians (XII–XIV): preliminary notes

Introduction

For a long time the XII century was considered as a period of fundamental change in the methodology of Christian polemics and the time of birth of Jewish anti-Christian polemical tradition, in the form of treatises¹. The controversy left the narrow confines of polemical treatises, the issues raised in polemical treatises have been discussed in university debates and in the theological works. The reception of Arabic scientific tradition² and the application of the knowledge of Hebrew and Jewish religious philosophy was the main phenomena of cardinal methodological change of polemics. The addition of new layers of knowledge required the complete revision of the classical hierarchy of authorities. Our interest is confined generally to the role of scientific knowledge during this period. The main purpose of the dissertation research is to analyze various aspects of the application of scientific knowledge in the reasoning system both in the anti-Jewish and in anti-Christian polemics during the declared period. Focusing on published sources as well as on unpublished, I would like to reestablish the full evolution of the usage of scientific knowledge in the religious controversies of this type.

In the preliminary investigation, we can mention only the particular use of scientific knowledge in the literature *Contra Judaeos* (sc. anti-Jewish polemical and apologetic treatises). In the course of the work we will use the fragments of different kinds of sources. The quotations from them are intended to note future trends of research. This kind of sources often represents a fictitious dialogue between a Christian and a Jew, the Jewish interlocutor's arguments are often invented by the author or, in less number of cases, taken from the Jewish tradition he was familiar with. We are not working with a real dialogue, but only with its model, having a more or less wide range of potential recipients, we have to analyze at first mental schemes operated by the authors of such treatises. In our work we start from the premise that every point of view, which is not challenged by a Jew, can be the part of the Christian idea of their common world view with the Jews. The primary goal of the future research is to determine the legitimacy of scientific knowledge in a dispute with the Jews. By the term "scientific knowledge" we understand both contemporary to the authors scientific conceptions (especially, astronomy and astrology) and the elements of philosophy (especially, logics) and also the single cases of application of common sense (mainly for the early period). It should be noted that working with

¹ The researchers (Talmage, Berger) note its dependence (at least at its first stage) on Christian anti-jewish polemics. David Berger indicate the acquaintance of Jacob ben Reuben, author of one of the first polemic treatise (*Milhamot ha-Shem*, The Book of the Wars of Lord, end of XII c.) with one of the first treatise of new type, "*Disputatio Judei et Christiani*" by Gilbert Crispin. The detailed comparative analysis of the works by Gilbert, Jacob and Alan of Lille in David Berger, "Gilbert Crispin, Alan of Lille, and Jacob Ben Reuben: A Study in the Transmission of Medieval Polemic", *Speculum*, Vol. 49, No. 1 (1974): 34–47.

² Alistair C. Crombie, *From Augustine to Galileo. The history of science. A.D. 400–1650* (Cambridge, Mass. : Harvard University Press, 1953), p. 200.

such sources, except the few cases, we can not see the continuity between their authors, who have almost never cited each other, but this statement should not contradict the thesis of the continuity of the tradition of polemics at least from the beginning of the XII to the middle of the XIV c. In this regard, we consider that it is necessary to define the nature of existence of such sources in the medieval West during this mentioned period. The treatises of a new type, differing from the works of the early Middle Ages, but preserving the continuity of them³, had the wide distribution as a genre in the XII c. and reached perhaps its peak at the turn of the century. The beginning of the active study of the modern Jewish authors should be attributed to the 40's. of the XIII c.. The prerequisites of new trends in the controversy are several translations of Hebrew texts into Latin authorities, active learning the Hebrew and Talmud, as well as the emergence of the tradition of public debates between the Christians and the Jews. All this led to the appearance of a new genre in the controversy, namely, the Christian criticism of the Talmud: “Pharetra contra Judaeos” by Theobald of Cezanne (mid-XIII c.)⁴; “Pugio fidei”⁵ and “Capistrum Judaeorum”⁶ by Ramón Martí (c.1220–c.1285); “Tractatus contra Talomot” by Andrew of Escobar⁷ (beginning of XV c.), based primarily on linguistic material of the authoritative Jewish body. At the end of the XIII c. we also do not see the recession of interest to the problem. The historiography of this issue is very poor⁸.

³ Especially in treatises where Augustine, Isidore of Seville and Bede are quoted. We mean these works: Augustinus. *Tractatus contra Judaeos, paganos et Arianos*. PL. Vol. 42. Col. 113–119; Isidorus Hispalensis. *De fide catholica ex Veteri et Novo Testamento contra Judaeos*. PL. Vol. 83. Col. 449–538 ; Beda Venerabilis. *De ratione temporum*. PL. Vol. 90. Col. 293–578.

⁴ Ms. Graz Univ. Bibl. 1530 ff. 37ra–63 vb.

⁵ Raimundus Martini. *Pugio fidei adversus Mauros et judaeos* (Leipzig, 1687).

⁶ Ramón Martí. *Capistrum Judaeorum*, ed. Adolfo Rables Sierra (Würzburg, 1998).

⁷ Ms Carpentras Bibl. Inguimbertaine, 153 ff 15ra–33va.

⁸ Treatises, in which scientific knowledge was used, have been identified as a separate group by Amos Funkelstein (Amos Funkenstein, «Basic Types of Christian Anti-Jewish Polemics in the Later Middle Ages», *Viator*, 2 (1971) : 382.). Restricting a general overview of small number of works of Latin authors, Funkelstein finds a small role of such arguments in the controversy. From the researcher's field of view escape both the works that are not treated as polemical, and the actual number of scientific works, in which the polemical tone could sound. This fact and the impossibility of the practical application of the classification of the Israeli scholar cast doubt on his conclusions. Potential base of the sources was expanded in the work by Gilbert Dahan (Gilbert Dahan *Les intellectuels chrétiens et les juifs au Moyen Age* (Paris : Edition du Cerf, 1990).). He affects a variety of aspects of the relation of Christian and Jewish intellectuals in the XII–XIV century, but he does it not without flaws. Dahan focuses primarily on early stage of polemics (anti-Jewish treatises published in Patrologia Latina), as well as those sources that he published himself. He misses as we show below, the important works for the question (such as “Capistrum Judaeorum” by Ramon Martí and “Dialogus libri vitae” by Rodrigo Jimenez de Rada which are unpublished at the time of writing of the work, and “Disputatio cum Simone Judaeo” by Peter of Cornwall (Ms Eton coll 130.), “Pharetra Judaeorum” by Theobald of Cezanne and “Triumphus perfidiae Judaeorum” by Jacob Civeroso (Ms. Vat. Lat. 1002. 1ra–97vb, thereafter Ms. V. and the number of folio), remaining unpublished) have received only a brief review. Modest role is given to the «Dialogus» by Peter Alfonsi (1062–1106), author of one of the earliest treatises, where the Jewish world view is criticized. Little attention is paid to the issue of the Christian mythology about the Jews (it is essentially a latent form of controversy) in which Christian intellectuals have actively used the scientific arguments. Again, the problem begins to sound in an article by Piero Morpurgo (Piero Morpurgo, “La polemica medievale contra la cultura e la scienza degli ebrei”, *Micrologus* IX, 2001, p. 105–124) but its expository character, as well as a limited number of sources that he use, it seems, do not allow the author to assess the issue fully.

The nature of the sources and the general trends in the historiography have partially determined the structure of the future research. This work will be based on the following principle: at first, we will consider the aspect of the legitimacy of scientific knowledge of every author, then indicate changes in the polemic methods, and proceed to the presentation of the material polemic treatises. We divide the range of application of the polemics into three parts: the apology (the proof of the truth of Christianity or Judaism, where our investigations at this stage are the most fruitful), the criticism of Jewish or Christian beliefs and mythology, which was also actively developed by the authors of these treatises.

Legitimacy

What did the authors of polemical treatises think about the idea of rational proof in a dispute with the Jews? The legitimization of this method of argumentation was difficult. Gilbert Crispin, the Abbot of Westminster (1055–1117)⁹ speaking of the first centuries of Christianity, pointed out the negative consequences of actions of philosophers for the Christian faith. Such a declaration, however, did not prevent him from using in his treatise at least some elements of the rational nature of the teaching of his master Anselm of Canterbury (1033–1109), who proclaimed in the title of one of his treatises that faith is in search of reason. However, the contemporary of Gilbert, Peter Alfonsi¹⁰ did not raise this question. He applied all available scientific knowledge in a fictitious dispute with a Jew¹¹. Peter Abelard (1079–1142)¹², and Walter of Châtillon (1135–1200)¹³ also denied the possibility of using such a reservoir of knowledge. The anonymous author of «Dialogus»¹⁴ gave a certain legitimacy to the usage of the scientific knowledge: Jew's criticism based on rational argument was directed against the Christian sacrament of baptism.

However, in the treatise of Peter of Blois (1135–1204) this knowledge once again got a legitimate estimate trying to prove the immaculate conception of Christ; he cited the example and, in his opinion, the Jews had to trust to this text more than to their own scriptures. The astrologist Abu Ma'shar wrote that in the first decane of Venus the mother was born. According to Peter, he definitely meant Mary, who had been born and betrothed under the sign of Venus, and the Christians, as long as the Sun was in the sign of Venus, celebrated the birth of the

⁹ Gilbert Crispin, *Disputatio Judei et Christiani* in *The works of Gilbert Crispin, abbot of Westminster*, ed. Abulafia Anna S., Evans George R. (Oxford: Oxford University, 1986), p. 34.

¹⁰ Petrus Alfonsi Christianus, *Dialogi In Quibus Impiae Judaeorum Opiniones Explicantur*, PL. Vol. 157. Col 535 – 672.

¹¹ That is, in fact, he disputes with himself before conversion to Christianity, Jew Moses Sephardi.

¹² PL. Vol. 178. Col. 1630.

¹³ Gualterus de Castilione, *Tractatus contra Judaeos*, PL. Vol. 209. Col. 424.

¹⁴ Guillelmus de Campellis, *Dialogus Christiani et Judaei de fide catholica*, PL Vol. 163. Col. 1065–1066. Until recent time it was attributed to the teacher of Abelard William of Champeaux.

Virgin¹⁵. Thus Peter sought to make this fragment sounded friendly to the Jews, including astrology in the sphere of legitimate in a dispute with them. Peter's contemporary Alan Lille (1125–1203) in his "Contra haereticos" refused to apply the rational proofs required by a Jew, in the matter of the Trinity and Christ's coming, because "miracles can not be explained by the laws of nature". The use of only a limited number of rational arguments in the controversy with a Jew coexisted in the "Summa Quatripartita" with the active use of such arguments in polemics against the heretics and Muslims.

This fragmentary references to the authority of philosophy and rational knowledge of the Jews in the writings of some authors still argue that such knowledge was involved regularly. The different attitude to this problem we can find in the works of the Archbishop of Toledo, Rodrigo Jimenez de Rada (arb. 1209–1247)¹⁶. Lucy Pick, in the article¹⁷ dedicated to the residence time of Michael Scott in Toledo, following Charles Burnett pointed out that the famous intellectual was strongly influenced by his surroundings, including the Archbishop himself. Pick founded that Rodrigo was the first who used the opposition *natura naturans – natura naturata*¹⁸. The first concept used to describe Creator who had an independent nature, the second referred to the entire created world. The application of this aspect in the controversy with Jews shows the legitimacy of using the ideas of the universe in this controversy, as we shall see below. The roots of this concept, according to Pick, are in the works of Alan Lille. It is known that in the 80s of the XII c. Rodrigo studied in Paris, where at the same time Alan worked. In the anti-Jewish part of the "Summa Quadripartita" we have not found any trace of the application of this concept, but it is presented in other works of Alan, for example *Distinctiones dictionum theologiarum*¹⁹. Hypothetically, Rodrigo could be familiar with the works of Alan. And he also could do something that was not possible for his teacher: to apply the rational evidence in a dispute with the Jews. The legitimacy of this method is evident in the «Dialogus»: treatise begins with the idea that philosophers in search of the first principle have come to the Supreme Intellect. Rodrigo recognizes the equality and the existence of similarities between the doctrines of the philosophers, the Christians, the patriarchs, the Jews and Saracens²⁰.

¹⁵ Petrus Blesensis, *Contra Perfidiam Judaeorum*, PL. Vol. 207. Col. 841. Here we can note an inaccuracy. Peter believes that Abu Ma'shar lived long before Christ.

¹⁶ Roderici Ximenii de Rada *Historiae minores ; Dialogus libri vite*, cura et studio Juan Valverde., Juan Antonio, Esteban Sola. (Turnhout : Brepols, 1999). (CCCM Vol. 72 thereafter).

¹⁷ Lucy Pick, "Michael Scot in Toledo: natura naturans and the hierarchy of being", *Traditio*, vol. 53, (1998) : 93–116.

¹⁸ CCCM. Vol. 72, 182. Then 10 years later it appears in Michael's works. Lucy Pick, "Michael Scot..." p. 110.

¹⁹ Lucy Pick, "Michael Scot..." p. 110.

²⁰ CCCM. Vol. 72, 183. as it is pointed out by Rodrigo, etymologically comparable and therefore are equal to each other magicians, Christian teachers, the Greek philosophers and Jewish scribes. CCCM. Vol. 72, p. 225

The work of Rodrigo did not make a breakthrough in this area: the treatise was not widely used²¹. However, in the XIII c. controversy revealed a new trend: criticism of the Talmud, launched in the middle of the XIII c. Theobald of Cezanne, the author of the treatise “Pharetra contra Judaeos”, written in the wake of the famous debate 1242 in Paris, which was popular, but still remains unpublished, in the list of topics for a dispute with the Jews, shows that he is going to criticize the Jews’ errors in their interpretation of the creation of the world²². No much examples of using of the natural science we find in later treatises by Ramón Lull²³ and Bernard Oliver²⁴, for whom, however, the legitimacy of using at least with the elements of philosophy in the discourse with Jews is not in doubt. Another late treatise, “Triumphus” by Jacob Civeroso (written in 1334–1335)²⁵, reflects not only the legitimacy of scientific knowledge, but also provides many examples of this. In his hierarchy of authorities Civeroso included Aristotle²⁶ despite the fact that the use of his second main, and his name is often hidden behind a streamlined formulation *inquit sapiens quidam*²⁷, which once again testifies to the continuing debate about the heritage of the Stagirite. Civeroso quotes the distorted text from writings of the philosopher (or distorts it himself); this fact allows us to put the question of the fate of the philosophical heritage of antiquity in the polemic literature, and of the character and forms of its existence. The formation of the legitimacy of rational truth could not be considered separately from the development of the theory of “double verity”²⁸ (philosophical truth and theological one); this famous problem was partly resolved in the Thomas Aquinas’ works (whose authority for the late polemicists, at least for Civeroso, was not disputable). He admitted that methodology of philosophy and theology is completely different, but they differ only partly in their subject²⁹. This compromise gives to the Christian polemicist an opportunity to appeal to the reason.

²¹ At the moment we have only one manuscript of the text (which, of course, does not mean that other manuscripts did not exist).

²² Unfortunately, we have not had the access to this manuscript. We cite it according Dahan’s transcription: Gilbert Dahan, *Les intellectuels...*, p. 435.

²³ Ramón Lull. *El «Liber predicationis»*, ed. José M. Millás Vallicrosa. (Madrid-Barcelona, 1957).

²⁴ Bernardo Oliver. *El tratado «Contra caecitatem Judaeorum» de fray Bernardo Oliver*, ed. Francisco Cantera Burgos. Madrid-Barcelona, 1965.

²⁵ We have prepared the full transcription of this interesting text.

²⁶ On the popularity of Aristotle’s works and their use in theological works see Ann Gilletti. «Aristotle in Medieval Spain: Writers of the Christian Kingdoms Confronting the Eternity of the World», *JWCI*, 67 (2004) : 23–48.

²⁷ Ms. V. f. 5ra.

²⁸ This theory is known in the West thanks to the late representative of the school of Chartres Gilbert de la Porré (1085/1090–1154) and representatives of the so-called Latin averroism: Siger of Brabant (1240–1284) and Boethius of Dacia (1230–1284). Appealing to the fact that philosophy has to deal with the concepts and absolutely transcendent God can not be reduced to a chain of material concepts, Gilbert comes to the conclusion that theology can not operate with philosophical methods. Siger and Boethius, recognizing the different spheres of philosophy and theology, in contrast to most of Averroists, give the priority to theological truth. Etienne Gilson, *The philosophy in the Middle Ages*, (Moscow, 2003), p. 250.

²⁹ *Ibid*, p. 340.

Method

At first we need to note the changes of the logical unit in the form of presentation of the material in polemical treatises. Syllogism was not a new method in the list of medieval logic tools used in polemics. Boethius, whose syllogisms were exemplary, got some authority among the authors of polemic treatises. I must admit that before the end of the XIII c. a syllogism appears in the treatises unsystematically. The most common was this syllogism, which occurred at an early stage (Gilbert Crispin, William of Bourges)³⁰: coming of the Messiah has required a miracle, the birth of the Messiah Jesus was wonderful, so he has been the true Messiah. In its most explicit form this tendency to shape the polemical work into a scientific treatise is shown in Ramón Lull's work³¹. Each of the sermons in his «Liber praedicationis» is a detailed syllogism, whose major premise in the most cases is the doctrine of the Trinity, and minor premise is any commandment of the Old Testament³². The most obvious form of this method is presented in «Contra caecitatem Judaeorum» by Bernard Oliver. Each issue³³ is divided into three or four *rationes*, each of them is treated as a separate syllogism. And Ramón and Bernard try to force a Jew to act within their own mental schema. However, the treatise lost the certain lightness, became less dialogic, that in fact had an impact on the effectiveness of its application in real life. Logical consistency of presentation was important due to another reason. Moses Maimonides (1135-1204) wrote in the «Guide of perplexed» that God has a power only over the thing, impossible in nature, but he has no power over logically impossible one³⁴. This opinion, which almost immediately became authoritative, demanded from Christian polemicists to pay more attention to the logical unit.

Apologetics

Miracles and the principle of similarity. One of the most common arguments, which proved different dogmas in the Christian anti-Jewish polemical tradition was the miraculous nature of events described in the New Testament. This statement was based on the fact, that every event of the New Testament was anticipated in the Old. The first person, who pointed to the fact that Jews do not recognize the miracles performed by Christ, was Peter the Venerable (1092/1094–1156), who called polemicists to scrutinize the miracles of the Old Testament³⁵. Caution of Peter did not

³⁰ Gilbert Crispin. *Disputatio Judei et Christiani*, p. 27. Guillaume de Bourges. *Livre des guerres du Seigneur*, ed. Gilbert Dahan (Paris, 1981), p. 100.

³¹ Ramón Lull. *El «Liber praedicationis»*, ed. José M. Millás Vallicrosa. (Madrid-Barcelona 1957).

³² Ramón labels parts of the syllogism: the sign *B* in the last sermons signifies the minor premise..

³³ The most discussed in this case is the problem of the relevance of the Old Testament

³⁴ Daniel J. Lasker, “Averroistic trends in Jewish-Christian Polemics in the Late Middle Ages”, *Speculum*, No 2 (1980) : 295.

³⁵ Petrus Venerabilis, *Adversus Judaeorum inveteratam duritiem*, in PL. Vol. 189 Col. 382. Mutual criticism of wonders even included another vector: the attribution to some biblical character the familiarity with magic. For

become a powerful argument for polemicists. An early example was the rejection of such an argument, contained in the «Dialogus» by Peter Alfonsi: the fact that Christ had risen, like Elisha and Elias, does not confirm that he was the son of God, but it shows only that in fact he was a prophet, but not the Son of God, as he called himself³⁶. Despite the fact that such appeal eliminates the need for any kind of argument, Christian writers come up with the schemes that allow the Jews to imagine a Christian miracle. The possibility of this scheme is confirmed by the correlation of the divine, natural and artificial: men imitate nature, according to their capabilities, nature imitates God, wherever it may and *must* do it (thus this principle is formulated by Jacob Civeroso³⁷). An early example of this kind of argument is the question of Peter Alfonsi to Moses³⁸: why did the omnipotent God not create everything in one day, but this process lasted for six days? Peter cites the example of fire, in which various materials are burned not once, but each in its time, depending on its combustibility³⁹. In the case of evidence of Trinity the most common method was an appeal to the triplicity of creatures, based on the theory of Augustine in “De Trinitate”⁴⁰. Comparison of the three parts of the soul (reason, intellect and love) with the hypostases of the Trinity and their attributes (potency, sapience and will) appear in the Gilbert Crispin, Peter of Blois and Alan Lill⁴¹. Archbishop Rodrigo questioned the relevance of such arguments: according to a Jew, believer can honour not three, but 4 or 5 of the hypostases of the Trinity (including memory, reason or intellect). Rodrigo answers: memory is required to mortals who change with time, but God who is outside the time, does not need it⁴². Despite the fact that in the Barcelona disputation (1263)⁴³, this argument provoked ridicule among the Jews as well as the numerological evidence of Christians in whole, it is found in “Liber praedicationis” by Ramón Llul (where it is at the heart of the treatise), and in “Triumphus” by Jacob Civeroso who offers the equilateral triangle as a cognitive model of God⁴⁴.

example, Moses in Peter Alfonsi’s work believes that Christ was able to ressurect from the dead because he learned magic in Egypt. To the question of Peter, where were the prophets, Moses suggested that they are in heaven, and to that Peter replied that they could ascend there only through the acquaintance of magic (PL. Vol. 157. Col. 605,). The perception of Christ as a magician sounds distinctly in Nizzahon Vetus, where learning of magic again is associated with Christ’s flight into Egypt (*The Jewish-Christian Debate in the High Middle Ages*. Critical edition of «*Nizzahon Vetus*». Ed. David Berger. (Philadelphia, 1979).). The demonization of Jews gets its development already in the polemical tradition, in particular, Guibert of Nogent (PL 156, 499–500.), but this trend gets its development especially in popular literature.

³⁶ PL Vol. 157. Col. 562.

³⁷ In the very text of Jacob we have found some interesting points which contradict to classical classification of medieval wonder by Caroline W. Bynum. See Caroline W. Bynum, “Wonder”, *AHR*, Vol. 102, №. 1, (1997) : 3–20.

³⁸ It is very odd-sounding opinion in the context of the controversy with the Jews, who of course recognize the authority of the Old Testament.

³⁹ PL. Vol. 157. Col. 574.

⁴⁰ Augustinus *De Trinitate libri quindecim*, PL Vol. 42. Col. 903–908.

⁴¹ Gilbert Crispin. *Disputatio Judei et Christiani* ... P, 30. Peter : PL 210, 410; Alan : PL. Vol. 210. Col. 402.

⁴² CCCM. Vol. 72, p. 189.

⁴³ Nahmanides. *The Vikuah // Judaism on Trial*. Ed. Hayim Maccoby. (London, 1982), p. 135.

⁴⁴ Ms V. ff 3ra–3rb.

Doctrinal problems One of the most important and controversial issues was the question of Trinity. Jacob Civeroso updates augustinian formulation of the creation of universe by God *ex nichilo* in first principle (sc. his son), adding to it the concept of *yle*⁴⁵. In Civeroso's argument is clearly evident the scheme, expressed through the terms of Aristotle in which God is the prime mover, that uses the harmonization of principle "Omne quod movetur ab alio movetur" (every moving body is moved by others)⁴⁶ with the idea of God as the prime mover. Aristotle's principle of motion is used for example in Thomas Aquinas' "Summa contra Gentiles", as the first evidence of the existence of God⁴⁷. The spread of theories on the nature of primordial *yle* in XII c. became actual for the polemics against the Jews. Alexander Neckam (1157–1217) believed that the opinion of Thales that the first matter was water, was shared by the Jews⁴⁸. A similar interpretation we find in the Archbishop Rodrigo's work. The Jews, in his opinion, think that the spirit of God was moved upon the water, the original matter, *creating, and warming it*⁴⁹. Neoplatonic interpretation, which sends us back to the school of Chartres, namely, Thierry of Chartres (died c. 1155)⁵⁰, is evident. The Aristotle's theory of the eternity of the world was officially banned by *Syllabus* (1277) of bishop of Paris Etienne Tempier⁵¹. The Doctrine of *Creatio ex nihilo* received its reinforcements in acts of IV Lateran Council (1215), the first decree of the Council was devoted to it⁵². The legitimacy of this strategy of argument depends on the amount of knowledge that medieval intellectual considered as common to Christians and Jews.

One of the most important and controversial issues was the conception of original sin and its atonement by the sacrifice of Christ, in which the Jew did not believe, evident in "Dialogus" by Peter Alphonsi. Peter finds a scientific solution: first man was created at the same time simple (to ascend to the angels) and compound (to rule the world), and therefore immortal and mortal. Moses objected, that it was impossible for man, like for any other creature, to be both mortal and immortal. However, Adam was created at the same time of the most subtle elements, and the four essential elements. However, after the fall Adam was deprived of the finest elements of

⁴⁵ Ms. V. f. 2rb–3ra.

⁴⁶ Weisheipl J. A. "The Principle Omne quod movetur ab alio movetur in Medieval Physics" // *Isis*. Vol. 56 1965. P. 26–45. Aristotle. *Physics*. VIII, 4.

⁴⁷ "In hac autem probatione sunt duae propositiones probandae, scilicet quod omne motum movetur ab alio, et quod in moventibus et motis non sit procedere in infinitum". Thomas of Aquinas *Summa contra gentiles* I, 13.

⁴⁸ The Jews thus wrong (*sinistre*) interpret the prophecy «Who laid the foundation of the Earth» (Ps. 104, 5). It is necessary to quote this verse in latin: "Qui fundasti terram super aquas" *Vulg.* Piero Morpurgo, *Critica...*, p. 103.

⁴⁹ CCCM. Vol. 72, 205.

⁵⁰ Etienne Gilson, *The philosophy...* p. 205.

⁵¹ John F. Whipple, "The Condemnations of 1270 and 1277 at Paris", *JMRS* VIII (1977) : 181.

⁵² Ann Gilletti, "Aristotle in Medieval Spain: Writers of the Christian Kingdoms Confronting the Eternity of the World", *JWCI*, 67 (2004) : 30.

which was created the body of Christ that helped him to ascend⁵³. Jewish criticism of the Christian concept of original sin occupied an important place in polemics since the birth of the Jewish-Christian polemics in the XII c. Joel Rembaum compared the material on this kind of criticism from the XII to the XVII c⁵⁴. But he made no attempt to search for Christian sources of this kind, which may also be the subject of analysis in our future work.

Astrology and Cosmology

A number of factors favored the use of such arguments, at first, a common consideration that Jews were astronomers. Peter Alfonsi, and Peter of Blois based their arguments on this opinion. Already in the XII c. was written an anonymous essay «Astronomia secundum Judaeos»⁵⁵. Rodrigo Jimenez de Rada, when he talked to the Jew about the signs of miraculous birth of Christ, pointed out that the magi geometrically calculated the location of a new star⁵⁶. At the end of the XIII c. significant number of astrological texts of Jewish origin were translated into Latin⁵⁷. All this factors contributed if not to legitimacy, but to the spread of conception that the Jews were the experts in astronomy. The use of even the most superficial ideas about macrocosm helped Jacob Civeroso to explain polemical quotation of the Gospel (Mt 12, 40)⁵⁸. Jew retorted: if, as claimed Civeroso, Christ was crucified on Friday at ninth hour, and rose in the first hour of Sunday, he remained under the ground not for 72 hours (3 days and 3 nights), but only for 40. In response Civeroso used the concept of artificial and natural days⁵⁹. Civeroso proved his truth with the help of theory of the sphericity of the Earth and the hypothesis of the antipodes. Other

⁵³ PL. Vol. 157. Col. 565. The extraordinary importance of this kind of argument was confirmed by the need to reaffirm the importance of the sacrament of baptism for salvation from original sin. The urgency of the problem is highlighted in the work by pseudo-William of Champeaux, but his argument is devoid of scientific content. The same fragment thematically adjacent apologetic for their content Peter Alfonsi. He says that after the general resurrection of the souls the righteous will not receive a rational soul, but the wind, composed of four elements, will give it not a rational soul, but breath of the life. Moses refers to the authority of the ancients who believed that the rational soul is composed of four elements, but Peter says that if the soul as the body is composed of four elements, so, the body and soul have to age similarly, but the body may be old, and the soul is young. Consequently, the rational soul is a separate substance. PL. Vol. 157. Col 575.

⁵⁴ Joel E. Rembaum, "Medieval Jewish Criticism of the Christian Doctrine of Original Sin", *AJS Review*, Vol. 7/8 (1982/1983) : 353–382.

⁵⁵ Ms. London, Brit. Libr. Cotton App. VI fol. 1ra–21vb.

⁵⁶ CCCM. Vol. 72, 215.

⁵⁷ Gilbert Dahan, *Les intellectuels chrétiens et les juifs au Moyen Age*. (Paris : Edition du Cerf, 1990), pp. 324–325. We use also general works on this subject : Gad Freudental, "Les sciences dans les communautés juives médiévales de Provence: leur appropriation, leur rôle", *REJ* 152, № 1–2 (1993) : 5–159. Reimund Leicht, *Asrologumena Judaica* (Tübingen : Mohr Siebeck Verlag, 2006); Mauro Zonta, "Jewish mediation in the translation of Arabo-Islamic science and philosophy to the Latin Middle Ages. Historical overview and perspectives of research" *Wissen über Grenzen. arabisches Wissen und lateinisches Mittelalter*. (Berlin : Walter de Gruyter, 2006) ; Juan Rodríguez Arribas *El cielo de Sefarad : los judíos y los astros : (siglos XII y XIV)* (Córdoba : El Almendro, 2011).

⁵⁸ "For as Jonah was in the belly of the whale three days and three nights, so shall the Son of Man will be at the heart of the earth three days and three nights".

⁵⁹ Natural day's length is not fixed, it depends on the approach or remove of the Sun from the Earth. Civeroso takes as a basis the artificial day (the day and the night are equal and make 12 hours). Ms V. f. 60va–61ra.

commentators of this fragment, such as Augustine⁶⁰ and Nicholas of Lyra⁶¹ (c. 1270–1349) explaining this passage, spoke that the Evangelist used here the synecdoche.

Criticism

The emphasis of this section from apologetics is conditioned both (in contrast to the apologetic sentences) by the difference of discussed subjects and by a fundamental difference in the use of certain arguments: Here it was possible to use the arguments based on scientific knowledge, not as illustrations to the arguments, based on the spiritual exegesis of sacred texts, but as a relatively independent argument, to which the words of Scripture served as an illustration.

Jewish conception of divine anthropomorphism could become an element of potential dispute, to which Christian writers often did not pay attention. This theory was formulated in a treatise Shi'ur Qomah⁶², which was authoritative, at least until the time when Maimonides condemned it. The criticism of this concept by Peter Alfonsi is the lonely example known to us at early stage. At first, Moses pays attention to the view widespread among the Jews that God is in the West as the stars ascend in the East and descend in the West⁶³. Peter refutes this view, based on the fact that the place of sunrise and sunset changes according to Earth's longitude⁶⁴. All other authors whose works we have studied ignore such a rich field for debate. However, an use of the tradition of critics of the Talmud may allow us to find other points of criticism. However, we can note that, at least in the later Jewish polemical tradition (Nizzahon Vetus, XIIIc.) similar arguments have been used against Christians⁶⁵. Such a concept is little known to Christian authors. Christian in the «Dialogus» of Pseudo-William of Champeaux mentions of the existence of the concept of divine anthropomorphism, but he attributes it to some «profanes» and not to the Jews⁶⁶.

Criticism of Jewish understanding of Messiah as a mortal man was a common subject in the debate. At an early stage we have found only denials based exceptionally on the text of Scripture. One of the first rational refutation of the view was offered by Rodrigo Jimenez de

⁶⁰ Augustinus, *De Doctrina Christiana*. PL. Vol. 34. Col. 103.

⁶¹ “Uno modo per synecdochen, quando ponitur pars temporis pro toto, sicut in Evangelio dicitur, Christum tribus diebus jacuisse in sepulcro: et tamen prima dies et tertia non fuerunt integrae”. Nicolaus de Lyra, *Postilla super totam Bibliam*. (Frankfurt-am-Main, 1971). Col. 0032B.

⁶² “Divine Dimensions” (IX c.). According to it, for example, God’s growth is 10 million parasangs (one parasang makes four miles). Collete Sirate, *La philosophie juive au Moyen Ages* (Paris, Editions CNRS, 1983), p. 25.

⁶³ Thus is interpreted by the Jews the passage from Nehemia 9, 6: «And the host of heaven worshippeth Thee» PL. Vol. 157. Col. 534–535.

⁶⁴ As a reference point he chose city Aran, equidistant, according to Peter, from the north and south poles. PL. Vol. 157. Col. 565.

⁶⁵ *Nizzahon Vetus...p, 100*. Christians use as evidence of the Trinity, the story of how the three angels came to Abraham, and believe that they are God. However, Abraham offered them food and they ate it, but an immaterial God can not eat, therefore Christians are wrong.

⁶⁶ PL Vol. 163. Col. 997. This fragment is a reference to “Confession” by Augustine, where he speaks of Manichaeans. Augustinus. *Confessionum libri tredecim*. PL. Vol. 32. Col. 690.

Rada. According to his Jewish interlocutor, after the coming of the Messiah barren land will become a fertile one. Such a change may occur, only by the fact that the air should become more humid. However, changes of climate and of the qualities of elements are in the power of God, called by Rodrigo *elementans*⁶⁷. Jew who agrees with this statement, says that the soul of the man Messiah, superior to the other the created spirits, could change the quality of elements. Disagreed with this statement, Rodrigo says that the soul can change the quality of other souls only by a persuasion, an admonition or an advice. Rodrigo also criticizes Jewish opinion that the Messiah and his descendants will live forever. Thanks to change of climate, they will eat fruits that will grow in abundance in their lands, and due to this diet, the proportion of essential humors in man will change that will bring him eternal life. The Jew can not disapprove the critics⁶⁸. All the things that will be established after the coming of the man Messiah will be perishable, sc., in the formulation of Rodrigo, they will be subject to generation and corruption (we can say that Rodrigo operates with Aristotelian terminology). The man Messiah could not be created before the celestial bodies⁶⁹, because, according to Genesis, luminaries were created on the fourth day, while every person on the sixth, as well as his name could not be created before the creation, because just Adam gave names to all creatures⁷⁰. The last statement finds a match in one of *quaestiones quodlibetales* by Nicholas of Lyra (c. 1270–1349), where among the things created before the creation of the world, according to the Jewish tradition, he mentions the name of the Messiah⁷¹. Complete study of Jewish criticism of Christian sacraments can also be part of future study⁷². We suppose that development of criticism on this subject party can be connected with anti-Christian criticism of this sacrament.

Mythology The refusal to debate at a high scientific level made a certain vacuum of knowledge about the Jews, which became a fertile soil for the development of the mythology about the Jews. Instead of a dispute the Christians offered their own versions, in which they could include arguments based on scientific knowledge. The myth of the mystical connection of the Jews and Saturn was widespread in late medieval literature. It is curious that in the classical work of

⁶⁷ Term that echoes the concept *natura naturans*, used by Archbishop.

⁶⁸ What will live forever, asks Rodrigo, the soul of the Messiah, or his body or the soul and body together? If the soul, then Jewish assumption is meaningless, because the soul is immortal, and so, if the body, then your statement is absurd as the body is constantly exposed to corruption until the general resurrection and the change that he attributes to so-called trial by fire, so it is impossible that they will live together, because the body will also be subject to corruption, and the soul will be immortal.

⁶⁹ As a Jew interprets Ps 71, 2–5.

⁷⁰ CCCM. Vol. 72, p. 312–341.

⁷¹ Ms Paris BN lat. 16558 ff. 58.

⁷² On the development of Christian philosophical explanation of the sacrament of eucharist see in David Burr, «Eucharistic Presence and Conversion in Late Thirteenth-Century Franciscan Thought», *Transactions of the American Philosophical Society, New Series*, Vol. 74, № 3 (1984) : 1–113.

Panofsky, Klebansky and Saxl⁷³ devoted to the perception of Saturn in the Middle Ages, it is said nothing about the mystical connection between Saturn and the Jews. Abu Ma'shar (787–886) and Al Kabizi (X c.)⁷⁴, assured that certain celestial body favours different peoples. For the first time in the Latin West this conception clearly sounded in “De Essentiis” by Hermann of Carinthia (c. 1100–1160). The stereotype about the melancholic Jew found certain place, though mostly not in the polemical literature⁷⁵. The conflict provoked by the Jews or Muslims occurs due to the fact that Venus and Saturn are never on friendly terms (sc. their conjunction means trouble). The «Triumphus» by Civeroso⁷⁶ includes a number of such statements. Jacob offers antithetical pair Sun – Saturn. Here he follows the idea that Saturn is the star of the Jews (still referred to Augustine). As the ecliptique and the orbit of Saturn are farther from Earth than the sphere and the orbit of the Sun, during the conjunction of the planets the Saturn joins the Sun, and during this connection Saturn's light by its scale is comparable with the light of the Moon during a full moon (which, obviously, is a formal sign for reverence to the planet for the Jews)⁷⁷. Civeroso demonstrates that this phenomenon is possible only thanks to the Sun⁷⁸. Worshippers of Saturn, the higher (altiores) in the law (as well as Saturn, the farthest planet from Earth) are as slow in grasping of Christ as the motion of Saturn. In another passage, Saturn is identified with the Synagogue. In the first hour of Sunday, when the Sun is above the earth, Saturn is under it, that is why the synagogue, according to Civeroso, pays its attention exclusively to terrestrial things⁷⁹. We would like to give a lot of attention in future work to the evolution of another myth

⁷³ Raymond Klubansky, Erwin Panofsky and Fritz Saxl, *Saturn and Melancholy*, (London: Basic books, 1964).

⁷⁴ Eric Zafran, “Saturn and the Jews”, *JWCI*, 42 (1979) : 16–27.

⁷⁵ As the melancholic does not like the society and look for a solitary place, so Jews separate themselves from society. On this problem see Peter Biller, “A scientific view of Jews from Paris around 1300”, *Micrologus*, XI (2001) : 154-155.

⁷⁶ The different aspects of legitimacy of astrology for Jacob Civeroso deserve a separate remark. According to Jacob, Pharisees believe that all the events in sublunary world have three causes: God, free will of man and motion of celestial bodies (“Cum igitur assererent pharisei Deum simul, et motus corporum celestium, hominum arbitrium esse causam eorum omnium que sunt hic”. Ms. V. f. 51vb.) In other place Civeroso uses instead the phrase “motion of celestial bodies” another expression, “fate”. Having put together these two passages we can say that Civeroso associates the motion of celestial bodies with fate. However, Pharisees keep a place for the Divine providence and free will. In spite of the fact that practically all Christian authors accept the influence of celestial bodies on sublunary world (sc. so-called ethiological aspect of astrology; see Alain de Libera. *Penser au Moyen Age*, p 187.), the association of fate with such a motion looks untraditional. (“Dixerunt quidem pharisei, omnia a Deo esse, et fato et arbitrio hominum etiam plura esse”. Ms. V. f. 51vb.).

⁷⁷ “Quoniam spera Saturni et eccentricus eius est altior et magis remotus a terra, quam sit eccentricus Solis, et Veneris defferens, propter quod a philosophis <et> astrologis ponderosus dominus diei sabbati Saturnus vocatur, Sol velox cursu, simul et Venus, atque omnes planete, ex quo coniungitur Saturno Sol, et non e converso. Set quid accidit Saturno ex coniunctione Solis et planetarum, ut quid credere debeas videamus, ipse non coniungitur planetis, licet omnes sibi. Et omnis lex aliquid a Moyse accipit ipse ab aliis nichil. Eidem coniungitur, et in coniunctione Saturnus dimittitur retro, et Solis est longitudo. Et cum Saturnus coniungitur Soli, est sub radiis Solis, et aufertur lumen eidem. Et in adventu claritatis Solis obumbratur etiam claritas cuiuscumque. Cumque recedit Sol a Saturno, idem illuminatur a Sole, et in maiori recessu magis, et in opposicione ut in plenilunio plus”. Ms. V. f. 65ra–65rb.

⁷⁸ “Erit inde lumen Saturni lumine solis, et non e contra. Erit insuper post periodum et lacionem Saturni, periodus et lacio Solis. Ex primo igitur colentes sabbatum, altiores in lege, tardi in motu ad credendum sunt”. Ms. V. f. 21vb.

⁷⁹ “Erit igitur in Christo verbum legis scripte illuminata, prius periodum inde et duracionem sinagoge et sacrificii ipsius antiqui, est periodus et duracio Ecclesie ac sacrificii novi ipsius corporis Christi Ihesu. Est adhuc Christi

which is associated with the myth of Jewish attachment to Saturn, namely the myth of the “men’s menses”, in his «medical» treatment related to the constitution of a melancholic person⁸⁰. A number of Christian intellectuals developed serious scientific reasoning both in support of the thesis and against it; finally, the very emergence of this theory, although it has received some attention in the recent studies, deserves more detailed investigation. The elucidation of the correlation of these positions and their influence will also be a separate problem of the work. We want to note that for the XIII c. such a view was marginal: Jacques de Vitry (1160–1240) was the first who put forward the theological interpretation, while Albert the Great (1206–1280) and Bartholomew the Englishman (1203–1272) did not mention the motive of punishment of the Jews by the death of Christ; they spoke of it as a disease prevalent among Jews, thanks to malnutrition, which was caused by Jewish food prohibitions⁸¹. Such a solution was thematically adjacent to the criticism of the Jewish rites, which confirms our thesis that the debate went beyond the narrow confines of the genre of dialogue against the Jews; that fact expanded the potential domain of the search of such a controversy.

Conclusion

We have presented enough evidence, if not of the legitimacy of this kind of knowledge in polemics, but at least of the inextinguishable interest in this problem. We can note common tendencies in all three aspects using for such kind of arguments: the apologetic proof of the truth of Christianity, criticism of Judaism, as well as the evolution the mythology about the Jews. In this paper we have analyzed only a poor part of potential research material: Christian polemical tradition and fragments of Jewish tradition. On the basis of this material we can formulate the perspectives of future research. We plan to expand in the future the source base⁸², primarily due to unpublished polemical treatises (whose authors criticize the Talmud), as well as to non-polemical works based on which we could present different aspects of the common to Christian and Jews scientific picture of the world. The later authors developed the logical structure of polemical treatises, it provoked our interest to the study of the formation of logical toolkit that polemicists used and particularly of their using of scientific terminology. The popularity of such works as “Extractio rabby Moisi” allows us to estimate its role in Christian anti-jewish

Mesie ortus super terram, quoniam, qui de celo venit, super omnes est. Saturni vero hora sub terra depressa, quoniam terrene magis contemplatur ipsa sinagoga usque adhuc. Et circa terrena eius intencio velut Saturnus sub terra versatur, et quoniam in succesimis ipsa dies Dominica sequitur sabbatum, ita post lacionem Saturni ipsa sinagoga antiqua et venit proiecta, supervenit desursum nova Ecclesia”. Ms. V. f. 22ra.

⁸⁰ See Peter Biller, “A scientific view of Jews from Paris around 1300”, in *Micrologus*, XI (2001) : 137–169.

⁸¹ Irven M. Resnick, “Medieval Roots of the Myth of Jewish Male Menses”, in *HThR* 93, No. 3 (2000) : 241–263.

⁸² Another recently published anonymous treatise could present interest for future research: *Coloquio entre un cristiano y un judío / edición crítica y estudio preliminar de Aitor García Moreno*. (London : Department of Hispanic Studies, Queen Mary, University of London, 2003).

polemics⁸³. The precedent of the Talmud's criticism from the standpoint of natural science, which examples of Peter Alfonsi and Rodrigo Jimenez de Rada have given, suggests the presence of similar material in polemical treatises by Theobald of Cezanne and Andrew of Escobar. The existence in the beginning of the XIII c. of the treatises, using scientific knowledge as a tool of argument, makes acquaintance with «Disputatio cum Simone Judaeo» by Peter of Cornwall very important. Sequential study of the existence of this tradition among Christians as well as the relevance to Jewish-Christian polemic of such a text as «Astronomia secundum Judaeos»⁸⁴ will also be the subject of study. An important role will play the study of later biblical commentaries on the most polemical passages of the Bible, as well as quaestiones quodlibetales⁸⁵ on the topics that we discussed above. Even a superficial acquaintance with these writings would help to present quite a full picture of the knowledge common to the Jews and the Christians, and the forms of its use in polemics.

List of abbreviations

AHR – American Historical Review

AJS review – Association for Jewish Studies Review

CCCM – Corpus Christianorum. Continuatio Medievalis

JMRS – Journal of Medieval and Renaissance Science

JQR – Jewish Quaterly Review

JWCI – Journal of Warburg and Courtauld Institutes

HThR – Harvard Theological Review

PL – Patrologiae latinae cursus completus

REJ – Revue des études juives

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⁸³ Ms Paris BN lat. 16096 ff. 124ra–134rb; Ms. Lisbonne BN Fg 2299 ff. 1ra–46ra (Abbreviatio rabby Moisi)

⁸⁴ Astronomical aspect of general view of world described in this text can be amplified by such treatises as “De computo Judaeorum” by Nicholas Trivet (Ms Oxford, Merton coll libr. 188 ff 16ra–25va) and the treatise with the same name by Robert of Leicester (Ms Oxford, Bodleian libr. Digby 212. ff. 2ra–10ra).

⁸⁵ We mean at first *quaestio* by Nicolas of Lyra that we have cited above.

Ms Oxford Merton Coll. libr. 188 ff 16ra–25va.
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