

Natural science in the polemics between Christians and Jews (XII–XIV c.)

The XIIth century was considered for a long time to be an époque of fundamental change in the methodology of Christian polemics and the time of the birth of Jewish anti-Christian polemical tradition, in the form of treatises. 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 tradition and the application of the knowledge of Hebrew and Jewish religious philosophy were 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 as in the anti-Jewish as 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 Focusing on published sources as well as on unpublished, I would like to reestablish the full evolution of usage of scientific knowledge in the religious controversies of this type.

How did authors of anti-Jewish polemical writings resolve this problem? Application of scientific knowledge is little-studied in the historiography of literature *Contra Judaeos*. Most researchers (Jeremy Cohen, Amos Funkelstein¹) believed that almost all polemicists rejected to use the scientific knowledge in the controversy with a Jew. A. Funkelstein did not dwell on this assessment. Assessing the significance of "scientific" anti-Jewish polemical treatises, he noted that their culture flourished just at the XIIth century. The use of scientific arguments, according to Funkelstein, was nothing more than a tribute to the fashion of the XIIth century. This scientist, however, did not see reason to give sufficient arguments to prove his position. This rather controversial point did not cause a serious response among the historiographers (the interest of modern scholars is focused on the exegetical innovation associated with the reception of a certain reservoir of knowledge of Hebrew or one of the provisions of the Talmud. I can note a great interest in recent years for the use of the natural science in "Dialogues against the Jews" by Peter Alfonsi), but his classification of anti-Jewish tracts, which would seem self-evident, has become a classical one.

As another example of fading interest in the application of scientific knowledge is a fact that one of the greatest polemicists of XIIIth century, and perhaps the most eminent Hebraist until the Renaissance, Ramon Martí, believed that reasonable evidence could not be applied in

¹ Amos Funkelstein, "Basic Types of Christian Anti-Jewish Polemics in the Later Middle Ages", in *Viator*, 2 (1971) : 382.

the case of a dispute with the Jews². Peter the Venerable (1092–1156) offered the following syllogism: since the man is a reasonable animal, and Jews do not hear the voice of reason, then they are like animals. In turn, accused the Christians that they have resorted to *ratio* in polemics, is clearly seen in one of the first polemical treatises, the "Book of the Covenant" by Joseph Kimhi³. Such a declaration, however, does not mean that in future rational arguments would not be used in the Jewish-Christian polemics. In our thesis work, we clearly proved the opposite on the material of the unpublished treatise "Triumph"⁴ by Jacob Civeroso (1334–1335).

Focus of research

One of the main tasks will be to determine the legitimacy of the scientific reasoning for this or that author. In the case of the Jewish-Christian polemics, we are not dealing with any specimen of writing such a treatise. The matches in the treatises are related mostly to the fact that the authors used the same source: Sacred Scripture. Controversial application of scientific knowledge in a dispute with the Jews is clearly visible by Jacob's controversial interpretation of Creation. The revision of the picture of the world under the influence of Aristotle's philosophy is an undoubtable fact. "Triumph" begins with the prove of the ternary being of God using the *Creatio ex nihilo* theory. Rationalistic, scientific interpretation of the process of creation of the world at the time of writing of the "Triumph" has already had a rich tradition that famous exegetes of school of Chartres (especially Thierry of Chartres (?–After 1156)) began in the XIIth century. The problem of the reception of Aristotle's theory of the eternity of the world was relevant, for example, during the dispute in Tortosa (1410)⁵. The Aristotle's theory of the eternity of the world was officially banned by *Syllabus* (1277) of Parisian bishop Etienne Tempier⁶. The Doctrine of *Creatio ex nihilo* received its reinforcements in acts IV Lateran Council (1215), it is devoted in the first decree of the Council⁷. The legitimacy of this strategy of argument, ultimately, depends on the amount of knowledge that medieval intellectual considered as common to Christians and Jews, in the case of anti-Jewish polemics with real ideas about the scientific picture of the Jewish world. Gilbert Dahan counted about 21 astronomical or

² Jeremy Cohen, *The Friars and the Jews: evolution of medieval antijudaisme*. (Cornwell : Cornell University Press, 1983), 150.

³ *The Jewish-Christian Debate in the High Middle Ages*. Ed. David Berger. (Philadelphia : The Jewish Publication Society of Amerika, 1979), 280.

⁴ Ms Vatican, Bibliotheca Apostolica lat. 1002 ff 1ra–97va.

⁵ Ram ben Shalom, "Between Official and Private Dispute: The Case of Christian Spain and Provence in the Late Middle Ages", in *AJS Review* 27, No. 1 (2000) : 61.

⁶ John F. Whippel, "The Condemnations of 1270 and 1277 at Paris", in *JMRS* VIII (1977) : 181.

⁷ Ann Gilleti, "Aristotle in Medieval Spain: Writers of the Christian Kingdoms Confronting the Eternity of the World", in *JWCI* 67 (2004) : 30.

astrological translations of works written by Jewish authors⁸. Reception of the cosmological and astrological knowledge, of course, has also expanded the toolkit of polemicist. In this work we will analyze the development and perception of the Christian myths about Jews, such as the commitment of Jews to Saturn, or the use of general or particular cosmological theories (the properties of celestial objects) for a dispute between Christians and Jews. The existence in the Latin West of a work entitled "Astronomy according to the Jews" shows us the relevance of this strategy of argumentation.

We can assume that the reasoning based on the natural science, as less comprehensible to the Jews, left the field of anti-Jewish polemical treatises. For the XIVth century we can note, at least, the reducing of the total number of such the treatises. However, a relatively recent study by G. Dahan actually discovered a new form of anti-Jewish polemics, *quodlibet*, where traditional topics of polemics discussed by the authors resounded in a new fashion and no less polemically. A further special study of this issue would prove or disprove the point of view of Funkelstein. The attempts to build a complete picture of devolution of scientific knowledge usage, how it seems, were not successful. A special aspect of the study can also be the improvement of polemicist's logical toolkit, particularly, the analysis of the translation of terms used in polemical treatises and of the very context of their usage.

The myth of the menstrual cycles which are appropriate to Jewish men, will also be subjected to analysis. According to the canonical version, the daughters of Eve were punished by menstrual cycles for participating in the Fall. I should admit that the mere comparison of the Jew with a sick man, and one of Christian preacher-polemicist with a doctor were not new at all. As from Augustine, stereotype of Jew as a blind man was firmly established in the polemical literature. A Jew is blind to the objective truth of Christianity, and therefore does not accept Christ. As from the XIIth century version (which did not totally displace the lead of the blindness) of the Jewish conscious sin (in the Christ's passion) became more influential. The version of the so-called men's monthly became the carnal dimension of punishment for the conscious sin. A large number of Christian intellectuals proposed⁹ quite serious scientific reasoning, driven as in support of the thesis, as also against it. Finally, the very emergence of this theory, although it received some coverage in the relatively recent studies, deserves more detailed study. Elucidation of the relation of these positions and their influence would also be another problem of our investigation.

The study of the fate of Stagirit's heritage in the polemical writings of Jews and Christians should become a special subject of research. Besides the obvious pseudo-Aristotelian

⁸ Gilbert Dahan, *Les intellectuels chrétiens et les juifs au Moyen Age*. (Paris : Edition du Cerf, 1990), 324–325.

⁹ Irven M. Resnick, "Medieval Roots of the Myth of Jewish Male Menses", in *HThR* 93, No. 3 (2000) : 241–263.

works (such as the enormously popular "Theology"¹⁰), we can see many cases of distortion of Aristotle's thought, made to support the dogma of the ternary being of God, the thesis connected with the thesis of the existence of a certain symmetry between supercelestial, celestial and earthly hierarchies. The research of the distortions of the classical theories of Aristotle, used to prove certain aspects of Christianity or Judaism would become a special part of the thesis.

Sources

We can divide the sources used in this study into two groups: published and unpublished. The most important group of published sources are classical anti-Jewish treatises written in XIIth-XIVth centuries, as from "Dialogue with the Jew," by Peter Abelard (1079 – 1142) and "Disputation of a Jew and a Christian" by Gilbert Crispin (c. 1055–1117) to the "Treatise against the blindness of the Jews" by Bernardo Oliver (1290–1345) and "Book of sermons against the Jews" by Ramon Llul (ca. 1232–1315). Our transcription of "Triumph over Jewish disbelief" by Jacob Civeroso will take its place in the thesis. In addition to the large number of published sources, which we pointed out above, I would like to use a number of manuscripts as the sources for our work. At this stage of our research we could divide them into three main groups.

The first group is the latin translations of many scientific works of Jewish origin (including Gersonides' treatise on harmonic numbers¹¹, saved only in the Latin version), written in the XIIth–XIVth c. Detailed analysis of the time of their creation, destiny and general content and their glosses will allow more volume to provide a unified picture of the scientific paradigm of Jews and Christians, which should line up by the results of this work. The existence of sufficiently large number of treatises translated from the Hebrew already in the XIIth c. (even if, according to Gad Freudental¹², they are not at all original) particularly proves the deep knowledge of Jewish science by Christian intellectuals.

The second group is the anti-Jewish unreleased treatises, such as *Pharetra contra Iudeos* by Theobald of Cezanne¹³ (mid-XIIIth c.) and a treatise against the Talmud by Andrew of Escobar¹⁴ (beginning of the XVth century.), as well as a number of small works by John Baconthorp¹⁵ (ca. 1290–1347) and Nicholas of Lyra¹⁶ (c. 1270–1349).

¹⁰ Cristina d'Ancona, "Pseudo-"Theology of Aristotle", Chapter I: Structure and Composition", in *Oriens* 36 (2001) : 78-112.

¹¹ Ms Paris BN lat. 7378A ff 63 ra–75 rb.

¹² Gad Freudental., "Les sciences dans les communautés juives médiévales de Provence: leur appropriation, leur rôle", in *REJ* 152, No. 1–2 (1993) : 100–109.

¹³ Ms. Graz Univ. Bibl. 1530 ff. 57ra–63 vb.

¹⁴ Ms Carpentras Bibl. Inguimbertaine 153 ff 15ra–33va.

¹⁵ Ms Paris BN lat. 16523 ff 43ra–47va.

¹⁶ Ms Paris BN lat. 16558 ff. 58ra–73vb.

The third group, the most important for us, includes the treatises, in which one or another aspect of the scientific world of the Jews is more or less treated (but they are not polemical writings), as from the extremely popular "Extractions of Maimonides' works"¹⁷ to "Astronomy according to the Jews"¹⁸ by anonymous author of the XIIIth c. and two treatises "On the computation of time according to the Jews" one by Nicholas of Trivet¹⁹ and another by Robert of Leicester²⁰. Even a superficial acquaintance with these writings will present quite a full picture of the knowledge common to the Jews and the Christians.

List of abbreviations

AHR – American Historical Review

AJS review – Association for Jewish Studies Review

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

Bibliography (selected list)

Primary sources

Manuscripts

Ms Carpentras Bibl. Inguibertine 153 ff 15ra–33va.

Ms. Graz Univ. Bibl. 1530 ff. 57ra–63 vb.

Ms. Lisbonne BN Fg 2299 ff. 1-46.

Ms. London Brit. Libr. Cotton App. VI ff 1ra–21vb.

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

Ms Oxford Bodleian libr. Digby 212 ff 2ra–10ra.

Ms Paris BN lat. 7378A ff 63 ra–75 rb.

Ms Paris BN lat. 16096 ff 124–134.

Ms Paris BN lat. 16523 ff 43–47.

Ms Paris BN lat. 16558 ff. 58–73.

¹⁷ Ms Paris BN lat. 16096 ff. 124ra-134rb; Ms. Lisbonne BN Fg 2299 ff. 1ra–46ra (Abbreviatio rabby Moisi)

¹⁸ Ms. London, Brit. Libr. Cotton App. VI fol. 1ra–21vb.

¹⁹ Ms Oxford, Merton coll libr. 188 ff 16ra–25va

²⁰ Ms Oxford, Bodleian libr. Digby 212. ff. 2ra–10ra.

Ms Vatican, Bibliotheca Apostolica lat. 1002 ff 1ra–97va.

Edited sources

Alanus de Insulis. *De fide catholica contra haereticos. Pars tertia*. PL. Vol. 210. Col. 390–410.

Bernardo Oliver. *El tratado "Contra caecitatem Judaeorum" de fray Bernardo Oliver*. Ed. Francisco Cantera Burgos. Madrid-Barcelona, 1965.

Gilbert Crispin. *Disputatio Judei et Christiani* in *The works of Gilbert Crispin, abbot of Westminster*. Ed. Abulafia Anna S., Evans George R. Oxford, 1986, 1–54.

Guillaume de Bourges. *Livre des guerres du Seigneur*. Ed. Gilbert Dahan. Paris, 1981.

The Jewish-Christian Debate in the High Middle Ages. Critical edition of "*Nizzahon Vetus*". Ed. David Berger. Philadelphia, 1979.

Nahmanides. *The Vikuah // Judaism on Trial*. Ed. Hayim Maccoby. London, 1982, 120–143.

Ramón Llul. *El "Liber predicationis"*. Ed. José M. Millás Vallicrosa. Madrid-Barcelona 1957.

Ramón Martí. *Capistrum Judaeorum*. Ed. Adolfo Rables Sierra. Würzburg, 1990.

Wilhelm von Conches. *Philosophia Mundi*. Ed. Gerhard Maurach. Pretoria, 1974.

Secondary sources

Ben Shalom, Ram. "Between Official and Private Dispute: The Case of Christian Spain and Provence in the Late Middle Ages." *AJS Review* 27, № 1 (2000) : 23–71.

Berger, David. "Christian Heresy and Jewish Polemic in the Twelfth and Thirteenth Centuries." *HThR* 68, №. 3-4 (1975) : 287–303.

Boudet, Jean-Patrice. *Entre science et nigromance. Astrologie, divination et magie dans l'Occident médiéval (XII–XV siècles)*. Paris : Publications de la Sorbonne, 2006.

Bouché-Leclercq, Auguste. *Astrologie grecque*. Paris : Culture et Civilisation, 1963.

Burr, David. "Eucharistic Presence and Conversion in Late Thirteenth-Century Franciscan Thought." *Transactions of the American Philosophical Society. New Series* 74, №. 3 (1984) : 1–113.

Bynum, Caroline W. "Wonder." *AHR* 102, №. 1, (1997) : 3–20.

Cohen, Jeremy. *The Friars and the Jews: the evolution of medieval antijudaism*. Cornwall : Cornwall University Press, 1983.

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

Dahan, Gilbert. *Les intellectuels chrétiens et les juifs au Moyen Age*. Paris : Edition du Cerf, 1990.

- Freudental, Gad "Les sciences dans les communautés juives médiévales de Provence: leur appropriation, leur rôle. " *REJ* 152, № 1–2 (1993) : 5–159.
- Funkenstein, Amos. "Basic Types of Christian Anti–Jewish Polemics in the Later Middle Ages." *Viator* 2 (1971) : 373–82.
- García-Ballester Luis, Ferre Lola, Feliu Eduard. "Jewish Appreciation of Fourteenth-Century Scholastic Medicine." *Osiris* 6 (1990) : 85–117.
- Gilleti, Ann. "Aristotle in Medieval Spain: Writers of the Christian Kingdoms Confronting the Eternity of the World." *JWCI* 67 (2004) : 23–48.
- Jordan, William C. "The last tormentor of Christ: an image of the Jew in ancient and medieval exegesis, art and drama." *JQR* 78, No ½ (1987) : 21–47.
- Leicht, Reimund. *Asrologumena Judaica*. Tübingen : Mohr Siebeck Verlag, 2006.
- Niehoff, Maren R. "Creatio ex Nihilo Theology in Genesis Rabbah in Light of Christian Exegesis." *HThR* 99 /1 (2005) : 37–64.
- Resnick, Irvn M. "Medieval Roots of the Myth of Jewish Male Menses." *HThR* 93, No. 3 (2000) : 241–263.
- Weisheipl, James A. "The Principle Omne quod movetur ab alio movetur in Medieval Physics." *Isis* 56 (1965) : 26–45.
- Wolfson, Elliot R. "Circumcision, Vision of God, and Textual Interpretation: From Midrashic Trope to Mystical Symbol." *History of Religions* 27, No. 2 (1987) : 189–215.
- Zafran, Eric. "Saturn and the Jews." *JWCI* 42 (1979) : 16–27.