

# The correspondence between Józef M. Bocheński (1902–1995) and Heinrich Scholz (1946–1954)

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#### Abstract

As is well known, Heinrich Scholz and his academic society maintained good scientific contacts with Polish logicians before, during, and after the Second World War. My interest here is to examine the details of their collaboration by presenting Scholz's unpublished correspondence with Fr. Józef M. Bocheński. The following topics are discussed here: Polish logicians who survived the war and their current place of work; reorganization of the scholarly environment, didactic activities, duties, scholarly trips; current research topics, prospects for post-war publications, and future publishing plans; information about Jan Łukasiewicz, Bolesław Sobociński, and Joachim Metallmann; personal matters.

Keywords J.M. Bocheński  $\cdot$  H. Scholz  $\cdot$  Polish logicians  $\cdot$  Mathematical logic  $\cdot$  Correspondence

"It is wonderful to learn in this way that even in the worst of all possible worlds there are still good people." (SB 6/8/1947).

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The letters of Łukasiewicz and Sobociński (Łukasiewicz 1998; Sobociński 1995, 2004) have been published.

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#### Introduction

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As is generally well appreciated in the literature, Heinrich Scholz's co-operation with the Polish logicians of the Lvov-Warsaw school was fruitful for both sides (Jadacki 2017; Schmidt am Busch and Wehmeier 2007). Their correspondence is preserved in the Universitäts- und Landesbibliothek Münster (Germany) and testifies to a successful international scholarly collaboration. So far, little is known about the subject since only a few letters have been published.<sup>1</sup>

In this paper, I undertake to describe the content of the Bocheński–Scholz correspondence. As far as I know, their correspondence has not yet been described or published at all. However, my goal in this article is not to provide a complete overview of their collaboration, as that requires further in-depth research.

#### Heinrich Scholz and his "Group from Münster"

Heinrich Scholz was a logician, philosopher, and theologian. He was one of the most important German academics in the twentieth century. In the years 1917–1919, he was professor of philosophy of religion and theology in the Schlesische Friedrich-Wilhelm-Universität zu Breslau (now the University of Wrocław), succeeding Rudolf Otto (1869–1937). Then, between 1919 and 1928, he held chair of philosophy at the Christian-Albrecht University of Kiel, where in 1921 he became acquainted with Alfred North Whitehead's and Bertrand Russell's *Principia Mathematica* and thereafter worked in the field of mathematical logic. His next and last workplace was the Westfälische Wilhelms-Universität (Münster, Germany), where he was employed in the years 1928–1952 and organized there a group of academics working together on mathematical logic called the "Group from Münster" [*Gruppe von Münster*] or the "Münster School." He established the Institut für Mathematische Logik und Grundlagenforschung that still exists (Peckhaus 2018).

Before the Second World War, Scholz received and kept in his university office the literary estates of Gottlob Frege (1848–1925) and Ernst Schröder (1841–1902). He hoped to be the first posthumous editor and publisher of Frege's papers, but he did not manage the task. Frege's literary estate counted more than 3000 pages and 32 notebooks.<sup>2</sup> Unfortunately, these papers were destroyed during an air raid in October 1943 (Heitfeld-Rydzik 2020),<sup>3</sup> together with an important part of Scholz' own papers and correspondence.

Interestingly, his remaining papers demonstrate that during the war Scholz substantially helped at least four Polish academics: Jan Łukasiewicz and his wife Regina, Alfred Tarski's family, Jan Salamucha, and a colleague from Cracow,

<sup>&</sup>lt;sup>1</sup> "Es ist schön, auf diese Art zu erfahren, dass es auch in der schlechtesten der möglichen Welten immer noch gute Menschen gibt."

 $<sup>^2</sup>$  Cf. Verzeichnis des wissenschaftlichen Nachlasses von Gottlob Frege. Sammlung Frege, Gottlob (1848–1925), sygn. X14, 002.

<sup>&</sup>lt;sup>3</sup> For a different opinion of the disappearance of these documents, see Wehmeier and Schmidt am Busch (2000).

Professor Kowalski.<sup>4</sup> Scholz visited Poland twice, in 1932<sup>5</sup> and 1938, and he knew Polish at least well enough to be able to read logical texts (MS 5/2/1947). Bocheński included Scholz among the top analytical philosophers, next to Willard Van Orman Quine, John L. Austin, Alfred Tarski, and Karl Popper (Bocheński 1993a, p. 38).

In the summer of 2018, Scholz's literary estate (Nachlass Heinrich Scholz) was transferred from the Institut für mathematische Logik und Grundlagenforschung der Universität Münster (Germany) to the Universitäts- und Landesbibliothek Münster. There are many documents from the 1930s through to the 1950s testifying to the cooperation of the local university community interested in mathematical logic with Polish logicians: Kazimierz Ajdukiewicz, Józef M. Bocheński, Tadeusz Czeżowski, Stanisław Leśniewski, Jan Łukasiewicz, Andrzej Mostowski, Jan Salamucha, Jerzy Słupecki, Bolesław Sobociński, Alfred Tarski, and Mordchaj Wajsberg. As far as I know, until now, only a few letters from Scholz's personal papers have been published (Schreiber 1995, 1998)<sup>6</sup>; the Bocheński–Scholz correspondence has not yet been published.

Bocheński's contribution to the history of logic is presented by Marcin Tkaczyk: *Bocheński's Model of the Development of Logic* in this volume. Additionally, his biography has recently been published (Policki 2018).

#### Preserved and lost letters

The very first thing to note is that the Bocheński–Scholz correspondence consists of at least 22 documents. These confirm that they stayed in touch for almost 9 years, between 1946 and 1954. I know nothing about where they met for the first time, nor about the beginning of their close collaboration. However, it certainly started before the Second World War. As early as during the war, Bocheński sent his paper on Theophrastus's logic to Scholz to protect it from destruction.

There are two original typed letters by Bocheński as well as 13 carbon copies of typed letters by Scholz. Contextual information makes it plausible to assume that some documents are missing from this correspondence. Bocheński wrote at least six more letters, Scholz at least one more, none of which have been found so far. From the content of the preserved letters, we know a little about the lost letters' content.

The list of the preserved and lost letters<sup>7</sup>:

1. 18.07.1946, Scholz to Bocheński\*

<sup>&</sup>lt;sup>4</sup> It was probably about Tadeusz Jan Kowalski (1889–1948), Polish orientalist and secretary of Polska Akademia Umiejętności (*Polish Academy of Arts and Sciences*). See Bolewski and Pierzchała (1989, pp. 330, 345, 349, 344).

<sup>&</sup>lt;sup>5</sup> See [A document in which dates and topics of lectures in Poland in 1932 are presented]. Nachlass Heinrich Scholz, sygn. X1,125.

<sup>&</sup>lt;sup>6</sup> There are a published postcard Scholz to Mostowski, 2.01.1947 and parts of the following letters: Mostowski to Scholz, 5.02.1947; Łukasiewicz to Scholz, 12.12.1943; Łukasiewicz to Scholz, 5.01.1944; Łukasiewicz to Scholz, 3.02.1944.

<sup>&</sup>lt;sup>7</sup> The missing letters are indicated here by an asterisk; Bocheński's letters are indicated in bold print.

- 2. 20.08.1946, Scholz to Bocheński
- 3. Before 29.01.1947, Bocheński to Scholz\*
- 4. 29.01.1947, Scholz to Bocheński
- 5. 11.02.1947, Bocheński to Scholz
- 6. 06.08.1947, Scholz to Bocheński
- 7. 13.08.1947, Bocheński to Scholz
- 8. 20.10.1947, Scholz to Bocheński
- 9. 14.04.1949, Scholz to Bocheński
- 10. 22.12.1949, Scholz to Bocheński
- 11. Around 08.07.1951, Bocheński to Scholz\*
- 12. 30.08.1951, Scholz to Bocheński
- 13. Between 30.08.1951 and 08.09.1951, Bocheński to Scholz\*
- 14. 08.09.1951, Scholz to Bocheński
- 15. Between 08.09.1951 and 22.10.1951, Bocheński to Scholz\*
- 16. 22.10.1951, Scholz to Bocheński
- 17. 01.03.1952, Scholz to Bocheński
- 18. Between 01.03.1952 and 09.08.1952, Bocheński to Scholz\*
- 19. 09.08.1952, Scholz to Bocheński
- 20. Between 09.08.1952 and 16.03.1954, Bocheński to Scholz\*
- 21. 16.03.1953, Scholz to Bocheński
- 22. 10.03.1954, Scholz to Bocheński

The following topics were raised in the correspondence:

- 1. Polish logicians who survived the war and their current place of work.
- 2. Reorganization of academic environment, didactic activities, duties (academic and non-academic research), scientific/academic travel.
- 3. Current research topics, prospects for post-war publications, and future publishing plans.
- 4. Exchange of information about Jan Łukasiewicz, Bolesław Sobociński, and Joachim Metallmann.
- 5. Personal matters, Scholz's health problems in particular.

Very similar lists of topics can be created for all of Scholz's correspondence with Polish logicians.

#### Polish logicians who survived the war and their current place of work

The exchange of information regarding the fate of Polish logicians during and after the war is an important part of this correspondence. It includes such thought-provoking quotations as the following:

As regards our Polish acquaintances, I can now let you know the following: [Tadeusz] Kotarbiński – university president in Lódź (part of the University of Warsaw); [Kazimierz] Ajdukiewicz – Breslau; [Zygmunt] Zawirski – still in Cracow; [Andrzej] Mostowski – lectures in Warsaw; [Stanisław] Jaśkowski – Thorn (new Univ.); [Jan] Łukasiewicz – now has a weekly one-hour lecture in Dublin; complains that he is not receiving any news from you; [Bolesław] Sobociński – 57, Faider Street, Brussels; looking for possibilities to publish his work in "European" languages; [Władysław] Hetper, [Leon] Chwistek, and others: deceased.(BS 11/2/1947)<sup>8</sup>

Below is an example of a similar message written in the same year by another of Scholz's correspondents, Mostowski:

The state of Polish logic is, as you probably know, very lamentable. Suffice it to say that it is much easier to list the names of logicians who are still working in Poland than to state the losses. Mr. [Kazimierz] Ajdukiewicz is in Poznań, Mr. [Zygmunt] Zawirski in Kraków, Mr. [Stanisław] Jaśkowski in Toruń, Mr. [Jerzy] Słupecki in Lublin and I myself am in Warsaw. And that's all of us. (MS 5/2/1947)<sup>9</sup>

## Reorganization of the academic environment, didactic activities, duties, academic travel

During the winter semester 1946/1947 Scholz delivered the following lectures and classes:

- 1. A 4 h lecture on the calculus of logic (*Logik-Kalkül*) for a group of more than 100 mathematicians/students (SB 29/1/1947).
- 2. A 2 h class in topology (SB 20/10/1947).
- 3. A 2 h lecture on Kant and the contemporary situation in research on the foundations of mathematics and physics (SB 20/10/1947).

Then, in the summer semester of the same academic year, he taught a second part of mathematical logic for the first time, and presented the following topics (SB 6/8/1947):

1. Axiomatization of the Theory of Description.

<sup>&</sup>lt;sup>8</sup> "Was unsere polnische Bekannten angeht, so kann ich Ihnen nun das folgenden mitteilen: [Tadeusz] Kotarbiński – Rektor in Lódź (teil der Warschauer Univ.); [Kazimierz] Ajdukiewicz – Breslau; [Zygmunt] Zawirski – immer [noch] in Krakau; [Andrzej] Mostowski – doziert in Warschau; [Stanisław] Jaśkowski – Thorn (neue Univ.); [Jan] Łukasiewicz – hat jetzt eine einstündige Vorlesung in Dublin; beklagt sich, dass er keine Nachrichten von Ihnen bekommt; [Bolesław] Sobociński – 57, rue Faider, Bruxelles; sucht Möglichkeiten seine Arbeiten in "europäischen" Sprachen zu veröffentlichen. [Władysław] Hetper, [Leon] Chwistek u[nd] a[ndere] gestorben." On Chwistek - Hetper collaboration see their common article (Chwistek, Hetper 1938) and (Woleński 1995).

<sup>&</sup>lt;sup>9</sup> "Der Zustand der polnischen Logik ist, wie Sie wahrscheinlich wissen, sehr beklagenswert. Es genügt zu sagen, dass es viel leichter ist, die Namen der Logiker aufzuzählen, die noch in Polen wirken, als die Verluste anzugeben. Herr [Kazimierz] Ajdukiewicz ist in Poznań, Herr [Zygmunt] Zawirski in Kraków, Herr [Stanisław] Jaśkowski in Toruń, Herr [Jerzy] Słupecki in Lublin und ich selbst in Warschau. Und das sind wir alle."

- 2. Theory of Identity.
- 3. Boole's Algebra.
- 4. The elementary description-free (*Kennzeichnungsfreier*) part of the theory of relations.

There is only one more reference to Scholz's teaching activities in the Bocheński–Scholz exchange. It refers to winter semester 1947/1948. That time, Scholz gave a lecture on the concept of order in mathematics (SB 20/10/1947).

At the beginning of 1947, Bocheński wrote to Scholz that he was teaching mathematical logic (BS 11/2/1947). From his next letter we learn that Bocheński became a professor of contemporary philosophy,<sup>10</sup> a position he would never have accepted in normal times. He lectured on existential philosophy because it was of great interest to many students. However, he himself did not have a very high opinion of this philosophy (BS 13/8/1947). Nor did Scholz think much of existential philosophy, which he called kitsch, and considered dealing with it a waste of time for Bocheński (SB 20/10/1947).

In both of these letters, Bocheński expressed the hope of finding ten students interested in logic, especially PhD students in the history of logic.

Bocheński believed that the great interest in existential philosophy testifies to the crisis of European culture (BS 13/8/1947).

The correspondence testifies to Bocheński and Scholz's other activities. In a lost letter (BS 1/3/1953), Bocheński informed Scholz about his plans to visit Paris. Scholz also wanted to travel there and meet old friends; however, his health was not good enough (SB 9/8/1952). The head of the Institut für Mathematische Logik und Grundlagenforschung was no longer Scholz but Professor Hans Hermes (SB 10/3/1954).

### Current research topics, prospects for post-war publications, and future publishing plans

Based on my research into the correspondence, I drew up a list of topics investigated in Scholz's school:

- 1. New formalization of the theory of the calculus of descriptions (*Kennzeichnung-skalküls*) (SB 29/1/1947).
- 2. The constitution (*Konstituierung*) and theory of semantic inference concepts for the predicate calculus of the first level (SB 29/1/1947).
- 3. Omega incompleteness models (SB 6/8/1947).
- 4. The theory of definable sets, based on Mostowski's paper (SB 14/4/1949).

<sup>&</sup>lt;sup>10</sup> More precisely, Bocheński was a professor of modern and contemporary philosophy (see Policki 2018).

- 5. Translation of Mostowski's book on mathematical logic (Mostowski 1948), of which the most important part was the proof of Gödel's completeness and incompleteness theorems (SB 14/4/1949).<sup>11</sup>
- 6. Quine's semiotic proof of the incompleteness theorem based on his last paper (SB 14/4/1949).
- 7. Hilbert–Bernays unsolved problem (SB 14/4/1949).<sup>12</sup>
- 8. Słupecki's papers on the axiomatization of Aristotelian logic (SB 14/4/1949).
- 9. Tarski's new, long-awaited work on the decision problem (SB 14/4/1949).

Only two of Scholz's own activities are mentioned, described briefly in two letters. The first is his work on a journal, *Archiv für mathematische Logik und Grundlagenforschung*, the first issue of which appeared in 1951 (SB 22/10/1951). The second is his evaluation of a new book on Aristotle (Zürcher 1952), in which the *Corpus Aristotelicum* is expounded as a result of radical reorganization of the Aristotelian estate by Theophrastus (SB 16/3/1953).

Concerning his own research, Bocheński wrote only in the first preserved letter. First, he informed his colleague from Münster on his plans for publication: "Indeed, I will publish no fewer than five volumes this year,"<sup>13</sup> and the volumes are listed in the letter as follows (BS 11/2/1947):

- 1. An edition of Peter of Spain's logical manuscripts (Bocheński 1947d) where Scholz is mentioned in the introduction (BS 13/8/1947).
- 2. An edition of a book on Theophrastus' logic (Bocheński 1947b) based on a paper Bocheński did publish (Bocheński 1939).
- 3. A book published with Prof. Evert W. Beth's<sup>14</sup> help (Bocheński 1949). Scholz and Beth were also in correspondence with each other (see Peckhaus 1998/1999).
- 4. Three volumes of a very elementary, critical bibliography for beginners providing a carefully selected list of resources, with some advice for autodidacts or first-year students. Beth worked out the mathematical logic therein (Bocheński 1948).
- 5. A popular book (Bocheński 1947a), 350 pages, originally written by the author in French and then translated into German.

Some other of Bocheński's activities and successes are commented on as well in his correspondence with Scholz.

 Scholz described Bocheński's investigations into the history of modal logic (Scholz 1946) and encouraged Bocheński to continue this work. It must be published. Scholz recommended writing in German or English, rather than French, to make it possible for him to discuss it with his associates in his school (SB 20/8/1946).

<sup>&</sup>lt;sup>11</sup> The translation was never published in German or English.

<sup>&</sup>lt;sup>12</sup> This refers to Hilbert–Bernays paradox. For more on it, see Priest (1997).

<sup>&</sup>lt;sup>13</sup> "Ich bringe ja in diesem Jahre [1947] nicht weniger als fünf Bände heraus."

<sup>&</sup>lt;sup>14</sup> For extended discussion of Scholz–Beth relationship, see Peckhaus (1998/99).

- Bocheński asked Scholz whether he would like to write a part on Leibniz or other German philosophers (Bocheński 1948). Alternatively, Scholz could seek out another author to carry out this task. There was only one condition laid down by Bocheński: the person had to be a good specialist in the given area, who can write on the topic objectively (BS 11/2/1947).
- 3. Bocheński let his colleague know that he was acting as chairman of the *Kom[m] ission der Schweizer[ischen] Phil[osophischen] Gesellschaft für die Ausgabe von Klassischen Texten* (Commission of the Swiss Philosophical Society for the Edition of Classical Texts) (BS 11/2/1947).
- Bocheński published a Polish collection of philosophical-religions papers in London (Bocheński 1947c, BS 11/2/1947).
- 5. Bocheński's editorial work on logical papers in the journal *Methodos* (1949–1951) (SB 8/9/1951), in a section dedicated to logic.
- Scholz congratulated Bocheński on: (1) transparent work on existentialism; (2) his publishing success: worldwide sales of 50,000 copies of a book whose "translation into German was exemplary." (SB 8/9/1951). Maybe he was thinking about Bocheński (1947a).

#### Theophrastus's story

Bocheński's paper on Theophrastus' logic was published for the first time in Warsaw as a part of the first issue of a journal *Collectanea Logica* (Bocheński 1939), although the entire circulation of this journal was destroyed during the war. Fortunately, one copy was preserved in Rome, which Bocheński realized only after the war (Bocheński 1994a, b, p. 138). Bocheński sent the manuscript of his work on Theophrastus's logic to Scholz to keep it safe in Germany during the war. Then in London, Bocheński read about the bombing of Münster by the Allies; the Scholz's copy was in fact lost during the war.

Bocheński wrote to Scholz about preparing the new edition of Theophrastus, finally published in 1947 (Bocheński 1947b). In the introduction, Scholz's help during the war was also mentioned, and called by Bocheński "a prehistory of the book." Bocheński considered this as a kind of word of thanks to Scholz for his help during the war: "ich wollte auch endlich ein öffentliches Zeugnis ihrer Stellung während des Krieges geben" (BS 11/2/1947). In the letter, Bocheński quoted the following excerpt from the book's introduction:

These galley proofs were sent to Mr. Heinrich Scholz, professor in the University of Münster, Westphalia. This scholar, equally distinguished by his scholarship as by his Christian attitude towards logicians of nations then believed to be definitively defeated, kept the copy safe in his institute ... (BS 11/2/1947).<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> "Ces épreuves furent transmises à M. Heinrich Scholz, professeur à l'Université de Münster en Westphalie. Ce savant, aussi distingué par la science que par son attitude chrétienne à l'égard des logiciens appartenant aux nations qu'on croyait alors définitivement vaincues, déposa l'exemplaire dans son séminaire ... etc."

This was especially important to Scholz after the war because of the reservations and prejudices against Germans (BS 11/2/1947, 13/8/1947).

Before the war, Scholz already had a very high opinion of Bocheński's work on Theophrastus (Scholz 1940), and in a letter from the 1950s, Bocheński is named as the best expert in Theophrastus's logic (SB 16/3/1953).

#### Exchange of information about Polish logicians

Jan Łukasiewicz (1878–1956) is mentioned in almost every letter: five times by his full name, sometimes only by capital letter L., or as "*mein Freund in Dublin*" (my friend in Dublin), "*Herr L.*," "*Unser gemeinsamer guter Freund in Dublin*" (our mutual good friend in Dublin), "*mein guter Jan*" (my good Jan).

Notice that the same letter headings already show how important Łukasiewicz was for Scholz. According to Bocheński, this respect and sympathy resulted from some similarities between them. Both Łukasiewicz and Scholz were great logicians of their time as well as Platonists (Bocheński 1993b, p. XV). Bocheński introduced his view by writing also:

[...] a similar union of love for rigour and beauty was not quite new with Łukasiewicz. It was already present in some Neo-Platonic thinkers, like Alexander of Alexandria. Łukasiewicz shared that attitude with another important logician of my time, Heinrich Scholz; this explains the friendship that existed between them. (Bocheński 1994a, p. 4)

From 1946 onwards, Scholz wrote about his letters sent to Łukasiewicz and complained about Łukasiewicz's lack of reply. Here is an example:

I have not received a reply from him yet. I don't understand why I have had no sign from him at all yet. I fear that something happened to him.  $(SB 20/8/1946)^{16}$ 

Fortunately, a few months later, Scholz shared with Bocheński some news about Jan's and his wife Regina's life and work in Dublin: Łukasiewicz had finally written to Scholz.

Scholz let Bocheński know that Łukasiewicz had been invited by Scholz to work at the university in Münster where he would be very welcome. Scholz wrote to Bocheński as follows:

In the last days of the old year, I finally received a message from Mr. Łukasiewicz. He and his wife are materially well cared for in Dublin, so well indeed that he has not so far been able to decide whether to accept the invitation to come to Münster; but he is exhausted and feels so isolated that he has not been able to do anything yet. It's hard on me, for I did foresee this. It

<sup>&</sup>lt;sup>16</sup> "Ich habe bis jetzt keine Antwort von ihm. Ich verstehe nicht, warum ich bis jetzt überhaupt kein Zeichen von ihm erhalten habe. Ich fürchte, dass irgend etwas ihm zugestossen ist."

seems to me that here he would have stepped into a circle of like-minded good friends, who would, bit by bit, have so stimulated him to the point of becoming productive again. (SB 29/1/1947)<sup>17</sup>

However, Łukasiewicz wanted to move to the USA, but Scholz believed that he had no chance of being employed there (SB 29/1/1947).

In August, the same year, Scholz complained that during 1947 Łukasiewicz had not written to him, and Scholz believed that "he was not feeling very well" (*es ihm nicht sehr gut geht*). Scholz wondered again whether Łukasiewicz should, however, move to Münster (SB 6/8/1947). Bocheński replied quickly and let Scholz know that he regularly received cards from Łukasiewicz, which meant one card every 9 months (BS 13/8/1947).<sup>18</sup>

As a good friend, Scholz remembered Łukasiewicz's 70th birthday on 21 December 1948 and sent him a postcard. This time, Łukasiewicz replied very quickly (SB 14/4/1949). More than 2 years later, Scholz complained again that he had had no message from "their friend in Dublin" and asked Bocheński to let him know what was going on there (SB 30/8/1951).

In the last of the discovered letters, almost an entire section is devoted to Łukasiewicz. Scholz referred to a letter sent to him by Łukasiewicz that did not survive or to their phone conversation. In any case, it is not clear what Scholz wrote to Bocheński. It could be that Łukasiewicz finally decided to move to Münster, but at that time Scholz regretted that this was no longer possible. In the last letter, Scholz also mentioned that Łukasiewicz was accused of acting against Jews during the war (SB 10/3/1954; Łukasiewicz 2013, pp. 42, 72, 78, 88).

The other Polish logician, Bolesław Sobociński (1906–1980), is mentioned only four times. Scholz knew that he survived the war and was in Brussels, but did not know his address and asked Bocheński for it (SB 29/1/1947). As Bocheński and Sobociński had stayed in touch at the time, Bocheński provided the address: 57, rue Faider, Bruxelles. Bocheński also added that Sobociński "is seeking opportunities to publish his works in 'European' languages" (*sucht Möglichkeiten seine Arbeiten in "europäischen" Sprachen zu veröffentlichen*) (BS 11/2/1947). In response, Scholz complained that he had sent Sobociński three letters but received no answer (SB 13/8/1947). He is mentioned one last time when Scholz recommended a piece of Sobociński's beautiful work for the Zentrallblatt für Mathematik (SB 30/8/1951).

Joachim Metallmann (1889–1942) is mentioned only once. He was a professor at the Jagiellonian University who was arrested on 6 November 1939 during the Special Operation Cracow (*Sonderaktion Krakau*). Metallmann was not a logician but a philosopher of the natural sciences who also dealt with methodology. Scholz reported that, although he had wanted to help him, he did not manage to do so, and

<sup>&</sup>lt;sup>17</sup> "In den letzten Tagen des alten Jahres habe ich endlich eine Nachricht von Herrn Lukasiewicz erhalten. Er ist in Dublin mit seiner Frau materiell gut aufgehoben, und so, dass er sich bis jetzt nicht hat entschliessen können, die Einladung nach Münster anzunehmen; aber er ist so erschöpft und er fühlt sich so isoliert, dass er bis jetzt noch nichts hat machen können. Es trifft mich sehr; denn dies habe ich vorausgesehen. Es scheint mir, dass er hier in einen Kreis von gleichgesinnten guten Freunden eingetreten sein würde, die ihn nach und nach so angeregt haben würden, dass er wieder produktiv wurde."

<sup>&</sup>lt;sup>18</sup> As an example of Bocheński - Łukasiewicz collaboration see Łukasiewicz 1993.

Metallmann died in Buchenwald. I include here Scholz's description and the request for contact with Metallmann's wife:

Perhaps you can also tell me something about the fate of Mrs. Metal[1]mann. I corresponded with her for as long as it was possible. For a long time, I tried in vain to save her husband from Buchenwald. It still haunts me. (SB 6/8/1947)<sup>19</sup>

#### Other persons mentioned in the correspondence

At the beginning of 1947, Dr. Paul Lorenzen from Bonn visited and lectured on "a new, significantly simplified CF-proof for elementary number theory based on lattice theory" (*einen neuen wesentlich vereinfachten WF-Beweis*<sup>20</sup> *für die elementare Zahlentheorie auf Verbandstheoretischer Grundlage*) (SB 29/1/1947).

In the same year, Paul Bernays' 14-day visit was planned. Scholz added: "We are very pleased" (*Wir freuen uns sehr*) (SB 6/8/1947), and in the next letter he reported that this visit had taken place and Bernays had delivered all his lectures during 14 days in September (SB 20/10/1947).

I also give a list of other people from the correspondence not mentioned yet in this article, in alphabetic order: Prof. [Karl] Dürr, [Robert-Marie] Feys, Prof. O[lof] Gigon, Prof. [Étienne] Gilson, [Thomas] Greenwood, Dr. [Gisbert] Hasenjaeger, Prof. [Hans] Hermes, Werner Jaeger, Prof. [Karl] Jaspers, [Régis] Jolivet, [Gabriel] Marcel, [Jacques] Maritain, [Thomas] Räber, [Marie-Dominique] Philippe, Max Pohlenz, [W.V.O.] Quine, [Michele Federico] Sciacca, Dr. [Karl] Schröter, [Paul] Wyser, a Franciscan [Johannes Bendiek] who learned Polish to translate Jan Salamucha's work on Ockham (see Salamucha, 1950).<sup>21</sup>

#### Personal matters

Bocheński wanted to send Scholz a package, but to do so he needed money, £50 that Grocholski<sup>22</sup> had not returned to him in London. As Grocholski did not respond to Bocheński's letters, Scholz wrote to him as well (BS 11/2/1947, 13/8/1947).

Scholz asked Bocheński for help in completing library collections, in particular about the missing journal issues (SB 9/8/1952).

Post-war evaluation of Scholz's attitude during the war (BS 11/2/1947, SB 20/10/1947).

<sup>&</sup>lt;sup>19</sup> "Vielleicht können Sie mir auch etwas zu dem Schicksal von Frau Metal[1]mann sagen. Ich habe mit ihr korrespondiert, so lange es überhaupt möglich war. Ich habe mich lange vergeblich bemüht, ihren Mann aus Buchenwald zu retten. Es geht mir immer noch nach."

<sup>&</sup>lt;sup>20</sup> Widerspruchsfreiheitsbeweis.

<sup>&</sup>lt;sup>21</sup> Birgit Heitfeld-Rydzik helped me to establish some first names and academic titles of the listed people and who was the mysterious Franciscan.

<sup>&</sup>lt;sup>22</sup> Unfortunately, I don't know anything more about who Grocholski, Bocheński's and Scholz's acquaintance, was.

Invitation to visit Münster in August or September 1954 (SB 10/3/1954).

Scholz suffered all his life from stomach problems; in some letters he mentioned morphine. Bocheński developed pneumonia (BS 13/8/1947).

Judging by the salutations of their letters, their intimacy increased from September 1949 on.

#### An unpublished paper by Bocheński

The archive in the Universitäts- und Landesbibliothek Münster includes an interesting six-page paper:

J. Bocheński: Ueber die Bedeutung der mathematischen Logik fuer die Philosophie und ihre Geschichte, [date 08.07.1951].

In fact, this text may be either a copy of Bocheński's work, or Scholz's (or his associate's) notes on Bocheński's work with the title given by Scholz. To my knowledge, the paper has never been published; I have not found such a title in Bocheński's published works from that period.

While much is crossed out and there are different corrections in his two preserved Bocheński's letters, there are no corrections introduced in this unpublished Bocheński's paper. Therefore, I suppose the copy was rather not typed by Bocheński.

#### Conclusions

There are many documents from the 1930s to 1950s that testify to the cooperation of Münster's academic community interested in mathematical logic with the Polish logicians: Kazimierz Ajdukiewicz, Józef. M. Bocheński, Tadeusz Czeżowski, Stanisław Leśniewski, Jan Łukasiewicz, Andrzej Mostowski, Jan Salamucha, Jerzy Słupecki, Bolesław Sobociński, Alfred Tarski, and Mordchaj Wajsberg.

Bocheński's correspondence with Scholz mainly concerns the organization of university life and publishing plans. Private threads are related to health or common friends. The common ground of their research was mainly the history of logic, which is not discussed extensively in this article, but is mentioned in the letters. Last but not least, the Scholz–Bocheński correspondence provides evidence of growing friendship and scientific cooperation between the philosophers.

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#### Declarations

**Conflict of interest** The author has no conflicts of interest to declare that are relevant to the content of this article.

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