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**TALER COINS
IN THE BULGARIAN LANDS IN THE 16th – 17th CENTURY**

ABSTRACT

OF THE DISSERTATION
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Field of higher education: 2. Humanities
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The dissertation is structured as follows: preface, review of sources and historiography, seven chapters, 5 appendices, list of abbreviations, descriptions of the sources of images, abbreviations and used literature and conclusion in a total volume of 518 pages.

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The public defense of the dissertation will take place on December 21, 2021 at 3 pm in Hall 309, Building 1 of the Konstantin Preslavski University – Shumen.

The **Preface** traces the reasons for writing the present paper, the chronological scope and objectives. The idea for this work was born ten years ago during my work with numismatic material and publications related to the collective coin finds from our lands under Ottoman rule, containing significant amounts of European *thalers*. Even before that, I was impressed by the almost complete lack of interest in our science to the coins of the period 16th – 17th century in particular, and in general to those of the Ottoman era. This negative tendency has its impact on the general development of the study of the coin circulation in our lands, due to the significant chronological gap in this area formed over time.

On the other hand, in other publications (historical, economic, etc.) concerning the period 16th – 17th century and commenting on various coin denominations, local and folk names of coins, in most cases there is ambiguity, incomplete and quite often complete confusion about numismatic problems. This trend is observed even after the appearance of the first publications of a coins. There are many reasons for this. Among them are the different denominations of the same coin in Europe (where, by the way, regional specifics of terminology are also taken into account, for example: *thaler* in German-speaking countries, *talero* in Italian-speaking countries, *dollar* in English-speaking countries, *efimok* in Russia, etc.), the Ottoman Empire (official documents) and the various peoples who inhabited it. This often leads to the confusion of a wide variety of coin names and to a number of ambiguities and confusions in some publications. Mistakes in this regard are not uncommon.

This research is largely based on my personal observations in this area for more than a decade. This time, of course, is too short to process and publish the vast quantities of *thaler* coins stored in our museums and private collections. However, the purpose of the present study is not to create a *corpus* of *thaler* coins from the territory of today's Bulgaria or to describe all *thaler* coins found in our country. The main goal is to highlight the place of our lands in the Pan-European processes (numismatic, economic and to a lesser extent historical, political and archaeological) accompanying the price revolution, the emergence of large silver coins with a value equal to the gold *ducat* and *florin*, their distribution and acceptance in a number of territories (including in our lands), etc. accompanying processes. In our lands under Ottoman rule, this eventually led to the gradual displacement of domestic Ottoman denominations from the market – the complete disappearance of the copper *mangir* and a

significant reduction in the number of *akches*. All this is connected with the decrease of the trust in the Ottoman coins as a whole (with the exception of the gold denominations) by the part of the population – both Christians and Muslims. This was accompanied by the almost complete inability of the Ottoman authorities for more than a century (after the outbreak of the crisis of 1585) to deal with the massive influx of European *thaler* coins. After all, the state takes practically no adequate measures to deal with this dangerous situation for the economy and politics, but on the contrary – accepts as regular payments (for example, taxes and state fees) with foreign *thaler* coins.

Despite the intensity of economic contacts between today's Bulgarian lands under Ottoman rule and Western Europe, in our country there is no special study on these issues from a numismatic point of view. The presence of a significant number of *thaler* coins has been the subject of attention by researchers most often, among other things. As a result, ill-founded and debatable theses concerning the economic and trade contacts between the lands where the *thalers* were struck and the Balkans appeared. They are also associated with the circulation of coins, especially after the 1980s. This period is associated with economic and political developments that leave a deep imprint both in Europe and in the Balkans.

The chronological scope of this study is related to the appearance and spread in our lands under Ottoman rule of the *thaler* and *thaler* coins (larger than *quarter-thaler*). However, both the start and end dates are largely conditional. The appearance of the *thaler* is probably more correctly perceived as a process, rather than a one-time act. Moreover, in the beginning it existed only as a local coin with almost no significance for international trade. Although the first *gulden*s were struck at the very end of the 15th century, they initially had only local significance. It was not until the first three decades of the 16th century that the *thaler* took shape as a coin, recognized by many countries and already beginning to spread in large areas. That's why I accepted the beginning of the 16th century as a borderline chronological benchmark. Moreover, there is no unanimity among scholars about the very nature of the *thaler*, because in the beginning it was a popular name, not an official one, and referred to several coins of different nature and origin. That is why all opinions about the starting date of the appearance of the *thaler* are subjective author's hypotheses, without a generally accepted in science date and place of appearance of this coin. In any case, the *thaler* became a coin of great

importance in the economic, commercial, financial and political spheres in the 16th century.

The end date was also not adopted by chance. The end of the 17th century was associated with numerous events of a numismatic, political, military and economic nature, which provoked the end date. Indeed, this is the time of the end of one of the most difficult wars for the Ottoman Empire, which ended in 1699 with the Karlovitz Treaty. It put an end to the empire's victorious campaigns in Europe, and for the first time it lost the initiative in the military as well as in the political and economic spheres. But the main argument is the results of the great financial and monetary reforms in the Ottoman Empire during the reign of Sultan Suleiman II, which are associated with a radical change in the Ottoman monetary system – the abandonment of the *akche* as the main currency, introduction of completely new coin denominations, closure of dozens of mints, attempt at centralization in the field of coinage, etc. But in addition, at the turn of the two centuries, as a consequence of the two main events described above, there was a significant, I would even say radical, change in the circulation of coins in the Ottoman Empire. It directly concerns the topic of *thalers* and is expressed in two directions: changing the *thaler* flow from the outside and creating its own Ottoman *thaler* coin – *kurus* (called by the Bulgarians by European model *gros*).

At the turn of the 17th and 18th centuries, without a more accurate dating, a radical change in the cash flow from European countries was observed. At the end of the 17th century, the most popular foreign silver coins in the previous two centuries, the Dutch *lion-thaler* and the Spanish *8-real* coin, gradually began to disappear. Even before that date, the Polish *troyaks* and *quarter-thalers*, so popular in the first half of the 17th century, had disappeared from the Ottoman markets. But the reasons for this are different – the weakening of the Polish-Lithuanian Commonwealth and the reduction of the silver content of the *3-gros* coins. Other *thaler* coins, such as the Italian *talero* and the German *reichsthaler*, have significantly reduced their quantity, which is also due to internal reasons. On the other hand, other *thaler* coins, especially the Austrian ones, are increasing their presence. New ones, unknown until now, also appear. In the first place among them are the Russian silver and copper coins. Their entry into the monetary circulation of the empire was initially timid and in very small quantities, but over time it would become regular, without being particularly massive.

The entry of *thaler* coins into the Bulgarian lands is a long and complicated process. So far, a satisfactory and reasoned answer to a number of important questions has not been given, such as: which are the oldest *thalers* found in the Bulgarian lands; when *thalers* began to enter the Balkan markets of the Empire regularly and in large quantities; when they were adopted by the Ottoman authorities as a regular means of payment, etc. I am far from believing that definitive answers to these questions will be given, but I believe that there is enough source data of a different nature that will shed light on these problems. Our goal with this dissertation is to study and analyze all available published source material on the topic – mostly written and numismatic, but also historical, economic, archaeological, etc. I believe that only a combinatorial approach to all available sources will give a complete picture of the entry and circulation of *thaler* coins in our lands.

It should also be borne in mind that the year of minting of a foreign coin, which participated in the monetary circulation of the Ottoman Empire, does not provide information when and how it got into it. Silver *thalers* have been at the heart of the European monetary system for several centuries. Of particular importance is their development and circulation during the strongest centuries for this denomination – 16th and 17th – when it was spread practically throughout Europe and in a number of territories outside it (America, Asia and Australia). Indirect data can be gleaned from the data of foreign travelers as to when *thalers* and European coins in general have been in regular circulation in the empire. Among them, probably the most valuable first-hand information was left to us by Hans Dernschwam. From his testimonies it is clear that during his journey through the Bulgarian lands on his way to Istanbul in 1553 – 1555, European *thalers* were probably not legal tender, as travelers had to exchange *thalers* for *asprons* (*akches*) at a rate of 1:37. This is the period before the crisis broke out.

In the Ottoman Empire, the idea of a large silver coin developed very slowly. In practice, this is happening after a long period of crises and shocks, during which there are almost no adequate fiscal measures. This large Ottoman silver coin appeared about two centuries later than European *thalers*. To this day, it has not been established with certainty what the causes are and what provoked the introduction of the *kurus*. It is also not clear who is the initiator of this – whether it is under external pressure or an internal decision. External pressure is more than logical, especially from the Ottoman allies – mostly the French and the British – who would benefit

from the displacement of the coins of their enemies – the German *reichsthalers*, the Dutch *lion-thalers* and the Spanish *8-real* coin. The very name of the coin – *kurus* (which comes from *gros*) – is a kind of proof that it was minted under European influence. And it is not surprising that the name is exactly like that, because the official name of the first Tyrolean *thaler* was originally *gulden-groschen*.

Sources and historiography. The sources for this study of *thalers* in the Bulgarian lands under Ottoman rule can be grouped into two main categories: written and numismatic. There are several subtypes of written testimonies of the epoch: fiscal inventories, cadastral registers, testimonies of foreign travelers, etc. *Tahrir defters* are official cadastral registers compiled for most of the territories under Ottoman rule. In some of them data on trade operations with precious metals are found.

Information about various fees and other revenues of the Ottoman treasury is also contained in the works of some historians of the era. For example, Laonicus Chalcocondylus testified that the Ottoman revenues reached 900,000 *staters* in the middle of the 15th century. He also describes various taxes, such as *haraj* and fees for grazing and transport of agricultural products. He also mentions a tax on hiring pack animals, such as horses and camels, a river transport fee and a rice transport fee.

The notes left by various foreign travelers, merchants and diplomats who passed through our lands contain especially valuable first-hand information about what they saw, including the prices of various goods, the amount of taxes, foreign exchange rates, etc. Among them, the most numerous are the specific data of foreign travelers who passed through our lands in the 16th – 17th century. The Yugoslav researcher Vuk Vinaver, based on numerous written sources, describes in detail the changes in the market rates of the various *thaler* coins in the individual cities and territories of the Empire. For the capital Istanbul, he describes a colorful picture of various exchange rates, which reflect the dynamics of these processes in the seventeenth century, lower than market prices. The information of this Yugoslav researcher is supplemented with a number of written and numismatic data by Vladimir Penchev.

There are also numerous announcements about the exchange rate of Spanish coins of *8-reals*. According to written sources, there are differences in the official exchange rate of the *reichsthaler* and the *8-real* coin. There are also reports that Spanish *8-real* coins are the most common foreign silver coins in the Ottoman Empire. Curious information about the

preferences of the population of Sofia for the *lion-thalers* was left to us by Giovanni Benolla, who passed through our lands in 1682 – 1683 and visited our present capital on March 9, 1682. He noted that the carters, Bulgarians by nationality, did not want to they were paid in any currency, especially in *lion-thalers*, gold or other large silver coins, and it took travelers a long time to obtain them from the local *sarafs*.

Information about the *thaler* course in the Empire can be gleaned from a number of Ottoman written sources. For example, in an Ottoman historical chronicle concerning the reign of Sultan Selim I (1512 – 1520) it is mentioned that the *sada-gros* (i.e. the ordinary *gros*, *thaler*) costs 35 *akches*. The information of foreign travelers who passed through our lands confirms that. The free circulation of foreign coins on the territory of the Empire is mentioned, for example, by the French traveler Delacroix in 1673 – 1675. Hans Dernschwamm in his famous diary about his trip to Istanbul in 1553 – 1555 notes that in the town of Smederevo they exchanged *thalers* for 37 *akches* each. Pierre Lescalopier mentions that in 1574 the *thalers* were equal to 40 *akches* and were in free circulation in the Empire. There are many other notices to Europeans that provide valuable first-hand information.

Apart from them, there are other written sources from which important information can be derived about the types of coins that participate in the circulation in the Bulgarian and other lands under Ottoman rule. One of the most detailed of these is the famous Chronicle of the Turkish Sultans, published in German in 1590. It contains much information about the coins used in the Ottoman Empire. The author gives specific data on the exchange rate of various European coins against the Ottoman *akches* (called by him *asperlins*). This work also contains information about the changes in the value of the *thaler* and it is noted that later one *thaler* was equal to 40 *akches* and the gold *ducat* to 60, and immediately before the author's departure from Istanbul the *thaler* became 80 *akches*. The author also gives extremely valuable information about the course of European *thalers* in the various Ottoman territories. These differences (according to what he was told on the spot) were due to the war with Persia. Apart from the Balkans under Turkish rule, the Chronicle also mentions other Ottoman territories (Syria, Egypt), mentioning that one German *thaler* is in fact equivalent to the Spanish *8-real* coin, as both in Tripoli (Syria) were exchanged for 45 *medins*, while the Venetian *ducat* was equal to whole 73 and even 75 *medins*.

Among the most valuable written sources for our lands is the ledger of the Ragusan merchant Benedetto Marino di Resti (1555 – 1611). In 1578 he came to Sofia, where he lived for many years and carried out trade operations with a number of settlements on the Balkan Peninsula, but mostly in the Bulgarian lands. His account book contains data for the period 1590 – 1605. It contains the names of about 600 people, including many Bulgarians with whom he had trade relations. This book unequivocally testifies that in 1599 – 1602 the *thaler* was equal to 100 – 110 *akches*. The book contains information about major trade deals with Bulgarians from different parts of the country. It is noted that two people from Oryahovitsa and Maglizh have to pay a total of 75,500 *akches* for buffalo and cow skins bought by them – a significant amount for this times. Di Resti's ledger contains many other, albeit indirect, valuable pieces of information. It indirectly testifies that the Spanish *8-real* coins have the same value as the *reichsthalers*, not only in the Ottoman Empire, but also in other places, such as Ragusa.

From the written sources one can extract valuable information about the purchase value of the Western European coins and about the prices in the Bulgarian lands under Ottoman rule and in a wider geographical area. Information about the prices in the Bulgarian lands has been left to us by a number of foreign travelers. Interesting, albeit scarce, information was left by the English merchant John Newbury, who crossed our Black Sea coast in April 1582. He mentioned that in Tulcea he paid a duty of two or three *crowns*. This announcement is surprising, because such coins have not been found so far in our lands or in Northern Dobrogea. It is possible that this is actually *thalers* and not English *crowns*. The same author further gives the prices of some goods in his description. Another Englishman, John Burberry, who passed through the Bulgarian lands in 1665, also mentions *crowns*. Apart from *crowns*, he also talks about *dollars* a little below in his description, which causes even greater confusion. As a name for the *thaler*, the term *dollar* is also used by other English travelers, such as the lawyer Henry Blount from 1634. Undoubtedly, in all these cases of mention of the terms *crown* and *dollar*, *thaler* is meant. It is very likely that these are different types of *thalers*. Unfortunately, none of the English travelogues contain more specific information.

The development of scientific interest in European *thalers* in particular and in coins from the 15th – 17th century in general, can be divided into three main periods: until 1964; between 1964 and 1986, and after 1986.

The main active factor in the first period was the sharp disregard for this type of artifacts, which is characterized by limited in number and specific publications. Unfortunately, these coins do not arouse almost any interest among researchers and do not become, with very few exceptions, available to science. Between 1878 and 1944, no specific article was published in Bulgaria concerning the circulation of *thaler* coins during the Ottoman era. During this period, there is not a single numismatist who deals in depth with the subject in question. Interest is focused mainly on ancient and to a lesser extent on medieval coins.

However, some indirect interest exists. For example, in 1910s, Diamandi Ihchiev drew attention to some problems in the circulation of foreign silver coins in the Bulgarian lands under Ottoman rule. He was the first to raise the issue of coinage in the Bulgarian lands during the Ottoman era and pointed out the differences in the weight of the coins minted in different mints. However, the author admits in his work numerous inaccuracies caused by the fact that he does not use empirical material, but only written sources. For example, he points out that the old Bulgarian *gros* with the image of a lion had the value of 40 *akches*. It is obviously a matter of confusion, because the *gros* from the time of Ivan Shishman and the Ottoman *akche* have a commensurate weight and silver content and it is practically impossible for the ratio between them to be 1:40. Obviously, Ihchiev is referring to the Dutch *lion-thaler* for a much later time. In other cases, it is not at all clear exactly what coin the author is referring to, for example when stating that *groses* without the image of a lion are worth 35 *akches*. Unfortunately, this in-depth study appears in isolation, and the problems posed remain without consequences.

Some issues are also analyzed in more general publications. For example, some important issues are addressed in the work of Anastas Ishirkov, devoted to the situation in Sofia in the 17th century. In the same way Ivan Sakazov, analyzing the Dubrovnik-thread trade indicates the exchange rates of a number of coins in different periods. For this purpose, he is guided not by numismatic material, but by the preserved written data. For example, he notes that the exchange rate of the Ragusan *ducat* is different from that of the Venetian *ducat*. Using the data from the court register from 1603, it is evident that 125,760 *akches* are equal to 1572.5 Ragusan *ducats*, ie. 80:1 ratio. Probably this is not a real coin, but a unit of account or a *silver ducat*, because at the same time the gold Venetian *ducat* already has the value of more than 300 *akches*.

When we talk about the work of these early researchers from the period before 1944, we cannot fail to note the numerous weaknesses of their work, which, of course, are completely justified. Account should also be taken of the fact that they wrote their research at a time when there was still no publication of specific numismatic material and that they were guided almost entirely by the written sources available at the time, which in many respects they are inaccurate, incomplete and confusing. They often use not real, but accounting currency units. In addition, real coin names are often confused with those distorted by the local population and even popular ones. That is why we must give well-deserved praise for the scientific work of these pioneers.

It was not until 1944 that, albeit a small number of publications appeared on various aspects of the circulation of coins. As a rule, *thaler* coins are not considered separately and specifically, but are part of more general publications concerning, for example, a specific collective finds, which, among other coin denominations, also contains *thalers*. During this period, a significant imbalance of research is observed. Some regions are relatively well-studied, while others are almost scientifically intact. Often the publications do not address the problems of *thaler* circulation in depth, because their scientific purpose is quite different. It should be noted that much more attention is paid to Western European coins in the collective finds, while the Ottoman ones are only mentioned. But they have only been partially studied. The most characteristic feature of almost all publications up to 1989 is their brevity. We do not fully know the reason for this, but we assume that among the negative factors is the political situation at the time, and another, and not insignificant, is the inaccessibility of Western European literature and coin catalogs of European coins. This is how we explain inaccurately, incompletely and even incorrectly defined specimens.

However, some rather successful and important attempts to work with *thaler* coins, their value, should not be underestimated. Todor Gerasimov is one of the most prominent scholars dealing with numismatics of the 16th – 17th centuries in Bulgaria. In the beginning, he did not deal specifically with the coins of this era, but with various analytical issues related to them. For example, as early as 1963, his article appeared, dedicated to the popular names of coins circulating in our lands during the late Middle Ages, preserved in works of folk art such as songs, legends and fairy tales.

Among the first publications of our prominent scientist, dealing specifically with *thaler* coins, is the one dedicated to the great treasure above Sofia – one of the most emblematic finds from the Bulgarian lands

under Ottoman rule. The coins were placed in a metal box, along with a silver ring and two iron knives, perceived by Todor Gerasimov as objects for ritual circumcision of Jewish boys. This gives him reason to assume that the money belonged to a rich Sofia rabbi. In addition, the treasure was found in a building next to Sofia's oldest synagogue in the old Jewish quarter. From the literature quoted by Gerasimov it is clear that he did not have almost any coin catalogs and other accompanying literature on the subject, but tried to determine the coins on the basis of his knowledge on the basis of images and inscriptions on them. This is extremely commendable, given his main activities in antiquity. In this way of working, the mistakes made in the article are completely understandable: the mixing of different types of Dutch *thalers*; the incomplete distinction between the *lion-thalers* of the different provinces, as well as the provincial ones; the mixing of the *thalers* of the Holy Roman Empire and the Archduchy of Austria, which also caused confusion of individual rulers; the misidentification of the *thalers* of various German states as Saxon; inaccurate distribution of Spanish coins by rulers, etc. However, Todor Gerasimov's article is extremely useful due to the detailed description of the coins and the photographic material of the most important ones. This allows errors, omissions and inaccuracies to be partially corrected. Gerasimov's professionalism is evident from the construction and arrangement of the publication itself. With some small exceptions, the coins are illustrated with the necessary descriptions, inscriptions, diameter and weight data. In addition to describing the coins themselves, the author analyzed a number of elements accompanying coin circulation, such as international trade in the Balkans at the time, the lack of English coins, the small number of French coins, etc., which illuminate many aspects of the economic reality of the era. That is why Todor Gerasimov's article is of great importance in the study of coins circulating at the end of the 16th and the first half of the 17th century. We owe Gerasimov other valuable, albeit very short, publications concerning the circulation of coins during the Ottoman era. All of them marked the beginning of the scientific description and study of the Ottoman and Western European coins circulating in the Bulgarian lands in the period 16th – 17th century.

Gerasimov's work has been continued by other scholars. One of the first publications in which both European and Ottoman coins are defined, we owe to Kunka Rogeva. Unfortunately, her short report on the large coin find from the Bistritsa village, Sofia region, which contains 986 silver coins, covers only four pages and is characterized by its schematic nature.

In the 1960s and 1970s there is an interesting trend concerning the numismatics of the period 16th – 17th century. Some researchers, although dealing with other issues, also publish coins from the Ottoman era. For example, an extremely interesting gold coin of 5 *ducats* of the Archdiocese of Salzburg was published as part of the collective find from Nessebar, containing mostly jewelry. The coin in question was re-used as part of jewelry.

One of the most important foundational publications is the work of Milko Mirchev and concerns the great treasure of Ottoman and Western European coins from the Dabravino village (Varna region), discovered in 1967. The article is an example of timely publication of numismatic material – only three years after the discovery of the find. Western European coins are presented in groups by countries, types and denominations, but without photos and metrics for each of them. The omissions and incompleteness of this publication are fully compensated by the professional presentation of the coins in the treasure. In addition, they are fully justified by the specifics of the period in which the article was written: lack of coin catalogs, inability to contact Western European scientists, information obscurity about the achievements of foreign researchers, lack of data on other similar findings from the neighboring Bulgarian countries, etc. Taking into account all of this, we believe that Mirchev's article is among the most important in our country since the 1970s.

In these decades, the experience of some of the researchers is very impressive and very cursory to analyze significant in quantity and variety of numismatic material coin finds. Thus, treasures with more than 500 coins were published on only a few pages. For example, one of the most important – that of Sofia's Benkovski district – was published by Kunka Grigorova on less than 4 pages, illustrating only 9 coins. This way of publishing, unfortunately, does not allow to extract the necessary information for such an interesting collective find. However, the promulgation of the treasure is of great importance for our numismatics. Unfortunately, the article has some weaknesses: there is no catalog; the data on diameter and weight are presented only in total by types; the denomination of French coins is erroneously defined as a *gros*; the Duke of Lorraine Charles IV was added to the French kings; *lion-thalers* are not distributed by province, etc. In addition, in the article we find incorrectly cited literature. The author points out that in their trade with the Turks the French used mainly coins of Austria-Hungary, citing Todor Gerasimov, but

on this page he noted that in its trade with the Ottoman Empire, France used mainly Spanish coins. But here we also see something very positive – French coins are presented in tabular form and are distributed by number and mints (with some small errors). That is why the publication of this interesting treasure deserves our admiration, even if only because of the fact that in just 4 pages an attempt was made to present such an emblematic coin find for our lands.

Among the researchers of *thaler* coins is Ivan Varbanov. The subject of his research are the Spanish coins circulating in the Bulgarian lands in the 16th – 17th century. Although in general his reasoning about the economic dimensions of the Ottoman reality in the 16th – 17th century is correct, he does not mention the economic crisis in The Ottoman Empire in that era. Furthermore, the claim that Turkey "*cut its money from low-quality silver*" is not true. Varbanov linked the participation of Spanish coins not to the activity of Spain itself, but to the activity of English merchants – a fact that cannot be accepted uncritically, but at least needs additional evidence. However, the author rightly draws attention to the almost complete absence of English coins in the European Ottoman markets. On the other hand, Varbanov correctly draws the line between the coins minted in the European mainland of Spain and those minted in colonies in America. He was the first to try to draw a dividing line between the two types of silver coins based on their shape and thickness. He also rightly points out that one of the reasons for the good reception of irregularly shaped coins minted in Spanish American possessions was their high silver value. Ivan Varbanov was among the first researchers in Bulgaria to connect Spanish real coins with the *thaler* and its subdivisions. It is not known why he misses King Phillip II when he lists the Spanish rulers whose coins are found in our lands, namely that he is actually among the best-represented Spanish rulers.

Among the most important researchers of *thaler* coins is Vladimir Toporov. In 1973, several consecutive issues of the journal "*Numismatics*" published his research on the emergence and distribution of *thalers*. For the first time, a special place is given to the different types of *thaler* coins and their subdivisions, as well as to their distribution during the different historical periods in many countries on different continents. The author's research and analysis were later summarized in a special monograph. This modest book is actually the first attempt in our country to summarize the topic of *thalers*. Despite the rather confusing structure, it is an ambitious attempt to summarize all the information concerning the appearance, nature and distribution of the *thaler* and other related and similar coins in

Europe and beyond. Despite a number of inaccuracies, sometimes reaching exaggerated and even shocking statements, the author has made a successful attempt to analyze an essentially quite difficult numismatic matter. Thus, he was one of the initiators of the analytical study of the denominations of Western European coins distributed in the Bulgarian lands under Ottoman rule. Eng. Toporov does not limit himself within specific chronological boundaries, but aims at a comprehensive study of the *thaler* and his successors to this day – an, in fact, a commendable initiative. However, it strikes the modest size of his work – only 85 pages of text (and a small format). In addition, the vast majority of his analyzes relate to the heirs of the *thaler* rather than to himself. He also devotes considerable space to the origin and development of the Bulgarian lev, rightly pointing out that (at least as a name) it is associated with the Dutch *lion-thaler*. Despite its shortcomings, Vladimir Toporov's book so far actually remains the only work in Bulgaria specifically dedicated to *thalers*.

A number of publications on economic and other topics, which shed light on a number of important issues, also relate to the circulation and value of *thaler* coins in our lands. Among these works of particular importance is the extensive monograph of Lyuben Berov on the movement of prices in the Balkans in the 16th – 19th centuries, which is of great importance for understanding the economic processes that led to the entry of Western European *thaler* coins in regular circulation in the Ottoman markets. The researcher, although not a numismatist, puts a relatively extensive separate paragraph in his monograph, entitled "*Coin circulation in the Balkan possessions of the Turkish Empire in the 15th – 18th centuries.*" He is guided mainly by written sources, without paying attention to the specific numismatic material and almost without using publications of foreign numismatists. However, it should be emphasized that the researcher knows the main publications on the subject, as well as some foreign coin catalogs. However, non-knowledge of numismatic material often leads to exaggerated, inaccurate and even completely wrong conclusions. However, these minor inaccuracies do not have a significant impact on the merits of the work concerning the overall performance of the monetary circulation. Thus, the work of Lyuben Berov is extremely important due to the fact that this is the first attempt at a comprehensive study of the circulation of money in connection with a number of aspects of coinage. From this point of view, Berov's research is characterized by

its interdisciplinary nature and is extremely important in the analysis of the overall financial situation in the Bulgarian lands under Ottoman rule.

In 1984, Snezhana Rakova's analytical article appeared, dedicated to Venetian coins originating from the territory of present-day Bulgaria. This publication is among the innovative studies and presents the overall monetary circulation in a long chronological range, covering the time before and after the fall of Bulgaria under Turkish rule. Rakova notes the hiatus between 1356 and 1570 in the distribution of Venetian coins, although the data are no longer relevant, because of the preserved (but unpublished) in some of our museums Venetian coins from the 15th – 17th century. Among the Venetian coins in the collective finds it is noted that there are both *thalers* and *half-thalers*. Unfortunately, there is no more detailed information about the types and exact dating of the mentioned Venetian *thalers*. Although the publication is illustrated with a map and a large table of the distribution and composition of the commented collective finds, there are no photographs of coins at all, which is probably due to the limited space or the author may have used only the bulletins for the collective finds, without working with coin material.

The beginning of the great interest in coins and the circulation of coins during the Ottoman era in the Bulgarian lands and at the same time the beginning of the last period should be set in the second half of the 1980s. These coin-treasures were sometimes exhibited in the museums, but more often they were stored for years in the museum funds. The publications most often appear on the pages of the magazine "*Numismatics*" – messages and small articles on individual findings or problems. Some long-known finds began to be published, which in this way, although incomplete, still became available to science.

We owe to Teodora Kovacheva an extremely interesting summarizing article about the collective coin finds from the Ottoman era from the Pleven region. In this article she published data on 18 collective coin finds stored in the museum in Pleven, buried during the Ottoman rule in the Bulgarian lands. Almost all treasures also contain European *thalers* and their fractions. Two years after this summary article, she published the Pleven treasure, consisting of 550 Ottoman and 74 European coins. In this article, the author pays special attention to *thaler* coins, without, of course, ignoring the other European coins. The detailed and comprehensive catalog of Western European treasure coins is extremely important – one of the best of its time.

A large number of problems with the circulation of *thalers* in the Bulgarian lands during the Ottoman era were commented on in Panayot Shiderov's publications, although his reports were often extremely short. In addition, his scientific output is analytical. Of great importance for Bulgarian numismatics is his summary article on the distribution of *thalers* of the Belgian Confederation in today's Bulgarian lands in the 17th – 18th centuries. This is the first study of its kind of coins for the territory of Bulgaria and neighboring countries. It should be noted that the researcher draws his conclusions on the basis of significant numismatic material. This publication, although innovative, pioneering and extremely important for its time, is already quite outdated. For example, his conclusions that the earliest *lion-thalers* from today's territory of Bulgaria are contained in the treasure from the Rudnik village (Burgas region) are no longer relevant. Panayot Shiderov's broad numismatic interests determine the fact that in his research we observe a detailed and comprehensive publication of numismatic material. In the time immediately before the changes of 1989, Panayot Shiderov formed himself as one of the greatest connoisseurs of Western European *thalers* from the 16th to the 17th century, circulating in the Bulgarian lands under Ottoman rule. He often co-authored with other researchers. For example, the Ottoman and Western European coins from the Vidin region were published together with Fionera Filipova. Among the finds published by them is the important treasure from the Peshakovo village, Vidin region. Fionera Filipova continued her studies with the circulation of gold Turkish and European coins during the Ottoman era in the Vidin Sandzak and after 1989.

Very important information is contained in the works of Andrey Tonev, related to the Kyustendil region. His article is one of the examples of correct and comprehensive presentation of a collective coin find with detailed data about the coins: diameter, weight, inscriptions and photos. This is actually one of the first detailed publications. The author later continued to write on the issue for the treasures in Kyustendil region, but in a much more concise version.

The scientific study of the coins circulating during the Ottoman era in our lands has reached considerable proportions in the last few decades. Coins from that time began to be published more and more often in a number of specialized editions. The greatest interest is on the Ottoman coins circulating in our lands in the 14th and 15th centuries, as well as in the Western European ones, although in most of the researches there are omissions and inaccuracies. Hristo Haritonov is one of the most prominent

researchers of European *thaler* coins and their circulation in the Balkans during the Ottoman era. In recent years, he has published dozens of articles on the subject and, among other studies, has become one of the founders of the in-depth study of all coins (from commodity money forms to modern ones) in our country. His extensive numismatic knowledge is also evident from his numerous studies of various problems affecting the distribution of Western European coins on the territory of present-day Bulgaria. Since the beginning of the 1990s, the main direction of his scientific interests in this field has emerged – the secondary function of coins. His innovation in this field is indisputable, and his achievements over the years – significant. During this period, he became interested in both Western European and Ottoman coins distributed in the Bulgarian lands. Thus, he emerged as one of the pioneers of scientific research related to various aspects of Ottoman coinage. Hristo Haritonov for the first time raises questions that are a link between numismatics, archeology, history and other sciences. He studied in detail the nature and spread of the ancient custom of Charon's *obol* during the Ottoman rule. His work is also the first monograph in our country, directly affecting the monetary circulation in the 15th – 18th centuries. It is the result of long-term work, and it is based on his research related to terminology during the Ottoman era. Here, for the first time, data are summarized for all hitherto known single and collective finds from the territory of present-day Bulgaria, as well as cases of Charon's *obol*. A large number of folk names of coins used in folk songs, tales, legends and myths are presented in encyclopedic form. This is the second such attempt (after Gerasimov), significantly supplemented and expanded. Although the monograph focuses on Western European coins, spread on the territory of the Empire in the 15th – 18th centuries, it is a separate place for the Ottoman ones.

Another prominent researcher of our coins from the Ottoman era is Lachezar Lazarov. A significant part of our museum numismatic collections are processed by him. Lachezar Lazarov is a man with broad scientific interests in the field of numismatics: ancient Greek, Celtic, Roman provincial, medieval Bulgarian coinage. His scientific studies marked the beginning of a number of interesting studies concerning important issues of coin circulation and other related problems of the Ottoman era in our lands. Lazarov published the coins from the small but interesting museum collection in the town of Yablanitsa, among which there are European ones from the period 16th – 17th century. He also

published collective coin finds, such as those from the Provadia villages Nevsha and Tutrakantsi.

The article dedicated to the treasure with European silver coins from Targovishte, published by Angel Konakliev in 1997, should not be missed either.

After 1989, some researchers dealt with the problems of Ottoman coins and coin circulation during the Ottoman era only by the way. For almost all of them, this is beyond their basic numismatic interest. The published *thaler* coins illuminate the coinage in the 16th – 17th centuries and provide a rich basis for analyzes and interpretations of the issue. Among the researchers who have published the most Western European *thalers* is Vladimir Penchev. His scientific interests are mostly related to the Bulgarian and Byzantine coinage, but when presenting collective finds, he also provides significant information about the Ottoman coins contained in the mixed collective finds. The numismatic material presented by him has been published according to all the rules of science and is extremely valuable. However, some of his publications are directly related to the period from the 16th to the 17th century. In the following years, his interest in *thaler* coins increased, as a result of which articles specifically devoted to this issue appeared. In 2017, he published an extensive study in which he published a number of coins stored in the fund of National museum of history – Sofia. Penchev also published collective finds containing *thaler* coins.

The case is similar with Zhenya Zhekova – also a researcher of mostly medieval Bulgarian and Byzantine coins. In some of her publications, however, she also analyzes Ottoman coins and publishes collective finds. Her article about the treasure from The Bortsi village (2006) is very important.

Many European *thaler* coins from the Burgas region have been commented on in Ivan Karayotov's publications. His main scientific activities are related to other eras, especially the ancient. However, in his attempts to shed light on the past of the city of Burgas and its region, he did not ignore the European coins from the period of Ottoman rule. In this respect, he was the first numismatist to publish significant data on the circulation of Western European coins in the Burgas Bay region. Although the coins from the Ottoman era are not among the main occupations of the prominent Bulgarian professor, we must point out that he did extremely well. Of particular importance is the fact that Karayotov for the first time commented on several collective finds from the Burgas region. Ivan

Karayotov for the first time correctly notes that the coins in the treasures of the region of Burgas, and not only there, come mainly by sea. This conclusion is especially important for their connection with the trade sea routes, in which the ports of Burgas, Nessebar and Pomorie play a key role in this part of the Balkans. In addition, Professor Karayotov was one of the first researchers in Bulgaria to pay attention to the circulation of coins and, analyzing the coins in the finds from Burgas, look for links between it, trade and economic processes in the Empire. In my opinion, this was done for the first time in Bulgaria by a numismatist. And last but not least, through the publications of Ivan Karayotov, concerning the Western European coins from the region of the Burgas Bay, in some popular science publications, as well as on the Internet, the results of his research became available to the general Bulgarian public.

Ivan Karayotov's case for publishing the finds from the Burgas region was continued by me and Miroslav Klasnakov. The latter undertook to publish the great treasure from Ahtopol, which has been stored for many years in the numismatic fund of Regional museum of history – Burgas, but remains unpublished (discovered in 1977). Klasnakov also deals mainly with other periods, mostly with prehistory. However, in recent years he has made timid attempts to work with Ottoman-era numismatic material. Its main purpose is to present mostly European coins, although it does not ignore the Ottoman ones. So far, several of his articles on the coins of different European countries, presented in the Ahtopol treasure, have been published. We assume that the other publications are forthcoming and so this interesting collective find will be published in full. But his numismatic interests are broader. The very important publication of the Dutch *lion-thalers*, stored in the numismatic fund of Burgas Museum, was published very recently.

In recent years, I have been dealing almost entirely with coins and coin circulation during the Ottoman era. A significant part of my publications directly or indirectly address various issues related to *thaler* coins originating from the territory of today's Bulgaria. Among them are the publications (independent and co-authored) of Ottoman and European coins from the fund of Museum of history – Popovo, the coins of Venice from Iskra museum of history – Kazanlak, the coin-hoard from Ovchaga village (Provadia region), the Ragusan coins from Iskra museum of history – Kazanlak, other coins from the fund of Iskra museum of history – Kazanlak. To this can be added a study dedicated to all coin denominations

known in the Ottoman Empire and circulating in the Bulgarian lands in the 16th – 17th century, as well as a monograph on Dutch silver coins.

To clarify the problem with the entry of Western European *thaler* coins into the Balkan markets, there are also publications by other authors who do not deal directly with numismatic problems. For example, various topics concerning the indirect coinage in the Bulgarian lands under Ottoman rule have been studied in more general works concerning trade problems. Probably the most important among them is Nikola Robev, because he tries to synthesize between the written sources and the numismatic data from the collective finds. In the publication published in 1996, he addressed a number of issues of coinage in the Bulgarian lands under Ottoman rule in the 16th century. Among his most important achievements is the attempt to define the so-called *esedi gurush*. But the inaccurate information in the published written sources leads the author to the false statement that it is about the French "*gros with a lion*". After all, he was the first to correctly translate this Arabic name, but in fact it was called the Dutch *lion-thaler*. Robev's erroneous conclusions are a consequence of overconfidence in the confused and inaccurate in a number of respects written sources. In his work he uses mainly written sources and published numismatic material, which is not always well analyzed, which leads to other inaccurate conclusions. The huge confusion in the written sources, mixing official and popular names of coins and overconfidence in obsolete publications, leads to exaggerated conclusions and inaccurate results. Not quite accurate is either the analysis of the different *thaler* coins, which are not defined and the differences in the exchange rate of the *reichsthalers*, *lion-thalers*, etc. are not indicated. This leads to the wrong conclusion about the higher exchange rate of the Spanish *8-real* coin against the *reichsthaler* in the 1580s and 1590s. Despite the mentioned inaccuracies and omissions, the work of Nikola Robev is among the most important and comprehensive publications, concerning the monetary circulation in the Bulgarian lands in the 16th century. His work is one of the first attempts at a detailed, thorough and comprehensive analysis of the financial and monetary situation in our lands under Ottoman rule.

Chapter One analyzes the preconditions for the appearance of the *thaler*. It consists of several paragraphs. The first of them is associated with silver in Europe in the 15th – 16th century. The reduced quantities of this metal are due to a number of factors, among which are the depletion of large mines, difficulties with imports from the East due to the Ottoman

invasion, increased demand and others. It was only after that date that some revival began, with the development of new silver mines playing a major role. The largest and most important of these are in the Alps (Schwatz in Tyrol) and Erzgebirge (i.e. the Ore Mountains) (Schneeberg in Saxony). The silver crisis in Europe is relatively well studied. Some researchers believe that this is the biggest crisis of the 17th century. The crisis was overcome after the Venetians took over most of the payments in silver with the East, while other countries began to pay in gold instead. The Great Crisis is affecting European and Mediterranean countries to varying degrees. It is believed to have occurred when the Turks took over the silver mines in Bosnia and Serbia in the 1450s and 1460s. The amount of gold mined also dropped significantly. The shortage of silver is related on the one hand to its value and quantity, and on the other to the goods offered on the market (domestic and international). It is very difficult to calculate the quantities of gold and silver circulating in European markets in the form of coins. Some researchers note the constant differences in the amounts of the two metals. By the middle of the 16th century, the volume of gold on the Old Continent was relatively large, and in reality gold coins in circulation fully satisfied economic needs. Demand is also not among the largest. Speaking for coin circulation in Europe in general and in the Ottoman Empire in particular, one often overlooks the fact that foreign coins circulate almost everywhere with some rare exceptions, such as England and Russia.

The large amount in circulation of silver and gold coins of different countries and rulers creates considerable difficulties in daily payments and larger commercial transactions. Some of the coins have stable images that do not change significantly over time. This is especially true for those used in commercial transactions with people who cannot read the inscriptions and do not always manage to navigate the images. Examples include the large trade operations between Muslims and Christians in the Levant, Egypt and the Maghreb.

The second paragraph presents the ratio between gold and silver. It is undergoing minor changes, which are quite dynamic in chronological and territorial aspect. This has been used quite successfully by a number of merchants and bankers, who are accumulating considerable fortunes. Unfortunately, the data on the ratio between gold and silver are not always synchronous and it is rare to draw conclusions about the differences in the different centers. But sometimes they are quite detailed. In most of Europe, the ratio is gradually but steadily declining. Since the second half of the

15th century, differences in ratio in different parts of the world have become a source of significant income for a number of citizens and even countries. The situation is similar with many Portuguese traders, who generate huge profits by transporting precious metals and goods to the Gulf of Guinea. In the following decades, this trade expanded, with a strong impetus given by the Portuguese bases in India and China, established in the era of the Great Geographical Discoveries. On the other hand, the large shortage of silver and the relatively significant quantities of gold available in China and other countries in the Far East predetermine the desire to trade in these two metals for both countries in this trade. Of course, significant profits are also generated by Chinese traders, who take advantage of the differences in the ratio between the coastal zone and the interior of China. In this country, in a number of earlier periods, there was a "*hunger*" for silver, which is also observed in some other areas of the East, such as India. There is even a hypothesis that the Chinese introduced paper money precisely in order to be able to release larger quantities of silver to be exported to the West. This in turn causes a shortage of white metal in the country and a significant increase in its value. This situation remained almost unchanged in the following centuries.

The third paragraph analyzes the imbalance in trade with the East. Northwest Asia Minor and the Balkans are located on one of the three important trade routes from Asia to Europe. The first (southern) is probably the oldest and most intensively used – across the Indian Ocean, the Arabian Sea, the Red Sea, Cairo and Alexandria. This important trade route after 1250 was controlled almost entirely by the Mamluks in Egypt, with whom the Seljuk and later the Ottoman Turks (as well as the Ilkhans) were generally great enemies. The second (central) connects the Mediterranean with the Persian Gulf. It has two branches: the first is through Asia Minor and Iran, and the latter through Syria and Baghdad. Both of its branches are controlled by the Ilkhans. The last (northern) route is through Constantinople and the Black Sea to Central Asia, bypassing the Caspian Sea from the north or south. The last branch has been functioning for many centuries and is known as the Silk Road.

Although by the end of the 15th century the amount of silver mined in Europe was increasing enormously, the imbalance in trade with the East remained. This is due to many factors: increasing demand for luxury imported goods, the low value of exports from Europe and others. Arnold van Hayev, who resided in Egypt in 1496, testified that the trade imbalance was equal to 300,000 gold *ducats* in silver. At the beginning of the 16th

century, the Ottoman Turks managed to establish control over many of the most important trade land routes in Asia Minor. According to some researchers, such as Sefket Pamuk, the Ottomans did not hinder or stop, and even tolerated this trade, welcoming goods from Western Europe. How then can we explain an entire epoch – that of the Great Geographical Discoveries, in which one of the most important factors is the almost complete interruption of the old trade routes with the East and the incredible rise in prices of goods imported from there? It is the disruption of trade between East and West that is one of the main causes of the crisis.

Chapter Two traces the process of the emergence and spread of *thaler* in Europe and beyond. This chapter also consists of separate paragraphs dealing with various issues or stages of this long and complex process. The *thaler*, like many other coins in the world, has a long history. The first paragraph discusses precisely the issue with its predecessors. The very appearance and idea of the emergence and struck of the *thaler* is associated with several older gold denominations. For example, the Tyrolean *gulden* aims to replace or at least become a silver analogue of the golden *gulden*, which is in fact a German imitation of the golden Florentine *florin*. Larger silver coins in Western Europe began to be minted in the 13th century with the appearance of the *gros* from the city of Tours (France) weighing about 4 grams. In the second half of the 14th century, a large silver coin appeared and in Byzantium – *stavraton*, equal to half golden *hyperpyron*. At that time, a Byzantine gold coin no longer really existed, and a few decades before, the *hyperpyron* had only 12 carats of gold. This is probably one of the earliest ideas for replacing gold coins with silver ones of the same denomination. With the return of silver to Europe after the development of the large silver mines in the Alps and the Ore Mountains, the minting of larger and high-quality silver coins gradually began. Initially, these attempts were timid, and the coins were not very large. The leading countries are those that have large amounts of silver. For example, in 1466 in the Burgundian Netherlands, the struck of a *double patard*, which contains about 3 grams of pure silver, began. It was immediately well received and became the base coin. The disintegration of the Burgundian state thwarted the further development of this interesting currency. However, over 8,000,000 *patards* and over 5,000,000 *double patards* have been struck in their short existence. Among the first large silver coins is the *real* weighing 7 grams, minted in 1487 by the Duke of Burgundy Philip the Bold for the counties in the Netherlands. But the amount of these *reals* and

the large ones that inherited them are small. Larger and heavier silver coins also appeared in other countries in Italy under the influence of coins minted in Milan and Venice. *Testons* became popular and began to be minted in Ferrara, Mantua, Savoy, several Swiss cantons and Genoa, then ruled by Milan. Heavier silver coins began to be minted also in England. In 1504, Henry VII (1485 – 1509) began minting *teston* weighing about 9 grams. A little later, in 1514, such a coin appeared in France during the reign of Louis XII (1498 – 1515) – 9,5 grams. But the quantity of these coins is small, and in addition, some of them are not intended for the domestic market, but for payments abroad.

The second paragraph is related to the appearance of the first real *thaler* coins – the *gulden* and the *guldengroschen*. But even today in numismatic science there is no unanimity on the problem of the emergence of the *thaler* as a currency. Individual researchers, express different opinions, which often contradict each other. The existing hypotheses can be divided into two main groups, based on which coin is considered to be the first *thaler*. It is traditionally accepted in numismatic science that the appearance of the earliest *thaler* coins should be associated with the name of the Austrian archduke (of Upper Austria) Sigismund von Habsburg (1446 – 1490). Some researchers note that the *gulden* was first struck in the County of Tyrol in 1484 and weighed 31.83 grams, i.e. is equal to one *ounce* or 60 *kreuzers*. This is not entirely true, because during that year, were minted coins of *half-guldiner*, while the indicated weight is for *guldiner*, which appeared 2 years later, in 1486 and has a silver content of 937.5 / 1000 at net weight 29.93. Although the official name of the coin is *guldiner*, it is also called *guldengroschen* or *guldenhaler* because it is equal in value to the *goldgulden*. A prerequisite for the emergence of a large and expensive silver coin is the presence of large quantities of silver in the Tyrolean mines. The external graphic design of the gold *gulden*s and the silver *guldiner*s is similar. They have almost identical images and layout and this is not a coincidence. The *guldiner* was struck in a very short time. Obviously, however, the time has come for the introduction of a large silver coin in European money markets, because the idea is spreading fast. *Guldiners* and *guldengroschens* are being struck in many places, still accidentally and most often in very small quantities. In the meantime, another attempt was made in Tyrol ten years after the first. *Guldiner* was minted again in the mint of the town of Hall by Archduke Maximilian (1493 – 1519) in 1495. Apparently the technique of coinage is already quite advanced and allows for the emergence of much larger coins. Proof of this

is that coins of 2 *gulden*s are known from the same ruler, as well as a very large coin of 5 *gulden*s, both not dated. I must note that all the early *thaler* coins were made very carefully and with great craftsmanship. Although no explicit information is available, they were hardly struck at the time in quantities sufficient for larger market needs, especially for exports abroad.

In the Ore Mountains (Erzgebirge) began intensive mining of silver ore. They are located on the border between Saxony and Bohemia. The first serious attempts were made in 1470 near the town of Schneeberg. Around 1491 – 1492 the development of the large deposits at Schreckenberg began. The minting of silver coins, including large ones, began. This is the so-called "*Great fever*", which caused a great displacement of the population to the ore areas. These processes give a particularly strong impetus to the growth of a number of cities, the largest of which are Schreckenberg, Marienberg (in Saxony) and Joachimstal (in Bohemia). In 1500, the Saxon rulers Frederick, Albert and Johann issued an order to struck "*a groschen of one gulden*". Probably for this reason, this silver coin became known as the *gulden**groschen*. On the obverse is depicted Elector Frederick III, and on the reverse – the Dukes Albert and Johann, represented by hoods, whence the native name of these coins – *klapmünzthalers* (i.e. '*hooded thalers*'). Researchers date the minting of the earliest *gulden*s to the Annaberg Mint in September 1500. Between 1500 and 1525, they began minting in a large number of mints throughout Saxony. The number of coins minted annually in the period 1519 – 1524 is about 100,000 in all Saxon mints. At the same time, coins from previous issues were not withdrawn from circulation even when the rulers changed.

The third paragraph is dedicated to the *joachimsthaler*. At the end of the 15th and the beginning of the 16th century, several large silver deposits were discovered in Central Europe. One of them is located near Konradsgrün in the northern part of the Kingdom of Bohemia, in a territory under the rule of Count Schlick. With his permission, a new settlement, Joachimsthal (i.e. '*the Valley of St. Joachim*'), was established, which in 1519 was declared a free mining town. Probably the first *joachimsthalers* were struck in 1519. On January 15, 1520, the Bohemian Landtag issued a permit "*large groschens according to the value of the Rhine gulden to be cut off, and at the same time – whole, halves and quarters*". These coins were minted according to the Saxon step, i.e. 8 pieces from each *Cologne mark*. This is explicitly stated in a treaty with the Saxon dukes, as the coins minted in Joachimsthal can be freely accepted on the territory of Saxony. Thus, too quickly, these coins left the territory of Bohemia legally and were

accepted without any problems, along with the Saxon *guldengroschens* and the Tyrolean *guldirers*. Thus appeared their popular name *joachimsthaler guldirer* (i.e. *the guldirer from Joachimsthal*). This name was soon abbreviated to *joachimsthaler*, and later to *thaler*. From 1520 to 1528, about 2,200,000 coins (*thalers*, *half-thalers* and a *quarter-thalers*) were struck, i.e. about 60 tons of silver were minted.

The fourth paragraph analyzes the emergence and distribution of perhaps the most important *thaler* coins in the 16th century – the *reichsguldirer* and the *reichsthaler*. There is an opinion that the German local rulers wanted to completely replace the golden *gulden* with an analogous and equivalent silver coin, expressed at the general imperial Reichstag in 1521. This led to the issuance of the so-called *Essling Mint Regulations* on November 10, 1524 by Emperor Charles V, declaring the *Cologne mark* to be the imperial coin weight, and the silver *guldirer* to be the imperial coin, along with the gold *gulden*. As this standard became valid for the whole empire, the coin became known as the *reichsguldirer*. This system, hitherto unknown in Europe, became nationwide in a relatively short time. It is proving to be hopeful, despite the ensuing major political upheavals. On August 29, 1526, in the battle with the Turks at Mohács, the Bohemian King Louis I (who was also a Hungarian king under the name of Lajos II) and Count Stefan Schlick were killed. The Bohemian and Hungarian crowns passed peacefully into the hands of the Austrian Archduke Ferdinand von Habsburg (1521 – 1564). He is in fact also the Count of Tyrol and the Mint of Hall is under his rule. Thus, two of the most basic centers for the production of *thalers* came under the rule of one ruler. This further strengthens the *thaler's* position as a currency in large parts of Europe. Ferdinand I began to struck *thalers* in his own name in both Hall and Joachimsthal.

In 1566, Charles V renounced the imperial crown and handed it over to Ferdinand I. The turbulent processes determined the search for other solutions. The new emperor decided to create a common imperial monetary unit. This is a kind of continuation of the beginning, set in 1559 with the *reichsguldirer*. The last one, however, never became a complete equivalent, but continued to play a more significant role only in the southwestern part of the German lands. The reasons for this are mainly due to the fact that it is associated with the *kreuzer* (i.e. equal to 60 *kreuzers*), and the deterioration of the quality of the latter also affects the *reichsguldirer*. The *reichstaler*, introduced in 1566, was originally equal to 68 *kreuzers* without being bound by it. In time, the *reichstaler* became

the equivalent. In Germany, the *thaler* gained its greatest popularity, and some of the coins reached the colossal denomination of 16 *thalers*. There is evidence of huge silver coins weighing over 450 grams.

The next few paragraphs of this chapter analyze the emergence and distribution of various *thaler* coins in some European countries. It is either about completely new coins and even monetary systems, or about adapting existing ones to the new international realities. This is how the Spanish 8-*real* coins appeared without changing the old coin standard. Elsewhere, brand new large silver coins appear, such as the Milan *ducaton*. *Thalers* appeared in different parts of Europe, and in a number of places local slightly distorted names were adopted, such as *daler* in the Scandinavian countries or *daalder* in the Netherlands. The situation with the English *crown* and the Scottish *rial* is more special, which is caused by local specifics. The French silver *ecu* was introduced with a completely new monetary regulation. Later, the Portuguese *cruzado* appeared, as well as the very specific rubles and *efimoks* in Russia, restriking on a variety of European *thalers*.

Chapter Three provides a detailed overview of the various *thaler* coins circulating in the territory of the United Provinces (Netherlands). This chapter analyzes a number of silver denominations, some of which are widespread in a number of places around the world, including the Bulgarian lands under Ottoman rule. Some of them were struck specifically for export. Others are intended for use on the Dutch domestic market. However, in recent years it has turned out that they are also found in our country. For example, in 2019 a silver *ducat* was registered in the treasure from the village of Byal Izvor, stored in Regional museum of history – Stara Zagora. I assume that future studies will register other Dutch *thaler* denominations in our lands.

In this chapter a distinction is made between the individual coins, representing different types, widespread in our lands. It's mostly about the *lion-thalers*. But other denominations similar to them are presented, which very rarely, in fact almost never, have been defined in our country – the city and provincial *lion-thalers*, the silver *florins* (*guldens*) and the joint city coinage.

Chapter Four traces the preconditions and reasons for the *thaler* to enter the Bulgarian lands under Ottoman rule in the period 16th – 17th century. Here are analyzed a variety of processes that led to the massive

entry of European silver coins into the Ottoman markets and their gradual adoption as legal tender, for example in the payment of taxes and fees. The chapter is divided into paragraphs, the first of which deals with the problem of reducing the production of precious metal mines in the Ottoman Empire. This leads to a reduction in the amount of silver in circulation, which is offset by European silver. The state tried to partially reduce this effect by developing new mines. The most productive mine in the Balkans in the first half of the 16th century was located near Sidrekapsi on the Halkidiki peninsula. According to European travelers, it employed more than 6,000 miners, and its average yield is estimated at about 6 tons of silver per year. The mine near Novo Brdo was the second largest, but the yield was more than twice as small. The total production from all silver mines in the Ottoman possessions in the Balkans in the first half of the 16th century, according to Serbian researcher Sima Cirkovic, was 26 – 27 tons per year. British economist and historian Rhodes Murphy estimates the total annual income from mines in Serbia, Northern Bulgaria, Macedonia, Thessaly and Thrace at around 50 tons in 1600. By comparison, pre-Ottoman silver mining in the Balkans' largest mines in Serbia and Bosnia is estimated at 10 tons per year in the early 15th century. Ottoman mining in silver mines increased almost continuously in the 17th century. But the largest amount of silver in Europe came from the Spanish colonies in America. For comparison, only the mines in Potosi, according to some researchers for 65 years (1574 – 1630) were mined about 10,000 tons of silver, and other estimates say that the silver mined in the city of Potosi and the surrounding area between 1574 and 1735 is equal to 73,351,672 Spanish silver *marks* or 16,874.19 tons, without taking into account about 25% of unaccounted silver, which it took directly for the Spanish rulers, without being entered in the registers at all.

The following paragraphs trace and analyze various problems, such as: declining revenues in the Ottoman treasury, rising prices, early fiscal crises in the empire, the Great Crisis of 1585, and others. As a consequence, there is a gradual decrease in the weight (and therefore the value) of the main Ottoman coin – the *akche*. It was then that the time of the entry of huge quantities of European *thaler* coins, especially after the outbreak of the crisis of 1585.

Chapter Five examines in detail the different types and variants of *thaler* coins found on the territory of modern Bulgaria and known from collective and individual finds. In the beginning, the ways of penetration

of the European silver coins in the Bulgarian lands under Ottoman rule are traced. I also discuss some controversial issues here. The next paragraph analyzes the reasons for the vaulting of the collective finds containing coins of the 16th – 17th centuries.

Further on, the text traces the various *thaler* coins known from the territory of today's Bulgaria, as they are distributed by countries, rulers, mints, types, variants, etc. In the first place are presented the various *thaler* coins of the Holy Roman Empire and its subjects. These coins are among the relatively widespread in our lands. From the end of the 15th to the middle of the 17th century, as subjects of the monarchy, there were about 350 so-called "*Imperial ranks*", among which there is a strict hierarchy. In the field of coinage, every German state or even city has been minting its own coins for centuries. Most often on them are depicted the ruler (or rulers) with the appropriate title, as well as various coats of arms and other signs. Very often a ruler is simultaneously the ruler of several countries, for which he bears the corresponding title. For example, the Archduke of Upper Austria has traditionally been both Duke of Burgundy and Count of Tyrol for quite some time. All these specifics and dynamics of the historical, political and economic development of the German lands make it difficult to study their numismatics. Very often, especially in shorter publications, all the coins of the Holy Roman Empire are called Austrian. This is becoming almost a rule in the Bulgarian numismatic literature. The easiest way to distinguish the coins of the Holy Roman Empire from those of the Archduke of Austria is through the coats of arms and inscriptions on them. A separate part of German late medieval coinage was the coins of the free German cities, which were not subordinated to the local rulers in the lands they were located, but directly to the emperor. The coinage of the Holy Roman Empire represents a large part of European late medieval numismatics. They often occupy more than half of the catalogs of world coins. The massive influx of German coins into the Ottoman Empire began after the outbreak of the crisis after 1585.

Bohemian *thaler* coins are rare in our lands. Until now, only one *reichsthaler* from the reign of Ferdinand I (1526 – 1564) has been documented from the territory of present-day Bulgaria, struck in the mint of Joachimsthal. The coin is from unknown location. The treasure from Sofia contains a coin of *half-joachimsthaler* of Matthias I (1612 – 1619), struck in the mint of Kutenberg (now Kutna hora) in 1617. Todor Gerasimov did not determine the denomination of the coin and placed it in

the column Austria, but on the other hand, he has given a relatively detailed description, as well as photographs, which allow its safe determination.

There are significantly more Brandenburg coins. In the Bulgarian lands under Ottoman rule there are *quarter-thalers* of George William (1619 – 1640), and earlier Brandenburg coins are still unknown. In the Bulgarian lands under Ottoman rule there are two main types of *quarter-thalers* of George William, the second is presented with two variants. So far, not a single *thaler* of Brandenburg has been published from today's Bulgarian lands. The treasure from Sofia (Council of Ministers) describes a coin weighing 26.55 g., minted in 1625. In that year, however, *thalers* were not minted in any Brandenburg mint. In addition, the marked diameter of 29 mm is too small, and the description coincides with the *quarter-thalers* of George William, struck in this year. In Gerasimov's publication, the coin is placed last, and a photo is missing. It is obvious that the coin did not make any impression on the researcher. It is obviously a typographical error, with 26.55 g printed instead of the correct weight of 6.55 g.

The *thalers* of Brandenburg-Franconia are extremely rare in Bulgarian lands. One coin is a single find from an unknown place in Bulgaria. This *thaler* was struck in 1549 in Erlangen mint during the first reign of Duke Albert II (1548 – 1550).

A single coin is also known from the Duchy of Württemberg.

Significantly more, though not mass, are the coins of Saxony. The Saxon *thalers* are among the most highly artistic of their time and are often a true work of art. The earliest known Saxon coin from the territory of Bulgaria is work of the Anaberg mint and dates back to the joint rule of Dukes John Frederick I and Henry (1539 – 1541), representatives of the Ernestine line of the Vetin dynasty. Coin was struck in 1539 and has a face value of *guldengroschen*. In the funds of National historical museum – Sofia and Iskra museum of history – Kazanlak are stored rare for our lands coins' denomination of *quarter-guldengroschen*, struck also before the Saxon civil war. The two coins are of the same type and are from the joint rule of the Dukes Maurice (representative of the Albertine line) and John Frederick (representative of the Ernestine line). Under the later rulers, the number of Saxon coins that entered the Bulgarian lands increased.

Coins of the Duchy of Saxony-Weimar (Saxe-Weimar) are often confused by researchers with those of the Duchy of Saxony (Sachsen). The treasure from Sofia contains a coin with the denomination *quarter-thaler* of the two brothers Frederick William I of Altenburg (1573 – 1602) and

Johann III of Weimar (1573 – 1605), but wrongly attributed by Todor Gerasimov to the reign of the Saxon Duke Frederick II (1486 – 1525).

The *florins* of Oldenburg-Delmenhorst are numerous. Often they are mistaken with *thalers*. In fact, they are equal to 28 *stuivers*, while, for example, the *lion-thalers* in the Netherlands are equal to 48 *stuivers*.

Only one Mecklenburg-Schwerin` coin from today's Bulgarian lands has been documented, kept in the National museum of history in Sofia – a *thaler* of Duke Johann Albert I (1556 – 1576).

The Duchy of Teschen (Cieszyn in Polish) is located in the southernmost part of the region of Silesia. Its coins are very rare in Bulgarian lands under Ottoman rule. So far, only one coin has been published in the treasure from the village of Razhdavitsa (Kyustendil region), but it has been wrongly defined as a coin of the Polish-Lithuanian Commonwealth. It turned out, however, that some of our museums still hold unpublished coins of this duchy.

Among the most interesting *thaler* coins are those of Mansfeld. In fact, these are several separate state formations. Mansfeld is, in fact, a small state in Thuringia, ruled by a family with many branches, all the way to the Spanish Netherlands. Despite its limited territory, significant quantities of *thalers* have been minted here, due to the large deposits of copper and silver. Although Mansfeld coins are widespread among German states, they are rare in the Ottoman Empire. The great treasure from Sofia contains a coin of the County of Mansfeld (senior line), incorrectly defined as Saxon. In fact, it is a *reichsthaler*, struck in 1579 during the joint rule of the five counts Johann Georg, Peter Ernst, Johann Albert, Johann Hoyer and Bruno.

From the County of Mansfeld (Mansfeld-Freideburg – senior line) of the Bulgarian lands is known only one coin, reused as jewelry in the treasure of Kopilovtsi (Montana region). It is a *reichsthaler* of 1582, struck in Eisleben under the joint rule of Counts Ernst I, Johann Albert, Johann Hoyer III, Bruno II and Hoyer Christoph (1579 – 1585).

The county of Mansfeld-Schraplau (middle line) emerged after the partition of 1486 and existed until 1602, when its lands passed into the possession of other members of the great House of Mansfeld. From the territory of today's Bulgaria is described a single *thaler* from 1602, struck in Eisleben mint and belonging to Count Henry II (1595 – 1602).

Only one coin of the northwestern German county of East Friesland has been documented from the territory of present-day Bulgaria. The joint rule of Erzard II and his younger brothers Christoph and Johann II (1540 –

1566) includes the only known coin from the treasure of Gorni Dabnik (Pleven Region), minted in 1564.

From the territory of today's Bulgaria until now only one coin of a small principality is known, which, however, is not correctly identified. It is contained in the treasure from Sofia and is a *reichsthaler*, incorrectly defined as Saxon of the Duke Christian IV (1588 – 1648). The coin is not described in sufficient detail in the publication and because it belongs to a type with many varieties, it cannot be precisely determined on the basis of the available information. This *thaler* was struck in 1625 and actually belonged to Prince Christian I von Braunschweig-Lüneburg-Celle (1611 – 1633).

The Prince-Archbishopric of Salzburg in Early Modern period was one of the most important and extensive ecclesiastical state in Europe. Only one silver coin is known from Archbishop Ernst von Bayern (1540 – 1554) – a *gulden*, minted in 1553. It is stored in the National historical museum and is probably a single find. From the next archbishop Michael von Kuenburg (1554 – 1560) is also known a *reichsthaler* from 1558, again in the National historical museum. A *thaler* of John Jacob (1560 – 1586) is kept in the fund of Iskra museum of history in Kazanlak. The great treasure from Sofia (Council of Ministers) contains a coin of Archbishop Paris von Lodron (1619 – 1653), struck in 1623.

In the Bulgarian lands there are also *thalers* of the free imperial cities. So far, only two specimens of the city of Augsburg are known, an integral part of jewelry from the village of Kopilovtsi (Montana region). The two *reichsthalers* belong to two different variants, struck in 1624 and 1626, in which the year is written in Roman numerals. They were minted during the reign of the holy Roman emperor Ferdinand II (1619 – 1637). To these we must add the *guldiner* of Kempten (1544) from Gorni Dabnik treasure, as well as several specimens of Kaufbeuren, registered in several museums. From the city of Nuremberg is known only one *reichsthaler* from 1625 weighing 23.75 g in the treasure of Sofia. There are significantly more *florins* of the city of Emden (Emden) in East Friesland.

Among the coins typical for our lands are those of the Kingdom of Hungary (since 1526 under Habsburg rule). Their largest concentration, without being mentioned by rulers and denominations, is observed in the region of Veliko Tarnovo. Most Hungarian coins (83 pieces) in a collective finding are contained in the treasure from Samokov region. The *thalers* of the reign of Ferdinand I (1526 – 1564) are relatively more widespread among the Hungarian coins from the 16th to the 17th century. The

numismatic fund of the National Museum of History – Sofia preserves a *reichsthaler* from 1556, struck in Kremnitz. In this museum is also kept a *reichsthaler* of Maximilian II (1564 – 1576). More coins are known from the reign of Rudolf II (1575 – 1612), but very few of them have been published with an indication that they were minted on the territory of the Kingdom of Hungary. They are most often declared Austrian, and the lack of more detailed information and photos makes it difficult to identify them accurately. Many unpublished specimens are kept in a number of Bulgarian museums, such as in the Iskra museum of history in Kazanlak.

Among the most common silver coins from our lands are those of Spain. At the end of the 16th and throughout the 17th century, Spanish coins circulated in large quantities throughout the Ottoman Empire. The Spanish monetary system in the 16th – 17th century is characterized by a number of features. The *real-coin* system was introduced by Ferdinand and Isabella through the monetary reform of 1497. The unexplained problems associated with Spanish coins in our lands are not few. Most of the coins were minted in the colonial possessions of the Spanish Empire. But so far there has been no thorough study of the mints to give a clearer picture of what percentage of Spanish coins are minted in Spain itself and how many are from the Americas. Special attention should be paid here to coins minted in Spanish European possessions such as the Kingdom of the Two Sicilies, the Duchy of Burgundy, the Duchy of Milan, the Spanish Netherlands and others. The Spanish coins with a face value of *8-reals*, equivalent in weight and silver content of the *thalers*, are one of the most common foreign coins in the Bulgarian lands under Ottoman rule. They are usually poorly struck, the inscriptions on them are almost invisible. This, of course, is a picture typical of almost all Spanish coins of the time, minted both in the colonies and in Spain itself. However, they are distinguished by their high silver content of 970/1000. Spanish coins minted in the time before the outbreak of the crisis in the Ottoman Empire are found on Bulgarian lands by accident. So far, only two Spanish silver coins of Ferdinand of Aragon and Isabella of Castile (1474 – 1516) have been documented from the territory of Bulgaria. Both have a face value of *4-reals* and were struck in Seville mint.

Among the most common Spanish coins are those that belong to the so-called *cob type*. Very often these are coins with a high degree of wear. Most of the mints cannot be determined with certainty, but from the types and irregular shape of the cores it can be concluded that most of them were minted in Spanish America. The *thaler* coins of the overseas Spanish

possessions constitute a significant part of a number of treasures from the 16th to the 17th century in the Bulgarian lands. For example, in the treasure from Sofia, they are 90 (about 1/3 of all Western European coins), and several mints are represented, all from Spanish America: Mexico, Potosi, Bogota, Santa Fe, Lima. Spanish coins were relatively widespread in the Bulgarian lands under Ottoman rule, as well as throughout the Empire. They are documented in as many as 36 collective finds. Although they are found throughout the country, their concentration is highest in Central North and Northwestern Bulgaria, and lowest in Thrace. The largest amount of Spanish coins is contained in the coin-hoards from the village of Dabravino (Varna region) and Sofia. Silver coins are presented to all Spanish rulers who ruled between the 1580s and the mid-17th century.

The *thalers* of the Spanish Netherlands have a very characteristic image – a large Burgundian cross, formed by the crossing of two scepters. They are very rare in today's Bulgarian lands. So far, only 3 coins are known in collective finds – in the treasures from Sofia (Council of Ministers), Peshakovo (Vidin region) and Pomorie, as well as a single find from Dobrich.

Most dispersed *thaler* coins from Bulgarian lands are these of the Netherlands (United Provinces). Coinage in the Netherlands is characterized by significant decentralization and the presence of numerous types and denominations, as has already been said. Coins were minted in and on behalf of almost all provinces. Only the province of Groningen and Ommelanden began his coinage much later (at the end of the 17th century) and its coins have not yet been found in today's Bulgarian lands. Among the Dutch coins distributed in the Bulgarian lands under Ottoman rule there are also those minted for domestic circulation in the Netherlands. However, they are very few in number and are found only by accident. So far, only two coins are known with the denomination *rijksthaler* (*rijksdaalder*) (minted according to a single standard, with different images – the first West Frisian *rijksthaler* and the second Dutch *rijksthaller*) from Bulgaria – the Province of West Friesland from 1596 in the treasure from the village of Dabravino (Varna region), and of the province of Holland from 1623 in the find from Sofia. The two coins have different images and inscriptions on the obverse and reverse, although they are minted according to the same standard: nominal weight of 29.03 g and silver content – 0.885. Another *reichsthaler* is known from our lands, but struck before the liberation of the Netherlands on behalf of the cities of Kampen, Davenport and Zwolle. It is part of the treasure from the village of Gorni Dabnik (Pleven region) and

was minted in 1555. The Sofia treasure also contains the only 4 coins with the face value of *arendsthaler* (*arendsdaalder*) of 60 *groots* (30 *stuivers*), known from the territory of present-day Bulgaria. Two of them belong to the province of Friesland, struck in 1617 and 1619, and the other two were struck in the Province of Zeeland from 1602 and 1618. Of our lands, only one silver *ducat* is known, struck in the Province of Gelderland in 1660. It is part of the treasure from Byal Izvor (Stara Zagora region).

Dutch *thalers* with the upright lion depicted on the reverse – the coat of arms of the United Provinces – are most common in our lands. For this reason, they are called *lion-thalers* (Dutch *leuvendaalders*). These coins of the Belgian Confederation appeared at the beginning of the struggle for independence of this country (erupted in 1574), and the first of them being minted in 1575. Dutch *lion-thalers* became very popular throughout Europe, Asia Minor and the Levant. They are even found in America, Ceylon and Australia, where their circulation is related to that of the Spanish *8-real* coin, with which they have the same value. The spread of *lion-thalers* in practically all lands, owned by the Dutch, once again confirms the opinion that these coins were minted exclusively for commercial purposes. Among the Dutch *lion-thalers*, two main types stand out, which can be conditionally defined on the basis of images on the shield (supported by the knight) of the coat of arms on the obverse. The first type depicts the state coat of arms – a lion standing on its hind legs moving to the left. This type of coin is much more common in the territory under Turkish rule. Apparently, this type of *lion-thalers* was used mainly in commercial operations outside the Netherlands itself. Also, the amount of minted coins of this type is significantly higher. The reasons for this probably lie in the purpose of these coins, namely for commercial operations in the Levant. The second type of *lion-thalers* differs from the first in that instead of the Dutch state coat of arms, the obverse shield depicts the coat of arms of the province in which the coin was minted. These coins are very rare in the Balkans under Ottoman rule and are called provincial *lion-thalers*. City *lion-thalers* are also known, which are even rarer.

French large silver coins were relatively rare in Ottoman markets in the 16th and 17th centuries, but there were also coins minted by various feudal states in France. The reasons for this can probably be found in the fact that French trade in the Mediterranean developed on a larger scale only after 1661. Then Colbert, Minister of King Louis XIV, tried to make the city of Marseille a center of trade in the Levant. French coins are found in limited

quantities in the Ottoman Balkan markets, which contradicts the written notices of trade activity of French merchants and the capitulations made with the Empire. Probably this fact leads to the delusion of some numismatists, who completely wrongly claim that French coins, along with English coins, are completely absent in the collective finds from our lands. Indeed, they are rare, but there are still treasures made up almost entirely of French silver coins, such as the one from the former village of Birimirtsi (City of Sofia). The wider distribution of French coins in today's Bulgarian lands is associated with the time of King Louis XIV (1643 – 1715), with mostly medium-sized silver coins. French coins of larger denominations from the 16th century – the first half of the 17th century, occur incidentally, but are still present in the monetary circulation. One of these treasures is from the Paleokastro area, where there are seven French coins. They have a denomination of *franc* and *half-franc* and represent all the French rulers, in which the denominations in question were minted: Henry III (1574 – 1589) – 3 coins, Henry IV (1589 – 1610) – 2, and Louis XIII (1610 – 1643) – 1. On the last coin the name of the ruler and the year are not visible. The posthumous issues, so characteristic of antiquity, were incidental in the late Middle Ages, and the 5 *sols*' coins were in fact subdivisions of the French silver *ecu*, which in turn was created as the French equivalent of the German *thaler* and with the same great popularity of the French 5 *sols* coins in the Ottoman markets, and not only in the Levant, caused the minting of numerous similar-looking coins. They were minted in various feudal estates in France (the principalities of Trevo, Dombes, Orange, Monaco and etc.) and Italy (Republic of Genoa).

The earliest Lorraine coins published from our lands date back to the beginning of the 17th century and belong to Duke Henry II (1608 – 1624). On the obverse of the coins from the reign of Charles IV and Nicole (1624 – 1625) are depicted busts of Duke Charles IV and Duchess Nicole (Nicolette). Duke Francois (Franz) II officially ruled only in the period 25.11.1625 – 01.12.1625, but his coins were minted for a long time in the mint of Badonville (Badenweiler) and are among the most common in our lands, although for mass can not to speak. The most common in our lands are the *testones* of Charles IV (1625 – 1634; 1634 – 1675). Lorraine *testones* are relatively rare in the finds. It is noteworthy, however, that they are present, albeit with only a few specimens, in most of the collective finds.

The Principality of Orange is located in the south of France, next to Avignon (a papal possession at that time). It has been an independent state

formation since 1163. The principality, although extremely modest in territory, managed to maintain its independence until 1673, when the French King Louis XIV (1643 – 1715) annexed its territory to the royal domain. Orange coins were found rarely in Bulgarian lands. The most common are the *testones* of Prince Frederick Henry. He was also the stadtholder of the Dutch provinces of the Holland, Zeeland, Overijssel, Guelders and Utrecht in the period 1625 – 1647. Most coins of Orange are contained in the treasure from the village of Trastikovo (Burgas region) – five pieces. They belong to two rulers of the principality: the aforementioned Frederick Henry and William Henry (1672 – 1702). The last of them is also a stadtholder under the name of William of Orange of the Holland, Zeeland, Utrecht, Guelders and Overijssel, as well as a king of England, Scotland and Ireland under the name of William III (1689 – 1702). A single coin of 5 *sols* of this ruler is kept in the Iskra museum of history in Kazanlak.

Coins of the Principality of Monaco are very rare in our lands. The treasure from the village of Razhdavitsa (Kyustendil region) contains two silver coins, defined by the author as *quarter-thalers*. Both were minted in 1638 during the reign of Prince Honore II (1604 – 1662), but weighed 4.36 and 4.48 grams and are impossible to be of this denomination.

Ragusa is located on the Dalmatian Adriatic coast of present-day Croatia. Dubrovnik coins are relatively common in the finds, but in small quantities. The Republic of Ragusa is represented by a large number of coins circulating in the Ottoman Empire. In the period under consideration, they are most often of small denomination (mostly *gros*), but belong to many different variants. The treasure from the village of Razhdavitsa (Kyustendil region) contains one *triple-gross* coin and three coins of one *gros* (also called *asproi*).

One of the most important Italian states, whose coins are widespread in the Ottoman Empire, is the Republic of Venice. In the 16th and 17th centuries, it emerged as one of the greatest competitors and enemies of the Ottoman Empire in economic and military terms. Both the silver and gold coins of the republic became widespread. Venetian coins in general (gold, silver and much less copper) were among the most common foreign coins in the Empire, and throughout the Levant until the outbreak of the crisis in the Ottoman Empire and the large-scale entry of *thaler* coins. But after the Ottomans provided extremely favorable trade conditions to England, France and the Netherlands, Venetian coins began to decline. This was especially noticeable in the 17th century, but Venetian coins did not

disappear completely from the Ottoman markets. Venetian coins are found until the middle of the 17th century still relatively rare. Their number increased after this date, and in addition to gold, there are now silver ducats. Among the Venetian coins distributed on the territory of the Ottoman Empire, mostly large denominations predominate. Although not widespread, silver ducats are found in some treasures, but their distribution before the middle of the 17th century was low and their number was limited. Among the smaller silver denominations, only one *testone* (40 *soldi*) has been known so far in the treasure of Sofia.

The coins of the Kingdom of Naples are very rare in the monetary circulation of the Bulgarian lands. The treasure from the village of Razhdavitsa (Kyustendil region) contains a coin with the denomination *grosso (carlo)*, type II of King Phillip II of Spain (1554 – 1598), who is also the king of Naples. Until now, another coin of the kingdom, originating from the territory of today's Bulgaria, has not been published.

Among the relatively common coins of the Duchy of Tuscany are the *thalers* struck in the Pisa mint. The most common are the coins of two great dukes: Ferdinand I (1587 – 1608) and Cosimo II (1608 – 1621). Coins with the denomination of *luigino* are also known from the territory of Bulgaria.

The coins of the Duchy of Modena are very rare in the Bulgarian lands. For example, in the treasure from Sofia only one coin from the reign of Duke Francesco I (1629 – 1658) is attested.

Urbino coins are also very rare in Bulgaria. So far, only three of three different collective finds have been made public. In the treasure from the village of Razhdavitsa (Kyustendil region) there is a coin of the duchy, wrongly defined as a coin of *quarter-thaler*. It belongs to the reign of the last ruler of Urbino Francesco Maria II della Rovere (1574 – 1621; 1623 – 1625) and has a face value of 2 *sedicine* (32 *quatrines*), i.e. $\frac{1}{10}$ of the *thaler*.

So far, only one coin of the principality of Loano has been documented from the territory of present-day Bulgaria. It is a silver *luigino*, originating from the area of the church of St. St. Cyril and Methodius in the center of Burgas. The coin is quite worn and has an almost completely erased surface. Fortunately, some of the inscriptions have survived, and this allows for its precise identification. The coin in question is anonymous, but was actually minted by Princess Violante Doria Lomellini (1654 – 1671) in 1667.

Only anonymous coins are known from the Principality of Frinco, minted mostly during the Maceti dynasty between 1581 and 1601. They are very rare not only for our lands. These are imitations of the famous and

popular in the Levant and the entire Ottoman Empire Dutch *lion-thalers*. But in the case of Frinco's coins, the inscriptions are different and often mistaken or omitted. So far, only one coin in Iskra museum of history – Kazanlak is known.

Papal coins are rare in the Bulgarian lands, and the smaller silver denominations, such as the Giulio coin (*systo*), weighing about 3.00 g, i.e. equivalent to approximately $\frac{1}{10}$ or $\frac{1}{8}$ of the *thaler*. One such coin is contained in the treasure from the village of Razhdavitsa (Kyustendil region). The author has refrained from referring it to the pontificate of a particular pope, probably because of the illegible inscription, but from the indicated preserved part of it there is no doubt that it is Pope Sixtus V (1585 – 1590). Among the rarest coins in the Balkans are papal coins minted in Avignon – a papal possession in these times. So far, only two copies in the Bulgarian lands have been published. The first coin is in the treasure from Sofia and has been described long ago – the coin is a *franc* from the time of Cardinal Scipio Borghese Cafarelli – a papal legate in Avignon between 1609 and 1618. The second coin is in the treasure from the village of Trastikovo (Burgas region) and is struck by Cardinal Flavio Kigi – legate of Pope Alexander VII (1655 – 1677). Probably the coin is a *luigino*.

Swiss *thaler* coins were found only incidentally in our lands under Ottoman rule in the 16th – 17th century. So far, only two coins have been identified – one of the city of Zurich and another of the cantons of Uri, Schwyz and Unterwalden.

The coins of the Transylvanian principality are relatively sparse in today's Bulgarian lands. A Transylvanian coin of Prince Stephen Bocskai (1605 – 1606) is contained in the coin-treasure of Sofia, incorrectly defined as a coin of Hungary and Transylvania of Stefan Bathory. Two Transylvanian coins with a face value of *three groschen* are kept in the fund of Iskra museum of history in Kazanlak. Both are from the reign of Prince Gabriel Bathory (1608 – 1613) and belong to two different types, minted in 1609 and 1611. A Transylvanian *gros* of Gabriel Bethlen (1613 – 1629), struck in 1625, was found at the Provadia fortress.

Danish coins are extremely rare in today's Bulgarian lands. So far, only one Danish coin is known in the treasure from the village of Peshakovo (Vidin region). These coins, although beautifully and precisely made, have a relatively low silver standard of 593/1000 and can hardly compete in the Ottoman Balkans with other European silver coins.

Among the most common foreign coins in the territory of the Ottoman Empire are these of the Polish-Lithuanian Commonwealth. It is wrong to

call this coins Polish, due to the many different subjects of this monarchy. In the Bulgarian lands under Ottoman rule there are specimens struck for both the Kingdom of Poland and the Grand Duchy of Lithuania, the city of Riga, the Duchy of Courland and the city of Danzig (Gdansk). The most common are the *quarter-thalers*, struck during the reign of two rulers – Stephen Bathory (1576 – 1586) and Sigismund III (1587 – 1632), who became so widespread, that they were presented in the collective finds until the 19th century. The *quarter-thaler* coin in the Polish-Lithuanian Commonwealth was called “*ort*”. In the Bulgarian lands under Ottoman rule there are both “*crown orts*” (i.e. struck on the territory of the Kingdom of Poland) and those of the city of Danzig (Gdansk). These coins are quite common in the Balkans and are probably called “*urupi*” or “*thalerichi*” here. Most recently, a collective finding of castings and molds for casting counterfeit European coins, mainly of three *gros* and *thalers* of the Polish-Lithuanian Commonwealth, was published. The find was discovered accidentally in the area of Staro Oryahovo (Varna region). The Rzeczpospolita coins are found in the largest number in several collective findings. Most of them are in the two Vratsa treasures, which contain about 1000 and about 800 coins, respectively.

The purpose of **Chapter Six** is to clarify the value and purchasing power of *thaler* coins in the Bulgarian lands in the 16th – 17th century. When analyzing or calculating the value of the *thaler* in our lands under Ottoman rule, several characteristic elements must be taken into account. Without their analysis, there would be confusion and erroneous conclusions. Below are my considerations in this regard (in order of importance). In the first place, the fact must be placed on the fact that different European *thalers* have different values in Europe, not only abroad, but also in the countries where they were struck. In addition, a number of European countries also have different *thalers* in circulation, which again have different values. For example, in the Netherlands, several types of *thalers* and other *thaler* coins with different denominations are in circulation: a *60-stuivers rijksdaalder*; *lion-thaler* of 48 *stuivers*; *florin (gulden)* of 28 *stuivers*, etc. In second place are the significant differences in the official and market rates of the *thalers* in the Ottoman Empire. The state imposes reduced exchange rates, which sometimes differ significantly from market rates, sometimes for fear of the death penalty. Third should be the differences in market exchange rates in the Ottoman Empire itself (in different territories, administrative units and even cities).

It is widely believed that the *akche* reduces not only its weight, but also its silver content. In most cases, researchers do not attach any evidence or arguments to this. It seems that only in one case in the publications is given an example with a specific study of a single *akche* of Murad III (1574 – 1595), which turned out to have a silver content of 79%. However, another study of a coin of Mehmed III (1595 – 1603) gave a result of 95% pure silver and this time the authors are of the opinion that a significant change in the silver content was not observed even in the second half of the 17th century. Studies of Ottoman coins of Murad III (1574 – 1595), Mehmed III (1595 – 1603) and Ahmed I (1603 – 1617) from the Beçin treasure, minted in several mints, prove that a drastic reduction in the silver content of the *akche* in the time of its depreciation is practically not observed. In recent years, Romanian scientists have published an analysis of the metal content of some of the silver coins found in present-day Romania, and in particular those minted there. The results of the analysis (performed by non-destructive methods) of a Transylvanian *thaler* of Sigismund Bathory, struck in 1593, show a silver content of 96.47%.

Next, the ratio between the *akche* and the gold coins is tracked, taking into account the officially imposed and market rates.

The next paragraph deals with the change in the value of the *reichsthalers* in the Ottoman environment. Several tables are attached, which reflect the change in official and market rates over the years. A number of outdated, unspecified and unproven claims over the last 110 years have been discussed here.

In an attempt to distinguish the data available so far of a different nature on the change in the official and market rates of the *reichsthaler* against the *akche*, I came to the following conclusions. The *reichsthalers* entered the territory of the Ottoman Empire quite quickly. In this respect the situation is analogous to that in the Christian part of Europe. In the time before the outbreak of the crisis in 1585, the available data suggest that there were no significant differences (or no differences at all) between the official and the exchange rate. There can be little doubt that this is due to the relatively stable at that time *akche*. The rise is small and amounts to approximately less than one *akche* per decade – from 35 in 1520 to 40 in 1574. After the crisis broke out, the exchange rate rose significantly and in 1590 reached 80 *akches* for a *reichsthaler*. It was at this level that the Ottoman government tried to maintain its official course for the next few decades, despite the devaluation of the *akche*. This is entirely to the detriment of taxpayers who own *thalers* and prefer to pay their taxes in

foreign coins. This category includes mostly traders, but also a variety of producers selling products on foreign markets, or those who sell their goods to European traders visiting the Ottoman Empire. The official course of the *reichsthaler* left by the government unchanged at 80 *akches*, without taking into account the jumping market. In 1617 he even tried to reduce the fixed exchange rate to 78 *akches*, a measure which in the end apparently proved unsuccessful, and three years later, in 1620, he returned to his previous official value of 80 *akches*. Data for the same course are also known for 1627 and 1641. It is not known exactly until when the Ottoman administration used these values in the payment of taxes and fees. Market rates are more dynamic than the official ones, although there is a tendency to change in both directions. From the available data it can be concluded that differences began to be noticed only after the outbreak of the crisis in 1585. Before this date there are no reliable reports of different values. The official exchange rate of 80 *akches* for the *reichsthaler* in 1590 and 1600 contrasts with the market rate of 100 – 110, attested in 1599. The difference is about 20%. For 1627, data are known for an unchanged official exchange rate of 80 *akches*, while the market rate is between 113 and 130 *akches* in the period from 1622 to 1664. In different places in the Ottoman Empire the exchange rate is not the same, as most data are stored for 1622, when in Sofia the *reichsthaler* was worth 113 *akches*, while in Novi Pazar it was 130, and in Istanbul – 120. Higher values are attested for the 1670s – 1680s, when the rate reached 140 – 180 *akches*. Data are also stored for lower market rates with values of 100 – 110 *akches* in 1630, 1634, 1644 and 1650. These differences are probably related to periods of stronger and weaker demand and supply or temporary calming of the economic situation due to the stabilization of the *akche* and lack of significant military action under Sultans Murad IV (1623 – 1640) and Ibrahim I (1640 – 1648).

The next paragraph follows the change in the exchange rate of the Spanish coin of 8-*reals*. The data are also presented in tables.

The text continues with the value of *lion-thaler*. Confusion is also found in the literature, especially in older publications. There are written sources that allow the value of *lion-thaler* to be calculated indirectly. In some tax documents, the amounts collected in accounts are recalculated in *lion-thalers* ("*esedi gurush*"). For example, in the inventory of the receipts from the *jizya* tax from the *waqf* in the region of Plovdiv from 1686 – 1687 it is stated that 11237773 *akches* were collected, which amount was calculated as 9364 ½ "*esedi gurushs*" and 33 *paras*. This stated that the official rate at that time was 120 *akches* for *lion-thaler*. The document also testifies to

an official recalculation of the tax in foreign silver coins (*lion-thalers*). In addition, it shows their great popularity and widespread use.

The value of the silver florins is also commented on. The problem of the prices and purchasing power of the *thaler* in the Bulgarian lands is presented in detail below, and a number of tables are given. The problem with the amount of paid taxes and fees has not been ignored either.

Chapter Seven presents all known data on the collective finds containing *thaler* coins, found on the territory of Bulgaria. Data on 155 treasures are presented. Some of them are known only from the scarce data in the bulletins for the collective finds discovered over the years. Most of them are scattered and lost forever to science. For other findings, there are more detailed data, but often very confused and inaccurate. I have tried to present here all the available information about a given find, and in many cases I have given my additions, clarifications and corrected a number of errors and confusions. For each individual find, I tried to extract as much detail as possible of the available information. The scheme for all is the same and contains information about the discovery of the find, about the publications and its composition, an attempt to define the earliest and latest coin in a given treasure, as well as a characteristic of the whole find and the important coins in it.

The research continues with several **Tables** and **Diagrams**, which present comparisons between the individual finds, the distribution of coins in some treasures by countries, rulers and types, etc. Some unofficial names of *thaler* coins are also presented in reference form. There are also **Maps**, which present the various treasures by country.

The **Catalog** includes all known until now countries, rulers, mints and types of *thaler* coins originating from the territory of today's Bulgaria. Unfortunately, I do not have good enough and detailed photos of some of the coins and therefore they are presented only descriptively. On the other hand, they have already been published by other researchers. So far, 174 types of coins have been identified, not counting their numerous variants, reaching in some cases up to several dozen. Since the purpose of the present study is not to compile a corpus of *thaler* coins from Bulgaria, I believe that the presentation of all registered variants would unnecessarily burden the exposition.

The **List of Images** presents the sources of the photographs of the coins in the text.

In the section **Abbreviations** and **References** all publications used in the dissertation are presented. 488 titles in Bulgarian, English, German, French, Russian, Serbian, Dutch, Romanian, Turkish and others are included.

The **Conclusion** traces the development and use of *thaler* coins after the end of the studied chronological period.

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Contribution statement

1. For the first time all available information about the circulation of European *thaler* coins in the Bulgarian lands in the 16th – 17th century has been processed and analyzed. In practice, this is the first specialized study of its kind in Bulgaria.

2. The whole process of origin and distribution of *thaler* coins in Europe and the World is traced, and the place of the Bulgarian lands in it is sought.

3. For more complete information and the most accurate analysis, both numismatic and written sources of different nature are involved.

4. All available literature on *thaler* coins, found on the territory of present-day Bulgaria, has been used. The information on a number of coins in most of the publications has been corrected or refined.

5. Unpublished single coins were used, as well as whole collective finds, hitherto unknown to science.

6. A number of conclusions have been corrected and refined, mainly in the older publications concerning the circulation of *thaler* coins, the time of their entry into the monetary environment of the Balkans, etc.

7. All available data (published and unpublished) for the collective finds containing *thaler* coins from the territory of today's Bulgaria have been used, and for a large part of them the information has been refined and corrected. Finds completely unknown to science are also included. For greater clarity, the data are presented in tabular form.

8. The data for the most common *thaler* coins in the Bulgarian lands – the Dutch *lion-thalers* – are specified, as they are distributed by provinces and cities (where this is possible on the basis of the stored data).

9. On the basis of published data and unpublished numismatic materials, several hitherto unknown silver *thaler* coin denominations have been identified, such as *guldenroschen*, *joachimsthaler*, *silver ducat*, *arendsthaler (arendsdaalder)*, *guldensthaler of 60 kreuzers*, *florin of 28 stuivers* and others.

10. A number of coins have been identified that have either not been published or have been published incorrectly.

11. Among the coins found in Bulgaria, a large number of hitherto unknown state formations, rulers, cities and coin types have been identified. A number of new coin variants have also been attested.