# POP CULTURE, MARGINALIZATION, REMEDIATION. DIGITAL ARTIFACTS OF THE CULT OF ST. CYRIL AND METHODIUS AND ST. VALENTINE ON THE X.COM PLATFORM

Andrzej Adamski – Arkadiusz Gaweł – Barbara Przywara

DOI: 10.17846/CL.2025.18.1.182-196

Abstract: ADAMSKI, Andrzej - GAWEŁ, Arkadiusz - PRZYWARA, Barbara. Pop Culture, Marginalization, Remediation. Digital Artifacts of the Cult of St. Cyril and Methodius and St. Valentine on the X.com Platform. The article analyzes the contemporary reception of the Cyril-Methodian heritage in the context of the mediatization of religion and the transformation of religious traditions in digital culture. The study compares the presence of the cult of Saints Cyril and Methodius (patrons of Europe) with the simultaneous popularity of St. Valentine and commercial "Valentine's Day" in the Polish media and religious space. Using the methodology of media archaeology and digital communication analysis techniques, the authors examine the virtual representations of both cults in the discourse of the Twitter/X platform (in Polish and English). Quantitative and qualitative analysis (analysis of topoi, study of remediation) shows that the cult of the Thessalonian Brothers in the media space in Poland is almost completely marginalized by the Valentine's Day pop-cultural narrative. The study also documents the complex processes of adaptation and transformation of traditional religious cults under the influence of digital media logic. The article contributes both to studies on the continuity of the Cyril-Methodian tradition in the digital age, as well as to the sciences of social communication and media, showing the mechanisms of functioning of historical religious heritage in an environment dominated by popular culture, dominant media narratives, and algorithms of social platforms.

**Keywords:** Social communication and media sciences, Cyril and Methodius, Valentine's Day, pop culture, St. Valentine, media content analysis, topoi analysis, media archaeology

#### 1. Introduction

The cult of Saints Cyril and Methodius in Poland is present in both the Catholic and Orthodox Churches. In addition to official liturgical celebrations, one can mention here the activities of the Orthodox Brotherhood of Saints Cyril and Methodius (Bractwocim 2023) or the erection of churches and parishes dedicated to these saints. The Orthodox Church commemorates St. Cyril on February 14, i.e., February 27 according to the Gregorian calendar, St. Methodius on April 6 (April 19 according to the Gregorian calendar). In addition, on May 11 (May 24 according to the Gregorian calendar), it celebrates a joint commemoration of both saints. In the liturgical calendar of the Catholic Church, the feast of St. Cyril and Methodius is celebrated on February 14. Initially Pope Leo XIII fixed their annual liturgical feast on 5 July. After the Second Vatican Council, as a result of the liturgical reform, the feast was transferred to 14 February. From the historical point of view it's the date of the heavenly birthday of Saint Cyril (14. 02. 869) (Zubko 2014, 88-89).

Nevertheless, some Slavic nations celebrate this feast on July 5, on the anniversary of the beginning of the Christianization mission of both saints. This is the case in the Czech Republic

and Slovakia - in these countries it is also a national holiday and a day off from work. Saints Cyril and Methodius, also known as the "Apostles of the Slavs," played a key role in shaping culture and religion in Central and Eastern Europe. They are called "the most intelligent Christian missionaries and diplomats of their period" (Ivanič - Hetényi 2017, 27-34; Maturkanič - Tomanová Čergeťová -Přibylová 2022, 161-176). Their undoubted merit in the sphere of the development of writing and language was the creation of the Glagolitic alphabet, which enabled the translation of important religious texts into Slavic languages (Ivanič 2020; 2024). The translation of the Bible and other liturgical texts into Old Church Slavonic was crucial for the spread of Christianity among the Slavs, it was an act of inculturation of the Gospel (Adamski - Przywara - Przybyło 2020, 111-123). Translations of the Gospel and liturgical texts into Old Church Slavonic enlivened the religious life of our ancestors and created the foundations of literature and culture for almost the entire Slavic world (Hetényi - Ivanič 2021, 417). Appreciating their contributions to contemporary Europe, Pope John Paul II declared them patrons of Europe on December 31, 1980, in an apostolic letter entitled Egregiae Virtutis. In 1985, on the 1100th anniversary of Methodius' death († 885), John Paul II issued the encyclical "Slavorum Apostoli" (Apostles of the Slavs), which can be considered one of the most important documents of the Catholic Church on St. Cyril and Methodius. (Hromják 2024, 132-140; Zubko 2014, 195-202).

On the same day (February 14), the Roman Martyrology commemorates two saints named Valentine (although they probably refer to the same person). In a copy of the Martyrology published in Poland in 1910, we read: "On the 14th of February in Rome at the Via Flaminia, the solemnity of St. Valentine, Priest, who during the reign of Emperor Claudius performed miraculous healings and through his teaching converted many to the true faith. First he was beaten with sticks, and finally beheaded. [...] In Terni, the memorial of St. Valentine, Bishop. Because his firmness did not change despite prolonged flogging and torture, by order of the city prefect Placidus, he was dragged out of prison at night and beheaded" (Roman Martyrology 1910, 53). The name of this saint gave rise to the term "Valentine's Day," which in pop culture means lovers' day. It falls on February 14 – thus on the liturgical commemoration of St. Valentine and (in the Church in Poland) the feast of St. Cyril and Methodius – Patrons of Europe.

# 2. Valentine's Day - origins and dimension of celebration in Poland

Researchers trace the deepest roots of Valentine's Day celebrations to ancient pagan Rome, in celebrations honoring two pagan deities: Lupercus, who protected lambs from wolves, and Juno, who watched over wives (Van Dyk 2013, 4). However, the beginnings of Valentine's Day celebrations in their current form should be sought in the 14th-century court culture of England. In the 19th century, they were transformed into a modern commercial holiday in the USA and returned to Europe in the next century. After World War II, Valentine's Day spread to Western European countries. In the last decade of the 20th century, after the fall of communist regimes, the celebration of Valentine's Day in the Anglo-Saxon style spread to Eastern European countries (Zajonc 2023, 403-425).

According to a Polish language textbook for foreigners, Valentine's Day refers to "events organized (following the Anglo-Saxon model) on the day of St. Valentine (February 14), who is the patron of lovers, and this day itself is precisely the holiday of lovers" (Kita – Skudrzyk 2009, 285-286). In Poland, Valentine's Day is considered a relatively new holiday, but its celebration – despite the name referring to the name of a saint, and thus religious roots – is evidently focused on the secular, often commercial dimension. It is also often called "lovers' day" and in the symbolism used (red color, hearts, etc.) does not refer to religious issues at all. Quasi-holidays of

a similar nature also include the so-called St. Andrew's Eve (celebrated on the evening preceding the feast of St. Andrew the Apostle – November 30, combined with fortune-telling for maidens preparing for marriage) or St. Nicholas' Day (the custom of giving gifts on the day of the liturgical commemoration of St. Nicholas – December 6) (Cf. Strzelecka 2014, 163-175). Slovaks have quite similar experiences related to the celebration of Valentine's Day. It is no coincidence that the term "holiday" is used in English to describe Valentine's Day, not "feast", understood as "an occasion or cyclically recurrent period of various duration, in which something important or extraordinary takes place or is remembered. During holidays, specific and, to some extent, normative ways of behaving are anticipated or evoked, to which symbolic meanings are attributed to varying degrees" (Popelkova – Zajonc 2022, 21-37). Similar to Poland, this holiday became popular during the latemodernity period and are not embedded in the historical tradition of the country and protected by important social institutions. Information about these holiday has spread mainly through schools, the internet, electronic media, and pop-culture (Popelkova – Zajonc 2022, 21-37).

## 3. Purpose and research method

#### 3.1. Purpose

To examine to what extent Saints Cyril and Methodius – patrons of Europe, and to what extent Saint Valentine, whom pop culture has made the patron of lovers, are present in internet discourse. The feast of St. Cyril and Methodius and Valentine's Day are celebrated in Poland on the same day – February 14. In a broader context, the analyzed example may help answer the questions:

- a. Does pop culture, by referring to religious symbolism, desacralize it and dominate, or is it a carrier of religious content and leads to increased interest in it?
- b. What actions should be taken to break through in media discourse with a serious message, and is it even possible from the perspective of designing communication in social media?

#### 3.2. Method

This study goes beyond a simple comparison of quantitative data. The authors seek to understand the analyzed data in the light of media archaeology (MA). This is a relatively new, interdisciplinary field of science. It defies a clear definition; it is not so much a theory as a heterogeneous collection of theories and methods. Its main goal is to understand new and contemporary media through an in-depth analysis of the past, especially through a critical analysis of media narratives. Traditional archaeology studies the past of humanity based on material remains, while media archaeology focuses on the history of media, communication technologies, and their cultural contexts. It explores alternative paths of media development, forgotten ideas and technologies, as well as those aspects of media history that have been forgotten or neglected for some reason. In this way, it challenges the supposed novelty of digital culture by showing that what we consider new already has its prototypes in the past. Jussi Parikka defines media archaeology as an undertaking between materialist media theories and an emphasis on the value of the obsolete and forgotten, realized through new cultural histories (Parikka 2012, 205; Parikka 2023, 3387).

This perspective allows treating posts on the Twitter/X platform not only as messages but as complex media artifacts (we use the name Twitter/X due to the recognizability and prevalence of the former name of the service, now known as X.com). The concept of a media artifact is

key to understanding media archaeology and fulfilling this article's objectives. In traditional archaeology, an "artifact" is an object made by humans, discovered as a result of research. Media archaeology extends this concept to all objects, systems, practices, and discourses related to media and communication technologies. A media artifact in this approach of MA doesn't have to be a physical object. It can be, for example, a specific data format, a piece of code, a user interface, but also a recurring discursive motif (topos), an idea, or even an "imaginary medium" (Wiatr 2020, 24; Bierzyński - Slivka 2024). Digital artifacts, on the other hand, are virtual objects or data created using technology. These can be websites, social media posts, digital images and artworks, video games, software, databases, algorithms, and even individual files, code fragments, or traces of user interaction (Fiveable 2024), whose form, content, and visibility are shaped by the specific "materiality" of the digital platform – its architecture, algorithms, and interfaces (Moschini 2018, 623-640). MA also enables the analysis of recurring motifs (topoi) (Huhtamo 2020, 340-367) and remediation processes (Hammond 2020), i.e., how the new medium, which is Twitter/X, processes and reconfigures older forms of religious worship and cultural narratives (Bolter - Grusin 1999). The aim is therefore not only to describe the state of the media presence of both saints but also to understand the mechanisms that lead to the observed situation, questioning simple, linear narratives about progress and the "newness" of digital media.

## 4. Research methodology in the perspective of media archaeology

The study is based on a combination of quantitative and qualitative methods, embedded in the theoretical framework of media archaeology.

## 4.1. Data collection (Documentary Research/Content Gathering)

This process first involved retrieving data from the Twitter/X platform to collect publicly available tweets containing specific keywords and hashtags related to the studied figures and holidays. At this stage, available posts (tweets) published in Polish and English on February 14, 2023 (as well as in the days immediately preceding and following, to capture the broader context of the discussion) were downloaded. Posts containing words in Polish and English related to St. Cyril and Methodius (e.g., "Cyril and Methodius", "Saints Cyril and Methodius") and to St. Valentine and Valentine's Day (e.g., "St. Valentine", "Saint Valentine", "#ValentinesDay", "Valentine's Day") and their variations were sought. The collected tweets are treated as mentions and analyzed in further steps. The analysis takes into account not only their content but also format, metadata (e.g., number of likes).

This process first involved retrieving data from the Twitter/X platform to collect publicly available tweets containing specific keywords and hashtags related to the studied figures and holidays. At this stage, available posts (tweets) published in Polish and English on February 14, 2023 (as well as in the days immediately preceding and following, to capture the broader context of the discussion) were downloaded. Posts containing words in Polish and English related to St. Cyril and Methodius (e.g., "Cyril and Methodius", "Saints Cyril and Methodius") and to St. Valentine and Valentine's Day (e.g., "St. Valentine", "Saint Valentine", "#ValentinesDay", "Valentine's Day") and their variations were sought. The collected tweets are treated as mentions and analyzed in further steps. The analysis takes into account not only their content but also format, metadata (e.g., number of likes).

## 4.2. Quantitative Analysis

This method involved measuring and comparing numerical data. At this stage, the authors undertook the following actions: comparison of the number of tweets (volume of discussion) on particular topics, analysis of engagement indicators (number of likes), calculation and comparison of the frequency of occurrence of specific words and word sequences (n-grams).

#### 4.3. Qualitative analysis

In the first stage, it was focused on the interpretation of meanings and patterns. The basis for the analysis of topoi and remediation was content analysis, including interpretation of tweet content (based on the most common words/phrases). The next stage was the analysis of topoi, i.e., identification and interpretation of recurring motifs, stereotypes, and interpretative frames (common places) with reference to Twitter/X data. Topoi analysis is a research method focusing on the identification and analysis of recurring cultural motifs, so-called "topoi", which recur throughout media history. Topoi are recurring formulas, common places, or stereotypes that are cyclically reproduced in various historical and media contexts. This method allows for the archaeological examination of media, where instead of a chronological description of technological development, the researcher identifies cultural patterns and narratives that accompany new media (Huhtamo – Parikka 2011, 14).

The operationalization of topoi identification proceeded in the following steps:

- a. Immersion in data. At this stage, the authors became familiar with all the collected material available for the studied entity (e.g., all tweets containing "St. Valentine").
- b. Identification of preliminary patterns. At this stage, the authors searched for and noted recurring keywords, phrases, content types (e.g., informational, promotional, prayer-related) in relation to the studied entity. In the case of Twitter/X data, the analysis of word frequency and n-grams provided key quantitative clues here and was performed automatically based on a written algorithm.
- c. Open coding, i.e., assigning working labels (codes) to identified data fragments that represent these recurring patterns. Then these working codes were combined into larger thematic groups that seem to represent a coherent motif, stereotype, or interpretive frame of the studied phenomenon.
- d. Defining and naming topoi. It involved formulating precise definitions for the emerging thematic groups that reflect the essence of the recurring cultural or media pattern. The authors tried to give a concise name for each identified topos.

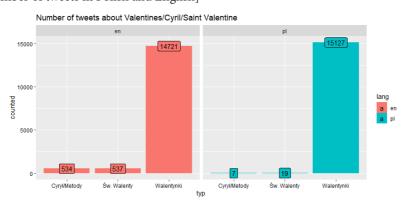
The third stage is the study of remediation, i.e., a comparative analysis of how a newer medium (Twitter/X) and contemporary practices (online/offline parish life) process, adapt, or replace older forms of transmission and practices related to the cult of saints. Quantitative data from Twitter/X were compared to identify patterns of popularity and possible traces of adaptation or transformation of symbolism. This method involved comparative interpretation of different types of data in search of traces of processing older content in newer contexts (Bolter – Grusin 1999).

The text is explanatory in nature, so the authors refrain from formulating hypotheses.

## 5. Quantitative research – data from Twitter/X

The data were analyzed using the R environment. In data processing and visualization, primarily the dplyr packages (for data manipulation and aggregation) and ggplot2 (for creating statistical visualizations) were used. Additionally, tidyverse, tidytext, and scales packages were used to support operations on text data and formatting chart axes. For better understanding of the context, words such as "not", "for", "and", so-called stopwords, were not removed from the sets.

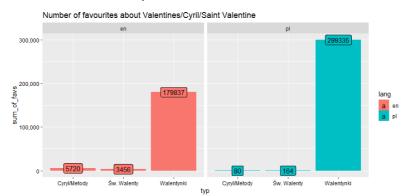
Figure 1 shows the distribution of the number of tweets in Polish and English. In both languages, Valentine's Day clearly had the most tweets (14,721 in English, 15,127 in Polish). The topics "St. Valentine" and "Cyril/Methodius" had significantly fewer mentions in both languages, with trace amounts in Polish (19 and 7 tweets, respectively).



[Fig. 1 Number of tweets in Polish and English]

Source: Own elaboration.

Figure 2 demonstrates the total number of likes of the analyzed tweets. Similar to the number of tweets, Valentine's Day tweets received the most likes (179,837 in English, 299,335 in Polish). Polish tweets about Valentine's Day were much more popular in terms of likes. Other topics had negligible numbers of likes in both languages.



[Fig. 2. Total number of likes of analyzed tweets]

Source: Own elaboration.

Fig. 3 shows the most frequent single words in tweets. In English, words such as "day", "the", "valentines", "valentine's", "and", "for", "of", "on", "you", "in" dominate. The most popular words in Polish are "walentynki" (Valentine's Day), "nie" (not), "ja" (I), "mi" (me), "mam" (I have), "tak" (yes), "mnie" (me), "dzień" (day), "od" (from), "sobie" (yourself).

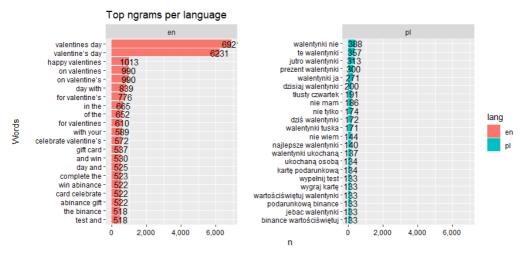
Top words per language 1437: walentynki day **36**79 the 8257 7756 1149 valentines 6546 valentine's mi lang Words 6405 and mam 4369 for tak 4001 3810 3284 you od 2962 in sobie 5,000 10,000 5.000 10,000 15,000 15,000

[Fig. 3. Most frequent words in Polish and English]

Source: Own elaboration.

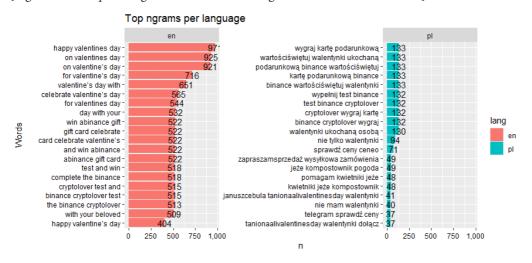
Figures 4, 5, and 6 show the most frequent word sequences (n-grams), with Fig. 4 showing combinations of 2 words, Fig. 5 the frequency of three-word expressions, and Fig. 6 combinations of 4 words. In English, common phrases include "valentines day", "valentine's day", "on valentines", "on valentine's", "thappy valentines day", "for valentine's", "celebrate valentine's", often related to greetings or the context of the day. There are also phrases related to contests or promotions ("win abinance gift", "complete the binance", "cryptolover test and win", "binance cryptolover"). In Polish, popular phrases include "walentynki nie" (Valentine's Day not), "te walentynki" (this Valentine's Day), "jutro walentynki" (tomorrow Valentine's Day), "prezent walentynki" (gift Valentine's Day), "walentynki ja" (Valentine's Day I), "dzisiaj walentynki" (today Valentine's Day). Similar to English, phrases related to contests and promotions appear, especially regarding Binance and cryptocurrencies ("wygraj kartę podarunkową" (win a gift card), "podarunkowa binance wartości" (gift Binance value), "kartę podarunkową binance" (gift card Binance), "wypełnij test binance cryptolover" (complete the Binance cryptolover test), "binance cryptolover wygraj" (Binance cryptolover win)).

[Fig. 4. Most frequent n-grams for Polish and English – 2-word combinations]

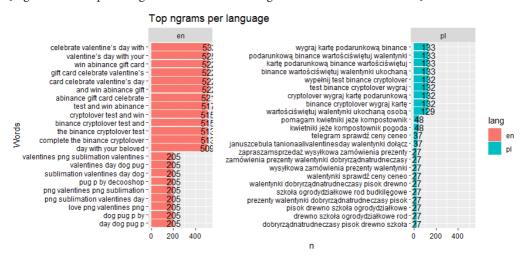


Source: Own elaboration.

[Fig. 5. Most frequent n-grams for Polish and English – 3-word combinations]



Source: Own elaboration.



[Fig. 6. Most frequent n-grams for Polish and English – 4-word combinations]

Source: Own work.

The quantitative analysis clearly shows that secular popular culture completely dominates the religious context. The commercialized version of Valentine's Day has an overwhelming advantage in the discussion on Twitter/X in both languages analyzed (over 14,000 tweets in English and over 15,000 in Polish). By comparison, references to religious figures are marginal (537 for Saint Valentine in English, only 19 in Polish, and even fewer entries were devoted to Saints Cyril and Methodius – 534 in English and 7 in Polish). This allows us to conclude that the pop culture holiday has almost completely erased its religious roots or other religious figures from public consciousness on Twitter/X. The same is true in terms of engagement (likes). Tweets about Valentine's Day received a very large number of likes (almost 180,000 in English and almost 300,000 in Polish), while those about St. Valentine or Cyril/Methodius received a negligible number of likes (a few thousand or less). This means that the secular holiday generated incomparably more interest and emotion among users. This trend was confirmed by an analysis of the most popular words.

The most frequently used words in both languages are dominated by terms related to the secular meanings of the day ("day," "valentines," "happy," "love," "gift" in English; "walentynki," "nie," "ja," "mam," "dzień" in Polish). Words directly related to religion and spirituality are missing from the top of the list. This is confirmed by an analysis of n-grams (popular phrases). The commercial and pop-cultural nature of modern Valentine's Day is a fact. Additionally, the commercial emphasis is highlighted by the fact that in both languages, phrases related to specific marketing campaigns and competitions appear in the context of Valentine's Day (e.g., numerous mentions of Binance and cryptocurrencies: "win abinance gift," "win a binance gift card," "binance cryptolover"). This shows how strongly pop culture and commerce shape the discourse around this day, pushing its potential religious references to the margins.

#### 5.1. Qualitative analysis

A qualitative content analysis was conducted, focusing on the analysis of topoi. An attempt (not entirely successful) was also made to study remediation.

## 5.1.1. Topoi analysis:

#### A. Cyril and Methodius

Based on the collected data, the only identifiable topos for Cyril and Methodius is their extreme marginality in the context of discussions on Twitter/X compared to Valentine's Day. This topos can therefore be defined as "Marginality/Reference point."

This topos was defined based on the following indicators:

- 1. Extremely low number of tweets containing keywords related to St. Cyril and Methodius (quantitative indicator).
- 2. Negligible number of likes for these few tweets (engagement indicator).
- 3. Complete absence of keywords "Cyril", "Methodius", etc. on the lists of most frequent words and n-grams (frequency analysis).

The number of tweets and likes is minimal in both languages. Within this analysis, they function mainly as a contrastive reference point, highlighting the immense popularity of Valentine's Day. The data do not allow for the identification of any specific stereotypes or interpretative frames related to their activities or significance – they are simply very rarely mentioned in this context.

#### B. St. Valentine

Similar to St. Cyril and Methodius, St. Valentine appears in the data (much less frequently than Valentine's Day, though slightly more often than Cyril and Methodius. The main topos that emerges from these data is the role of the historical or religious predecessor of the contemporary, secular holiday. His presence in the discourse is trace, which positions him as a secondary figure, whose connection with contemporary celebrations is very weak in the awareness of Twitter/X users (at least those analyzed). The topos can therefore be defined as "Historical/Religious Predecessor/ Secondary Figure." It was defined based on the following indicators:

- 1. Very low number of tweets containing "St. Valentine" compared to "Valentine's Day" (quantitative indicator), but noticeably higher than for "Cyril and Methodius".
- 2. Very low number of likes compared to Valentine's Day.
- 3. Absence of "St. Valentine" on the lists of most frequent words and n-grams.

#### C. Valentine's Day

Based on the data for this concept, several dominant topoi can be identified:

## C1. Topos "Mass popularity and engagement". It was defined based on the following indicators:

- 1. Very high number of tweets containing keywords related to Valentine's Day, overwhelmingly higher than for other topics (quantitative indicator).
- 2. Very high total number of likes for tweets about Valentine's Day, significantly exceeding engagement for religious topics (engagement indicator).

Data on the number of tweets and likes unequivocally indicate the topos of Valentine's Day, which appears as an event of mass popularity that generates enormous engagement on social media.

This engagement causes media noise that overshadows and drowns out other figures or holidays potentially associated with a given day.

C2. Topos "Secular celebration (Lovers' Day)". It was defined based on the following indicators:

- 1. High frequency in top words and n-grams of terms referring to the day/occasion itself (e.g., "day", "dzień", "valentines day").
- 2. High frequency of words and phrases expressing positive emotions, wishes, interpersonal relationships (e.g., "happy", "love", "you", "ja", "mi", "mam").
- 3. Absence or trace presence of specifically religious terms (e.g., "saint", "prayer", "God", "church") in the most common words and n-grams related to Valentine's Day.

The most popular words and n-grams indicate an interpretative frame of Valentine's Day as a general, secular holiday ("day", "dzień") related to relationships, feelings, and wishes ("happy", "love", "valentines", "valentine's", "happy valentines day"). It is an occasion to express personal feelings and experiences ("ja", "mi", "mam", "mnie", "you").

C3. Topos "Commerce and consumption". It was defined based on the following indicators:

- 1. High frequency of occurrence in top n-grams (two-, three-, four-word) of names of specific brands (e.g., "Binance").
- 2. High frequency of n-grams containing words related to promotional activities and contests (e.g., "wygraj" (win), "win", "test", "karta podarunkowa" (gift card), "gift card", "abinance gift").
- 3. Presence in top n-grams of words related to gifts and buying (e.g., "gift", "prezent walentynki").

Especially in n-grams, there is a strong topos of Valentine's Day as an occasion for commercial activities and consumption. Phrases concerning gifts ("gift", "prezent walentynki") and numerous references to contests and promotions (especially related to Binance and cryptocurrencies: "win abinance gift", "wygraj kartę podarunkową binance", "cryptolover test and win", "binance cryptolover") show the interpretative frame of this day as an event strongly coupled with the market and marketing.

C4. Topos "Controversy/Negation". It is visible especially in Polish. It was defined based on an indicator, which was the statistically high position of a specific phrase with negative connotation ("walentynki nie" – Valentine's Day not) in the ranking of the most frequent n-grams in Polish. The high position of this n-gram suggests the existence of a topos of contestation, negation, or criticism of Valentine's Day. This indicates an interpretative frame in which some users refer to this holiday with distance or negatively.

#### 5.1.2. Remediation analysis

It was not possible to study remediation, i.e., to conduct a detailed analysis of remediation of earlier forms of transmission (religious texts, iconography, folk traditions, historical messages) nor to precisely examine how religious symbolism is adapted or transformed in tweets. This results from the specificity of the collected data, specifically the low frequency of religious references. As the analyses have shown, references to the figures of St. Valentine and Cyril and Methodius are extremely rare compared to secular Valentine's Day. With such a small number of mentions, it is difficult to infer any dominant patterns of adaptation or transformation of religious symbolism. The data indirectly suggest marginalization and replacement rather than active remediation or

transformation of religious symbolism. The enormous popularity of secular Valentine's Day and related commercial themes (visible in n-grams) suggests that the pop-cultural version of the holiday has largely replaced potential references to its religious roots in discourse on Twitter/X, instead of adapting or processing them. Moreover, in the most popular words and phrases, there are no traces of adaptation of religious symbolism to the pop-cultural context. Secular, commercial terms and those related to everyday emotions dominate.

## 6. Conclusions

The media discussion on Twitter/X on February 14 is completely dominated by a secular, commercialized version of Valentine's Day. This is reflected in the huge number of tweets, high engagement (likes), and the overwhelming number of words and phrases related to celebration, emotions, but also commerce and promotions (e.g., cryptocurrencies). Religious figures – both Saints Cyril and Methodius (patrons of Europe) and Saint Valentine (historical patron) – are almost invisible in this discourse. At best, they serve as a marginal point of reference or historical background. The relationship between religion and popular culture on Twitter/X is clear: it is a complete erasure and marginalization of religious discourse by popular culture from the space of discussion in cyberspace. Pop culture has become a catalyst for marginalization (we understand a catalyst as "an irregular causative factor in the transformation of institutions, norms, culture, social and family structure or a factor escalating this transformation") (Bierzyński 2024).

Thus, the aim of the study, defined as "To examine the extent to which Saints Cyril and Methodius, patrons of Europe, and Saint Valentine, whom popular culture has made the patron saint of lovers, are present in online discourse on February 14," has been largely achieved. Quantitative research on Twitter/X clearly showed the minimal media presence of saints (Cyril and Methodius and Valentine) compared to the massive popularity of secular Valentine's Day. Qualitative analysis (topoi) allowed us to determine that their position in the discourse is marginal and only serves as a background or contrast to the dominant theme. The analysis also showed that it is the secular, pop-cultural version of the holiday ("Valentine's Day"), rather than the figure of St. Valentine, that dominates the discourse related to February 14.

Based on the results of the study, an attempt can be made to answer the questions posed.

a. Does pop culture, by referring to religious symbolism, desacralize it and dominate, or is it a vehicle for religious content and leads to an increase in interest in it?

Based on the analysis of discourse on Twitter/X, it must be concluded that popular culture (commercial Valentine's Day) completely dominates this particular media space. This results in a kind of functional desacralization of religious symbolism. This is achieved through its complete marginalization, removal from the discourse space, and replacement. The study showed a strong link between contemporary Valentine's Day and commercialism and consumer culture. This is a clear manifestation of fundamental desacralization, which reduces the liturgical commemoration of a saint to a consumer opportunity, driven and fueled by marketing. This process is similar to the celebrity culture surrounding religious leaders, which is very intense due to digital media (Mikuláš – Chalányová 2017). Even if the name "Valentine's Day" refers to a saint, the content of the discussion is almost entirely secular and commercial, devoid of religious references.

b. What steps should be taken to break through the media discourse with a serious message, and is this even possible from the perspective of social media communication design?

The study shows that this is extremely difficult. Is it even possible? Perhaps, but it must be realistically noted that serious messages about the patrons of Europe or the historical dimension of the cult of St. Valentine were practically absent against the backdrop of the dominant, light-hearted, and commercial Valentine's Day content. A complete and dominant breakthrough into the mainstream discourse in social media may be unrealistic due to the logic of these media (algorithms promoting engagement, speed, emotions). However, strategies to increase visibility in specific niches or attempts to "tap into" the mainstream are feasible and possible. One can consciously refer to popular trends in order to present deeper content in their context. Certainly, a high technical level of the messages created and the creation of content in formats preferred by the platform (visually attractive graphics, short videos, engaging storylines) are necessary. These are tools that convey a "serious message" in an accessible way. It would also make sense to build an engaged community. This can be achieved by building and nurturing relationships with a group of recipients who are genuinely and deeply interested in a given topic (history, religion, culture). This is definitely a more realistic and purposeful approach than fighting for a mass audience. It would also be useful to use storytelling, i.e., presenting stories and characters in an emotionally engaging way that has a chance to stand out in the flood of information. Key to success is understanding that social media is a specific environment and that the direct transmission of traditional forms of "serious communication" (e.g., long articles, lectures) is doomed to failure. Effectiveness requires adapting the form and strategy to the logic of the medium. However, this is not always easy or possible without certain compromises regarding the depth of the message. Better is the enemy of good - therefore, for those who want a deeper religious message to emerge in the digital environment and information smog, it is necessary to precisely plan goals and choose a strategy appropriate to the possibilities and realities.

## 7. Limitations and ethical issues

The authors are aware of the limitations of the study, resulting, among other things, from the ephemeral nature of online content, potential difficulties in accessing all data, especially on Twitter/X (e.g., private profiles, the operation of algorithmic "black boxes"), and the dynamic nature of the platform. The study includes only publicly available data. The authors provide only aggregate data that in no way violates user privacy, in accordance with the ethical principles of research in the digital space. As a next step, the authors plan to investigate the presence of the cult of St. Cyril and Methodius in Poland outside Twitter/X, in the broader digital space (e.g., through the activities of parishes dedicated to St. Cyril and Methodius, their cult in these parishes in Poland – Roman Catholic, Greek Catholic, and Orthodox). For methodological consistency between the two articles, it will be useful to use similar research methods (quantitative and qualitative analysis, topos analysis, and maintaining the study within the perspective of media archaeology). It may also be appropriate to maintain a comparison with the cult of St. Valentine in the same space.

# **List of figures**

Figure 1: Number of tweets in Polish and English

Figure 2: Total number of likes of analyzed tweets

Figure 3: Most frequent words in Polish and English

Figure 4: Most frequent n-grams for Polish and English - 2-word combinations

Figure 5: Most frequent n-grams for Polish and English – 3-word combinations

Figure 6: Most frequent n-grams for Polish and English – 4-word combinations

## References

- Adamski, Andrzej Przywara, Barbara Przybyło, Sylwia. 2020. Church's attitude to the means and philosophy of communication in the 9th and 16th centuries: courage and trust versus escape and censorship. In Konštantínove listy [Constantine's Letters] 13/2, 111-123.
- *Bierzyński, Tomasz Slivka Daniel. 2024.* Wartości rodzinne i dziedzictwo duchowe zaklęte w kamieniu: analiza symboliki na Żydowskim Cmentarzu w Rzeszowie przy alei Rejtana, Społeczeństwo-kultura-wartości. In Studium społeczne 26, 127-139.
- *Bierzyński, Tomasz.* 2024. Media i AI jako katalizatory zmian społecznych w kontekście nauk o rodzinie In Studium społeczne 26, 12-22.
- Bolter, Jay Grusin, Richard. 1999. Remediation. Understanding New Media. Cambridge Massachusetts.
- *Bractwocim. 2023.* Bractwo Prawosławne świętych Cyryla i Metodego. https://bractwocim.pl/pl/. *Działo, Maria. 2024.* Walenty św. In Sakralne Dziedzictwo Małopolski. https://sdm.upjp2.edu.pl/ludzie/walenty-sw.
- Fiveable. 2024. 8.9 Artifacts and appearance Media Expression and Communication. https://library.fiveable.me/media-expression-and-communication/unit-8/artifacts-appearance/study-guide/LHigjx2ubTbMZEzc.
- Hammond, Adam. 2020. Remediation. In Oxford Research Encyclopedia of Literature. https://oxfordre.com/literature/view/10.1093/acrefore/9780190201098.001.0001/acrefore-9780190201098-e-1087.
- *Hetényi, Martin Ivanič, Peter. 2021.* The Contribution of Ss. Cyril and Methodius to Culture and Religion. In Religions 12/6, 417.
- *Hromják, Ľuboslav. 2024.* Prínos pápeža Jána Pavla II. pre Slovanov v moderných dejinách cyrilometodského kultu. In Konštantínove listy [Constantine's Letters] 17/1, 132-140.
- Huhtamo, Erkki. 2020. Media studies as an 'archaeology': elements of genealogy. In Early Popular Visual Culture 18/4, 340-367.
- *Huhtamo, Erkki Parikka, Jussi. 2011.* Introduction: An Archaeology of Media Archaeology. In Media Archaeology: Approaches, Applications, and Implications. Los Angeles, 14.
- *Ivanič*, *Peter. 2020.* Christianization of the Territory of Today's Moravia and Slovakia before 863. In Bogoslovni vestnik/Theological Quarterly 80, 655-667.
- *Ivanič*, *Peter.* 2024. The Life of St. Constantine-Cyril and the Veneration of His Relics = Život sv. Konštantína-Cyrila a úcta k jeho relikviám. Roma.
- *Ivanič*, *Peter Hetényi*, *Martin*. *2017*. Invitation, Arrival and Activities of the Byzantine Missionaries in Great Moravia. In European Journal of Science and Theology 13/3, 27-34.
- Kita, Małgorzata Skudrzyk, Aldona. 2009. Człowiek i jego świat w słowach i tekstach. Katowice, 285-286.
- Maturkanič, Patrik Tomanová Čergeťová, Ivana Přibylová, Dagmar. 2022. Cyrilometodějská tradice v pojetí české společnosti 21. století [Cyrillo-Methodian Tradition in Czech Society in the 21st Century]. In Konštantínove listy [Constantine's Letters] 15/1, 161-176.
- *Mikuláš*, *Peter Chalányová*, *Oľga. 2017*. Celebritization Of Religious Leaders. In Contemporary Culture. In European Journal of Science and Theology, Vol. 13, No.6, 43-52.
- *Moschini, Ilaria.* 2018. Social semiotics and platform studies: an integrated perspective for the study of social media platforms. In Social Semiotics 28, 623-640.
- Parikka, Jussi. 2012. What is Media Archaeology? Polity: Cambridge (UK) Malden (MA).
- *Parikka, Jussi. 2023.* What is media archaeology, 10 years later. In Perspectivas De La Comunicación 16/1. https://doi.org/10.56754/0718-4867.2023.3387.

Popelkova, Katarina – Zajonc, Jurai. 2022. Halloween and Valentine's Day in Slovakia: new holidays or new opportunities for celebration? In Łódzkie Studia Etnograficzne 61, 21-37. https://doi.org/10.12775/LSE.2022.61.02.

Rzymskie martyrologium. 1910. Czytania na każdy dzień roku. Mikołów – Warszawa.

Strzelecka, Aneta. 2014. W jaki sposób i z jakiej okazji świętują podręcznikowi i prawdziwi Polacy? Negocjowanie ważności świąt. In Acta Universitatis Lodziensis. Kształcenie Polonistyczne Cudzoziemców 21, 163-175.

Van Dyk, Natalie. 2013. The Reconceptualization of Valentine's Day in the United States: Valentine's Day as a Phenomenon of Popular Culture. In Bridges: An Undergraduate Journal of Contemporary Connections 1/1. http://scholars.wlu.ca/bridges\_contemporary\_connections/vol1/iss1/4.

Wiatr, Przemysław. 2020. Siegfried Zielinski – archeolog i wariantolog mediów. In Dialogi Polityczne, 24.

*Zajonc, Jurai.* 2023. Valentine's Day and the Eventisation of Slovakia's Festive Culture. In Slovenský národopis 71/4, 403-404.

*Zubko, Peter. 2014.* Kult svätých Cyrila a Metoda v tradícii latinskej cirkvi. Vybrané kapitoly cyrilo -metodského kultu. Ružomberok.

Prof. Andrzej Adamski, PhD.
University of Information Technology and Management in Rzeszow Faculty of Media and Social Communications ul. Sucharskiego 2
35-225 Rzeszow
Poland
aadamski@wsiz.edu.pl
ORCID ID: 0000-0002-4075-4224

Arkadiusz Gaweł, PhD.
University of Information Technology and Management in Rzeszow Faculty of Applied Information Technology ul. Sucharskiego 2
35-225 Rzeszow
Poland
agawel@wsiz.edu.pl
ORCID ID: 0000-0001-8668-5626

Barbara Przywara, PhD.
University of Information Technology and Management in Rzeszow Faculty of Media and Social Communications ul. Sucharskiego 2
35-225 Rzeszow
Poland
bprzywara@wsiz.edu.pl
ORCID ID: 0000-0003-0674-1080