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Networks of Confessional Affiliation

Religious Choice and the Schism of Utrecht

Abstract This article demonstrates our methodology for studying the process of intra-Catholic confessional affiliation during the schism that occurred in the Catholic Church in the eighteenth-century Dutch Republic. This schism resulted in the remarkable fact that the Republic, a Protestant state, became home to two competing Catholic Churches, the Roman Catholic Church and the *Roomsch-Katholieke Kerk der Oud-Bisschoppelijke Cleresie* (OBC Church).

In order to understand the choices made by laypeople for one of the two Catholic Churches, we created a dataset based on the baptisms and marriages taking place in two mission stations that were part of the OBC Church in the cities of Utrecht and Leiden. The data was ingested into a specifically designed graph database – connecting people, events (baptism and marriages), and places (churches and secular courts) – that enabled us to study the people who participated in events in the Catholic Churches as well as their roles at these events. In addition, we constructed two-mode networks, connecting people to events, and their projections, consisting only of links between people. Taken together, this approach allowed us to perform both detailed and structural analysis of the data.

One insight revealed by our analysis is the existence of a group of lay Catholics who participated in events that took place in rival Catholic Churches. Moreover, network analysis has shown that the process of intra-confessional religious affiliation did not take place in the context of larger groups or collectives, but nor was

it a strictly individual affair, as it mainly occurred at the level of couples or individual family nuclei.

Our mixed-methods approach, combining qualitative and quantitative analyses, has various advantages, as it: (1) enhances our understanding of the schism; (2) enables a more detailed analysis of religious choice than the quantitative methodology adopted in the older literature on the schism; and (3) spurs and gives focus to further archival research.

1.   Introduction*

In a letter from July 1703, Anthoni van Sonsbeek, a Catholic priest serving in the small villages of Woubrugge and Hoogmade, complained bitterly about how he and members of his congregation had become the target of a series of harassments.[1] Two laypeople had destroyed the priest's garden, one of whom had even violently entered his home and injured the shocked clergyman. A mere two months later, a number of people had deliberately sunk the rowboat of an old and crippled man that he used to transport coreligionists to Van Sonsbeek's church. Moreover, his opponents had prevented access to his church by disabling a makeshift bridge (a *draaiplank*), and had also borrowed his boat under a false pretext, as a result of which the priest was unable to leave his home for some time. Thus, by cleverly using the characteristics of the bogland, Van Sonsbeek's adversaries sought to prevent him from providing pastoral care.[2]

Van Sonsbeek stressed that the people who opposed him were inhabitants of the villages in which he served, but who had abandoned him in favor of priests who sided with Theodorus de Cock. In May 1702, Rome had appointed De Cock as the replacement *ad interim* for Petrus Codde, the apostolic vicar and leader of the *Missio Hollandica* (or Holland Mission).[3] Almost two years earlier, in September 1700, Codde had left for Rome in order to acquit himself of accusations of Jansenism. His plight was a local manifestation of the international conflict between the Jansenists and their opponents that shook early modern Catholicism to its core. The former were a group of priests and laypeople who had embraced one or more of the core ideas of Jansenism, a current of renewal in the Catholic Church

1   The village of Woubrugge was formerly known as Esselijkerwoude.
2   Het Utrechts Archief [hereafter HUA], Metropolitaan kapittel (1835), inv. 735: July 1703. Van Sonsbeek sent this letter to the Provincial States of Holland.
3   This was the name of the Catholic Mission in the Dutch Republic, officially a Reformed Protestant state. For recent studies on the *Missio Hollandica* and early modern Dutch Catholicism, see, e.g., Charles Parker, *Faith on the Margins: Catholics and Catholicism in the Dutch Golden Age* (Cambridge [Mass.]: Harvard University Press, 2008); Jaap Geraerts, *Patrons of the Old Faith: The Catholic Nobility in Utrecht and Guelders, c. 1580–1702* (Leiden: Brill, 2019); Carolina Lenarduzzi, *Katholiek in de Republiek: De belevingswereld van een religieuze minderheid, 1570–1750* (Nijmegen: Vantilt, 2019).

which advocated a positivist theology rooted in Scripture and patristic texts, propounded a rigorist brand of Catholic spirituality, and defended the authority of local churches vis-à-vis the papacy.[4] Codde was allegedly a Jansenist and, unfortunately for him, during his long stay in Rome he did not manage to convince his superiors that the accusations directed against him were unfounded. As a result, he was suspended from office in 1702 and finally removed from it in 1704.[5]

The aforementioned conflicts in Woubrugge and Hoogmade in 1703 show that during Codde's stay in Rome, local Catholic communities had already started to fragment. In nearby Rijpwatering, Catholic laypeople were also defecting from their priest in favor of a clergyman who was considered loyal to De Cock and Rome.[6] Soon the label "loopers," meaning "walkers," gained currency; not to be confused with the zombies from *The Walking Dead,* this term signified Catholics who walked out to visit other priests.[7] In the countryside in particular, where villages often boasted only one clandestine Catholic church (or none at all), this often meant traveling to a nearby location.

The distinction between the *cleresie* and the Holland Mission was important in relation to the choices made and preferences voiced by laypeople for particular priests.[8] The former comprised priests who remained loyal to Codde and his allies, and who received permission to work in the Republic, either from him or from the Haarlem and Utrecht chapters, which initially allied themselves to the *cleresie;*[9] the latter consisted of priests who were loyal to Rome and/or were admitted into the mission by the apostolic vicar appointed by the Pope and, from

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4   For a general introduction on Jansenism, see William Doyle, *Jansenism: Catholic Resistance to Authority from the Reformation to the French Revolution* (Basingstoke: Macmillan, 2000). Jansenism was far from a homogenous movement, hence scholars speak of "Jansenisms," e.g., Monique Cottret, *Histoire du Jansenisme* (Paris: Perrin, 2016) and her *Jansénismes et Lumières: pour un autre XVIIIe siècle* (Paris: A. Michel, 1998).

5   For the general background of this conflict, see: Betrand van Bilsen, *Het schisma van Utrecht* (Utrecht: Het Spectrum, 1949); Bastiaan van Kleef, *Geschiedenis van de Oudkatholieke Kerk van Nederland* (Assen: Van Gorcum & Comp. N.V., 1953); Pontianus Polman, *Katholiek Nederland in the achttiende eeuw,* vol. I (Hilversum: Paul Brand, 1968); M. G. Spiertz, *Ambtelijk onbegrip: Kanttekeningen bij de breuk Utrecht-Rome* (Nijmegen: Dekker & Van de Vegt, 1972).

6   HUA, Metropolitaan kapittel (1835), inv. 735: July 1703.

7   See, e.g., HUA, Metropolitaan kapittel (1835), inv. 702: 21-7-1707 (from Nicolaes de Reeder).

8   Dick Schoon, *Een aartsbisschop in Rome aangeklaagd. Dagboeken over het verblijf van Petrus Codde te Rome* (Hilversum: Verloren, 2019), 14.

9   Later, in 1708, the majority of the canons of the Haarlem Chapter accepted Rome's appointment of Adam Daemen as apostolic vicar. J. J. de Graaf, "Het Oud-Kapittel van Haarlem tijdens het Jansenistische schisma," *Bijdragen voor de geschiedenis van het bisdom Haarlem* 24 (1899): 130.

1727 onwards, the nuncio in Brussels.[10] While the political and religious loy-
alties of priests were certainly not the only factor on which laypeople based their
choices,[11] these were the defining characteristics that were emphasized by the
two sides as well as, to an increasing extent, by the secular Dutch authorities.
Reflecting the importance of such loyalties, the two warring parties were also
designated by the terms "State Catholics" (*Staatskatholieken*) and "Roman Ca-
tholics" (*Roomskatholieken*).[12]

The suspension of Codde thus initiated a new phase in the relationship be-
tween Utrecht and Rome, one of increasing fragmentation between both the
Catholic clergy and laity. This relationship was rendered more fraught by the elec-
tion and consecration of Cornelis Steenoven, against the wishes of Rome, as the
archbishop of Utrecht in 1723–24. At this point the fragmentation of the Catho-
lic clergy and laity in the Republic became institutionalized, as Steenoven would
lead what was called the *Roomsch-Katholieke Kerk der Oud-Bisschoppelijke Clere-
sie* or "Church of Utrecht." (Note that for reasons of clarity and in order to avoid
confusion, the name OBC Church will be used in this article.) From that moment
on, the Dutch Republic, a Protestant state, was home to two competing Catholic
Churches.

These were some of the main events constituting the so-called "Schism of
Utrecht" that tore apart Catholicism in the eighteenth-century Dutch Republic.
The schism, which exists to this day, proved to be a bitter and highly contested
episode in the history of Dutch Catholicism for centuries to come. Hitherto, it
has mainly been the subject of traditional church histories, which viewed it from
rather circumscribed theological and juridical perspectives and predominantly
focused on the clergy.[13] Geraerts' current book project aims to remedy this his-
toriographical lacuna by focusing on the role and experiences of the Catholic

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10   After the death in 1727 of Johannes van Bijlevelt, the last apostolic vicar of the Holland
      Mission appointed by Rome, the nuncio in Brussels presided over the mission in the
      Dutch Republic.
11   For lay preferences in the late seventeenth-century Dutch Republic, see: Jaap Geraerts,
      "Contested Rights. Clerical and Lay Authority in the Holland Mission," *Early Modern Low
      Countries* 2, no. 2 (2018): 198–225.
12   Pontianus Polman, ed., *Romeinsche bronnen […] deel III: 1686–1705* (The Hague: Marti-
      nus Nijhoff, 1952): 614 (#802); Nationaal Archief, Inventaris van het archief van de
      Gedeputeerden van Haarlem […] (3.01.09), inv. 986. "State Catholics" referred to the
      fact that members of the *cleresie* had tried to win the support of the Dutch state in their
      conflict with Rome. See, e.g., Pontianus Polman, "Cleresie en staatsgezag. Het plakkaat
      van 17 augustus 1702," *Mededeelingen van het Nederlandsch Historisch Instituut te Rome* 9
      (1957): 163–89.
13   M. Th. J. van der Vorst, SJ, *Holland en de troebelen in de Hollandse Zending 1702–1727*
      (Nijmegen: Janssen, 1960); A. H. M. van Schaik, "Bataafs en Rooms. Drie studies over
      de verhouding van de katholieke Kerk in de Noordelijke Nederlanden en Rome aan

laity in the context of the schism.[14] One of the topics which figures prominently within this, and which is the central focus of this article, is religious choice and the process of intra-Catholic religious affiliation. With which Catholic Church did laypeople affiliate themselves, when did they make their choice, and how can we explain it? Furthermore, we are interested in whether Catholics who switched Churches were related to one another. With the help of network analysis, a clear pattern of intra-Catholic religious affiliation is revealed: lay Catholics tended to move to a competing Catholic Church as couples or as part of a nuclear family, but not as part of larger sub-groups or collectives (e.g., as members of different families linked by [spiritual] kinship relations). Moreover, the existence of families that became divided by faith across generations suggests that in a number of cases, religious choice was an individual affair.

2.   Data

The topic of religious choice in the context of the schism has not been entirely neglected: four studies have examined the process of religious affiliation among Catholic laypeople in various localities.[15] All these works make use of the same methodology: on the basis of extant registers of baptisms and marriages, the number of times these sacraments were administered in competing Churches are simply counted, thereby showing the movement of laypeople between these Churches. While this quantitative methodology is effective to some extent, the numbers which are derived from these registers were likely influenced by other factors, including birth rates and migration. In addition, such a quantitative approach leaves many questions regarding the process of intra-Catholic religious affiliation unanswered. Who actually joined another Church, and what was that person's position in the local community and their socio-economic status? Did family members and friends join the same Church as well? In order to answer

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het eind van de 17ᵉ en het begin van de 18ᵉ eeuw" (PhD diss., Utrecht University, 1979); Spiertz, *Ambtelijk onbegrip;* J. Y. H. A. Jacobs, *Joan Christiaan van Erckel (1654–1734): pleitbezorger voor een locale kerk* (Amsterdam: APA – Holland Universiteits Pers, 1981).

14   For more information on this project, see: https://www.ieg-mainz.de/en/research-projects/the-catholic-laity-and-the-Schism-in-the-Catholic-Church-in-the-Dutch-Republic.

15   W. L. A. Roessing, "De voormalige oud-katholieke kerk te Rijswijk vanaf haar ontstaan tot 1909," *Nederlands archief voor kerkgeschiedenis* 51, no. 2 (1971): 209–24; Theo Clemens, "Kerkscheuring op lokaal niveau. Petrus van der Maes van Avenrode en de voorgeschiedenis van het schisma van 1723," in *Geloven in het verleden: Studies over het godsdienstig leven in de vroegmoderne tijd, aangeboden aan Michel Cloet,* ed. Eddy Put, M. J. Marinus, and H. Storme (Louvain: Universitaire Pers Leuven, 1996): 413–30; Gerard Witkamp, "Vervreemding. Een onderzoek naar de kerkscheuring tussen de cleresie en hun kerkvolk in Culemborg in de periode 1680–1750," *Culemborgse Voetnoten* 34 (2006): 2–40; J. P. Rogier, "De betekenis van de terugkeer van de minderbroeders te Delft in 1709," *Archief voor de Geschiedenis van de Katholieke Kerk in Nederland* 2 (1960): 169–204.

these and related questions, we aim to study religious choice in relation to the schism by using a mixed-methods approach,[16] with the aid of network analysis.

Central to our analysis are two data sets based on the information comprised in the same sources as the aforementioned articles, namely lists of baptisms and marriages. The core of the data presented here is based on the records pertaining to the congregations of two mission stations that were manned by priests who were part of the *cleresie* in the cities of Utrecht and Leiden. The choice of these cities was largely pragmatic: the information contained in the registers of baptisms and marriages had already been transcribed and was available in Extensible Markup Language (XML). In addition, virtually all the stations of the *cleresie* were located in Holland and Utrecht, hence the focus on cities in these provinces.[17] Other reasons informed this decision as well: the city of Utrecht was home to a sizeable Catholic community, was of great (symbolic) value to Dutch Catholicism and, given the smaller number of Catholics in Leiden, the latter city serves as a useful counterpoint and comparison to the former.

In the early eighteenth century, the city of Utrecht was home to a total of fourteen Catholic mission stations.[18] Of these, six would eventually become part of the OBC Church, including the station St Maria de Mindere achter Clarenburg.[19] Established in a house bought by a Catholic nobleman in 1640, its pastor, Cornelis Stakenburg, signed the supplication in favor of Codde that was sent to Rome in 1701 and remained loyal to the *cleresie.*[20] In comparison to the other mis-

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16   Betina Hollstein, "Mixed Methods Social Networks Research: An Introduction," in *Mixed Methods Social Networks Research: Design and Applications,* ed. Silvia Domínguez and Betina Hollstein (Cambridge: Cambridge University Press, 2014): 3–34. See also D. Linkevicius de Andrade and D. Vasques Filho, "Moderation and Authority-Building Process: The Dynamics of Knowledge Creation on History Subreddits," *Internet Histories* 6, no. 4 (2022): 369–90 for an example of applying a mixed-methods approach to historical research. Ingeborg van Vugt has coined the term "disclose reading," advocating a combination of close and distant reading of data. Ingeborg van Vugt, "Using Multi-Layered Networks to Disclose Books in the Republic of Letters," *Journal of Historical Network Research* 1, no. 1 (2017): 25–51.

17   Geraert's project will examine data from Leeuwarden, the city that was home to the only station of the *cleresie* and later also OBC Church outside the provinces of Utrecht and Holland.

18   G. Brom, "Verslag der Hollandsche Missie ten jare 1701," *Archief voor de geschiedenis van het aartsbisdom Utrecht* 18 (1890): 441. Eleven of these were located within the city walls, three in the "suburbs."

19   These two particular mission stations have been chosen mainly because of the extant source material, and because both stations were served by priests who were loyal to Codde and the *cleresie* from the beginning (as opposed to stations which became part of the *cleresie* or OBC Church at a later stage in the eighteenth century).

20   A. J. van der Ven, "Het Huis Clarenburch te Utrecht," *Jaarboek Oud-Utrecht* (1952): 32–65. Schoon, *Een aartsbisschop aangeklaagd,* 813. According to Gian Ackermans, "he

Name of mission station	No. of baptisms	No. of marriages	Total
St Jacob (Buiten de Weerd	1660	298	*1958*
St Maria de Mindere (achter Clarenburg)	1289	237	*1526*
St Jacob (Drakenburgsteeg)	1413	110	*1523*
St Gertrudis	810	103	*913*
St Nicolaas	393	59	*452*
St Maria de Mindere (de Kamp)	241	32	*273*

Tab. 1 Baptisms and marriages in the mission stations which became part of the OBC Church in the period 1702–75.

sion stations that were part of the OBC Church, this station was one of the largest in terms of the number of baptisms and marriages during the period 1702–75, as Table 1 shows.[21] As such, the baptismal and marriage registers of this mission station provide a sizeable data set, allowing us to chart the process of intra-Catholic affiliation in this city.

In stark contrast to the city of Utrecht, the *cleresie* and later the OBC Church had only one mission station in Leiden (whereas the Roman Catholic Church had seven). Established by Hugo van Heussen, a priest who remained loyal to Codde and had an important role in the *cleresie,* this station (called "De Liefde") catered to a far smaller number of people in comparison to St Maria de Mindere achter Clarenburg.[22] In the period 1702–75, 499 baptisms were administered and 58 marriages solemnized in this mission station. As a result, the community of laypeople that followed priests who were loyal to Codde and his allies (and later became part of the OBC Church) was much smaller.

As previously mentioned, the lists of baptisms and marriages that were created by the priests serving in these two mission stations form the starting point and basis of the two data sets presented here. However, given that we follow the movement of laypeople to rival Churches, our data comprises information de-

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never acknowledged the authority of De Cock," Codde's successor. Gian Ackermans, *Herders en huurlingen: bisschoppen en priesters in de Republic (1663–1705)* (Amsterdam: Prometheus/Bert Bakker, 2003), 443–44. Nowadays this house boasts a pub with a great selection of Belgian beers, but elements of the former clandestine church are still visible.

21   Namely the stations of St Jacob (Drakenburgsteeg) and St Jacob (Buiten de Weerd).

22   H. [J. W.] V[erhey], "Leiden," *De Oud-Katholiek* 74 (1958): 157–71.

rived from Roman Catholic as well as other sources.[23] The construction of the data sets was based on the following principles:

- The starting point and core of the data comprise the people who participated in baptisms and marriages that took place in these two mission stations in the period 1702–50.[24] All rites in which these people participated were included, hence the inclusion of rites which occurred before 1702 and after 1750.
- In order to limit the size and scope of the data sets, the rites in which children born after 1750 participated were not included (apart from their own baptism) unless the majority of their siblings were baptized before 1750, in which case the rites of an entire generation have been included.
- Regarding the family members of the people who participated in rites taking place in either of the two mission stations in the period 1702–50: all the rites in which these family members participated were included in our data sets. However, we did not do the same for the family members of those who participated in the rites in other mission stations. For example, if a couple had child A baptized in one of the two mission stations studied here, but child B in another mission station, the other rites in which the godparents of child B participated were included (this is particularly relevant when child B was baptized in a mission station that was part of a rival Catholic church, namely to see with which church the godparents were affiliated).
- The events in which the family members of child B's godparents participated were not included because (1) the focus is on the (successive) generations of the families mentioned on the aforementioned lists of baptisms and marriages, and (2) due to the need to limit the scope and size of the data sets.

Let us take Antonius Hoes as an example. He is part of our data set because his last child was baptized in the mission station of the OBC Church in Leiden (in 1717). His seven other children were baptized in the Roman Catholic Church. All the rites in which Antonius, his two wives, all their children, the godparents of their children, and the witnesses of their weddings participated were added to the data set. However, some godparents also participated in rites together with people who are not in any way tied to the mission station that belonged to the OBC Church in Leiden. For these people, we have not added the other events in which they participated. Johanna van Dieperbeek, for example, acted as a godparent for two of Dirck Jan Hoes' children (Dirck Jan was one of Antonius' sons). All the rites in which she participated are captured (see Fig. 1), but we have not done the same for the people involved in another baptism (in 1737), in which Johanna acted as godparent but which was unrelated to the Hoes family.

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23   Some Catholic laypeople participated in events that took place in other, non-Catholic Churches as well, hence the inclusion of other sources such as the list of baptisms and marriages that were performed in the Dutch Reformed Church.
24   Currently work is being undertaken to extend the period up to and including 1775.

Fig. 1 Rites in which Johanna van Dieperbeek participated (our data).

In the end, this has resulted in the data sets shown in Table 2.

Luckily, the data sets did not have to be created from scratch. Various Dutch archives, assisted by an army of volunteers, have transcribed the data in the list of baptisms and marriages (among other sources) in XML. This data can be accessed in various online databases, and some archives have made data dumps available as well.[25] By means of a Python script, the relevant data was exported

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25   For an example of such an online database, see: https://hetutrechtsarchief.nl/onderzoek/resultaten/archieven?mivast=39&mizig=100&miadt=39&milang=nl&miview=tbl. The data of the majority of Dutch archives can be accessed at: https://www.wiewaswie.nl/. The data created by Dutch and Belgian archives is systematically gathered and made available on the Open Archives website (https://www.openarch.nl/exports/).

	Utrecht	Leiden
Number of people	8685	8346
Number of baptisms	4249	2741
Number of marriages	1352	896

Tab. 2 Numerical overview of the two data sets. One reason for the roughly similar number of people contained in the data set in Leiden, in spite of the significantly lower number of baptism and marriages, is that the average number of people connected to these events was higher than in Utrecht.

to a comma-separated values (CSV) file, which functioned as a temporary staging database. The data was then cleaned and standardized, and various unique identifiers were assigned to the people, events, and places (churches and courts) in the data set. This was a necessary step as many archives attribute unique identifiers to the people attached to a single event (or rite), but not across events.[26] It frequently happens, however, that a person occurs several times in the data set, for instance because he or she had several children baptized. Hence, on the basis of time-consuming genealogical research, it had to be assessed whether person X was in fact the same as person Y. In addition, the data has been enriched with information about people's profession, among other things.

After this stage of the process had been completed, the data was ingested into a specifically designed graph database.[27] Its underlying data model is relatively straight-forward and comprises three main entities (the nodes): people, events, and places (churches and courts). The attributes of the edges between the nodes are largely derived from the information in the XML files that specify someone's role at a particular rite. For example, one could be a mother, father, person being baptized (*dopeling*), or godparent at a baptism. In the end, the data in the graph database is expressed in the following manner (Fig. 2). By means of labels, a distinction is made between the various types of events, such as baptisms and marriages, and between the different Churches and courts (in several provinces of the Dutch Republic one could legally marry in secular courts).

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26   The "events" or "rites" refer to the baptisms and marriages in our data.
27   The open-source graph database Neo4j has been used. See https://neo4j.com/ [last accessed: 27 October 2022].
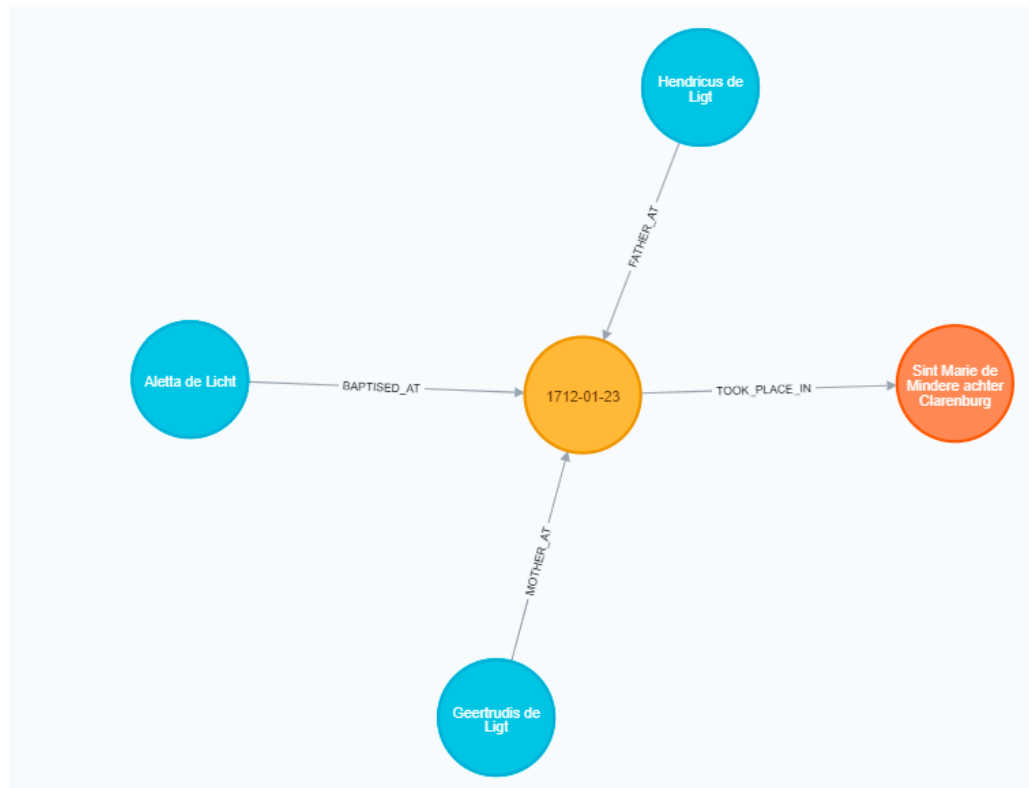
Fig. 2 Selection of the graph database showing the three types of nodes. In this example, the names of the people, the name of the mission station, and the date at which the rite occurred are displayed.

3.   Methodology

While it makes use of the same sources as earlier studies, the way that this data has been expressed in the graph database allows us to move beyond a quantitative analysis. This makes it possible to track down the names of individuals who participated in events in different Catholic Churches as well as their roles at these events, enabling, among other things, the performance of both quantitative and qualitative analyses in an iterative manner. Apart from relying on the graph database for our quantitative approach, we also employ network analysis in this study. Recent studies have shown how network analysis can further the boundaries of our knowledge of early modern history. For example, network reconstruction using parish records has provided new insights into the social structure of several local communities in the seventeenth and eighteenth centuries. Social positioning was investigated through prestigious scores in "spiritual kinship networks" – based on the relations between parents, children, and chosen godparents – in the Portuguese towns of Óbito, Lousã and Soure. Such networks were also key to studying the social hierarchy and community evolution of Beaubassin,

an Acadian settlement.[28] Public and private correspondence, interpersonal loan records, and membership of religious groups, are some of the other early modern sources that have been subjected to network analysis.[29]

In our case, the application of network analysis complements the use of a graph database. While the latter has enabled us to discern particular patterns (more about which below), the tripartite (people, events, and places) graph makes it difficult to apply network analysis based on the connections between people. Therefore, in order to reveal other aspects of the schism with network analysis, we decided to reduce the data dimensionality and build two-mode networks comprising people and events.

A two-mode network is a bipartite graph $B = \{U,V,E\}$, where U and V are sets of nodes representing, in our case, people and events respectively, and E is the set of edges connecting people to the events (either baptism or marriage) in which they participate. In two-mode networks, no connections between nodes of the same set exist; through the creation of so-called projected networks, we can capture and analyze such connections. A projected network (or projection) is a one-mode network consisting of nodes of only one set (either U or V), which are connected if they have at least one connection in common within the original two-mode network.[30] Hence, given our interest in the connections between people, we created (one-mode) projected networks of individuals who are connected to each other if they participate together in at least one event.

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28   Ana Isabel Ribeiro and Joaquim Ramos de Carvalho, "Using Network analysis on Parish Registers: How Spiritual Kinship uncovers Social Structure," *Bridging the Gaps: Sources, Methodology and Approaches to Religion in History* (Pisa: PLUS-Pisa University Press, 2008): 171–86. Joaquim Carvalho and Rosário Campos, "Interpersonal Networks and the Archaeology of Social Structures; Using Social Positioning Events to Understand Social Strategies and Individual Behaviour," *Revista de História da Sociedade e da Cultura* 7 (2007): 175–93. Gregory Kennedy, Thomas Peace, and Stephanie Pettigrew, "Social Networks across Chignecto: Applying Social Network Analysis to Acadie, Mi'kma'ki, and Nova Scotia, 1670–1751," *Acadiensis* 47, no. 1 (2018): 8–40.

29   Dan Edelstein, et al., "Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project," *The American Historical Review* 122, no. 2 (2017): 400–24. Agata Błoch, Demival Vasques Filho, and Michał Bojanowski, "Networks from Archives: Reconstructing Networks of Official Correspondence in the Early Modern Portuguese Empire," *Social Networks* 69 (2022): 123–35. Ruth Ahnert and Sebastian E. Ahnert, *Tudor Networks of Power* (Oxford: Oxford University Press, 2023). Paul D. McLean and Neha Gondal, "The Circulation of Interpersonal Credit in Renaissance Florence," *European Journal of Sociology/Archives Européennes de Sociologie* 55, no. 2 (2014): 135–76. Andrew Fincham and Nicholas Burton, "Religion and Social Network Analysis: The Discipline of Early Modern Quakers," *Journal of Management History* 27, no. 3 (2020): 339–58.

30   Demival Vasques Filho, "Structure and Dynamics of Social Bipartite and Projected Networks" (PhD diss., University of Auckland, 2019).

There are several methods for creating projections of two-mode networks. We opted for the simple weighting technique, where the projected network is a weighted graph whose edge weights represent the exact number of common connections a pair of nodes has in the two-mode network.[31] Here, the edge weight between a pair of nodes represents the strength of the tie connecting them, according to the number of events in which they participate together. For instance, if person A and person B participate in a marriage and two baptisms, the weight of their edge (their tie strength) equals three. Note that the networks built according to this principle do not connect siblings, unless these had a different role at some point (e.g., a woman being the godmother of her brother's child). We therefore added a layer of connections when two individuals have either a father or a mother in common.

We assigned the reduced dimension (where the event took place) of the original graphs as an attribute of the events in the two-mode networks. In the projected networks, individuals inherit this attribute from the events in which they participate.[32] If an individual participated in events that took place in the OBC Church and Roman Catholic Church, the individual carries both confessions as an attribute, which might indicate that they changed their religious affiliation (Fig. 3).

It is important to reiterate that these networks consist of people and the links between them due to their participation in the same event. The roles of people in the events in which they participated (e.g., mother, father, godparent), which are captured in the graph database, are not recorded in these networks. Given the importance of these roles in understanding the process of intra-Catholic affili-
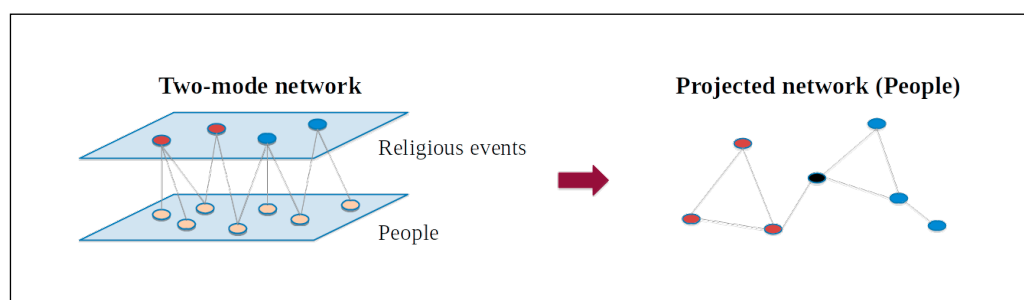

Fig. 3 Schematic diagram of the network construction. The colors of the nodes represent different confessions; black indicates individuals participating in events that took place in different Churches.

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31   Ibid.
32   Note that the data in the graph database captures the mission station where an event took place. See Fig. 1 on p. 63.

ation – acting as a godparent in a rival Catholic Church did not necessarily indicate a "movement" to this Church, whereas marrying or having a child baptized there often did – it is necessary to check the patterns revealed by network analysis against the data in the graph database.

The networks are temporal, built to enhance our understanding of how the schism evolved among the Catholic laity in mission stations in the cities of Leiden and Utrecht. We created cumulative snapshots starting from 1702, then 1705, and every ten years after that, until 1775, so that the latter snapshot consists of all people and events in the database until (and including) that year.[33] In order to compare the network structure between the two cities from a macro perspective, we generated and analyzed several descriptive network statistics during the whole period (cumulative networks). Thereafter we tracked the evolution of confessional proportions in the temporal networks, focusing on actors labeled as being connected to events in the OBC Church, Roman Catholic Church, or both, in order to explore the process of intra-Catholic affiliation. Finally, we traced the neighborhood composition of those individuals labeled as having participated in events taking place in both Catholic Churches. With this method, we aim to gain insights into the importance of interpersonal relations with regard to the decision to move to another Church.

Before discussing the results and findings of this mixed-methods approach, we should pause for a moment and consider the limitations of our methodology, which mainly stem from the available source material. To start with, all the Churches in the Republic were voluntary, and membership lists, apart from the relatively small group of people who became full members of the Dutch Reformed Church, do not exist. In some rare cases there are lists of people who converted, took communion at Easter, received the sacrament of confirmation, or died, but apart from the snapshots offered by such sources, in general it is fairly difficult to get an idea of the composition of an entire congregation at a given point in time. Moreover, people disappeared from the sources because they remained single, did not have (any more) children, or died.[34]

As a result, it is perfectly possible that someone changed Churches without leaving any paper trail or record of this switch. In 1716, Alardus van Haeften, the priest in Leeuwarden who ended up serving in what would be the only mission

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33   The data also includes events which occurred prior to 1702. For an explanation of the construction of the data sets, see p. 62.

34   The death of members of a congregation were often also recorded, but these records tend to be patchy and have to be treated with some caution. Moreover, Catholics ended up in the records of the Dutch Reformed Church as they were generally buried in Reformed churches and their cemeteries. As a result, the information about someone's death has been included in the data, yet burials are not treated as separate events in the graph database.

station of the OBC Church outside of the provinces of Holland and Utrecht, complained that the size of his congregation had halved due to death, emigration, and because "many simple people (*veel sleght volk*) walked away."[35] It is impossible to track down and establish the identity of the majority of these people. We thus have to be mindful of the gaps in the available sources when drawing conclusions based on our data and the resulting networks.

4.   Religious diversity and religious choice

The Protestant and Catholic Reformations of the sixteenth century introduced religious diversity on a hitherto unprecedented scale. The advent of religious difference was often experienced as a painful and deeply disturbing process by everyone involved as, among other things, it created rifts between colleagues, friends, and family members.[36] In this respect, the schism in the eighteenth-century Dutch Catholic Church had similar outcomes: Theodorus Spoors, a priest who served the OBC Church in Hoogkarspel, mentioned how, due to the schism, "children stood up against their parents, brothers against sisters, and even domestic servants against their masters."[37] This suggests that the schism initiated a process of intra-Catholic affiliation which mainly comprised individuals who made a decision to affiliate themselves with one of the two competing Catholic Churches. We can examine the veracity of Spoors' claim by analyzing the data from the two aforementioned mission stations. Was the process of intra-Catholic affiliation mainly individual in nature, or did larger groups of people change Church together (and if so, how were they related to one another)?[38]

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35   HUA, Metropolitaan kapittel (1835), inv. 775: 4-4-1716 (from Van Haeften).
36   For the challenges caused by religious diversity in early modern Europe and the ways in which people sought to overcome them, see, e.g., Benjamin J. Kaplan, *Divided by Faith: Religious Conflict and the Practice of Toleration in Early Modern Europe* (Cambridge [Mass.]: Harvard University Press, 2007); Alexandra Walsham, *Charitable Hatred: Tolerance and Intolerance in England, 1500–1700* (Manchester: Manchester University Press, 2006). For a moving case study of a family that was divided by faith, see: Craig Harline, *Conversions: Two Family Stories from the Reformation and Modern America* (New Haven: Yale University Press, 2011) and his *Jacobs vlucht: Een familiesaga uit de Gouden Eeuw* (Nijmegen: Vantilt, 2016).
37   HUA, Metropolitaan kapittel (1835), inv. 834: 19-12-1706 (from Spoors).
38   It is unclear whether a formal conversion was always necessary in order to join another church, although some sources indicate that people who wanted to exchange the OBC Church in favor of the Roman Catholic Church were required to do so. For more about the terminology, see the conclusion.

4.1   Utrecht and Leiden networks: Differently structured congregations

In order to come to terms with the processes of religious choice, it is helpful to briefly examine the main characteristics of the networks that have been generated, as these tell us something about the structure of the Catholic congregations in both cities. A comparison of the cumulative (the entire data sets) network properties of the two (one-mode) networks reveals that they are quite similar in terms of size, density, average degree and diameter (Table 3). However, the largest connected component (LCC) and the global clustering are somewhat different.[39] The likely cause of this difference in the one-mode network structure is the number of overlaps in the two-mode networks (Table 4). Overlaps are patterns that appear when two individuals participate in more than one rite together, e.g., a couple marrying and being present at the baptism of their child. A high frequency of these patterns suggests the presence of several pairs of people participating together in many rites, resulting in close-knit communities with a higher clustering than expected (if connections were at random) in the network.[40]

Another important distinction between the Leiden and Utrecht one-mode networks (not captured by the average degree) is the presence of highly connected individuals in Utrecht, even though Leiden has a higher average degree. That is, the degree distribution of the Utrecht network is much more right skewed than that of Leiden (Fig. 4a). This is particularly striking because, given the peaked distributions[41] of event size (the number of people participating in events), highly connected people would only be present in the network if they participated in a significant number of baptisms and/or marriages, as we see in Utrecht but not as much in Leiden (Figs. 4c and 4d).[42]

These highly participative and therefore well-connected nodes are the spiritual virgins, unmarried or widowed Catholic women who devoted their lives to the Catholic cause. They schooled children, assisted priests, and gathered Catholics for clandestine religious services. Through these and other activities, they signif-

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39   Here we use the global clustering coefficient, calculating the proportion of closed triplets (A is connected to B, which is connected to C, which is connected to A) across all existing triplets (both open and closed).

40   Demival Vasques Filho and Dion R. J. O'Neale, "Transitivity and Degree Assortativity Explained: The Bipartite Structure of Social Networks," *Physical Review E* 101, no. 5 (2020): 052305; Demival Vasques Filho and Dion R. J. O'Neale, "The Role of Bipartite Structure in R&D Collaboration Networks," *Journal of Complex Networks* 8, no. 4 (2020): cnaa016.

41   The term "peaked distribution" is generally used to characterize a distribution with low variance, with most data points having the same value, and the other points being very close to the most common one.

42   Demival Vasques Filho and Dion R. J. O'Neale, "Degree Distributions of Bipartite Networks and Their Projections," *Physical Review E* 98, no. 2 (2018): 022307.

	One-mode projected network	
	Utrecht	**Leiden**
Density	7.8×10^{-4}	8.6×10^{-4}
Average degree	6.8	7.3
Components	229	54
LCC	7010	7962
Diameter	16	18
Average shortest path length	6.7	7.3
Global clustering	0.51	0.41

Tab. 3 Descriptive network statistics for both Utrecht and Leiden one-mode projections. Although it has a higher density and average degree, the Leiden network is less clustered than the Utrecht network. This is due to the higher frequency of overlaps (i.e., more pairs of individuals participating in more events together) found in the two-mode network of the latter city (Table 4).

	Two-mode network	
	Utrecht	**Leiden**
Density	4.0×10^{-4}	5.5×10^{-4}
Average event size	3.4	4.5
Average participation	2.2	2.0
Overlaps	17,448	13,791

Tab. 4 Descriptive two-mode network statistics for both Utrecht and Leiden. Utrecht shows a larger number of overlaps, which explains the lower average degree, lower proportion of the LCC (size of LCC with regard to size of the network), and higher clustering of its projected network (Table 3), even with lower two-mode density and average event size, and higher average participation, when compared to Leiden.
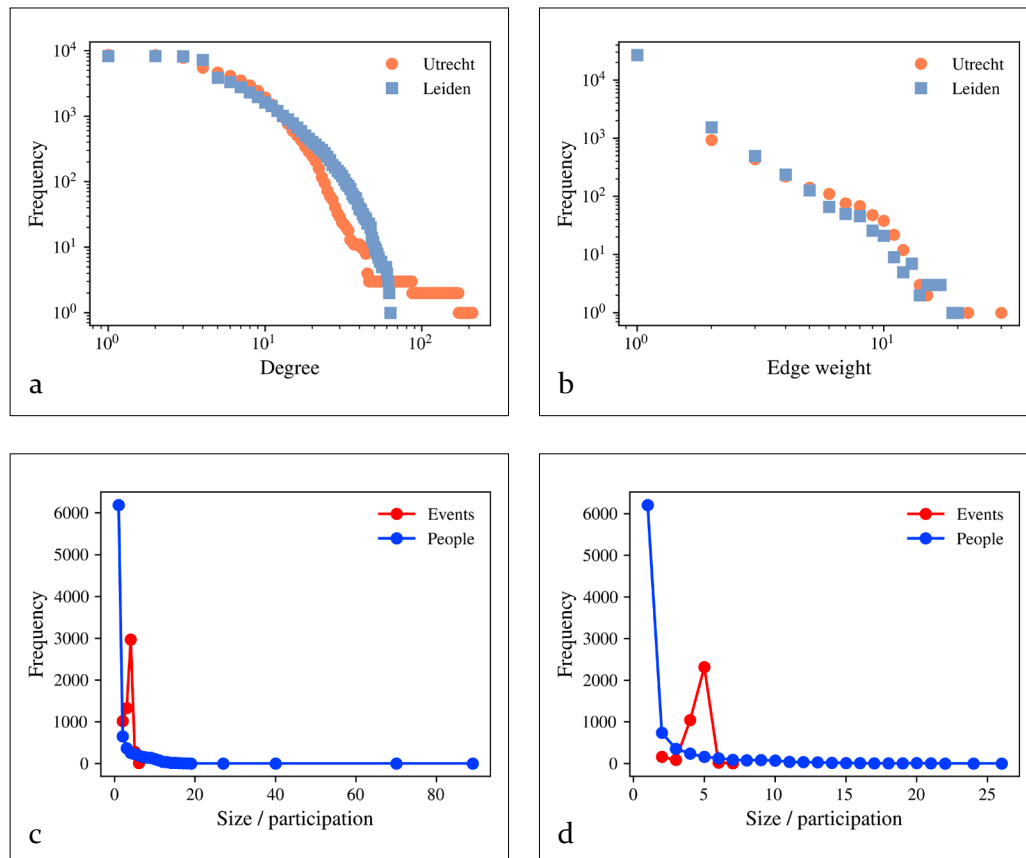
Fig. 4 (a) One-mode projection degree and (b) edge weight distributions for Utrecht and Leiden, and event size and participation distributions in Utrecht (c) and Leiden (d). Some people in Utrecht (the spiritual maidens) participated in a large number of baptisms and marriages and are therefore very well connected. Their presence results in Utrecht's right-skewed degree distribution. Moreover, Utrecht also has a more right-skewed edge weight distribution than Leiden. This pattern is caused by the higher number of overlaps in the two-mode network, which ultimately generates more clustering and more fragmentation in Utrecht.

icantly contributed to the survival of Catholicism in the Dutch Republic.[43] While they were involved in similar activities throughout the Dutch Republic, the data sets from Utrecht and Leiden show clear differences. Whereas in the former city spiritual maidens often acted as witnesses at weddings and as godparents at baptisms, this was not the case in the latter.[44] What caused this difference remains an open question. Although one could expect that their presence could connect parts of the Utrecht network due to their high degree (of connections to other people), once again, the higher level of overlaps in Utrecht results, in a counterintuitive way, in a much more fragmented network (with 229 components) in comparison to Leiden (54 components).[45] This could have important ramifications: Wietse van der Velde has argued that the death of a spiritual virgin could have a serious and negative impact on a congregation, given that some of them encouraged their family members to remain loyal to the OBC Church.[46] Yet because of the more fragmented nature of the Utrecht network, in which the spiritual maiden did not bridge or link its separate components, their influence was likely limited to the sub-communities with which they were connected.

While the importance of spiritual maidens for the very survival of Catholicism in the Dutch Republic is well known, network analysis has disclosed their central position in particular networks as well as the diverse roles and activities they assumed in different mission stations and cities in the Dutch Republic. Although in recent years, female agency in early modern religious communities has received increasing attention,[47] network analysis thus provides another approach to reveal the contributions of previously overlooked and understudied (lay)people.

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43   See, e.g., Joke Spaans, *De Levens der Maechden. Het verhaal van een religieuze vrouwengemeenschap in de eerste helft van de zeventiende eeuw* (Hilversum: Verloren, 2012).

44   It should be noted that the behavior of the spiritual maidens in Utrecht was not unique, as in other localities they also acted as godparents and witnesses. J. I. J. M. Velthuyse, *Katholiek Berkel en Rodenrijs in de loop der eeuwen* (Rotterdam: Gebrs. Peters, 1948), 33; Gerrit den Ouden, *Jansenisten en Papen. Katholieken in de Noorkop. 350 jaar oud-katholieke kerk in Huisduinen en Den Helder* (s.l.: self-pub., 2017), 80.

45   Vasques Filho, "Cohesion and Segregation in Higher-Order Networks."

46   As a result, in some cases the death of a spiritual maiden prompted a "defection" of family members to the Roman Catholic Church. Wietse van der Velde, *Sint Joris op't zand: Geschiedenis van de Oud-Katholieke Kerk van Nederland en haar parochie te Amersfoort,* (Amersfoort: Bekking, 2009), 78. We have not found this pattern in our data sets.

47   Relevant studies include Judith Pollmann, "Women and Religion in the Dutch Golden Age," *Dutch Crossing* 24, no. 2 (2000): 162–83; Carys Brown, "Women and Religious Coexistence in Eighteenth-Century England," in *Negotiating Exclusion in Early Modern England, 1550–1800,* eds. Naomi Pullin and Kathryn Woods (London: Routledge, 2021): 68–87.

4.2 Participating in events in competing Catholic Churches

Irrespective of the structural differences between the two congregations, there are several similarities in terms of the evolution of their size and the process of intra-Catholic affiliation. First, the number of baptisms and marriages which occurred steadily declined over time. As Fig. 5 makes clear, aside from occasional spikes, on average the number of times these sacraments were administered in the 1710s was never achieved again. In Utrecht, the numbers from the other mission stations of the OBC Church reveal a similar development. These figures are indicative of a larger trend that can be observed in the OBC Church across the Dutch Republic. Contrariwise, the numbers in the stations of the Roman Catholic Church in Utrecht gradually increased, albeit only slightly. In Leiden, on the other hand, the decline of the OBC Church did not lead to an upsurge in the Roman Catholic Church, which experienced a notable decline in this city as well over the course of the eighteenth century.

Secondly, the data from both cities corroborate Theo Clemens' conclusion that "the schism of 1723 must have been preceded by many smaller ruptures at a local level in the first years of the eighteenth century."[48] In both Leiden and in Utrecht

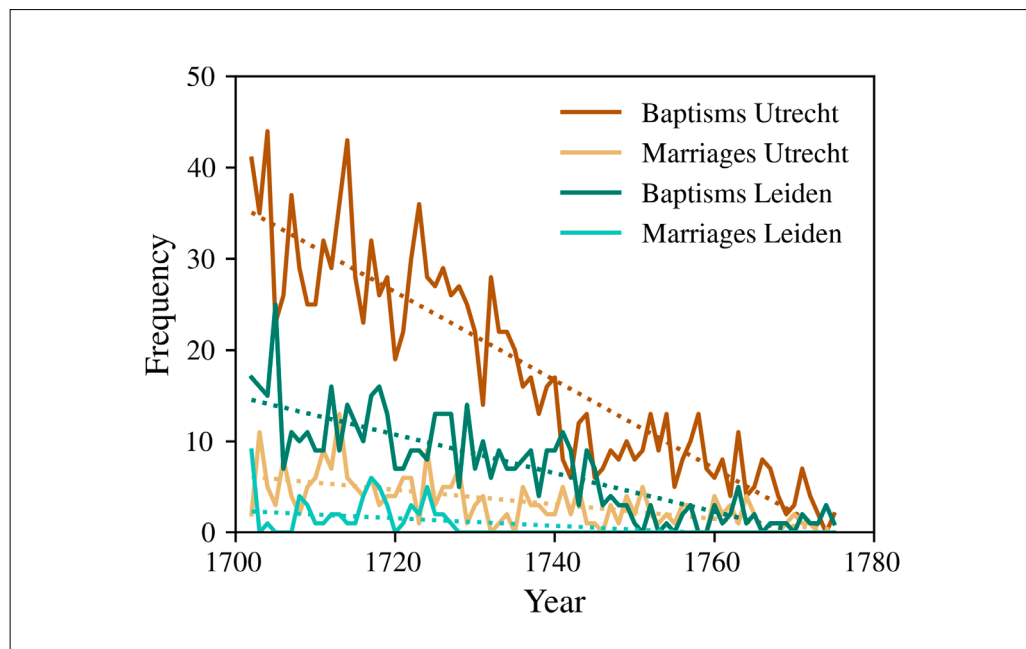**Fig. 5** Number of baptisms and marriages in the two mission stations in Utrecht and Leiden, 1702–1775. The dotted lines represent the linear regression.

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48 Clemens, "Kerkscheuring op lokaal niveau," 429. He based this conclusion on his study of the developments in Noordwijkerhout, where a conflict broke out between the local pastor, who remained loyal to Codde, and several members of his congregation.

the majority of Catholics who started to participate in events that took place in a rival Catholic Church did so in the period prior to 1723 and in the years immediately thereafter. This is shown in Fig. 6, which traces the confessional composition of the networks in both cities. In Utrecht, the proportion of people participating in events that took place in the Roman Catholic Church increased, while those taking parts in events in the OBC Church decreased, at a similar pace until around 1750 (Fig. 6a). Arguably this was caused by the fact that after 1702 the proportion of people who participated in the events of both Churches increased at a very fast pace, namely more than threefold by 1723 (Fig. 6b). The Roman Catholic Church thus had a greater influx of people coming from the OBC Church. The general proportion grew faster as other people, not previously accounted for in the data set (children, witnesses, and godparents), appear for the

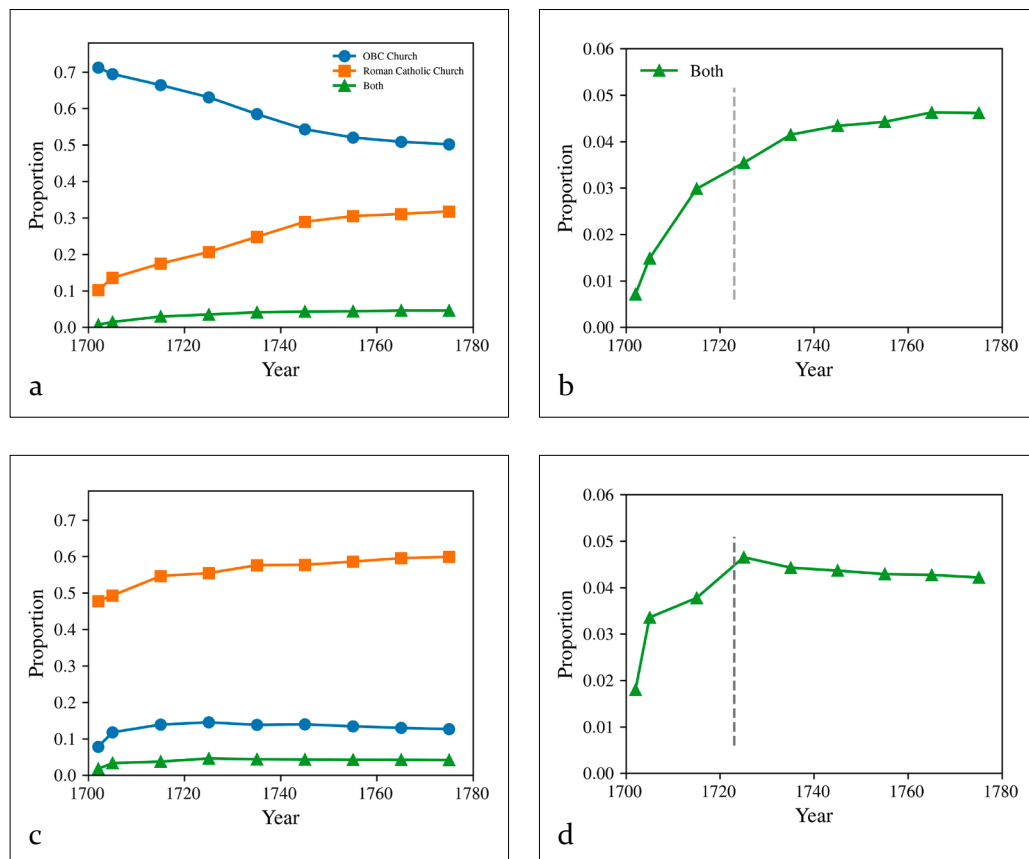**Fig. 6** (a)/(c) Evolution of confessional affiliation proportions, zoomed in for (b)/(d) the proportion of people that participated in events in both Churches in Utrecht and Leiden, respectively. The vertical dashed line in (b) and (d) represents the year 1723. Most people that started to participate in events in a rival Catholic Church did so in the period prior to 1723 and in the years immediately thereafter.

first time partaking in events together with those who started to participate in events in a rival Catholic Church. We see a similar trend in Leiden, albeit less pronounced, where the proportion of people participating in events in the Roman Catholic Church also increased in the period between 1702 and up to around 1725, despite already being much larger than the proportion of those partaking in events in the OBC Church (Figs. 6c and 6d).[49]

The fact that there were people who participated in events that took place in different Catholic Churches did not necessarily mean that they exchanged one Church in favor of the other. As we shall see below, the process of intra-Catholic affiliation was neither linear nor unidirectional. Some Catholics formally converted, others moved back and forth between Churches, and still others limited their engagement with the rival Catholic Church through a specific form of participation in certain rites of passage, such as by acting as a godparent. As mentioned earlier, the patterns revealed by network analysis should be further contextualized by juxtaposing them with the data in the graph database.

A third similarity pertaining to the developments in the mission stations in Utrecht and Leiden becomes clear when focusing on the people who participated in events in competing Catholic Churches (those in Figs. 6b and 6d). It turns out that, in general, people who did this were not part of a larger group or collective. This pattern is clearly borne out by various analyses. When examining the confessional attributes of people in the network neighborhood of (i.e., directly connected to) those that participated in events in both Churches, we see that, on average, most of the neighborhoods comprised either people affiliated with the OBC Church or with the Roman Catholic Church (with a vast majority of the latter in Leiden, see Figs. 7a and 7c). Conversely, most of those who started to partake in events in a rival Catholic Church were not connected to many individuals who also did this (indicated by the green line in Figs. 7a and 7c). Moreover, concentrating on parents who baptized their children in a competing Catholic Church (after having baptized one or more earlier children in the other Catholic Church) shows that in general people became part of a new religious community when changing Churches; witnesses and godparents tended to be part of the congregation to which one moved and not from the one that was left behind.

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49   The larger number of Roman Catholics in the Leiden network partly results from the greater number of events that took place before 1702 in the Leiden network (248 events involving 983 people) compared to the Utrecht network (thirty-nine events comprising 122 people).
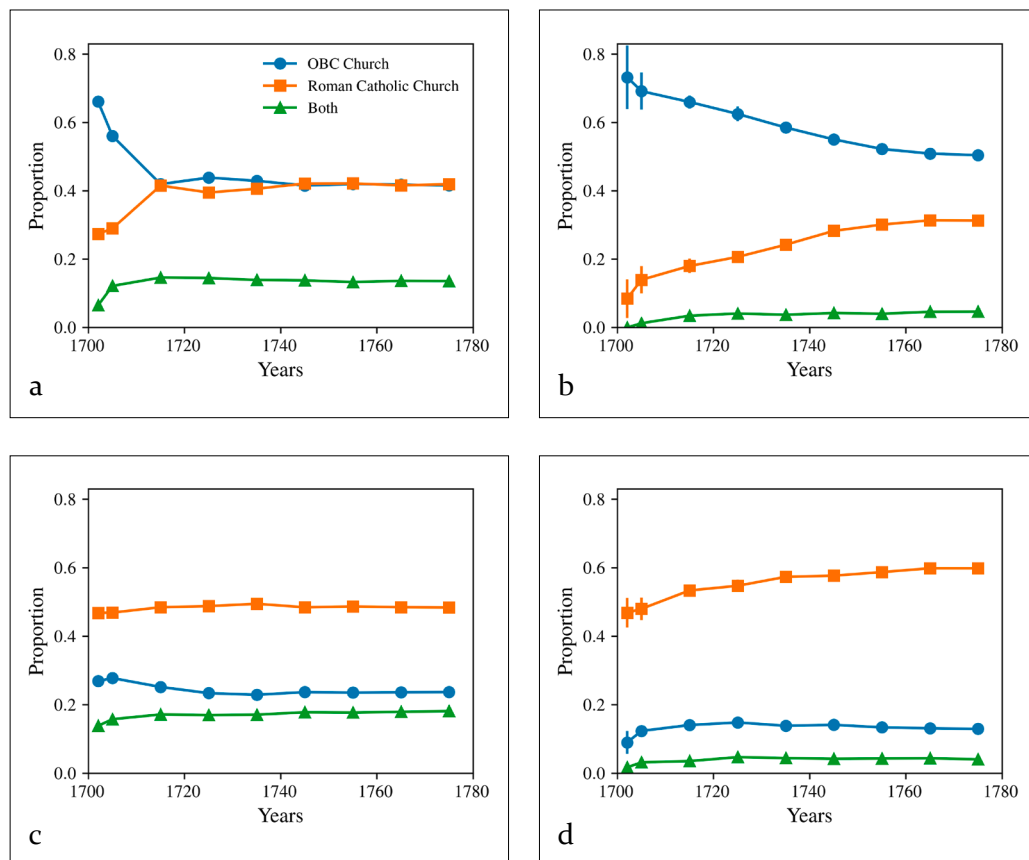
Fig. 7 Evolution of confessional affiliation proportions found in the neighborhood of people who partook in events in both Catholic Churches for the (a)/(c) empirical data and (b)/(d) random networks, in Utrecht and Leiden, respectively. Values for the random networks are averages over ten runs, and bars are the standard deviation. On average, the neighborhood of people who participated in events in both Catholic Churches consists of a small proportion of others that did the same, in both empirical and random networks. However, such proportions are smaller in the random networks, suggesting that the participation in events taking place in a rival Catholic Church primarily happened at the level of couples or individual family nuclei, instead of as part of a collective movement or as an individual choice.

When we compare the empirical networks to random networks,[50] where nodes are connected only by chance – breaking any kind of pattern – we notice something else. The neighborhood of people who partook in events in both Catholic Churches has a larger number of other people that have done the same in the empirical than in the random networks (Figs. 7a and 7c). That is, although there were people who decided to participate in rites that took place in a rival Catholic Church individually, often setting themselves apart from their families, this is not the most common pattern we have found. Such behavior did not predominantly happen in the context of a larger collective (or in large groups, or even involving the extended family). Nor did it happen by and large on the individual level. Instead, our analysis shows that in the majority of cases, participation in events in both Catholic Churches took place at the level of couples or individual family nuclei (e.g., parents baptizing some of their children in a rival Catholic Church).

In addition, we have discerned the existence of particular marriage patterns: marriages with a spouse of another faith, so-called mixed marriages, often prompted a move to the Church of the spouse. To offer one example, Cornelis Laven, baptized in the OBC Church, married his Roman Catholic wife Cecilia Rijken in Leiden's town hall in 1723. Their two children, Elisabeth and Joannes, were both baptized in the Roman Catholic Church. In the majority of cases, such mixed marriages resulted in a movement to the Roman Catholic Church, thus contributing to the decreasing number of laypeople affiliated with the OBC Church. In a number of cases, spouses formally converted, so that in this context we can speak of a clear change in confessional affiliation.

The aforementioned patterns are clearly revealed at the local and meso-level of the network structure as well. The networks often contain "bunches" comprising someone who participated in events in both Catholic Churches, but who was primarily connected to other people affiliated with the Church to which they transitioned. Albert van Baaren, for example, was baptized in the OBC Church, but married and had all his children baptized in the Roman Catholic Church. One of his siblings, his brother Joannes, remained loyal to the OBC Church, while his sister Anna was connected to events which occurred in both Catholic Churches (see Figs. 8 and 9). Moreover, when we run the modularity community detection algorithm,[51] the result confirms that religious change did not occur within

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50   Paul Erdös and Alfréd Rényi, "On Random Graphs I," *Publicationes Mathematicae Debrecen* 6 (1959): 290–97. We created the random networks by connecting individuals at random, but keeping the total number of people and ties, as well as the confessional affiliation of each person, as in the original projected networks. By comparing the empirical and random networks, we can infer whether network structures result from specific mechanisms or just by chance.

51   Mark E. J. Newman, "Modularity and community structure in networks," *Proceedings of the National Academy of Sciences* 103, no. 23 (2006): 8577–82.

Fig. 8 The connections of Albert van Baaren. This image was created in Gephi (https://gephi.org/). Albert is the black node to the left of the middle. The purple nodes – representing people who were only connected to events in the OBC Church – are his parents and most of his siblings. The green nodes are Albert's wife and their offspring. The orange node is his brother Joannes, who married in the Reformed Church but had all his children baptized in the OBC Church. The black node on the right is Anna, who acted once as a godparent in the Roman Catholic Church, but otherwise participated in events that took place in the OBC Church.

the context of larger groups; indeed, many nodes in the networks connected to the two Catholic Churches are spread across different network communities.

To be clear, there are occasions where the process of religious affiliation occurred in the context of larger clusters of people. In some cases, for instance, entire "generations" (i.e., siblings) exchanged one Catholic Church for the other. In Leiden, eleven parents had their children baptized in the OBC Church, yet all their (surviving) children thereafter married and/or had their children baptized in the Roman Catholic Church; in twenty-four cases, it was exactly the other way around. In Utrecht, the data shows a contrary pattern: eighty-three families baptized their children in the OBC Church, but these all ended up marrying and/or baptizing their children in the Roman Catholic Church (only nineteen families moved in the opposite direction). These figures point to a rather remarkable development in Leiden, namely that more married couples left the Roman Catholic Church in favor of the OBC Church, which runs contrary to the general pattern observed in many localities throughout the Republic. However, this does not mean that a rosy future awaited the OBC Church in Leiden.

First of all, as Fig. 5 above has indicated, the number of marriages and baptisms that occurred in the OBC Church in Leiden steadily decreased over the course of the eighteenth century, suggesting that the influx of formerly Roman Catholic laypeople could not turn the tide. Secondly, and at least as problematic, is the fact that people who were baptized in the OBC Church tended to participate more frequently in events that took place in the Roman Catholic Church in comparison to their Roman Catholic counterparts (see Table 5). Indeed, the
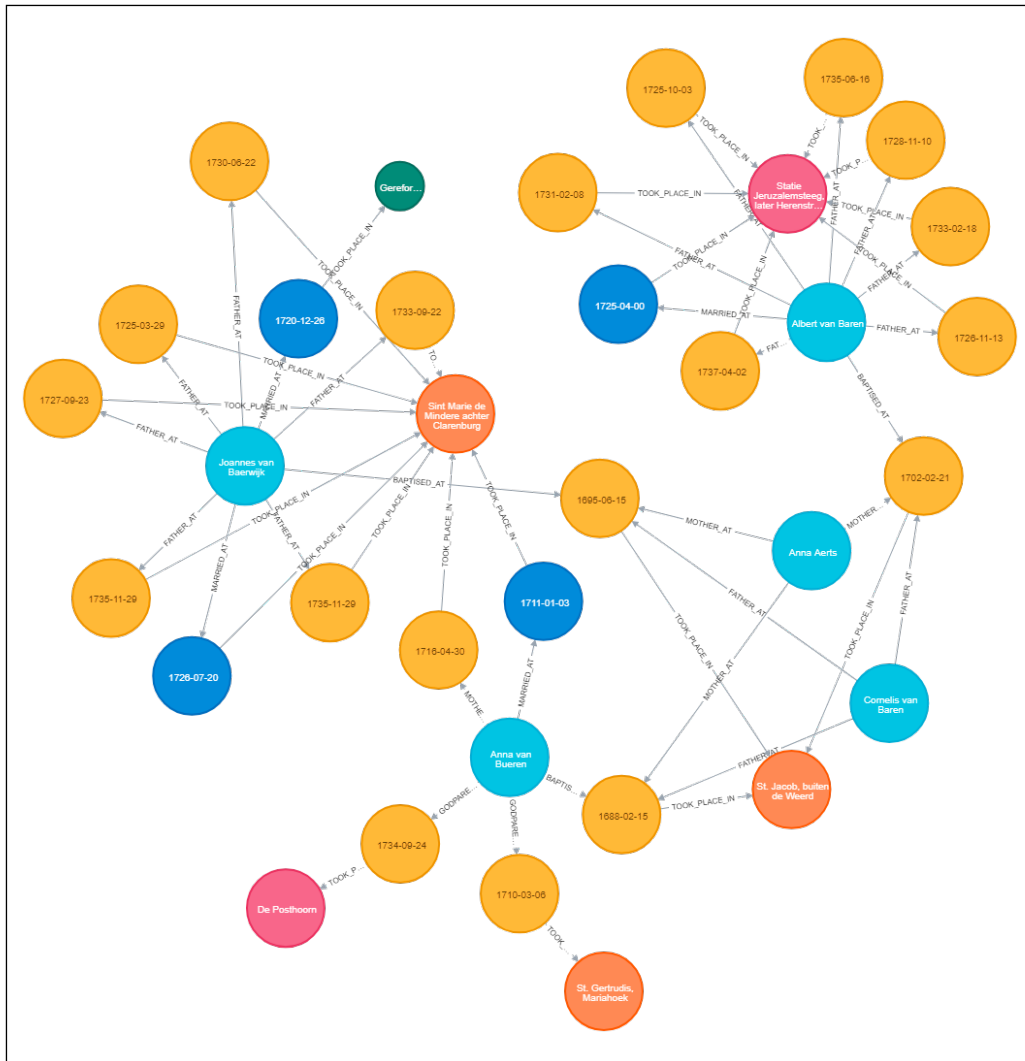
Fig. 9 The rites in which Albert, his brother Joannes, and his sister Anna participated. The azure blue nodes represent people; the dark blue ones weddings; the yellow ones baptisms; the orange and purple ones mission stations of the OBC Church and the Roman Catholic Church, respectively. The green node indicates a Dutch Reformed church.

	OBC Church	Lutheran Church	Reformed Church	Roman Catholic Church	Total
Baptized RCC **(n = 270)**	191	3	32	724	*950*
Baptized OBC **(n = 81)**	68	0	58	168	*294*

Tab. 5 Leiden network: people participating in events in different Churches (all roles). This is based on a selection of people who were connected to at least one rite (other than their own baptism) that took place after 1702, the year of Codde's suspension.

eighty-one people baptized in the OBC Church participated in 226 events (that is, 76.9% of all the events in which they participated) that took place in other Churches. This stands in stark comparison to the 270 people baptized in the Roman Catholic Church, who only participated in 226 events (23.8%) that took place in another Church. The figures from Leiden could indicate a greater willingness of the people who were baptized in the OBC Church to interact with members of other religious groups. However, this willingness was much lower among their fellow believers in Utrecht: more than half of the events in which they participated (52.4%) took place in the OBC Church. Arguably, the smaller size of the congregation of the OBC Church in Leiden increased the frequency with which its members interacted with people belonging to other religious groups, which could have prompted movements to a rival Church. This is something which merits further investigation (but which falls outside the scope of this article).

Third, in some cases, children from subsequent generations returned to the Church their parents had been baptized in. Consider, for example, Joannes van der Valk, whose only child, Adrianus, was baptized in the OBC Church. However, Adrianus' only child, Jan, was baptized in the Roman Catholic Church. In a similar fashion, while Nicolaes van Es was himself baptized in the Roman Catholic Church, all eight of his children were baptized in the OBC Church. Four of these children had offspring, and while two of them remained loyal to the OBC Church, the other two had all their children baptized in the Roman Catholic Church. The fact that children did not always meekly embrace and remain faithful to the religious choice of their parents could result in a back-and-forth movement between competing Catholic Churches that stretched across successive generations. Hence the growth of a congregation achieved through the choices made by one generation could be partially undone by the next. Gains could thus be temporary as individuals moved back and forth between Churches. Jan Niemands, for example, had four children baptized in the Roman Catholic Church, then five in the OBC Church, and another five again in the former Church. Only three chil-

dren – incidentally, all of whom were baptized in the Roman Catholic Church – had offspring. Two of them remained loyal to the Roman Catholic Church and had their children baptized there; the remaining one had two of her children baptized in the Reformed Church, and one in the Roman Catholic Church.

5.   Maintaining and transgressing religious boundaries

In both Leiden and Utrecht, people thus opted to affiliate themselves with different Catholic Churches and their choices were by no means permanent and uni-directional. However, moving to another Church had wider implications, as one became part of a new (religious) community: members of the congregation that had been left generally did not participate in the events celebrated in the Church to which people had moved. This is clearly visible when looking at the godparents of families that moved to a rival Catholic Church. In the far left column of Tables 6 and 7, the families are divided based on five different patterns of intra-Catholic confessional affiliation. The four other columns include information about the godparents and the Church where the events in which they participated took place. As the figures in both tables show, while the majority of the godparents participated in a single event, a significant percentage only participated in events in one of the two competing Catholic Churches. This suggests that in most cases the godparents were "recruited" from the new congregations that a family became part.

	Single event	OBC only	RCC only	Both
OBC to RCC	39.4	9.2	**27.5**	23.9
RCC to OBC	31.8	40.9	9.1	18.2
OBC to RCC to OBC	50.0	16.7	0.0	33.3
RCC to OBC to RCC	30.2	7.9	41.3	20.6
Other*	48.6	1.4	18.1	19.4
Total**	36.6	9.2	30.4	21.5

* Of the godparents associated with the people in this category, 12.5% participated in events which took place in the Reformed Church.
** The missing 2.2% are the godparents in this category who participated in events which took place in the Reformed Church.

Tab. 6 Overview of the godparents of families who affiliated themselves with a rival Catholic Church, in percentages (Leiden).OBC stands for the OBC Church; RCC for the Roman Catholic Church. "OBC to RCC" indicates that a couple moved from the OBC Church to the Roman Catholic Church (and did not move to another Church thereafter).

	Single event	OBC only	RCC only	Both
OBC to RCC	31.9	20.2	22.9	25.0
RCC to OBC	35.7	28.6	21.4	14.3
OBC to RCC to OBC	40.7	37.0	0.0	22.2
RCC to OBC to RCC	28.1	6.3	31.3	34.4
Other	33.3	0.0	55.6	11.1
Total	32.9	20.8	22.5	23.8

Tab. 7 Overview of the godparents of families who affiliated themselves with a rival Catholic Church, in percentages (Utrecht).

Still, despite the objections from the clergy, a number of laypeople acted as godparents in baptisms which took place in a competing Catholic Church. In both cities, approximately a quarter of the godparents participated in events which took place in the two Catholic Churches, as Tables 6 and 7 show, and there are indications that kinship ties and convivial relationships remained intact after having joined another Church. A telling example is that of Peternella de Hoogh, a mother of eight: five of her children were baptized in the OBC Church, after which her other three children were baptized in the Roman Catholic Church. Nevertheless, she was the godparent of the three children of Joannes de Groot and Catharina Erbos. The last of these three was baptized in the OBC Church, as Joannes and Catharina, in contrast to Peternella, left the Roman Catholic Church. It should be noted that it was not only families who joined another Church that had godparents who straddled the boundaries between the two Catholic Churches. Between 13% and 36% of the godparents of the children of families which were only connected to events that took place in one of the Catholic Churches also participated in events that occurred in the other, competing Catholic Church.[52]

It therefore seems that when acting as godparents, Catholic laypeople showed a degree of willingness to transgress confessional boundaries. However, we should not overemphasize their inclination to do so. It seems that the readiness to cross the religious divide mainly, albeit certainly not solely, existed among a select group of people. This becomes apparent when introducing more restric-

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52   For example, 15.4% (n = 125) of the godparents of the children from parents who only participated in events in the Roman Catholic Church were connected to events in the OBC Church (Leiden); for Utrecht this was 31.3% (n = 98). *Vice versa*, 36% (n = 82) of the godparents of the children from parents who only participated in events in the OBC Church were connected to events in the Roman Catholic Church (Leiden); for Utrecht this was 13.2% (n = 58).

tive parameters to our queries and excluding the people who married and whose children were baptized in different Churches. For example, in Leiden, fifty-nine Roman Catholic laypeople acted as godparents at baptisms which took place in the OBC Church; this was only the case for twenty-eight laypeople belonging to the OBC Church.[53] However, when looking at the godparents who had been baptized, married, or had children baptized in a rival Catholic Church, the numbers increase: 106 godparents in the OBC Church had participated in events in the Roman Catholic Church (and 102 the other way around). This suggests that a significant portion of godparents who were willing to act in this capacity in a rival Church came from the group of people who had themselves crossed the religious boundary by marrying or having children baptized in the other Catholic Church. In other words, there existed a group of people who enjoyed links to several Churches.[54] Given that the individual "members" of this group were not all intimately connected to each other, network analysis did not identify these people as a subcommunity, further stressing the need for a mixed-methods approach comprising qualitative and quantitative methodologies that complement each other.

There are signs that the number of people who straddled the boundaries between the two Catholic Churches decreased over time. The figures from Leiden indicate that around the middle of the century, the number of baptisms that included godparents who participated in events in a competing Catholic Church steadily decreased, suggesting an ongoing process of boundary formation (Fig. 10). The existence of such a boundary becomes even more apparent when considering that of the 2,055 people acting as a godparent in the Roman Catholic Church, 1,914 (93.1%) did not participate in events that took place in other Churches (this was 73.3% [n = 365] in the OBC Church). Interestingly, in Utrecht a much higher percentage of the people who acted as godparents in the OBC Church (92.8%, n = 855) did not participate in events in other Churches. This may again be an indication that the smaller size of the congregation in Leiden resulted in the more frequent involvement of members of other religious groups in important rites of passage.

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53   Roman Catholic laypeople are defined here as people that were either baptized, married, or had their children baptized in the Roman Catholic Church and not in the OBC Church. Moreover, at least one of the events in which they participated in the Roman Catholic Church had to take place after 1702. Likewise, at least one of the baptisms in the OBC Church in which this person acted as a godparent also had to take place after 1702. A total of 441 Roman Catholic laypeople acted as godparents; the same applies to eighty members of the OBC Church.
54   When only including people who participated in at least one rite that occurred after 1702, we find that in Utrecht there were 687 people (8.9% of the total number of laypeople in the data set) who were connected to events which took place in different churches (including a variety of Protestant churches). In Leiden, this group comprised 808 people (11.4%).
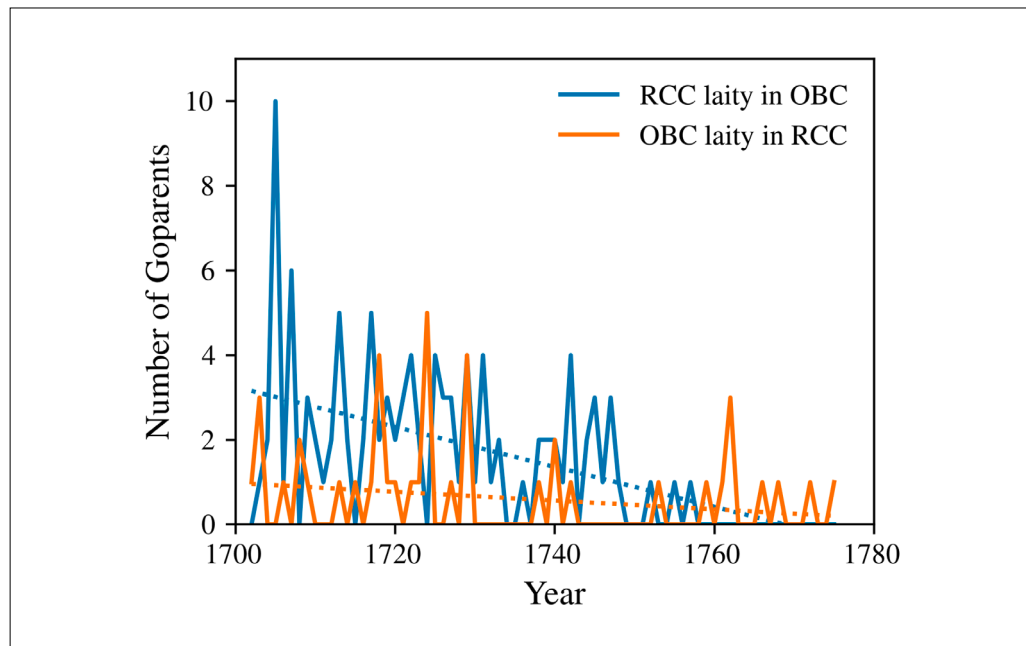
Fig. 10 Number of godparents in Leiden who participated in events in a rival Catholic Church. OBC stands for OBC Church; RCC for Roman Catholic Church. The dotted lines represent the linear regression.

6.   Conclusions

The data and analysis presented in this article enhance our understanding of the Schism of Utrecht in several ways. To begin with, our data point to the importance of the religious choices that were made in the first three decades of the eighteenth century, the period comprising the roughly twenty years that separated the suspension of Petrus Codde and the institutional schism of 1723, as well as the years immediately following this monumental event in the history of early modern Dutch Catholicism. To be sure, this did not prevent later generations from making their own choices, but in general the number of movements between the Churches dwindled as people remained loyal to the Church that was favored by their ancestors (as shown in Figs. 6b and 6d).

As Theo Clemens has already suggested, the institutional schism of 1723 was thus preceded by various "local" schisms as people left their priests and sought out the services of clergymen of their liking. The local conflicts which broke out after Codde's suspension, such as those in Woubrugge and Hoogmade cited in the introduction, show that laypeople were acutely aware of the differences between priests. Such differences were actively emphasized by Rome, as a number of priests were punished for their unwavering support of Codde and formally ex-

communicated.[55] In addition, Dutch Catholics were exhorted not to have "communion" with priests who had been excommunicated or otherwise deemed unruly.[56] Moreover, the harsh stance of the Roman authorities meant that the necessity for the laity to make a choice became ever more urgent. Yet despite this pressure, Catholic laypeople ultimately chose a Church themselves. By showing how the Catholic laity voted with their feet, this article contributes to the growing body of studies on the agency enjoyed and exerted by (Catholic) laypeople in the early modern world.[57]

On the whole, this process of intra-Catholic affiliation was not a communal affair: rather than exchanging one Catholic Church in favor of the other as part of larger groups or collectives, religious change tended to occur primarily at the level of couples or individual family nuclei. Moreover, mixed marriages often prompted a movement to the Church of the spouse – and more often to the Roman Catholic Church than *vice versa*. The movement to a rival Catholic Church meant changing communities; godparents tended to be selected from the community that was joined, rather than the one that was left behind. Not all ties were cut, however, as a (decreasing) number of Catholics acted as godparents at baptisms that took place in the competing Catholic Church. Often these people had straddled the boundaries between the Catholic Churches before, which might have increased their willingness to do so again. As a result, there was a relatively small group of Catholics who participated in rites in both Churches. This group also comprised laity who moved back and forth between competing Catholic Churches, as the process of intra-Catholic affiliation was by no means always unidirectional.

The existence of this group of people – which remained undetected in the quantitative methodology adopted by earlier studies – shows that boundaries between the two Catholic communities were porous and raises questions about the correct terminology: when discussing religious choice in the context of the schism, should we be talking about conversions? Apart from the fact that some people alternated rather freely between the two Catholic Churches, only the Roman Catholic Church seems to have demanded a formal conversion from members of the OBC Church – and, based on the extant sources, only in some cases and not consistently – which renders it difficult to speak of conversion at all times. In particular contexts, it is therefore more appropriate to speak of "participation" in certain rites or of "movements" from one Church to the other.

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55   See, e.g., HUA, Metropolitaan Kapittel (1835), inv. 823: 29-5-1711 (from Bussi).
56   See, e.g., HUA, Metropolitaan Kapittel (1835), inv. 698: 31-12-1709 (from Etma); inv. 702: 7-5-1709 (from Nicolaes de Reeder); inv. 766: 12-4-1703 (from 't Zul).
57   For the agency of the Catholic laity in the Dutch Republic, see, e.g. Parker, *Faith on the Margins;* Geraerts, "Contested Rights."

Likewise, we must also nuance and qualify the term "schism": it was only gradually and over time that the meaning of the events that are now collectively grouped under the label of the "Schism of Utrecht", as well as the outcomes of the process of fragmentation they set in motion, crystallized. Moreover, whereas for some people the Schism of Utrecht meant the existence of two different and separate Churches, one of which could not even legitimately call itself part of the Catholic Church, this was certainly not the case for others.[58] Studying the behavior of laypeople enables us to move beyond (or at least to question) the dichotomies that appear so frequently in the (polemical) literature of the time, and helps us to enhance our understanding of the schism's meaning for lay Catholics and its impact on the ways in which they engaged and interacted with the rival Catholic Church and the laypeople affiliated with it. As such, this article adds to the existing literature on the practice of religious toleration in the Age of the Enlightenment.[59]

Our methodology has revealed a number of patterns that are hard to detect in the quantitative approach adopted by earlier studies. In this sense, this article is another example of how network analysis can be fruitfully applied to early modern sources, as evinced by a series of recent publications.[60] At the same time, we should be aware of the limits of our methodology and allow for the likelihood that a larger number of people made their choice for a competing Catholic Church (but without leaving a trace of this). Aside from being able to disclose specific patterns, our methodology has another distinct advantage: it provides us with precise information about individual lay people and their religious choices. While the patterns shown by our mixed methodological approach are highly valuable in themselves, as we hope this article has made clear, it has another and perhaps even more important benefit: it spurs and gives further direction to archival research, thus allowing us to marry quantitative and qualitative analyses and enabling a more rounded examination of the behavior, roles, and experiences of the Catholic laity in the context of the Schism of Utrecht.

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58   For attempts by the OBC Church to prove that it was still part of the Roman Catholic Church, see Joke Spaans, "Katholieken onder curatele. Katholieke armenzorg als ingang voor overheidsbemoeienis in Haarlem in de achttiende eeuw," *Trajecta* 3:2 (1994): 110–30.
59   See the following study and the literature cited therein: Benjamin J. Kaplan, *Cunegonde's Kidnapping. A Story of Religious Conflict in the Age of Enlightenment* (New Haven: Yale University Press, 2014).
60   See the works cited in footnotes 28 and 29, inter alia.

7.   References

Ackermans, Gian. *Herders en huurlingen: bisschoppen en priesters in de Repu-bliek (1663–1705).* Amsterdam: Prometheus/Bert Bakker, 2003.

Ahnert, Ruth, and Sebastian E. Ahnert. *Tudor Networks of Power.* Oxford: Oxford University Press, 2023.

Bilsen, Betrand van. *Het schisma van Utrecht.* Utrecht: Het Spectrum, 1949.

Błoch, Agata, Demival Vasques Filho, and Michał Bojanowski. "Networks from Archives: Reconstructing Networks of Official Correspondence in the Early Modern Portuguese Empire." *Social Networks* 69 (2022): 123–35.

Brom, G. "Verslag der Hollandsche Missie ten jare 1701." *Archief voor de geschie-denis van het Aartsbisdom Utrecht* 18/19 (1890–91): 432–75; 1–70.

Brown, Carys. "Women and Religious Coexistence in Eighteenth-Century Eng-land." In *Negotiating Exclusion in Early Modern England, 1550–1800,* edited by Naomi Pullin and Kathryn Woods, 68–87. London: Routledge, 2021.

Carvalho, Joaquim, and Rosário Campos. "Interpersonal Networks and the Ar-chaeology of Social Structures; Using Social Positioning Events to Under-stand Social Strategies and Individual Behaviour." *Revista de História da Sociedade e da Cultura* 7 (2007): 175–93.

Clemens, Theo. "Kerkscheuring op lokaal niveau. Petrus van der Maes van Avenrode en de voorgeschiedenis van het schisma van 1723." In *Geloven in het verleden: Studies over het godsdienstig leven in de vroegmoderne tijd, aangeboden aan Michel Cloet,* edited by Eddy Put, M. J. Marinus, and H. Storme, 413–30. Louvain: Universitaire Pers Leuven, 1996.

Cottret, Monique. *Jansénismes et Lumières: pour un autre XVIIIe siècle.* Paris: A. Michel, 1998.

Cottret, Monique. *Histoire du Jansenisme.* Paris: Perrin, 2016.

Doyle, William. *Jansenism: Catholic Resistance to Authority from the Reforma-tion to the French Revolution.* Basingstoke: Macmillan, 2000.

Edelstein, Dan, et al. "Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project." *The American Historical Review* 122, no. 2 (2017): 400–24.

Erdös, Paul, and Alfréd Rényi. "On Random Graphs I." *Publicationes Mathema-ticae Debrecen* 6 (1959): 290–97.

Fincham, Andrew, and Nicholas Burton. "Religion and Social Network Analysis: The Discipline of Early Modern Quakers." *Journal of Management History* 27, no. 3 (2020): 339–58.

Geraerts, Jaap. "Contested Rights. Clerical and Lay Authority in the Holland Mission." *Early Modern Low Countries* 2, no. 2 (2018): 198–225.

Geraerts, Jaap. *Patrons of the Old Faith: The Catholic Nobility in Utrecht and Guelders, c. 1580–1702.* Leiden: Brill, 2019.

Graaf, J. J. de. "Het Oud-Kapittel van Haarlem tijdens het Jansenistische schisma." *Bijdragen voor de geschiedenis van het bisdom Haarlem* 23–24 (1898–99): 372–98; 95–132.

Harline, Craig. *Conversions: Two Family Stories from the Reformation and Modern America.* New Haven: Yale University Press, 2011.

Harline, Craig. *Jacobs vlucht: Een familiesaga uit de Gouden Eeuw.* Nijmegen: Vantilt, 2016.

Hollstein, Betina. "Mixed Methods Social Networks Research: An Introduction." In *Mixed methods Social Networks Research: Design and Applications,* edited by Silvia Domínguez and Betina Hollstein, 3–34. Cambridge: Cambridge University Press, 2014.

Jacobs, J. Y. H. A. *Joan Christiaan van Erckel (1654–1734): pleitbezorger voor een locale kerk.* Amsterdam: APA – Holland Universiteits Pers, 1981.

Kaplan, Benjamin J. *Divided by Faith: Religious Conflict and the Practice of Toleration in Early Modern Europe.* Cambridge [Mass.]: Harvard University Press, 2007.

Kaplan, Benjamin J. *Cunegonde's Kidnapping. A Story of Religious Conflict in the Age of Enlightenment.* New Haven: Yale University Press, 2014.

Kennedy, Gregory, Thomas Peace, and Stephanie Pettigrew. "Social Networks across Chignecto: Applying Social Network Analysis to Acadie, Mi'kma'ki, and Nova Scotia, 1670–1751." *Acadiensis* 47, no. 1 (2018): 8–40.

Kleef, Bastiaan van. *Geschiedenis van de Oud-katholieke Kerk van Nederland.* Assen: Van Gorcum & Comp. N.V., 1953.

Lenarduzzi, Carolina. *Katholiek in de Republiek: De belevingswereld van een religieuze minderheid, 1570–1750.* Nijmegen: Vantilt, 2019.

Linkevicius de Andrade, Daniela, and Demival Vasques Filho. "Moderation and Authority-Building Process: The Dynamics of Knowledge Creation on History Subreddits." *Internet Histories* 6, no. 4 (2022): 369–90.

McLean, Paul D., and Neha Gondal. "The Circulation of Interpersonal Credit in Renaissance Florence." *European Journal of Sociology/Archives Européennes de Sociologie* 55, no. 2 (2014): 135–176.

Newman, Mark E. J. "Modularity and Community Structure in Networks." *Proceedings of the National Academy of Sciences* 103, no. 23 (2006): 8577–82.

Ouden, Gerrit den. *Jansenisten en Papen. Katholieken in de Noorkop. 350 jaar oud-katholieke kerk in Huisduinen en Den Helder.* s.l.: self-published, 2017.

Parker, Charles. *Faith on the Margins: Catholics and Catholicism in the Dutch Golden Age.* Cambridge [Mass.]: Harvard University Press, 2008.

Pollmann, Judith. "Women and Religion in the Dutch Golden Age." *Dutch Crossing* 24, no. 2 (2000): 162–83.

Polman, Pontianus, ed. *Romeinsche bronnen [...] deel III: 1686–1705.* The Hague: Martinus Nijhoff, 1952.

Polman, Pontianus. "Cleresie en staatsgezag. Het plakkaat van 17 augustus 1702." *Mededeelingen van het Nederlandsch Historisch Instituut te Rome* 9 (1957): 163–89.

Polman, Pontianus. *Katholiek Nederland in the achttiende eeuw.* Hilversum: Paul Brand, 1968.

Ribeiro, Ana Isabel, and Joaquim Ramos de Carvalho. "Using Network analysis on Parish Registers: How Spiritual Kinship uncovers Social Structure." In *Bridging the Gaps: Sources, Methodology and Approaches to Religion in History,* edited by Joaquim Ramos de Carvalho, 171–86. Pisa: PLUS-PISA University Press, 2008.

Roessing, W. L. A. "De voormalige oud-katholieke kerk te Rijswijk vanaf haar ontstaan tot 1909." *Nederlands archief voor kerkgeschiedenis* 51, no. 2 (1971): 209–24.

Rogier, J. P. "De betekenis van de terugkeer van de minderbroeders te Delft in 1709." *Archief voor de Geschiedenis van de Katholieke Kerk in Nederland* 2 (1960): 169–204.

Schaik, A. H. M. van. "Bataafs en Rooms. Drie studies over de verhouding van de katholieke Kerk in de Noordelijke Nederlanden en Rome aan het eind van de 17e en het begin van de 18e eeuw." PhD diss., Utrecht University, 1979.

Schoon, Dick. *Een aartsbisschop in Rome aangeklaagd. Dagboeken over het verblijf van Petrus Codde te Rome.* Hilversum: Verloren, 2019.

Spaans, Joke. "Katholieken onder curatele. Katholieke armenzorg als ingang voor overheidsbemoeienis in Haarlem in de achttiende eeuw." *Trajecta* 3, no. 2 (1994): 110–30.

Spaans, Joke. *De Levens der Maechden. Het verhaal van een religieuze vrouwengemeenschap in de eerste helft van de zeventiende eeuw.* Hilversum: Verloren, 2012.

Spiertz, M. G. *Ambtelijk onbegrip. Kanttekeningen bij de breuk Utrecht-Rome.* Nijmegen: Dekker & Van de Vegt, 1972.

Vasques Filho, Demival. "Structure and Dynamics of Social Bipartite and Projected Networks." PhD diss., University of Auckland, 2019.

Vasques Filho, Demival. "Mechanisms and Emergent Properties of Social Structure: The Duality of Actors and Social Circles." SocArXiv, 2020.

Vasques Filho, Demival. "Cohesion and Segregation in Higher-Order Networks." *arXiv e-prints* (2022): arXiv–2207.

Vasques Filho, Demival, and Dion R. J. O'Neale. "Degree Distributions of Bipartite Networks and Their Projections." *Physical Review E* 98, no. 2 (2018): 022307.

Vasques Filho, Demival, and Dion R. J. O'Neale. "Transitivity and Degree Assortativity Explained: The Bipartite Structure of Social Networks." *Physical Review E* 101, no. 5 (2020): 052305.

Vasques Filho, Demival, and Dion R. J. O'Neale. "The Role of Bipartite Structure in R&D Collaboration Networks." *Journal of Complex Networks* 8, no. 4 (2020): cnaa016.

Velde, Wietse van der, *Sint Joris op't zand: Geschiedenis van de Oud-Katholieke Kerk van Nederland en haar parochie te Amersfoort.* Amersfoort: Bekking, 2009.

Velthuyse, J. I. J. M. *Katholiek Berkel en Rodenrijs in de loop der eeuwen.* Rotterdam: Gebrs. Peters, 1948.

Ven, A. J. van der. Het Huis Clarenburch te Utrecht." *Jaarboek Oud-Utrecht* (1952): 32–65.

V[erhey], H. [J. W.]. "Leiden." *De Oud-Katholiek* 74 (1958): 157–71.

Vorst, SJ, M. Th. J. van der. *Holland en de troebelen in de Hollandse Zending 1702–1727.* Nijmegen: Janssen, 1960.

Vugt, Ingeborg van. "Using Multi-Layered Networks to Disclose Books in the Republic of Letters." *Journal of Historical Network Research* 1, no. 1 (2017): 25–51.

Walsham, Alexandra. *Charitable Hatred: Tolerance and Intolerance in England, 1500–1700.* Manchester: Manchester University Press, 2006.

Witkamp, Gerard. "Vervreemding. Een onderzoek naar de kerkscheuring tussen de cleresie en hun kerkvolk in Culemborg in de periode 1680–1750." *Culemborgse Voetnoten* 34 (2006): 2–40.