Fig. 15.1: Map of Jerusalem (undated) by Catharine Hermine Kølle. Photo: Svein Skare © University Museum of Bergen.

Kristina Skåden

Chapter 15

Drawing a Map of Jerusalem in the Norwegian Countryside

Catharine Hermine Kølle (1788–1859) lived by the Hardangerfjord in West-Norway. She drew a map of Jerusalem at some time in her life. This chapter examines Kølle’s Jerusalem-map using a “circulation of knowledge” approach, combined with the established methods for the analysis of Jerusalem maps such as studying orientation, perspective, and cartogenealogy. The investigation of Kølle’s map involves identifying and studying decisive moments of knowledge work in time and space, and tracing connections between the map and the different actors that in some way have impacted the conception and execution of the map: Kølle’s education and upbringing, her mapping practice and fieldwork, as well as her religious art production during her childhood and adult life. Kølle’s map is understood as an outcome of the circulation of knowledge between centers and the periphery of academic work. Kølle’s map thus constitutes a chapter in the history of knowledge.

This chapter concerns an undated map of Jerusalem, stored in the collection of the University Museum of Bergen (Fig. 15.1).¹ In the lower-right corner of the map, we see the signature “C.H. Kølle.” Catharine Hermine Kølle (1788–1859) lived at her farm in the countryside, on the west coast of Norway, where she farmed; made and sold exquisite bead embroidery; worked as an artist; and even as a mapmaker. Although she never reached Jerusalem, her travels were out of the ordinary. The Jerusalem map she drew, represents one singular piece of paper in the “Kølle Collection,” a collection that consists of more than 1800 handwritten pages of text, several maps, and approximately 250 watercolours and sketches. The Kølle Collection is owned by the University of Bergen Library, the University Museum of Bergen, and

¹ Catharine Hermine Kølle, undated, *Kart over Jerusalem [Map over Jerusalem]*, Marcus, Spesialsamlingene, Bergen University Library: ubm-bf-diby-000383. Reproduced by Svein Skare.

Note: I want to thank those whose help was significant in the writing of this chapter: Torild Gjesvik, Peter Lavender, Christine Nightingale, Erling Sandmo, Therese Sjøvoll, Ragnhild Johnsrud Zorgati, and Marianne Paasche; and Ola Søndena at the Bergen University Library.

the Ulvik municipality's local history archive.² Kølle's Jerusalem map remained unpublished, and ended up in the archives of the Bergen University Library. The map has not been subject to analysis, despite increased focus on female cartographers, and Kølle's entire map production has received little attention.³ Instead, the emphasis has been on writing Kølle's life and work into the history of art, the history of tourism, and the history of folk costumes.⁴

Cartogenealogy and the Circulation of Knowledge

Academic approaches to the study of maps open up different routes of analysis and investigation. In the definition of maps of Jerusalem, we have to include conceptual images of past periods such as "Biblical Jerusalem," not only graphic information

2 Marianne Paasche and Ola Søndena, "Vandrende samlinger – om arkivmaterialet etter Catharine Hermine Kølle," in *Årbok for Universitetsmuseet i Bergen 2017*, eds. Heidi Lie Andersen, Knut Olav Aslaksen, Asbjørn Engevik, Aino Hosia, Marianne Herfindal Johannessen, Hana Lukesova and Jo Høyer (Bergen: Universitetsmuseet i Bergen, 2017), 133–44. The University of Bergen Library and the University Museum of Bergen made a vital contribution to "Kølle research" by curating the web exhibition *Catharine Hermine Kølle (1788–1859)* (2017), and by digitalising Kølle's paintings and some of her manuscripts. For the exhibition, see: Spesialsamlingene ved Universitetsbiblioteket i Bergen, "Catharine Hermine Kølle (1788–1858)," accessed January 14, 2019, <http://marcus.uib.no/exhibition/chk>. For searching in the digitalised archive, see Marcus, Spesialsamlingene ved Universitetsbiblioteket i Bergen, <http://marcus.uib.no/home>.

3 Will C. Van den Hoonaard, *Map Worlds: A history of women in cartography* (Canada: Wilfrid Laurier University Press, 2013).

4 An extensive art-historical study of Kølle's work is Anka Ryall and Jorunn Veiteberg, *En kvinnelig oppdagelsesreisende i det unge Norge. Catharine Hermine Kølle* (Oslo: Pax Forlag, 1991). See also Anne Wichstrøm, *Kvinnerns bilder. Malerinner i Norge før 1900: Lillehammer malerisamling 25 juni–16. august 1982*, Kunstnerforbundets katalog nr. 12 (Oslo: Riksgalleriet, 1982). A tourism history approach is taken by Signe Brueneck, "Catharina Kølle. Norges første kvinnelige fotturist," *Bergens Historiske Forenings Skrifter* 63 (1960), 79–89; Nanna Ebbing, "Norges første kvinnelige turist gikk til fots gjennom Europa," *Aftenposten*, June 29, 1961, 22–3; Nanna Ebbing, "Catharina Hermine Kølle. Vandrende turist og malerinne," *Hordaland* 27 (February 1988); Jan E. Hansen, *Catharina Kølle vår første vandrerske* (Oslo: J. M. Stenersens Forlag, 1991); Margit Harsson, *Kongevegen over Krokskogen* (Hole historielag, 1997), 36; Claus Helberg, *De første vandrere* (Den Norske Turistforening: Grøndahl og Dreyers Forlag, 1994), 98–106; and Elsa Ulvig, "Vi dameturister for og nu," *Den Norske Turistforenings årbok 1918*, ed. H. Horn (Kristiania: Grøndahl & Søn's Boktrykkeri, 1918), 76–87. See Ryall for a focus on skills and learning; Anka Ryall, "Dannelse, fotturisme og norskhet: Catharine Kølle og Ulvikparlamentet," in *Nordisk salonkultur. Et studie i nordiske skønånder og salommiljøer 1780–1850*, ed. Anne Scott Sørensen (Odense: Odense Universitetsforlag, 1998), 403–24. The Hardanger and Voss Museum has a collection of the bodice inserts made by the Kølle sisters. See the exhibition "1000 bringklutar" ["1000 Bodice Inserts"]: Hardanger og Voss Museum, "1000 bringklutar," accessed March 4, 2019, <https://hardangerfolkemuseum.no/utstillinger/1000-bringklutar/>.

about “the real World.”⁵ My work is indebted to an established method for analysing maps of Jerusalem, which consists of dating criteria and identifying “the map-maker”; whom may either be an individual, or a regional or national group of mapmakers. Classification criteria have been established and a typology has been created, for the more than 300 maps of Jerusalem drawn between the end of the fifteenth and the beginning of the nineteenth century. Classification involves studying the orientation and the perspective of the maps. The third method is to identify the concepts conveyed by the map; either maps that describe Jerusalem in a historical, imaginary framework or maps that describe the contemporary city. In addition, a fourth method of classification is referred to as “cartogenealogy.” Cartogenealogy attempts to identify original maps and to distinguish between them and the copies based on them.⁶

The theoretical underpinning for my study of Kølle’s Jerusalem map is the concept of “circulation of knowledge.” This concept was first put to use in *Nach Feierabend* (2011), the Zurich Yearbook for History of Knowledge, and outlined in the editorial of this volume by literature and cultural scientist Philipp Sarasin and historian Andreas B. Kilcher.⁷ Sarasin and Kilcher clarify that the concept emerged as an approach within the field of the history of knowledge; with references to the history of science, culture, and ideas: In the genealogy of cultural history, the term “circulation of knowledge” refers to a fundamentally material dimension of “circulation.”⁸ Know-how, meaning, and sociality are essential and are based on material circulation, on the exchange of material, and the passing on of things. The focus is on how knowledge occurs by cultural processes, and usually crosses boundaries of geographical and cultural spaces, thus transcending social and institutional barriers. This does not mean, however, that knowledge is accessible for everyone, at any time. Knowledge occurs and circulates under the conditions of complex power relations and within systems of restriction. The history of the circulation of knowledge is therefore always also the history of those semiotic, discursive, and medial systems that make knowledge possible in the first place.⁹

In a Nordic context, Sarasin and Kilcher’s concept of circulation is transformed and challenged by the book *Circulation of Knowledge. Explorations on the History of Knowledge* by Johan Östling, David Larsson Heidenblad, Erling Sandmo, Anna

5 Rehav Rubin and Yehoshua Ben-Arieh, *Image and Reality: Jerusalem in Maps and Views* (Jerusalem: Hebrew University Magnes Press, 1999), 14.

6 Rubin and Ben-Arieh, *Image and Reality*, 45–55.

7 Philipp Sarasin and Andreas B. Kilcher, “Editorial,” in *Nach Feierabend. Zirkulationen*, eds. David Gugerli, Michael Hagner, Caspar Hirschi, Andreas B. Kilcher, Patricia Purtschert, Philipp Sarasin, and Jakob Tanner (Zürich: Diaphanes, 2011).

8 Sarasin and Kilcher, “Editorial,” 7–11.

9 Sarasin and Kilcher, “Editorial,” 9–10.

Nilsson Hammer, and Kari Nordberg.¹⁰ The *Circulation of Knowledge* emphasises “how knowledge moves and how it is constantly moulded in the process”; without offering a shared understanding of what the circulation of knowledge is. The book demonstrates, rather, that both “circulation” and “knowledge” can be understood, employed, and analysed in a multitude of ways and historical settings.¹¹

In his investigation of how objects of knowledge are produced, transformed, and mediated, the historian Erling Sandmo claims “that present-day studies of the history of knowledge, and of how circulation is part of that history, are both innovative and part of a history which stretches a long, long way back in time.”¹² This argument can be exemplified by studies of various versions of Jerusalem as an object of knowledge, mediated by maps of the city and by maps of the world with Jerusalem as the central focal point.¹³ Maps of what is referred to as the “Holy Land” – the area located roughly between the Jordan River and the Mediterranean Sea, which is considered holy by Jews, Christians, and Muslims – constitute the longest unbroken chain of graphical representations in the world.¹⁴

The Protestant publisher Christoph Froschauer of Zürich, published part of Luther’s translation of the Old Testament and included the first map in a Bible printed in 1525.¹⁵ Jerusalem maps printed in Bibles are related to the upheavals of the Reformation, and religious convictions of leading reformers such as Martin Luther and John Calvin and their followers.¹⁶ Especially in the sixteenth century, the maps were intended to help unschooled readers to understand and clarify information in the text. The printing industry was new, and Bibles spread on a large

10 Johan Östling, David Larsson Heidenblad, Erling Sandmo, Anna Nilsson Hammer, and Kari Nordberg, eds., *Circulation of Knowledge – Explorations in the History of Knowledge* (Lund: Nordic Academic Press, 2018).

11 Johan Östling, David Larsson Heidenblad, Erling Sandmo, Anna Nilsson Hammer, and Kari Nordberg, “The History of Knowledge and the Circulation of Knowledge. An Introduction,” in *Circulation of Knowledge – Explorations in the History of Knowledge*, eds. Johan Östling, David Larsson Heidenblad, Erling Sandmo, Anna Nilsson Hammer, and Kari Nordberg (Lund: Nordic Academic Press, 2018), 17–8.

12 Erling Sandmo, “Circulation and monstrosity. The sea-pig and the walrus as objects of knowledge in the sixteenth century,” in *Circulation of Knowledge – Explorations in the History of Knowledge*, eds. Johan Östling, David Larsson Heidenblad, Erling Sandmo, Anna Nilsson Hammer, and Kari Nordberg (Lund: Nordic Academic Press, 2018), 175.

13 Rubin and Ben-Arieh, *Image and Reality*; Ariel Tishby, ed., *Holy Land in Maps* (Jerusalem, New York: The Israel Museum and Rizzoli International Publication, 2001).

14 Naftali Kadmon, “The Holy Land in Maps: From Stone Mosaic to Satellite Images,” in *Holy Land in Maps*, ed. Ariel Tishby (Jerusalem, New York: The Israel Museum and Rizzoli International Publication, 2001), 13.

15 Catherine Delano-Smith and Elizabeth Morley Ingram, *Maps in Bibles, 1500–1600: An Illustrated Catalogue* (Geneva: Librairie Droz, 1991), 22.

16 Catherine Delano-Smith, “Maps in the Sixteenth Century,” *The Map Collector* 39 (1987): 2–4.

scale and also to unschooled readers.¹⁷ In the history of cartography, maps of the land of Israel and the city of Jerusalem are documents of changes in religions, as well as scientific and artistic thoughts, from antiquity to the present day.¹⁸ To sum up: Maps of Jerusalem are embedded in numerous forms of materiality, as well as relations and stories of circulation, which extend in time and place. Kølle's map of Jerusalem belongs to this history.

In science- and knowledge history research, the Actor-Network Theory (ANT) – a methodological and theoretical approach dominated by Bruno Latour and his anthropology of science – emphasizes (more so than the circulation of knowledge approach) how facts are made and how they gain authority within networks. ANT makes no distinction between human and non-human actors within the networks, as long as the actors get things done.¹⁹ Maps have this potential.²⁰ By extension of this argument, I understand Kølle's Jerusalem-map and other artefacts as potential "actors," without agency, in networks of circulation of knowledge. Rather than following the actors within networks, I am identifying and studying decisive moments in time and space, and tracing relations between the map and the different actors that in some way have mobilized the conception and execution of the map. These "moments" represent Kølle's knowledge work during childhood, youth, and adult life; her education, her mapping practice, and her fieldwork. There is one more point to make: by exploring the entanglements between ANT, and literary criticism, linguistics, and book history, the historian Kristin Asdal and cultural historian Helge Jordheim suggest to approach

17 Elizabeth M. Ingram, "Maps as Readers' Aids: Maps and Plans in Geneva Bibles," *IMAGO MUNDI: The International Journal for the History of Cartography* 42, no. 1 (1993): 29.

18 James S. Snyder, "Foreword," in *Holy Land in Maps*, ed. Ariel Tishby (Jerusalem/New York: The Israel Museum and Rizzoli International Publication, 2001), 6. This is materialised in exhibitions and books, even in the three current volumes of *The Jerusalem Code*. A recent example is the exhibition *Welcome to Jerusalem, Jewish Museum Berlin*. 11 December. 2017–30 April 2019, Margret Kampmeyer and Cilly Kugelman, *Welcome to Jerusalem* (Berlin: Jüdisches Museum Berlin/Wienand Verlag, 2017).

19 Bruno Latour, "Visualisation and Cognition: Drawing Things Together," in *Knowledge and Society Studies in the Sociology of Culture Past and Present*, ed. Henrika Kuklick (Greenwich: Jai Press, 1986); Bruno Latour, *Reassembling the Social. An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2007), 46ff.

20 Kristina Skåden, "Vegarbeid. Transnasjonale relasjoner i perioden 1800–1942: Tre eksempler," (PhD diss., University of Oslo, 2013); Kristina Skåden, "The Map and the Territory: The Seventh International Road Congress, Germany 1934," *Transfers: Interdisciplinary Journal of Mobility Studies* 5, no. 1 (2015): 69–88; Kristina Skåden, "Scientific Relations and Production of Knowledge: Hertzberg, Goethe, and Humboldt," in *Forster – Chamisso – Humboldt. Weltreisende im Spannungsfeld der Kulturen*, eds. Julian Drews, Ottmar Ete, Tobias Kraft, Barbara Schneider-Kempf, and Jutta Weber (Göttingen: V & R unipress, 2017), 357–68; Kristina Skåden, "Mapping the Fields: Geographies of Knowledge Production – Et forskningsprosjekt om romlige-digitale-arkivale sammenfiltringer," *Nordisk Museologi* 2–3 (2018): 73–89.

the text and “take as a starting point their mobility, and at same time their ability to mobilize.”²¹ In line with this approach, I am thinking about Kølles Jerusalem map as part of “historical processes, events, or discourses” – within different histories of knowledge.²²

Inspired by recent approaches in the history of knowledge, combined with insights from the traditional method of analysis for Jerusalem maps, and by analysing seventeenth- to nineteenth century sources, this chapter investigates: What was Kølle’s Jerusalem map mobilised by in terms of processes of materiality, discourses on “sacred geography,” and events and networks? How was the map a mobilising force in the production and circulation of knowledge?

Through my investigation, I am directing attention towards how mapped knowledge about Jerusalem moved, and how these perceptions of Jerusalem were moulded in the process. Why did Jerusalem constitute the object of a map drawn by a woman in rural Norway in the early nineteenth century? What local and international relations are embedded in this map? I am arguing that Kølle’s work, including her Jerusalem map, represents a contribution to the history of knowledge in the Northern periphery; a location situated at a distance from centres of academic and cartographic studies.

The Materiality of the Object

Kølle’s map figures as an illustration on the upper part of a sheet of paper, while a numbered list of place names covers the lower part of the page (Fig. 15.2). The text and the map-illustration are carefully written and drawn with a black pencil; landmarks, shadows, and different constructive elements are water coloured in shades of grey and blue. The map-illustration measures 21.6 x 15.5 cm, and the entire map sheet 21.6 x 32.5 cm. While a signature identifies the mapmaker, no further information is given regarding the title; there is no cartouche nor any contextualising text. Instead, some inscriptions mark the map: “Sion or the Upper City,” “Acra or Jerusalem and Siloam,” “The Lower City,” “David’s City,” and the “Mount of Olives.” The Mount of Olives is symbolised by a drawn mountain range consisting of twelve peaks. We see water flowing from the “Royal Fishpond,” through the “Royal Garden,” and further on in a small river alongside the city wall. Kølle’s painstaking attention to detail, the mapped landscape surrounding the city and the structure of the city, together with the inscriptions, visualise for an informed reader that the place in question must be Jerusalem.

²¹ Kristin Asdal and Helge Jordheim, “Texts on the Move: Textuality and Historicity Revisited,” *History and Theory* 57, no. 1 (2018): 58.

²² Asdal and Jordheim, “Texts on the Move,” 58.

Fig. 15.2: Detail of Kølle's Jerusalem map (Fig. 15.1).

Small Illustrations of Details

Maps of Jerusalem created in Europe between the invention of the printing press in the mid-fifteenth century and the early nineteenth century, constitute two main categories when viewed as a whole. The historical geographer Rehav Rubin describes the first group as composed of maps of Jerusalem that depict an imaginary historical-biblical Jerusalem, which is based on the Holy Scriptures and books about Jewish history; such as the works by the first-century Romano-Jewish historian Titus Josephus Flavius.²³ These imaginary maps, Rubin writes, are conceptual: they are ideological documents, which reflect the Christian images of Jerusalem in the time of Christ rather than the realistic landscape of the city. The second category of maps, defined as the “realistic” ones, claim to portray contemporary Jerusalem. Even these maps, drawn by people who had visited Jerusalem, were highly ideological and they emphasised the Christian sites while omitting those worshipped by the Muslims and the Jews.²⁴

²³ J. Ben-Arieh and N. Elhassid, “Some notes on the maps of Jerusalem 1470–1600,” in *Jerusalem in the early Ottoman period*, ed. Amnon Cohen (Jerusalem: Keter Publishing House, 1979), 121–51.

²⁴ Rehav Rubin, “Ideology and landscape in early printed maps of Jerusalem,” in *Ideology and landscape in historical perspective. Essays on the meanings of some places in the past*, eds. Alan R. H. Baker and Gideon Biger (Cambridge: Cambridge University Press, 1992), 16–9.

Kølle's map belongs to the first category, and like many of the mapmakers in this category, she never visited Jerusalem. In her Jerusalem map, textual descriptions of places, landscapes, and events of the Old and New Testaments are transformed into a mapped visualisation. In Kølle's map, a number accompanies every graphic symbol, constituting a list of 77 numbers referring to specific geographic locations. (For readers with an interest in detail, I provide the whole list in the appendix.) The biblical landscape is represented by, amongst others, the mountain of Zophim (number 26) where Balak built seven alters and offered a bull and a ram on each alter.²⁵ One of the most central events in the New Testament – the Crucifixion of Jesus – is represented by number seven, "Golgotha," and the graphic figure of a small hill with three crosses. Additionally, Kølle maps locations related to historical events with religious impact. One example, the first listed, is Titus's Roman legion camp, placed in the upper-left corner of the map. This place, visualised by a cluster of tents, refers to the Roman emperor Titus, and how Roman legions breached the walls of Jerusalem in 70 C.E., conquered the city, and destroyed the Second Temple. The destruction of the Temple is regarded as one of Judaism's most significant events, both historically and religiously. There are no human figures drawn into the map; rather, it seems like Kølle had a special eye for the different types of building structures and the infrastructure of the city. There are detailed pictorial representations of clusters of tents, a castle with round towers and spires, smaller houses of different designs, the city's fortifications, walls, gates, fishponds, roads, and water pipes. Many of them are related to Christian holy sites and traditions. One example is the "Pool of Siloam" (number 51); a place mentioned in the fifth chapter of the Gospel of John (5:1–18), where Jesus heals a sick man.

Kølle's map seems more like an artistic drawing in which she seeks to present a faithful representation of the object Jerusalem by being detailed and accurate, rather than a map that is the product of accurate survey and measurement. Kølle's map does not include a map scale, nor have the cardinal directions been indicated, yet all the elements appear plausible and they provide valuable information about the geography of the Christian tradition. The map synchronises and make time visible; several historical events and religious time periods are imaginable in one gaze.²⁶ By mapping the events, landscapes, and places of the Old and New Testaments, Kølle took advantage of the many textual and visual images of the "sacred geography" of the Holy Land that were in circulation, in the form of texts and maps published in the seventeenth and eighteenth centuries.

²⁵ John McClintock and James Strong, "The Cyclopedia of Biblical, Theological, and Ecclesiastical Literature," accessed January 14, 2019, <https://www.biblicalcyclopedia.com/Z/zophim.html>.

²⁶ For more on different ways of conceptualising multiple times and means for synchronising time, see Helge Jordheim, "Introduction: Multiple times and the work of synchronizing," *History and Theory* 53 (2014): 514.

Sacred Geography and Cartogenealogy

Sacred geography, as the geographer Robin Butlin notes, represents a broad issue: it is a major topic of European theological interest, both Catholic and Protestant, which dates to the early fourth century C.E., and it involves the use of historical and geographical skills to locate and characterise the important biblical places and events.²⁷ A decisive moment in the tradition of sacred geography were the publications authored by Edward Wells (1667–1727); a clergyman of the Church of England and the rector of a church in Leicestershire, England. He published *An Historical Geography of the New Testament* in 1708, and *An Historical geography of the Old Testament* in three volumes in 1711–1712.²⁸ In Wells's four volumes on the historical and geographical background of the places, landscapes, and events of the Old and New Testaments, he uses the term "historical geography." Wells reflected a range of past and contemporary theological and geographical ideologies and perspectives (he drew heavily on Juan Bautista Villalpando, whom I will return to below). The volumes were reprinted and re-engraved several times during the early part of the nineteenth century, and they have been assigned great importance in the circulation of sacred geography. The 1801 version was translated into German with the title *Historische Geographie des Alten und Neuen Testaments* [*The Historical Geography of the Old and New Testaments*].²⁹

A Norwegian version of sacred geography, analysed by Sandmo in the current volume, is the translation of the seventh edition of the German *Biblische Geographie für Schule und Familien* [*Biblical Geography for School and Family*] by Gottlob L. Hochstetter, which was translated by Hans Julius Knudsen and published in Norwegian in 1858 as *Bibelsk Geographie for Skoler og Familier*.³⁰ Knudsen's volume was, like the German version, enriched by fifty drawings and one map of the Holy Land. The drawings mostly visualised different settings of the biblical events, and amongst them was *Jerusalem*.³¹ We do not know if Kølle was aware of Wells' volumes,

²⁷ See Chapter 16 (Rana Issa), 309–27; Chapter 17 (Ragnhild Johnsrud Zorgati), 328–59.

²⁸ Edward Wells, *An Historical Geography of the New Testament: In two volumes* (Oxford: W. Botham, 1708); and Edward Wells, *An Historical Geography of the Old Testament: In Three Volumes* (London: Printed for James Knapton, at the Crown in St. Paul's Church-Yard, 1711–1712).

²⁹ Robin A. Butlin, "Ideological contexts and the reconstruction of Biblical landscapes in the seventeenth and early eighteenth centuries: Dr Edward Wells and the historical geography of the Holy Land," in *Ideology and Landscape in Historical Perspective: Essays on the meanings of some places in the past*, eds. Alan R. H. Baker and Gideon Biger (Cambridge: Cambridge University Press, 1992), 31–45; Edward Wells, *Historische Geographie des Alten und Neuen Testaments in vier Theilen. Mit dazu gehörigen landkarten versehen* (Nürnberg; Christoph Riegels, 1765).

³⁰ See Chapter 19 (Erling Sandmo), 390–409; Gottlob Ludwig Hochstetter, *Biblische Geographie für Schuler und Familie* (Stuttgart: Calw. Verlag der Vereinsbuchhandlung, 1836); Hans Julius Knudsen, *Bibelsk Geographie for Skoler og Familie. Med 50 Tegninger og Kart over Bibelens Lande* (Christiania, Stavanger: Lønning, 1858).

³¹ Knudsen, *Bibelsk Geographie for Skoler og Familie*, 54.

however, it seems reasonable that her inspiration was something other than the Norwegian publication. Kølle's map has very few similarities with the drawings in Knudsen's book, and they were published when she had a long life of mapping and painting behind her.

Villalpando's Jerusalem Map

An attempt to classify Kølle's map by cartogenealogy and thereby place it into family of maps will have to start with Juan Bautista Villalpando (1552–1608). He was a learned Spanish Jesuit monk, an artist, architect, and cartographer, who lived and worked in Rome. His map *Vera Hierosolymae veteris imago . . . [A true image of ancient Jerusalem . . .]* was part of the *Explanaciones in Ezechielis et apparatus urbis ac templi Hierosolymitani [Explanations of Book of Ezekiel and Plan of City and Temple of Jerusalem]*, vol. 3, Rome (1604) (Fig. 15.3). In the catalogue of the first exhibition of maps of the Holy Land from antiquity up until modern times at the Israel Museum exhibition (2001), the editor Ariel Tishby describes the Villalpando map as an “imaginary portrayal” of Jerusalem, characterised by a wall surrounding the city.³² A hilltop at the centre of the map, encircled by a wall, represents the City of David, with the king's palace in the middle. A network of streets divides the city. The map is diachronic in character. It depicts structures and sites of different ages side by side, without chronological differentiation.³³

Villalpando's map was copied, transformed, and circulated either by using the whole design, or just by borrowing certain elements and ideas.³⁴ Traces we recognise from Villalpando's map on Kølle's map are how the City of David is made into a focal point and surrounded by a city wall. Outside this wall, an outer circle, the larger city wall, surrounds the upper and lower parts of Jerusalem. Both Villalpando and Kølle examine the infrastructure and buildings of the city, and on both maps there are pictorial representations of tents marking Titus's Legion.³⁵ So far, it seems that Kølle's map relates to the “circulation of knowledge” of sacred geography. More precisely, the map stands out as a materialized “distant relative” of the Villalpando map family. Villalpando, in turn, mobilised Edward Wells's influential version of sacred geography.

³² Tishby, *Holy Land in Maps*, 150.

³³ Tishby, *Holy Land in Maps*, 150.

³⁴ Rubin and Ben-Arieh, *Image and Reality*, 123–35.

³⁵ I would like to thank Ayelet Rubin at the Eran Laor Cartographic Collection/The National Library of Israel, Jerusalem, for pointing to the relation between Kølle's and several versions of Villalpando's map.

Fig. 15.3: *Vera Hierosolymae Veteris Imago*. An imaginary plan drawn after Villalpando. From Eusebius, *Kanaän en d'omleggende landen*. . . Leeuwarden, François Halma, 1717. Copperplate. The National Library of Israel, The Eran Laor Cartographic Collection.

Hence, Kølle, while drawing her map, was dependent on anonymous human and non-human actors – like other mapmakers, scientific instruments, manuscripts, printing technologies, colours, pencils, publishing houses – all involved in moving texts and maps through space and time. In an unknown place, one or another version of a Jerusalem map/text was brought into circulation through practices and networks that included Kølle; serving as model or at least as a mobilising force in Kølle's own mapping of Jerusalem.

John Lightfoot's Map: A Mutual Text-Visualization Approach

Following an extended search in archives and books for the specific map that might have been Kølle's model, I was close to giving up. Suddenly, while looking for English translations of Kølle's list of sites, an auction website appeared in the internet flow:

Fig. 15.4: *Urbs Hierosolyma ex Descriptione Joan Lightfootii*, from John Lightfoot's *Opera omnia* . . . (Francecker, Leonard Strik, 1699). Copperplate. The National Library of Israel, The Eran Laor Cartographic Collection.

and *here* was the missing link – sold for € 25 on December 1, 2015 (Fig. 15.4). The auction-site had a description of the map, aimed at an audience of map-collectors:

Holy land, Jerusalem; John Lightfoot – *Urbs Hierosolyma ex Descriptione Joan Lightfootii* – 1686. Copper engraving of Jerusalem. Dimensions: 21 x 33 cm. Condition: moderate. Margins narrow, left hand side trimmed to over face of map. Verso: blank. See scans and photos to determine condition. This is an uncommon plan of the ancient city of Jerusalem. The imaginary plan shows the outer wall with Calvary outside the wall. The City of David and the King's Palace are pictorially represented, whereas Solomon's Temple is depicted only as a sketch plan.³⁶

The mapmaker John Lightfootii (or Lightfoot) (1602–1675), was a Hebraist and biblical scholar, born in Stoke-on-Trent, England. Among his many tasks was to participate in the Westminster Assembly of Divines; a council of theologians and members of the English Parliament appointed to restructure the Church of England. He contributed to

³⁶ “Holy land, Jerusalem; John Lightfoot – *Urbs Hierosolyma ex Descriptione Joan Lightfootii* – 1686,” Catawiki, accessed January 11, 2019, <https://www.catawiki.com/1/3546529-holy-land-jerusalem-john-lightfoot-urbs-hierosolyma-ex-descriptione-joan-lightfootii-1686>.

debates and held services. In 1645, he had urged the House of Commons to commission a review and survey of the Bible. Lightfoot returned to academic life and to the University of Cambridge where he continued biblical studies.³⁷ He assisted Brian Walton's work with the polyglot Bible (1657), including providing a map of Judea.³⁸

Nine years after Lightfoot died, in 1684, Lightfoot's text and maps were printed in a book given the title: *The Works Of the Reverend and Learned John Lightfoot, D.D. Master of Katharine Hall in Cambridge; Such as were, and such as Never before were PRINTED. In Two Volumes. With the authors live, and Large and Useful TABLES to each Volumes.* Highlighted in red letters and following the title is the following information given: *Also Three Maps: One of the TEMPLE drawn by the AUTHOR himself; The others of JERUSALEM and the HOLY LAND, Drawn according to the AUTHORS Chorography, with a DESCRIPTION collected out of his Writings.*³⁹ The book was printed in London, by W.R [the publisher] for Robert Scot, Thomas Basset, John Wright, and Richard Chiswell. Robert Scot had his business in Little Britain in London, an important center for the retail book trade. In addition to his stock in England, he had warehouses in Frankfurt, Paris, and other places.⁴⁰ Thomas Basset was a bookseller in Fleet Street; he was a seller often identified by legal tomes and maps.⁴¹ Through Scot Basset, and probably also the other publishers' network of distribution, Lightfoot's work was ensured large circulation.⁴² Two

37 Newton E. Key, "Lightfoot, John," Oxford Dictionary of National Biography, accessed January, 2019, <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-16648>, 1–9.

38 Key, "Lightfoot, John," 4.

39 John Lightfoot D. D., *The Works Of the Reverend and Learned John Lightfoot, D.D. Late Master of Katharine Hall in Cambridge; Such as were, and such as Never before were PRINTED. In Two Volumes. With the authors live, and Large and Useful TABLES to each Volumes. Also Three Maps: One of the TEMPLE drawn by the AUTHOR himself; The others of JERUSALEM and the HOLY LAND, Drawn according to the AUTHORS Chorography, with a DESCRIPTION collected out of his Writings* (London: Printed by W.R, 1684).

40 A. W. Ward and A. R. Waller, eds., *The Cambridge history of English literature. Volume XI, The period of the French revolution* (Cambridge: The University Press, 1970), 331.

41 Elizabeth Lane Furdell, *Publishing and Medicine in Early Modern England* (New York: University of Rochester Press, 2002), 67.

42 The National Library of Israel has digitalised tree versions of Lightfoot's Jerusalem map in the Eran Laor Cartographic Collection: one printed in England in English, and two editions printed in Rotterdam, in Latin: Lightfoot, John. 1684. *The city of Jerusalem according to Dr. Lightfoot By I.W. [i.e. John William] printed for Richard Chiswell.* Copperplate, From: Lightfoot, John. The works . . . London, Vol. II, p. 20, format 36 x 51.5 cm. English text on the map. Available at: [http://beta.nli.org.il/en/maps/NNL_ALEPH002368115/NLI#\\$FL7073489](http://beta.nli.org.il/en/maps/NNL_ALEPH002368115/NLI#$FL7073489); Lightfoot, John, Leers, Reinier. 1686. *Urbs Hierosolyma ex Descriptione Joan Lightfootii.* Copperplate. Rotterdam: Regner Leers. From: Lightfoot, John. Opera omnia . . . Rotterdam: Regner Leers, Vol.II, p.185, format 35.5 x 51 cm. Latin text on the map. Available at: [http://beta.nli.org.il/en/maps/NNL_ALEPH002368116/NLI#\\$FL7071287](http://beta.nli.org.il/en/maps/NNL_ALEPH002368116/NLI#$FL7071287); Lightfoot, John, Strick Leonard. 1699. *Urbs Hierosolyma ex Descriptione Joan Lightfootii.* Copperplate. From: Lightfoot, John. Opera omnia . . . Francecker, Leonard Strik. 2nd Latin edition, Vol. II, between

years after the English publication, the book and the map were published in Latin in Rotterdam.⁴³

In *The Works Of . . . John Lightfoot*, we can read Lightfoot's short chapter "To the reader," written May 30, 1649. Here he explains the process and the intention with the map and the visual representation of the Temple:

My design, in reference to the affairs of the Temple, when first I undertook a work of that nature, was first to describe the place, and to give the character and platform of the Temple itself, and then to have something to say about the service. And, accordingly, with no small pains and study, out of the Scripture, and the highest antiquities of the Jews, I drew up, in a large tractate and discourse, – as, also, in a very large map and figure, – a full plain, punctual, and exact prospect and description (if I may have liberty to say so much of mine own work) of the Temple at Jerusalem, especially, as it stood in those times, when our Saviour himself, in humane flesh did resort thither: . . .

But that hap of becoming public, is not happened to it [the map]: for the schematical delineation of the temple, and of the buildings about it, in the map, and the verbal description of them in the written tract, do so mutually face, and interchangeably refer one to the other (the map helping to understand the description of the book, and the book helping to understand the delineation in the map), that they may not be sent forth into public apart, or one without the other, but must needs appear (if ever they appear) both together. . . . London, May 30, 1649.⁴⁴

Lightfoot emphasizes the purpose with his work: "to have something to say about the service." The text continues by describing the unsuccessful efforts undertaken to get the map and the text published together. In the context of this study, the most fascinating argument in Lightfoot's text is his awareness of the text-map-relation; how a visualisation, according to him, can deepen an understanding of a text, and vice versa. By establishing this relation, he aims to let the reader gain a deeper understanding of the biblical places and the text of the Scripture through the means of visualisation by mapping.⁴⁵ Kølle's map looks like a slightly simplified copy of one or the other version of Lightfoot's printed map, and her work reflects Lightfoot's account; the text-visualisation relation. The main difference in the design is Lightfoot's inclusion of a scale and the directions, and how the mapmakers have both combined the written information and the symbols. Kølle adds the list of names below the painted map, and Lightfoot writes the place names directly on the map. Having analysed Kølle's translation of Lightfoot's text, it seems plausible that she has seen one of the Latin publications.

pp. 180–1, but on the map written p. 185 as in the first edition, format 35.5 x 51 cm. Available at: [http://beta.nli.org.il/en/maps/NNL_ALEPH002368117/NLI#\\$FL7071977](http://beta.nli.org.il/en/maps/NNL_ALEPH002368117/NLI#$FL7071977).

⁴³ Lightfoot 1886. *Opera Omnia, cum Vita ejus præfixa cura Joh. Texelii*, 2. Vols. folio, Roterodami.

⁴⁴ John Rogers Pitman, ed., *The Whole Works of the Rev. John Lightfoot, D.D. Master of Chatharine Hall, Cambridge IX*, Containino The Tempel-Servise and The Prospect of the Tempel (London: J. F. Dove, 1823), 3–4. I am quoting the 1823 edition since the English is modernized in this edition, and therefore more accessible to the reader.

⁴⁵ Skåden, "The Map and the Territory."

Childhood, Youth and Education

Up to this point, I have traced the relationships between Kølle's Jerusalem map and earlier maps of Jerusalem. Kølle has obviously seen a version of Lightfoot's map. Through examining decisive moments in Kølle's life that might have motivated and enabled her to map Jerusalem, the next section of this study will work out more in detail, how she engaged with the circulation of knowledge through her knowledge work practices and networks. These moments have specific dates and locations in a network that is producing, circulating, transforming, and controlling knowledge in the past, present, and future. First, I relate Kølle's Jerusalem-map to her education in childhood and early youth. Thereafter, the focus is on her adult life; I examine a dedication on a map and her travel diary, as well as paintings based on journeys to Denmark, Sweden, and Germany.

A possible thesis is that the map was motivated by, or resulted from, school-work, and/or through the social spheres in which knowledge circulated in her childhood. The period in question is approximately 1795–1807, between the years she presumably started school and the year she moved to Ulvik in Hardanger. Until she was fifteen, and while she was attending school, she lived together with her family on the farm *Snarøen*, located on a peninsula (today called Snarøya) roughly fifteen kilometres south of Christiania (now Oslo).⁴⁶ Her mother, Elisabeth Monrad (1758–1829), grew up in an ecclesial environment with many priests on the male side of the family, and there were extensive kinship relations with bourgeois families in Norway and Denmark. Catharine's father, Christian Kølle (1736–1814), also belonged to a family of priests, and was himself educated in theology. Catharine Kølle was the oldest of four sisters: Petronelle Johanne died only one month old in 1793; Helene Johanne was born in 1795 (died 1877); and her youngest sister Ambrosia was born in 1796 (died 1855). At that time education for all, including girls, was encouraged, as Denmark-Norway had decreed obligatory schooling in 1739.⁴⁷ Thereafter, schools were established throughout Norway, and all children – both boys and girls – over the age of seven were obliged to attend school to at least learn Christianity and reading. The introduction of this schooling law was a result of the adoption of the law of obligatory confirmation in Denmark-Norway in 1736.⁴⁸ From the age of seven or eight, boys and girls were obliged to go to school until they were confirmed. In practice, this meant that they attended school for about two months a year. It is worth noting that among the social circles, Kølle belonged

⁴⁶ Christian Kølle, *Kort Beskrivelse over Snarøen, en liten Gaard ved Christiania* (Christiania, 1792).

⁴⁷ "Denmark-Norway" refers to the multi-national and multi-lingual real union of the Kingdom of Denmark and the Kingdom of Norway, including overseas possessions, and several colonies. Personal union 1523–1533, dual monarchy 1537–1814.

⁴⁸ Einar Høigård and Herman Ruge, *Den norske skoles historie. En oversikt* (Oslo: Cappelen Forlag, 1963), 44–7.

to – the bourgeoisie and governmental officials – education, even for girls, was encouraged even before the new regulation.⁴⁹

Her father, Christian Kølle established a boarding school for boys from the bourgeoisie on Snarøya (outside Oslo), which operated until 1892. Teaching may have motivated him to publish articles and books, and to participate in discussions on education, religion, Latin grammar, and the Danish-Norwegian language. In the book *Is it reasonable to have religion? And which of the many is the most sensible one?* [*Ær dæt Fårnuftigt at have Religion? åk Vilken av så mange ær dæn Fårnuftigste?*], published in 1794, he discussed relations between religion and reason.⁵⁰ His enthusiasm for language and grammar had one outlet in the publication *Short education for beginners in the High-German Language, with German-Danish dictionary* [*Kort Undervisning for Begyndere i det Høy-Tyske Sprog, med tydsk og dansk Ordbok*].⁵¹ The folklore collector, Thrond S. Haukenæs, has written about the nature and residents of the Hardanger area. In *Nature, Folk life, and Folk Beliefs* [*Natur, Folkeliv og Folketro*], in the chapter entitled “The Holmen Maidens” – which was the nickname given to the three sisters while they were living in Ulvik, in Hardanger – Haukenæs wrote that the father was his daughters’ teacher, “and not any lazy teacher either.” Catharine, in particular, had accumulated a wealth of knowledge and had learned several languages.⁵² Regarding her upbringing, Catharine wrote in her short autobiography that she stayed two years in Christiania, the Norwegian capital, learning to sew, embroider, draw, and do lace-work.⁵³ The parents believed that girls needed to be educated, and this might be viewed as a direct consequence of the father’s position as a teacher. One might also assume that the girls’ father, Christian Kølle, was influenced by the Moravian community in Christiansfeld, Denmark.⁵⁴

49 Ida Bull, “Leseopplæring og lesebehov i norske byer for 1750,” *Heimen* 52 (2015): 266.

50 Kølle, *Kort Beskrivelse over Snarøen*, 1794.

51 I have not been able to locate Kølle’s publication, but it is referenced in the entry “Kølle” in a biographical dictionary of learned men in Denmark, Norway, and Iceland: Jens Worm, *Forsøg til et Lexicon over danske, norske og islandske lærde Mænd, som ved trykte Skrifter have gjort sig bekendte, saavel som andre Ustuderede som noget have skrevet, hvorudi deres Fødsel, betydeligste Levnets Omstændigheder og Død ved Aarstal kortelig erindres, og deres Skrifter, saavidt mueligt, fulstændig anføres af Jens Worm, Professor Philosophiae ved Kiøbenhavns Universitet, og Rector ved den latinske Skole i Aarhuus* (Kjøbenhavn: Gyldendals Forlag hos August Friderich Stein, 1784), 427.

52 Th. S. Haukenæs, *Natur, Folkeliv og Folketro: belyst ved Natur- og Folkelivsskildringer, Eventyr, Sagn, Fortællinger o.s.v. av ældre og nyere Tid* (Ulvik, Hardanger: Udgiverens Forlag, 1885), 259.

53 Catharine H. Kølle, “Selvbiografiske optegnelser av Catharine Hermine Kølle (f. 1788),” manuscript: ubb-ms-0659-d-01, accessed January 14, 2019, <http://marcus.uib.no/instance/manuscript/ubb-ms-0659-d-01.html>, 53. The page number refers to the digitalised version.

54 Ryall and Veiteberg, *En kvinnelig oppdagelsesreisende i det unge Norge*, 16.

Kølle's Painting of Christiansfeld

The Moravian community strongly emphasised education. They opened a boarding school for boys and girls, aiming to foster human qualities by combining ideas about children's autonomy, with a Christian message.⁵⁵ Women played an active role in the Moravian communities. Girls learned to express themselves through painting and singing. This way of communication, theologian Elisabeth Engell Jessen argues in the present volume, was an expected way to dwell upon the life of Jesus, and to share inner religious experiences and feelings.⁵⁶ In the years 1793–1807, eighteen Norwegian girls were inscribed into the Christiansfeld School. Catharine was not amongst them.⁵⁷ In her youth, however, Kølle visited her uncle David Monrad in Copenhagen, where she was eager to practise drawing.⁵⁸ Amongst Kølle's watercolours, we find a neat map of Christiansfeld (Fig. 15.5), which may imply that, although not as a regular pupil, she visited, or had some special interest in the Moravian town.⁵⁹ In sum, we can assume that Catharine, and her sisters, received far more education – both in total hours, and in different subjects – than was usual for girls at the time. In this way, education in her childhood and youth enabled her to mobilise different forms of knowledge transfer that were applicable, not only to her present life, but also to her future life. By theoretical and esthetical tactile knowledge and skills, she textualised, visualised, and materialised dreams, imaginations, experiences, and “facts.” Despite Kølle's relatively good education, however, and her access to intellectual spaces, there were still institutional barriers for women; access to university or to art academies was impossible.⁶⁰

Mapping Practices in the Periphery

In 1802, the Kølle family left eastern Norway to settle in Western Norway. After five years in Kopervik on Karmøy, on May 28, 1807, Christian Kølle and his three daughters moved to the small farm Holmen, in Ulvik, Hardanger. His wife, Elisabeth, remained in Kopervik as a “care patient” because of what is described as mental disorder. The farm was located on a small promontory in the fjord and was surrounded by high mountains

⁵⁵ Jens Holdt, “Kostskolerne i Christiansfeld,” *Sønderjydske Årbøger* 1 (1943): 25.

⁵⁶ See Chapter 4 (Elisabeth Engell Jessen), 86–107.

⁵⁷ Jens Holdt, “Elev-Fortegnelse fra Christiansfelds Kostskoler 1775–1891,” *Årbøger* 1 (1944): 117–8. Camilla Collet, who would become a famous Norwegian novelist, was also a pupil at the school at a later date.

⁵⁸ Ryall and Veiteberg, *En kvinnelig oppdagelsesreisende i det unge Norge*, 21.

⁵⁹ I will return to Kølle's Christiansfeld map below.

⁶⁰ The first female student enrolled at the University of Copenhagen was Nielsine Nielsen (1850–1916) in 1877. In 1884, women obtained access to the University of Oslo.

Fig. 15.5: *Christiansfeldt*, c.1826–1827, by Catharine Hermine Kølle. Signed C.K. Photo: Svein Skare © University Museum of Bergen.

with spectacular waterfalls. The farm also had a magnificent view of the Ulvikafjord.⁶¹ The Ulvikafjord is a branch of the Hardangerfjord, the second-longest fjord in Norway. After their father died in 1841 – Catharine was then 26, Helene 19, and Ambrosia 18 – the sisters lived alone at Holmen. Financially, they remained independent due to a modest inherited fund and a thrifty lifestyle.⁶² Their excellent needlework skills

⁶¹ Ulvik: *Gards- og ættesoga 1. Almennsoga og ein del gards- og ættesoge* (Ulvik herad: Bygdeboknemnda, Stavanger: Dreyer Bok, 1987), 386–7.

⁶² Ole T. Lekve, “Familien Kølle i Ulvik,” in *Hardanger* (Hardanger: Hardanger historielag, 1923).

enabled them to sell embroideries,⁶³ and the farm was regarded as an example to follow.⁶⁴ After their mother died in 1829, the financial situation became a little easier because they were no longer responsible for paying for their mother's care.⁶⁵

If Kølle's Jerusalem map was part of her knowledge work during her adult life, it was part of a broader intellectual network on the West Coast of Norway. I will introduce one moment – the dedication of a map – which can be analysed as an outcome of network mapping and efforts to create an intellectual space in the periphery of Norway. In 1825, the Protestant priest Niels Hertzberg (1759–1841) published his map, *Høiderne av de hidtil maalde Bjerger i Norske eller Rhinlandske Fødder* [*The Heights of the Previously Measured Mountains in Norwegian or Rhineland feet*].⁶⁶ An exceptional version of this map is stored in the local archive in Ulvik.⁶⁷ Unlike the two black-and-white etchings at the National Library in Oslo, this version is delicately coloured and has a handwritten dedication: “To Catharine Kølle from author Niels Hertzberg.” In this map, systematic comparisons based on measurements taken from the geology, mountains, glaciers, and plants of Norway, Europe, and the Americas, are turned into a pictorial landscape map. By doing so, Hertzberg transformed one or another version of the German writer and public official Johann Wolfgang von Goethe's (1749–1832) map *Höhen der alten und neuen Welt bildlich verglichen* [*Heights in the old and new World compared visually*] into a Norwegian version by removing, adding, and reframing the model.⁶⁸ Hertzberg was strongly engaged in scientific practices such as measuring heights, recording meteorological conditions, mapping, and writing reports from his municipality. On the map, he included many of his own measurements of the high mountains in the area, and some of the newest results from other scientists, like the height of the Himalayas.⁶⁹ Goethe's

⁶³ Gudrun Stuland, *Hardangerbunaden før og no* (Oslo: Fabritius Forlagshus, 1980), 41, 80; Gunvor Ingstad Trætteberg, *Handkledet og den seremonielle tildekning av hendene* (Oslo: Johansen og Nielsen Boktrykkeri, 1944), 20.

⁶⁴ Olav Kolltveit, *Granvin, Ulvik og Eidfjord i gamal og ny tid. Bygdesoga II* (Bergen: Granvin, Ulvik og Eidfjord Bygdeboknemd, 1977), 137.

⁶⁵ Ole T. Lekve, “Familien Kølle i Ulvik,” in *Hardanger*, (Hardanger: Hardanger historielag, 1924).

⁶⁶ Niels Hertzberg, *Høiderne av de hidtil maalde Bjerger i Norske eller Rhinlandske Fødder*, 1825. Lithography by L. Fehr & Søn. 34 x 47.6 cm. National Library of Norway, Map 216, 1. Thanks to Benedict Gramborg Briså at the National Library of Norway and Nils Voje Johansen for discussing and contributing to locate this map.

⁶⁷ Niels Hertzberg, *Høiderne av de hidtil maalde Bjerger i Norske eller Rhinlandske Fødder*, 1825. Lithography by L. Fehr & Søn. 34 x 47.6 cm., colored. Lokalhistorisk arkiv, Ulvik herad. Another coloured copy of the Hertzberg map is in the public library of Bergen; Bergen Offentlige Bibliotek, call number ff 912 H.

⁶⁸ Johann Wolfgang von Goethe, “Höhen der alten und neuen Welt bildlich verglichen. Ein Tableau vom Hrn. Geh. Rath v. Göthe mit einem Schreiben an den Herausg. der A. G. E.,” *Allgemeine geographische Ephemeriden* 41, no. 1 (1813): 3–8. Etching by Johann Christian Starck, acuatint print, 34.6 x 38.8 cm. Thüringen Universitäts- und Landesbibliothek.

⁶⁹ Skåden, “Scientific Relations and Production of Knowledge,” 362.

map was in turn an interpretation of Alexander von Humboldt's (1769–1859) text *Ideen zu einer Geographie der Planzen, nebst einem Naturgemälde der Anden* [Essay on the Geography of Plants] (1807); Humboldt's first volume was published after his five-year-long scientific journey to South and Central America in 1799–1804.⁷⁰ A main point was to compare heights, and to locate the zones of different plants. Hertzberg's map enables us to follow a Humboldt-Goethe-Hertzberg-Kølle relation whereby knowledge produced in places like South America, Paris, Berlin, Weimar, and Jena, ends up by several modifications, by subtracting and adding facts, in a small rural place in Hardanger, in Western Norway.⁷¹ It seems reasonable, furthermore, to interpret the dedication from Hertzberg to Kølle as his confirmation and acknowledgment of her contribution to the community of knowledge circulators and producers in a place regarded as the periphery. Despite the great age difference, Kølle and Hertzberg were friends and had common interests. They both owned a library, they were intellectually oriented towards the natural sciences, and they lived in an area and time that took great interest in reading and in collecting books.⁷² Moreover, both had skills in mapping and both drew different kinds of maps.

It is possible to categorize Kølle's maps in three different ways: The first category includes maps in which her local landscape was visualised with detailed information. This is an embodied landscape and knowledge – a landscape she knew from childhood with its seasonal colours, smells, and light. Her body knew the roads and routes, the vegetation and the geology, and she transformed all this embodied knowledge into lines on the map. The second category encompasses maps of places Kølle visited during her journeys. One example is the previously mentioned map of Christiansfeld: We may assume that she visited the town during on one of her journeys in Denmark, yet the map is a modification of an earlier printed map of Christiansfeld that she had probably seen in a library.⁷³ Kølle also made several other maps in Denmark; these are freehand drawings based on her close relation to the Danish landscape, which she knew very well. The third category contains maps of places she never visited. The Jerusalem map is one such

⁷⁰ Alexander von Humboldt and Aimé Bonpland, *Ideen zu einer Geographie der Pflanzen: nebst einem Naturgemälde der Tropenländer: auf Beobachtungen und Messungen gegründet, welche vom 10ten Grade nördlicher bis zum 10ten Grade südlicher Breite, in den Jahren 1799, 1800, 1801, 1802 und 1803 angestellt worden sind* (Tübingen, Paris; Bey F.G. Cotta: Bey F. Schoell, 1807).

⁷¹ Jean-Christophe Bailly, Jean-Marce Besse, and Gilles Palsky, *Le monde sur une feuille: Les tableaux comparatifs de montagnes et de fleuves dans les atlas du XIXe siècle* (Lyon: Fage Editions, 2014) shows how Goethe's maps of heights became a new genre with offshoots in several countries. Hertzberg's version is not included in this volume.

⁷² Kolltveit, *Granvin, Ulvik og Eidfjord i gamal og ny tid*, 389; G. Stoltz, "En gammel boksamling fra Ulvik, og dens eier," *Årsskrift Hardanger* (1945): 87.

⁷³ Ole Nielsen Flint, "Christiansfeld," <http://www.kb.dk/images/billed/2010/okt/billeder/object392737/da/>.

example. Despite all the details, the map is drawn by a person who did not personally experience the place in question, but based her description on her imagination, on possible models such as that of Lightfoot, and on stories from the Bible.

Fieldwork – and Bringing Things Home

The second moment I will bring into play is Catharine Kølle's writing in her travel diaries, and some letters written during her journeys. Catharine Kølle travelled extensively in Norway and even abroad; sometimes alone and sometimes together with one or both of her sisters. In 1838, she went to Stockholm, and in 1841, through Germany, all the way to Venice. Back home, by working diligently, she transformed what I want to conceptualize as her "field jottings" into a purely handwritten, hard-cover book with some self-drawn illustrations.⁷⁴ Through writing diaries, she was able to recall observations and experiences made on the road, bring them home, and share them with audiences in the local community. One way of doing this was by arranging gatherings – small-scale salons – where they discussed, read, and exchanged good stories, books, and information.

What was the motivation for this unusual and remarkable travel activity? The three sisters were unmarried. They were not following in a husband's footsteps, nor were they, like many contemporary men, commissioned to travel due to more or less professional activity. Kølle is thus in line with many other female travel writers; their accounts tend not to be prescribed by the need to satisfy a patron or a professional reputation.⁷⁵ One explanation for Kølle's travelling is the medical treatment she received in 1826 in Copenhagen, where Professor Vithusen encouraged her to walk as a cure for bad health. A simple walk in the neighbourhood was not enough for Kølle who had a "particular belief" in travelling as a remedy, as an observer remarked: "It was too much quietness that made people ill, she thought; travelling and a change of place were the best curative."⁷⁶ Her travels were a way out of the limited social and cultural opportunities offered by the location of her home, and

⁷⁴ Catharine H. Kølle, "Frk. Catharine Hermine Kølles Reisejournal 1838 og 1841," Manuscript: ubb-ms-0289, accessed January 14, 2019, <http://marcus.uib.no/instance/manuscript/ubb-ms-0289.html>. There are also other travel diaries written by Kølle in the archive. Most likely, they are the result of work along the road, and they have not undergone a similar processing.

⁷⁵ Jane Robinson, *Unsuitable for Ladies: An Anthology of Women Travellers* (Oxford, New York: Oxford University Press, 2001), xii.

⁷⁶ Haukenæs, *Natur, Folkeliv og Folketro*, 259. "Ho hadde ei ser Tru paa Reisur. Det var formykjet Roligheit, som gjorde Folk sjuke, meinte ho; Reising og Umbyting av Plass var den beste Lækjedom." My translation.

not an attempt to solve existential needs – in Kølle's time walking served this purpose for many less privileged women and men.⁷⁷

We get a glimpse of Kølle's investigative approach to her surroundings through her diaries. Her main method is to make comparisons by observing her surroundings and studying similar phenomena in museums and libraries. In a letter to a friend, she describes a reading situation and how she was engaging with art and science during a stay in Copenhagen in 1827. As a diligent guest in the royal reading room, she reads expensive books with and without copper engravings. The reading room is beautiful and there are two ovens: "In the middle of the floor is a large table, where usually many gentlemen are sitting and reading and writing, partly the cavalier with glasses, partly others. In the corner there is a small table, and at one of these where there is an oven, I have my seat."⁷⁸ She is taking part in a reading situation in one of the noblest places for the circulation of knowledge in the Nordic countries, but her physical location in the room, one might argue, can also serve as a metaphor for women's social place within knowledge regimes of the time.

Kølle's journeys appear as fieldwork; a way of collecting knowledge of places and environments revealed through mobility and interacting with one's surroundings.⁷⁹ The diaries can be interpreted as field diaries, where she writes down detailed observations and comparisons of nature, places, museums, castles, artwork, libraries, churches, and cities. One example is how she combines her religious practice with her interest in art by participating in a number of worship services, and by describing, comparing, and judging the quality of the interiors, paintings, and altarpieces in countless churches. Still, her strongest focus and sharpest gaze was directed towards nature: real landscapes seen outdoors and mediated landscapes exhibited in museums, galleries, newspapers, and books. She observes where trees and plants grow, how nature is transformed into aestheticized practices in parks and gardens, and into paintings of landscapes. She expresses her affection towards landscape paintings after a visit to a museum in Berlin in 1841, where most of the paintings were historical and biblical paintings; "so not entirely to my taste."⁸⁰ Rather, it seems that modest or small religious paintings aroused her enthusiasm.

⁷⁷ Karin Sagner, *Frauen auf eigenen Füßen. Spazieren, Flanieren, Wandern* (München: Elisabeth Sandmann Verlag, 2016), 13.

⁷⁸ "Midt paa Gulvet staar et stort Bord, hvorom plejer side mange Herrer der læser og skriver, dels Brillekavallierer dels andre. I Hjørnerne ere anbragte Smaaborde, og ved det af disse der staar nærmest Ovnene, har jeg min Plads." My Translation. Letter from Kølle to Iver Paulsen Lekve, March 31, 1827. Ms 1124, Bergen University Library, Bergen.

⁷⁹ Kent Mathewson, "'In Camp' and 'Out of Bounds': Notes on the History of Fieldwork in American Geography." *Geographical Review*, 91/1/2 (2001): 215.

⁸⁰ Kølle, *Frk. Catharine Hermine Kølles Reisejournal 1838 og 1841*, Tuesday 1, July, 1841.

In a small church outside Salzburg, she contemplates paintings of Jesus on the Cross, and of the Crucifixion in Jerusalem, and she found these more pleasing than the large history paintings of the museums.⁸¹

Writing diaries was one way of recalling observations and experiences, and of modulating the circulation of knowledge. An additional strategy was painting the previously mentioned maps and watercolour prospects. Most of the paintings are landscape studies and prospects of places in vivid colours, with an attention to small details. Some are from her home area; others are inspired by her travelling. Kølle usually worked with watercolours, as she did when mapping Jerusalem. Watercolour pigments and brushes were lightweight and portable. Hence, in the nineteenth century, for women who went abroad – often with strong artistic training although still amateurs – water colouring became a versatile tool for recording, documenting, and communicating changes in their lives.⁸²

Religious Images

The last theme I want to introduce is a small, yet notable collection of watercolour paintings with religious motifs. These religious paintings distinguish themselves from Kølle's main art production, which is focused on various forms of motifs taken from nature. These religious motifs demonstrate, once again, that Kølle's knowledge work involved both religious and profane aspects.

The religious paintings are undated, like the Jerusalem map, and thus no further connection can be established between the map and the paintings apart from their obvious Christian focus.

One motif among the religious paintings shows Jesus in Gethsemane, the garden at the foot of the small hill – the Mount of Olives – on the eastern ridge of Jerusalem.⁸³ The place where Jesus stayed the night before the Crucifixion, according to Christian tradition, is also included in Kølle's Jerusalem-map and marked with number 22.

Kølle's religious motifs were often inspired by other artworks. The image of the *Baptism of Christ* (Fig. 15.6), for example, builds on a well-known renaissance composition by Andrea del Sarto, in the Chiostrò dello Scalzo (c.1511–1526).⁸⁴ Details in other images point, on the other hand, to more "classicistic" models. There are elegant

⁸¹ Kølle, *Frk. Catharine Hermine Kølles Reisejournal 1838 og 1841*, July 1841.

⁸² Jordan Pomeroy, "'We Got Upon Our Elephant & Went Out After Subjects': capturing the world in watercolor," in *Intrepid Women: Victorian Artists Travel*, ed. Jordana Pomeroy (Aldershot: Ashgate, 2005), 39–40.

⁸³ Kølle, untitled. Watercolour, 240 x 193 mm. Lokahistorisk arkiv, Ulvik herad.

⁸⁴ Kølle, untitled. Watercolour, 239 x 193 mm. Lokahistorisk arkiv, Ulvik herad.

Fig. 15.6: *The Baptism of Christ*, undated and untitled, by Cathrine Hermine Kølbe. Lokalhistorisk arkiv, Ulvik herad. Photo: Knut Aslaksen © University Museum of Bergen.

landscapes with obelisks and vases, for example, which seem to be inspired by imagery of the last half of the seventeenth century and the first half of the eighteenth century.

Although many of the religious motifs appear to be based on various prototypes – unlike most of her profane images – the religious images are not mere copies, but independent works that exhibit her skill and her creative, thoughtful gaze.⁸⁵

⁸⁵ One rare example of a profane motive she modified was the “Niagara-fossen seet fra Traffelklippen,” from one or another version of the many sublime Niagara Falls pictures. See: Spesialsamlingene ved Universitetsbiblioteket i Bergen “Niagara-Fossen Seet fra Taffelklippen,” <http://marcus.uib.no/search/?q=k%C3%B8lle%20niagara>; and Isaac Weld, “View of the Horse Shoe Fall of Niagara,” in *Travels Through the States of North American in 1795, 1796 and 1797* (London: Printer for John Stockdale, Piccadilly, 1799), opposite p. 313 in Elizabeth McKinsey, *Niagara Falls: Icon of the American Sublime* (Cambridge: Cambridge University Press, 1985), 45. An awareness of and interest in the Niagara waterfall is demonstrated by articles in Norwegian newspapers and magazines around the middle of the nineteenth century. See: Torild Gjesvik, “The Road in Art: Three Cases from Nineteenth-Century Norway,” (PhD diss., University of Oslo, 2014), 136.

Conclusion

The map of Jerusalem, as mapped by Kølle, is a material expression of her religious life and her scientific interests and knowledge. I have argued that her practices are more than private amusement; rather, they can be interpreted as contributions to history of knowledge. The Jerusalem map was designed within a network of knowledge producers and knowledge circulators in Norway, whom had strong links to international communities engaged in science. Kølle was, by a variety of methods and tools, studying the agricultural, religious, scientific, and aesthetic aspects of landscapes. Despite different systems of restrictions – such as no access to higher education or a publisher for her works; among them the Jerusalem map, her diary, and her paintings – the three ladies' farm at the end of a long fjord in Norway was not only a place for fruit trees and farming: The Kølle home stands out as a household producing and circulating knowledge.

We don't know whether Kølle's map and work was seen outside her home and thereby known to a larger public. During her journeys and when back home in Ulvik, however, her know-how and skills were circulated through discussions and teaching, and her Jerusalem-map may have been an actor in this knowledge work. A local initiative in the first half of the twentieth century, which aimed to preserve her house by granting it a Permanent Protection Order, expresses a recognition of Kølle's contributions to the circulation of knowledge.⁸⁶ The initiative did not succeed, unfortunately, but Kølle's maps, texts, and drawings now receive renewed attention.

Appendix

My English translation of Kølle's text is based on the texts from two versions of the Lightfoot map. The original Norwegian titles from Kølle's text are provided in brackets.⁸⁷

1. Titus's Camp, [*1 Titi Lejr*].
2. Pompey's Camp, [*2 Pompeji Lejr*].
3. The Royal Fishpond or The Kings Pool, [*3 Den Kongelige Fiske-Dam*].
4. The King's Garden, [*4 Kongens Have*].
5. The Lower Fishpond or The Pool Shelah or lower pool, [*5 Den nedre Fiske-Dam*].
6. The water main Etam, or Etam Conduit, [*6 De Vandledning Etam*].

⁸⁶ "Holmen. Køllehuset," c.1935–1953. Riksantikvarens bilde-, tegnings- og dokumentarkiv, RAKV-S-6224-D-Db-Db12-0085-0021-0001, Riksantikvaren, Oslo.

⁸⁷ I want to thank Inger-Karin Martinsen for transcribing the handwritten original. My translation into English.

7. Calvary, [7 *Golgatha*].
8. Siloah water, or Gihon, or Fountain of Siloam or Gihion, [8 *Siloæ Vande, eller Gihon*].
9. The Valley with the same source or The Valley of the Fountain of Siloam, [9 *Dalen af samme Kilde*].
10. Tower of Eder, or Migdal Eder, [10 *Det Taarn Eder*].
11. The place to colour or bleach, or Ager Fullonis, [11 *Farver- eller Bleger-Sted*].
12. The Field of Blood, Aceldama, [12 *Blod-Ageren Hacheldama*].
13. The Hinnom Valley, or Topheth or Vallis Hinnon sive Tophet, [13 *Den Dal Hinnon eller Tophet*].
14. Camp of the Assyrians, or The Tents of the Assyrians, [14 *De Assyriers Lejr*].
15. Mons Offensionis, Mons Corruptionis [15 *Fordervelsens Bjerget, Mons Corruptionis*].
16. The Bathing-Place, or Lavacrum, [16 *Bade-Stedet*].
17. Bethany, or Bethania [17 *Bethanien*].
18. Two cedar trees, or Duæ cedri [18 *To Ceder Træer*].
19. Signs of the fire in the Valley of Hinnom, or Signa ignis, [19 *Tegn til den Ild, som blev holdt i Hinnons Dal*].
20. Where the red cow was burned [20 *Der, hvor den røde Koe blev brændt*].
21. Kidron Valley, where Kidron's creek flowed or Vallis Kidron, [21 *Kedrons Dal, hvor Kedrons Bæk gik*].
22. Gethsemane, [22 *Gethsemane*].
23. Gardens outside the City [23 *Haver, uden for Byen*].
24. The outermost tower or the tower lying out, or Turris exterior. [24 *Det yderste Taarn*].
25. Herod's burial place, or Herodes monumentum, [25 *Herodis Begravelses Sted*].
26. The Mountain of Zophim, or Mont Zophim, [26 *Det Bjerg Sophim*].
27. The Almond Fish Pool, or the Almond Pool, or Piscina Amigdale, [27 *Amigdelæ Fiske-Dam*].
28. House Lebanon and Regia/Kings Palace, [28 *Det Hus Libanon og Slottet*].
29. The Wool-Market, [29 *Uld-Torvet*].
30. Xystus, a tower. [30 *Xystus, et Taarn*].
31. Asmoneans castle, [30 *Asmoneernes Slot*].
32. The prison house, or the city's prison, or court of the Prison, [32 *Fange Huset, eller Stadens Fængsel*].
33. The road from the castle to the temple, [33 *Vejen fra Slottet til Templet*].
34. The fish pond full of pipes, Piscina Juncosa, [34 *Den Fiske-Dam fuld af Rør, Piscina Juncosa*].
35. The tower Antonia, [35 *Taarnet Antonia*].
36. The gate Tedi, a gate to the temple to the north, [36 *Porta Tedi, en Port til Templet mod Norden*].

37. The gate Shallecheth, a gate to the temple to the west, [*37 Porta Schalechet, en Port til Templet mod Vesten*].
38. The gate Parbar, a gate to the temple to the west, [*38 Porta Parbar, en Port til Templet mod Vesten*].
39. Port Regis, the Kings gate to the temple, [*39 Porta Regis, Kongens Port til Templet*].
40. Port Equina, the horse gate, [*40 Porta Eqvina, Hæste Porten*].
41. The King's stables, or Stabula Regis, [*41 Kongens Stalde*].
42. Moriah, or the mountain of the temple, [*42 Moria, eller Templets Bjerg*].
43. The road to the Temple, [*43 Gaden til Templet*].
44. Bethpage, [*44 Betphage*].
45. The road from Bethpage to the Temple, [*45 Vejen fra Betphage til Templet*].
46. The water gate, or Porta Aqua, [*46 Vand-Porten*].
47. The water Etam, or Aqua Etam, [*47 Det Vand Etam*].
48. Ophel, [*48 Ophel*].
49. The horse gate, or Porta Equorum, [*49 Hæste-Porten*].
50. Tower of Siloam [*50 Siloa Taarn*].
51. Pool of Siloam, or pool of Bethesda, [*51 Siloa Dam, eller Betesta Dam*].
52. Porta Miphkad, or the Gate of Commandment, [*52 Porta Miphgad eller Befalings Porten*].
53. 53 The Sheep Gate, [*53 Faare-Porten*].
54. The Sheep Market, [*54 Faare-Torvet*].
55. The Tower of Meah, [*55 Det Taarn Meah*].
56. Tower of Hananeel, [*56 Det Tarn Hananael*].
57. The Fish Gate, [*57 Fiske-Torvet*].
58. The Fish Market [*58 Fiske-Torvet*].
59. The Old Gate [*59 Den gamle Port*].
60. The Chicken Market, [*60 Høse-Torvet*].
61. The City Hall, [*61 Raad-Huset*].
62. The Archive [*62 Archiv*].
63. The Gate of Ephraim, [*63 Ephraims Port*].
64. The road from the Gate of Ephraim, [*64 Gaden fra Ephraims Port*].
65. The Broad Wall, [*65 Den brede Mur*].
66. The Corner's Gate, [*66 Hjørne-Porten*].
67. Turris Fornacaria, the Oven Tower, [*67 Turris Fornacaria, Ovne-Taarnet*].
68. The Valley's gate, [*69 Dal-Porten*].
69. Tyropaeon or the Long Road, Tyropaeon or the valley and street of Cheesemongers, [*Tyropæum, eller Hoker (?) -Dalen, den lange Gade*].
70. The Dung Gate, [*70 Møg-Porten*].
71. Fountain Gate, Water Gate, [*71 Porta Fontis, Vand-Porten*].
72. The way up to the City of David, [*72 Opgangen til Davids Stad*].

- 73. David's Grave, [73 Davids Grav].
- 74. Armoury, [74 Rust-Kammeret].
- 75. The House of the Mighty, [76 Den Mægtiges Hus].
- 76. The Tower of Psephinus, [76 Sephini Taarn].
- 77. Caenopolis, or the New City, [77 Cænopolis eller den nye Stad].