Chapter 1

THE TRANSFORMATION
OF FRANKISH JERUSALEM
History, Historiography and New Methodologies

The conquest of Jerusalem in 1099 was recorded in numerous chronicles that circulated widely in the medieval West. Shortly thereafter, Christian pilgrims to the Holy Land were supplementing conquest-related depictions of Jerusalem with descriptions of the city's sacred topography and main religious shrines, thus continuing the rich and enduring tradition of pilgrimage itineraries. Maps of Jerusalem that accompanied some of these texts added to the textual and visual imagery that developed after the conquest. Both narrative and pictorial sources offered a panoramic view of the cityscape and a similar perception of its space, reflecting significant interest in the city's monumental edifices and religious worship sites. In these texts, Jerusalem is defined as the sum of its major monuments. This focus has been absorbed into the scholarship and is reflected in the tendency to emphasise Jerusalem's symbolic transformation as manifested in its monumental skyline.[1]

Echoing the dominant emphases of narrative sources on the monumental landscape, archaeological studies similarly focused on the reconstruction of walls, important shrines and the basic layout of major streets and markets.[2] These sources have been employed to determine

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[1] Sections of this chapter and Chapter 2 expand and provide updated data on issues first discussed in A. Gutgarts, 'The Earthly Landscape of the Heavenly City: A New Framework for the Examination of the Urban Development of Frankish Jerusalem', *Al-Masāq: Journal of the Medieval Mediterranean*, 28 (2016), 265–81.

[2] See Pringle, *The Churches*; Boas, *Jerusalem in the Time of the Crusades*. For works on specific monuments, see J. Seligman, 'A Wall Painting, a Crusader Flood Diversion Facility and Other Archaeological Gleanings from the Abbey of the Virgin Mary in the Valley of Jehoshaphat, Jerusalem', in D. L. Churpcala (ed.), *Christ Is Here! Studies in Biblical and Christian Archaeology in Memory of Michele Piccirillo, OFM* (Milan, 2012), pp. 185–220; D. Vieweger and S. Gibson (eds.), *The Archaeology and History of the Church of the Redeemer and the Muristan in Jerusalem* (Oxford, 2016); M. Biddle (ed.), *The Church of the Holy Sepulchre* (New York, 2000); Y. Zelinger, M. Haber and V. Shotten-Hallel, 'Jerusalem's Via Templi: A Twelfth-Century Builder's Exercise', *New Studies in the Archaeology of Jerusalem and Its Region*, 11 (2017), 226–38 (in Hebrew); S. Gibson and R. Y. Lewis, 'Capturing Jerusalem: The Fātimid/Seljuk, Crusader, and Ayyūbid Fortifications, Ditches, and Military Outworks of the City', *Journal of Medieval Military History*, 21 (2023), 1–74.

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the location and appearance of certain monuments at different points during the twelfth century. However, as noted in the Introduction, these inquiries tend to overlook the more prosaic aspects of urban development. Moreover, they perpetuate a perception of the cityscape as a sacred topography of pilgrimage, veneration and conquest, rather than a lived space whose sacrality was circumscribed by the practices of everyday life.

A third category of sources, namely diverse documents reflecting the activity of the city's main religious institutions, provides a complementary image, albeit, as we shall see, a fragmented one. Many of the archives of the Latin Kingdom were lost after its final fall in 1291. The majority of the documents that survived can be found in cartularies of the main religious institutions and military orders that operated in the Latin East, which were brought to western Europe in the wake of the Mamluk conquest. Printed editions of such cartularies as well as individual documents retrieved by scholars have been published since the nineteenth century.[3] These documents range from decrees concerning the establishment, structure and function of various Jerusalemite institutions, to records of legal disputes and property transactions concerning individuals who represented different social strata in the Frankish society. Due to the practical and legal purposes of these documents, they do not offer an overview of the city such as can be found in other contemporary textual sources. Instead, following the conventions of their time, they provide relative coordinates that rely on the parties' acquaintance with the cityscape. They describe, in a rather haphazard way, the state of a particular edifice at the particular point in time when the document was drafted. Due to the scattered and fragmentary nature of such documents, they provide only isolated glimpses into mundane moments of municipal activity. Nonetheless, such glimpses constitute an invaluable source that sheds light not only on the physical development of lived spaces but also on socio-economic, legal and institutional interactions.

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[3] The first edition of a corpus that aimed to encompass summaries of all the Frankish documents was R. Röhricht (ed.), *Regesta Regni Hierosolymitani (MXCVII–MCCXCI)* (Innsbruck, 1893–1904). Other publications provided full-text editions of some of the documents summarised by Röhricht, as well as others, not included in his corpus. See Geneviève Bresc-Bautier (ed.), *Le cartulaire du chapitre du Saint-Sépulcre de Jérusalem* (Paris, 1984); an earlier version of the cartulary was published in the middle of the nineteenth century by M. Eugène de Rozière (ed.), *Cartulaire de l'église du Saint Sépulchre de Jérusalem* (Paris, 1849); H. F. Delaborde (ed.), *Chartes de Terre Sainte provenant de l'abbaye de N.-D. de Josaphat* (Paris, 1880); H. E. Mayer (ed.), *Die Urkunden der lateinischen Könige von Jerusalem.* Monumenta Germaniae Historica. Diplomata regum Latinorum Ierosolymitanorum, 4 vols (Hanover, 2010); H. F. Delaborde (ed.), *Chartes de Terre Sainte provenant de l'abbaye de N.-D. de Josaphat* (Paris, 1880); C. Kohler, 'Chartes de l'abbaye de Notre-Dame de la vallée de Josaphat en Terre-Sainte (1108–1291)', *Revue de l'Orient Latin*, 7 (1899), 108–222.

This book aims to bridge the historiographic divide between the image of Jerusalem as a sacred space, as it emerges from chronicles and pilgrimage accounts, and the lived environment that can be reconstructed on the basis of the documentary material. In order to present Frankish Jerusalem as a dynamic urban landscape, this study draws on recent advances in the scholarship of medieval urban environments, shaped by the spatial turn, and historical geography. Perhaps the greatest debt, however, is to the burgeoning use of databases of medieval documents as a subfield of digital humanities (DH), which allows us to offer a new approach to the analysis of the documentary evidence and to reintegrate the earthly and the heavenly city into a more coherent representation of the multilayered landscape of Frankish Jerusalem.

The use of the documents that stand at the centre of the present study in the historiography of Frankish Jerusalem has been to a large extent shaped by their main traits, namely their kaleidoscopic and rather scattered nature. In studies focused on the reconstruction of the cityscape from spatial and archaeological perspectives, the documents have mainly been used in an auxiliary manner, complementing the narrative sources in order to delineate and locate different areas or monuments at various points throughout the twelfth century.[4] Conversely, the documents were amply used in studies of the institutions of the Latin East, as well as prosopographic studies that, together with a close scrutiny of each individual document, clarified the relationship between interrelated documents. Hans E. Mayer, Joshua Prawer and, later, Christiane Tischler have each painted a vivid picture of prominent figures from different ranks of Frankish Jerusalem's society, and in so doing elucidated broader

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[4] Consider, for example, the use of documents in Bahat, 'Topography and Archaeology'; Boas, *Jerusalem in the Time of the Crusades*, particularly in the chapters referring to the physical layout; Pringle, *The Churches*, vol. 3. Recently, several documents, outstanding in the spatial information which they provide, did merit independent discussion. See, for example, R. Hiestand, 'Gaufridus abbas Templi Domini: An Underestimated Figure in the Early History of the Kingdom of Jerusalem', in P. Edbury and J. Phillips (eds.), *The Experience of Crusading*, vol. 2, *Defining the Crusader Kingdom* (Cambridge, 2003), pp. 55–56; M. Ehrlich, 'The Ovens of the Holy Sepulchre during the Crusader Period', *New Studies on Jerusalem*, 16 (2010), 361–68 (in Hebrew); D. Pringle, 'A Rental of Hospitaller Properties in Twelfth-Century Jerusalem', in S. Edgington and H. J. Nicholson (eds.), *Deeds Done beyond the Sea: Essays on William of Tyre, Cyprus and the Military Orders Presented to Peter Edbury* (Farnham, 2014), pp. 181–96. For several earlier studies applying this approach to Frankish settlements outside Jerusalem, see R. Ellenblum, 'Colonization Activities in the Frankish East: The Example of Castellum Regis (Mi'ilya)', *The English Historical Review*, 111 (1996), 106–15; R. Kool, 'The Genoese Quarter in Thirteenth-Century Acre: A Reinterpretation of Its Layout', *'Atiqot*, 31 (1997), 187–200, especially 191–96; M. Mack, 'The Italian Quarters of Frankish Tyre: Mapping a Medieval City', *Journal of Medieval History*, 33 (2007), 147–65; P. Arad, 'Thanks to a Neighbour's Bad Reputation: Reconstructing an Area of Thirteenth-Century Acre', *Crusades*, 5 (2006), 193–97.

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socio-economic, legal and institutional issues.[5] However, within this framework the cityscape tended to remain in the background, serving as a fixed arena for the events and processes charted in these studies. In that sense, while these studies were concerned with events, institutions and social structures situated in Jerusalem, they did not deal with the history of the cityscape in its own right and therefore did not ground their subjects in a broader spatial context.

An exception is the question of the division of jurisdiction in the city between the king and the patriarch (an issue I expand on in Chapters 2–4). However, even in studies that tackled this issue, the primary concern remained the legal and institutional implications of this division, rather than its impact on socio-economic processes and their reciprocal connection to the urban fabric at large. Moreover, in the debate over this matter, scholars attempted to reach a conclusion that would be applicable to the entire duration of the Frankish rule in Jerusalem in the twelfth century.[6] This tendency represents a broader historiographical standpoint, already demonstrated in the Introduction, in regard to Frankish Jerusalem, according to which its institutions remained essentially static throughout the period of Latin rule.

The aforementioned approaches have disregarded aspects associated with Jerusalem's functions as a vibrant and dynamic urban space shaped by the daily practices of pilgrims, inhabitants, officials and institutions. Only recently has scholarly interest begun to shift towards more intricate perceptions of Jerusalem's urban space, emphasising the customs and practices of pilgrims and inhabitants, and their manifestations in the ever-evolving cityscape. This line of inquiry brings to the fore the complex forces that stimulate urban change and calls for a fresh consideration of other mechanisms that shaped the urban environment, extending the scope beyond the city's symbolic landscape.

A more comprehensive methodological approach, then, is needed in order to incorporate the documents, hitherto studied in a narrow context of Jerusalem's urban layout, in a broader study of economic and institutional processes and their spatial manifestations. A systematic examination of the intersection of these two facets, common in

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[5] See H. E. Mayer, 'Studies in the History of Queen Melisende of Jerusalem', *Dumbarton Oaks Papers*, 26 (1972), 93–182; H. E. Mayer, 'Ehe Und Besitz Im Jerusalem Der Kreuzfahrer', in J. France and W. G. Zajac (eds.), *The Crusades and Their Sources: Essays Presented to Bernard Hamilton* (Aldershot and Brookfield, 1998), pp. 155–68; H. E. Mayer, 'King Fulk of Jerusalem as City Lord', in P. Edbury and J. Phillips (eds.), *The Experience of Crusading*, vol. 2, *Defining the Crusader Kingdom* (Cambridge, 2003), pp. 179–88; Prawer, *Crusader Institutions*, 296–314; C. Tischler, *Die Burgenses von Jerusalem Im 12. Jahrhundert: Eine Prosopographie Über Die Nichtadligen Einwohner Jerusalems von 1120 Bis 1187* (Frankfurt am Main, 2000).

[6] Prawer, *Crusader Institutions*, 296–314; Mayer, 'King Fulk', 179–88.

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the historiography of medieval urban settlements elsewhere, will help to clarify the mechanisms that propelled the city's urban change.

Reflections on the possibility of positioning Jerusalem's urban development within a wider context have thus far considered the evidence too scanty to form an encompassing framework.[7] This notion is reinforced by the uneven chronological spread of the chronicles, the literary tropes that shaped chronicles and pilgrims' accounts, and the loss of a significant portion of the documents after the fall of the Latin Kingdom.[8] However, exploiting methodologies applied in the study of other medieval urban environments in the past decades, I argue otherwise. The modification of these methodologies and their application to Frankish Jerusalem facilitates the incorporation of seemingly fragmentary evidence extracted from the documents into a new framework that enables us to root a systematic examination of socio-economic change within a transforming urban setting. The following sections briefly survey some of the main methodological currents that this approach builds upon.

I.I FROM DOCUMENT TO DATABASE: MEDIEVAL PROPERTY DOCUMENTS AND THE DYNAMICS OF SETTLED ENVIRONMENTS

The use of diverse types of documents, including records of taxation, land demarcation and other socio-economic interactions, as sources for the study of the dynamics of settled environments in the Middle Ages is widespread in European historiography. Since the 1970s, this branch of scholarship has been making increasing use of computerised methods that facilitate the retrieval and analysis of data extracted from historical documents.[9]

The 1990s witnessed a shift towards a closer inspection of documents recording more complex forms of property transactions, similar to those

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[7] See, for example, Pringle, 'A Rental', 193. For attempts to address specific questions, such as property values, through an analysis of the documents, see A. J. Boas, *Domestic Settings: Sources on Domestic Architecture and Day-to-Day Activities in the Crusader States* (Leiden and Boston, 2010), pp. 221–39, especially table 6, p. 230; Tischler, *Die Burgenses*, 229–43; Mayer, *Von der Cour des Bourgeois*, 232.

[8] On the loss of documents, see, for example, Tischler, *Die Burgenses*, 3.

[9] For example, the pioneering work of David Herlihy on medieval Tuscany and particularly his and Christiane Klapisch-Zuber's study of the Florentine *catasto*. See D. Herlihy, *Medieval and Renaissance Pistoia: The Social History of an Italian Town* (New Haven, 1967); D. Herlihy and C. Klapisch-Zuber, *Les Toscans et leur familles: Une étude du Catasto florentin de 1427* (Paris, 1978). On the conversion of 'repetitive' sources such as the *catasto* into numerical data, see M. Zerner, 'Un type de document répétitif fournissant des données quantitatives: Les cadastres de 1414 du Comtat Venaissin', in C. Violante, A. Vauchez and L. Fossier (eds.), *Informatique et l'histoire médiévale: Actes du colloque de Rome (20–22 Mai, 1975)* (Rome, 1977), pp. 157–64.

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found in the Latin East. This spurred a spate of studies that mined archival material from institutional, predominantly monastic, networks in specific regions.

The main historiographic innovation of these studies was the incorporation of anthropological and sociological theory into the examination of medieval property transactions, as demonstrated in the studies of Stephen White, Barbara Rosenwein and others.[10] This approach highlighted not only the role of land exchanges in the evolving economy and legal institutions of the High Middle Ages, but also the role of gifts of landed estates as catalysts for the formation of socio-economic structures.[11] Thus, it demonstrated the importance of land as both an economic and a symbolic resource in medieval economies.[12]

The significance of this historiographical trend extended beyond the subject matter itself, since the analysis of a vast number of documents could be achieved only by converting them into quantifiable data. This yielded yet another methodological shift, as the document ceased to be the main unit of reference and was instead deconstructed down to its elementary components. This methodology produced a previously unavailable analysis of the different layers of information and multiple transactions contained in a given document.[13] The transition to an analysis that was centred on transactions, rather than on documents or entire cartularies, drew renewed attention to the characteristics of different documents, the modes and circumstances of their transmission and production, and the impact of these differences on the documents' social functions.[14]

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[10] See S. D. White, *Custom, Kinship, and Gifts to Saints: The Laudatio Parentum in Western France, 1050–1150* (Chapel Hill and London, 1988); B. Rosenwein, *To Be the Neighbor of Saint Peter: The Social Meaning of Cluny's Property, 909–1049* (Ithaca, 1989); C. B. Bouchard, *Holy Entrepreneurs: Cistercians, Knights, and Economic Exchange in Twelfth-Century Burgundy* (Ithaca, 1991). For the legal aspects of medieval property transactions, see E. Zack Tabuteau, *Transfers of Property in Eleventh-Century Norman Law* (Chapel Hill and London, 1988).

[11] For a comprehensive discussion of this approach, see A.-J. A. Bijsterveld, 'The Medieval Gift as Agent of Social Bonding and Power', in A.-J. A. Bijsterveld, *Do ut Des: Gift Giving, Memoria, and Conflict Management in the Medieval Low Countries* (Hilversum, 2007), pp. 21–50. For the use of anthropological theory in the analysis of land transactions, see F. Weber, 'De l'anthropologie économique à l'ethnographie des transactions', in L. Feller and C. Wickham (eds.), *Le Marché de la terre au Moyen Âge* (Rome, 2005), pp. 29–48.

[12] See Rosenwein, *To Be the Neighbor of Saint Peter*, chapters 2–4; C. Wickham, 'Land Sales and Land Market in Tuscany in the Eleventh Century', in *Land and Power: Studies in Italian and European Social History, 400–1200* (London, 1994), pp. 257–74.

[13] For a review of the basic structure of such documents, see, for example, R. Sharpe, 'Charters, Deeds and Diplomatics', in F. A. C. Mantello and A. G. Rigg (eds.), *Medieval Latin: Introduction and Bibliographical Guide* (Washington, DC, 1996), pp. 230–40.

[14] For the role of cartularies in the formulation of a sacred narrative of the past, see C. Bouchard, 'Monastic Cartularies: Organizing Eternity', in A. J. Kosto and A. Winroth (eds.), *Charters, Cartularies, and Archives: The Preservation and Transmission of Documents in the Medieval West – Proceedings of a Colloquium of the Commission Internationale de Diplomatique (Princeton and*

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This shift can be paralleled to the notion of 'distant reading', a term coined by Franco Moretti in 2000 in the context of literary studies. Moretti suggested that academic research should move away from the close scrutiny of a narrow literary canon to a large-scale analysis of entire literary corpora, enabled by the deconstruction of the texts into diverse subunits such as genres, tropes and themes.[15] Similarly, the transition from an exclusively prosopographic to a quantitative reading of medieval documents expanded the scope of the analysis, which can now include *longue durée* patterns and new, previously inaccessible, angles.[16] This was not a one-way transition but rather a shift that opened new avenues of inquiry, which complemented previous methods and approaches. The oscillation between close and distant reading of the documents and the challenges it yielded, namely converting sources that resist the standard categorisations imposed by modern computer analysis into a functional database, helped to crystallise and transform notions concerning legal and social mechanisms, and raised new research questions.

Thus, for example, the need for precise categorisation that stemmed from the conversion of the documents into a database highlighted the difficulty in distinguishing between different types of economic exchanges that were often concealed by generic formulae. This difficulty introduced new elements into the debates concerning the demarcation between different types of transactions and the socio-economic relationships they implied.[17]

While the use of computerised methods in historical research continued to develop throughout the second half of the twentieth century, especially as user-friendly data analysis platforms became household items, it was not until the past decade that historians witnessed the meteoric rise of DH as an independent field and began to grasp its impact on their discipline.[18]

New York, 16–18 September 1999) (Toronto, 2002), pp. 22–32. On the transition between document and cartulary, see G. Declercq, 'Originals and Cartularies: The Organization of Archival Memory', in K. Heidecker (ed.), *Charters and the Use of the Written Word in Medieval Society* (Turnhout, 2000), pp. 147–70.

[15] F. Moretti, 'Conjectures on World Literature', *New Left Review*, 1 (2000), 56–58.

[16] J. Guldi and D. Armitage, *The History Manifesto* (Cambridge, 2014), chapter 4, especially pp. 89–95.

[17] See, for example, Bouchard, *Holy Entrepreneurs*, 62–65; Bijsterveld, 'The Medieval Gift', 37. For an early discussion of the conversion of textual materials into data, see, for example, R.-H. Bautier, 'Les demandes des historiens à l'informatique: La forme diplomatique et le contenu juridique des actes', in C. Violante, A. Vauchez and L. Fossier (eds.), *Informatique et l'histoire médiévale: Actes du colloque de Rome (20–22 Mai, 1975)* (Rome, 1977), pp. 179–86.

[18] On the impact of DH in historical disciplines, see T. Weller, 'Introduction: History in the Digital Age', in T. Weller (ed.), *History in the Digital Age* (Abingdon and New York, 2013), pp. 1–19; S. Robertson, 'The Differences between Digital Humanities and Digital History', in M. K. Gold

One of the most notable effects of this process resulted from its convergence with another rising current in the humanities, dubbed the 'spatial turn'. For historians, this theoretical shift was marked by a rising awareness of and interest in the dynamic interplay between society and its physical environment.[19] This theoretical substrate has prompted a wide range of engagements, varying from analyses of the formation of physical spaces to discussions of symbolic representations and perceptions of space.

These shifts of interest yielded greater attention to maps and cartography as well a burgeoning use of GIS (geographic information systems) and similar tools, not just as means of visualising spatial data but also as analytical tools. Such platforms enabled the exploration of intricate connections between various and multifaceted social, economic and cultural phenomena, unveiling their dynamic and reciprocal relationship with their geographical or spatial setting.

1.2 NEW TOOLKITS GENERATING NEW QUESTIONS: MEDIEVAL URBAN DEVELOPMENT AND THE SPATIAL TURN

Medieval urban growth and decline, as well as the continuity and change of urban forms and mechanisms, were central themes in the works of Henri Pirenne and Max Weber, pioneers in the modern historiography of medieval urban development. The methodologies developed in recent years as a result of the spatial turn and the proliferation of computerised analysis have permitted us to tackle these questions

and L. F. Klein (eds.), *Debates in the Digital Humanities 2016* (Minneapolis and London, 2016), pp. 289–307; C. Blevins, 'Digital History's Perpetual Future Tense', in M. K. Gold and L. F. Klein (eds.), *Debates in the Digital Humanities 2016* (Minneapolis and London, 2016), pp. 308–24: https:// dhdebates.gc.cuny.edu/read/untitled/section/ed4a1145-7044-42e9-a898-5ff8691b6628#ch25; J. Baker, 'A History of History through the Lens of Our Digital Present, the Traditions That Shape and Constrain Data-Driven Historical Research, and What Librarians Can Do about It', in J. W. White and H. Gilbert (eds.), *Laying the Foundation: Digital Humanities in Academic Libraries* (West Lafayette, IN, 2016), pp. 15–31: www.thepress.purdue.edu/titles/laying-foundation-digital-humanities-academic-libraries; S. Dorn, 'Is (Digital) History More than an Argument about the Past?', in K. Nawrotzki and J. Dougherty (eds.), *Writing History in the Digital Age* (Ann Arbor, 2013), pp. 21–34.

[19] On the impact of the spatial turn, see, for example, B. Warf and S. Arias, 'Introduction: The Reinsertion of Space into the Social Sciences and Humanities', in B. Warf and S. Arias (eds.), *The Spatial Turn: Interdisciplinary Perspectives* (Abingdon and New York, 2009), pp. 1–10; C. W. J. Withers, 'Place and the "Spatial Turn" in Geography and in History', *Journal of the History of Ideas*, 70 (2009), 637–50; B. Kümin and C. Usborne, 'At Home and in the Workplace: A Historical Introduction to the "Spatial Turn"', *History and Theory*, 52 (2013), 305–18. On the influence of the spatial turn on medieval studies, see M. Cohen, F. Madeline and D. Iogna-Prat, 'Introduction', in M. Cohen and F. Madeline (eds.), *Space in the Medieval West: Places, Territories, and Imagined Geographies* (Farnham, 2014), pp. 1–20, especially 7–13; Cassidy-Welch, 'Space and Place', 1–8.

from a new perspective. At first, this was achieved mainly by means of more accurate proxies for the measurement of urban growth and decline, such as taxation and demography, which could now be examined using econometric analysis.[20] However, the increasing emphasis on space proved to be particularly fruitful in the study of urban spheres. This, in turn, gave rise to current notions of 'urban fabric',[21] referring to the intricate connections between urban forms and their changing functions, as prescribed by evolving socio-economic mechanisms and changing historical circumstances.

Its function as a unique repository of spatial information made medieval property documentation a particularly useful resource for this approach.[22] The documents' use of relative coordinates, lack of consistency both in measurements and toponymy, and the loss of many records over time make the information challenging to interpret. However, in the study of medieval urban environments, this difficulty was at least partially resolved by comparison with other types of evidence, predominantly archaeological.[23] Moreover, in such groundbreaking studies as

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[20] On the use of econometric methods and theory in historical analysis, and their distinction from quantitative history, see D. Greasly and L. Oxley, 'Clio and the Economist: Making Historians Count', in D. Greasly and L. Oxley (eds.), *Economics and History: Surveys in Cliometrics* (Chichester, 2011), pp. 1–20. On the implementation of such methods in studies of urban environments, see J. F. Hadwin, 'The Medieval Lay Subsidies and Economic History', *The Economic History Review*, New Series, 36 (1983), 200–17; S. H. Rigby, 'Late Medieval Urban Prosperity: The Evidence of the Lay Subsidies', *The Economic History Review*, New Series, 39 (1986), 411–16; J. B. De Long and A. Shleifer, 'Princes and Merchants: European City Growth before the Industrial Revolution', *Journal of Law and Economics*, 36 (1993), 671–702.

[21] On the term 'urban fabric', see H. Noizet, *La fabrique de la ville: Espaces et Sociétés à Tours (IXᵉ–XIIIᵉ siècle)* (Paris, 2007), pp. 16–17.

[22] On the importance of charters in the definition and remapping of urban spaces, see S. Watson, 'City as Charter: Charity and the Lordship of English Towns, 1170–1250', in C. Goodson, A. E. Lester and C. Symes (eds.), *Cities, Texts and Social Networks, 400–1500: Experiences and Perceptions of Medieval Urban Space* (Farnham and Burlington, 2010), pp. 243–44.

[23] On the incorporation of data extracted from documents into a geographical analysis, see, for example, the studies by P. Bertrand and X. Hélary, and M. Bourin and É. Zadora-Rio, in R. Le Jan, K. Krönert and F. Guizard-Duchamp (eds.), *Construction de l'espace au Moyen Âge: pratiques et representations – XXXVIIᵉ congrès de la SHMES (Mullhouse, 2–4 Juin, 2006)* (Paris, 2006); the studies by P. Portet and A. Rigaudière in A. Rigaudière (ed.), *De l'estime au cadastre en Europe: Le Moyen-Âge* (Paris, 2006); A. E. Lester, 'Crafting a Charitable Landscape: Urban Topographies in Charters and Testaments from Medieval Champagne', in C. Goodson, A. E. Lester and C. Symes (eds.), *Cities, Texts and Social Networks, 400–1500: Experiences and Perceptions of Medieval Urban Space* (Farnham and Burlington, 2010), pp. 125–28; for a discussion of these difficulties, particularly in regard to charters, see the first chapter of D. Keene, *Survey of Medieval Winchester* (Oxford, 1985), vol. 1, pp. 3–41. For the integration of data extracted from maps and archaeology, see H. Gelinié, *Ville, espace urbain et archéologie* (Tours, 2000), pp. 11–20; K. D. Lilley, 'Mapping the Medieval City: Plan Analysis and Urban History', *Urban History*, 27 (2000), 5–30; K. D. Lilley, 'Digital Cartographies and Medieval Geographies', in S. Daniels, D. DeLyser, J. Nicholas Entrikin and D. Richardson (eds.), *Envisioning Landscapes, Making Worlds: Geography and the Humanities* (London and New York, 2011), pp. 25–33.

Daniel Lord Smail's *Imaginary Cartographies*, on late medieval Marseille, patterns observed in these discrepancies were used in order to analyse the diversity of medieval urban space and how it was perceived in the eyes of contemporaries.[24]

With the proliferation of interest in urban landscapes, scholars have applied these notions to individual case studies, demonstrating processes of socio-economic transformation as seen through the prism of textual evidence within a concrete urban setting. Thus, for example, research on cities such as Paris or Rome has used the changing demarcation of land plots as traced in documents and maps to examine the links between architectural transformation and socio-economic and political fluctuations.[25] At the same time, thematic monographs have investigated the social implications of certain urban units common to case studies in a particular region and period, such as episcopal palaces or marketplaces, through their spatial manifestations.[26]

More comprehensive examinations aimed to provide a fuller depiction of life in various medieval cities, while highlighting spatially oriented questions, such as residential and occupational distribution within the urban landscape, the spatial implications of trade and real estate development, and more.[27] Setting the standard for this approach was Derek Keene's *Survey of Medieval Winchester*. Keene's work is particularly relevant in the present context, since it laid many of the foundations for future research, addressing the methodological issues that stem from the analysis of medieval property documentation in an urban context.[28]

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[24] D. Lord Smail, *Imaginary Cartographies: Possession and Identity in Late Medieval Marseille* (Ithaca and London, 1999).

[25] F. Boudon and J. Blécon, 'Tissu urbain et architecture: L'analyse parcellaire comme base de l'histoire architecturale', *Annales. Économies, Sociétés, Civilisations*, 30 (1975), 773–818; R. Descimon and J. Nagle, 'Les quartiers de Paris du Moyen Âge au XVIIIᵉ siècle: Évolution d'un espace plurifonctionnel', *Annales. Économies, Sociétés, Civilisations*, 34 (1979), 956–83; S. Passigli, 'Geografia parrocchiale e circoscrizioni territoriali nei secoli XII–XIV: istituzioni e realtà quotidiana', in É. Hubert (ed.), *Rome aux XIIIᵉ et XIVᵉ siècles* (Rome, 1993), pp. 43–86.

[26] M. Miller, *The Bishop's Palace: Architecture and Authority in Medieval Italy* (Ithaca and London, 2000); D. Romano, *Markets and Marketplaces in Medieval Italy* (New Haven, 2015).

[27] See Keene, *Survey of Medieval Winchester*; D. Nicholas, *The Metamorphosis of a Medieval City: Ghent in the Age of the Arteveldes 1302–1390* (Lincoln, NE and London, 1987); G. Rosser, *Medieval Westminster 1200–1540* (Oxford, 1989); É. Hubert, *Espace urbain et habitat à Rome: du Xᵉ siècle à la fin du XIIIᵉ siècle* (Rome, 1990); C. Wickham, *Medieval Rome: Stability and Crisis of a City, 900–1150* (Oxford, 2015). Such monographs join a rich literature on general aspects of medieval urban development across Europe. See, for example, D. Nicholas, *The Growth of the Medieval City: From Late Antiquity to the Early Fourteenth Century* (London, 1997); K. D. Lilley, *Urban Life in the Middle Ages, 1000–1450* (Hampshire and New York, 2002).

[28] See, for example, Keene, *Survey of Medieval Winchester*, vol. 1, 7–10. Many of the problems he addresses are common to studies dealing with similar sources.

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While Keene's study was perhaps the first to adopt a data-driven and spatially oriented approach on a large scale, it was carried out at a time when technological solutions to the methodological challenges of such studies were in their infancy. In recent years, further methodological and technological advances have prompted several monographs, as well as collaborative projects, that aim to improve the spatial contextualisation of historical analysis.[29] Thus, the topography and urban environment of medieval cities such as Paris or Tours, examined in these works, become central factors in the historical analysis, influencing various social, economic and religious developments rather than merely providing them with a setting. The spatial representation of multifaceted data has allowed us to examine previously undetected connections. For example, medieval tax payment data, archaeological evidence and a close analysis of historical maps have been cross-referenced in order to demonstrate the expansion patterns of religious institutions vis-à-vis residences of the nobility and their mutual impact on the city's urban fabric over the course of the High and Late Middle Ages.[30]

Although the elaborate models offered by such projects do not suit the comparatively limited scope of the Frankish documents in the twelfth century, they nevertheless present new directions that impact the study of medieval urban environments. The importance of a systematic analysis of property documentation for understanding the dynamic processes that shaped the cityscape is thus reinforced. This is especially germane to a city such as Jerusalem, whose unique symbolic status has often obscured its functions as a lived-in urban space.

1.3 THE DATABASE OF FRANKISH JERUSALEM

The Jerusalem database builds on a longstanding tradition of comprehensive collections of documents related to the Latin East that have been published in critical editions since the nineteenth century. A first

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[29] See, for example, H. Noizet, B. Bove and L. Costa (eds.), *Paris de parcelles en pixels: Analyse géomatique de l'espace parisien medieval et modern* (Paris, 2013); Noizet, *La fabrique de la ville*; D. Carrion, F. Migliaccio, G. Minini and C. Zambrano, 'From Historical Documents to GIS: A Spatial Database for Medieval Fiscal Data in Southern Italy', *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 49 (2016), 1–10.

[30] B. Bove, 'Typologie spatiale des hôtels aristocratique à Paris (1300, 1400)', in H. Noizet, B. Bove and L. Costa (eds.), *Paris de parcelles en pixels: Analyse géomatique de l'espace parisien medieval et modern* (Paris, 2013), pp. 257–79. The spatial implications of the *taille* imposed on the citizens of Paris at the end of the thirteenth century by Philippe the Fair were explored in an unpublished working paper, available online, A. Slivinski and N. Sussman, 'Tax Administration and Compliance: Evidence from Medieval Paris' (February 2019), CEPR Discussion Paper No. DP13512. https://ssrn.com/abstract=3332315.

corpus of the extant Frankish documents (in a summarised version) was Reinhold Röhricht's *Regesta Regni Hierosolymitani*, published in 1893 and supplemented with an addendum in 1904, a work that is to this day considered an invaluable source for scholars of the Crusades and the Latin East.[31]

Over the years, additional materials that were not included in the original *Regesta* have come to light in various forms, either as individual documents or as new compilations of documents from a certain institution or milieu, such as Hans E. Mayer's *Die Urkunden der lateinischen Könige von Jerusalem*. In 2012, the late Jonathan Riley-Smith initiated a project that aimed to update and revise Röhricht's *Regesta*, thus forming a new, comprehensive corpus of documents produced in and related to the Frankish Levant. Adapting to the spirit of the times, it was decided to publish the corpus in the form or a searchable online database, which was ultimately launched in 2016 as the *Revised Regesta Regni Hierosolymitani* (*RRR*).[32] Until recently, the corpus of documents from the Latin East was examined predominantly using a prosopographic approach; however, a study of naming patterns conducted by Iris Shagrir was the first to demonstrate the applicability of quantitative approaches to this corpus.[33]

While drawing on these compilations as indices for documents related to the city and its main institutions, the database of Frankish Jerusalem (DB of Frankish Jerusalem), constructed for the purposes of this study, differs from them in its scope and particular foci, as well as in the units that comprise it. It aims to encompass all the available documents that reflect either the distribution of (mostly) landed properties in Jerusalem and its environs,[34] or the activities of Jerusalem-based institutions in the Latin East during the period of Frankish rule in the twelfth century (1099–1187).[35] Particular attention was given to the first six decades of

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[31] On Röhricht's biography and career, see H. E. Mayer, 'Der Prophet und sein Vaterland: Leben und Nachleben von Reinhold Röhricht', in I. Shagrir, R. Ellenblum and J. Riley-Smith (eds.), *In Laudem Hierosolymitani: Studies in Crusades and Medieval Culture in Honour of Benjamin Z. Kedar* (Aldershot and Burlington, 2007), pp. 233–41.

[32] *Revised Regesta Regni Hierosolymitani Database*, www.crusades-regesta.com.

[33] I. Shagrir, *Naming Patterns in the Latin Kingdom of Jerusalem* (Oxford, 2003).

[34] See the online resource cambridge.org/gutgarts for a list of the main transactions related to Jerusalem and its vicinity.

[35] These activities were not confined to the Latin Kingdom and extended to the other Crusader principalities of the Latin East as well as Europe. Considering the direct mutual influence (structural, administrative and economic) between centres of these institutions in different regions of the Frankish Levant, especially during the first half of the twelfth century, the database takes into account documents that refer to their activities throughout the Latin East, particularly when comparing patterns of economic engagement in Jerusalem versus other regions. It does not, however, include documents relating to the activity of these institutions in Europe.

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the twelfth century, which was chosen because this timespan coincides with the zenith in the transformation of Jerusalem's monumental sky-line and is therefore considered a formative period in the shaping of the cityscape. The distribution of lands and their affixed properties, as well as rights pertaining to those estates, was particularly significant in light of the political and socio-economic structures that emerged with the formation of the Crusader states in the Latin East.[36]

Therefore, the documents reflect the gradual formation and practical implications of the institutional and legal apparatus that stemmed from the Latin rulers' task to establish a framework that would support the newly formed political entities that emerged as a result of the First Crusade.[37] The ruling mechanisms established at the beginning of the twelfth century incorporated the main Jerusalem-based institutions, namely the Church of the Holy Sepulchre, the Hospital of St John and prominent monastic institutions such as St Mary of the Valley of Jehoshaphat. The impact of these institutions on the political, social and economic affairs of the Latin states echoed far beyond the walls of Jerusalem. Therefore, the corpus of documents that they produced has traditionally been examined within the context of the broader legal, bureaucratic, social and religious structures of the Latin East, and not necessarily deemed relevant to the city itself.[38] Although numerous new institutions were founded in the decades that followed the Crusader conquest, the surviving documents reflect mostly the activities of the

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[36] On land distribution and the socio-legal structures of the Latin, see, for example, S. Reynolds, 'Fiefs and Vassals in Twelfth-Century Jerusalem: A View from the West', *Crusades*, 1 (2002), 29–48. This article was part of a discussion of the notion of Frankish feudalism. See P. Edbury, 'Fiefs and Vassals in the Kingdom of Jerusalem from the Twelfth Century to the Thirteenth', *Crusades*, 1 (2002), 49–62; J. Rubin, 'The Debate on Twelfth-Century Frankish Feudalism: Additional Evidence from William of Tyre's Chronicon', *Crusades*, 8 (2009), 53–62. For earlier discussions of this matter, see P. Edbury, 'Feudal Obligations in the Latin East', *Byzantion*, 47 (1977), 328–56, especially from p. 348. For a critical revision of the term 'Latin States', see A. Buck, 'Settlement, Identity, and Memory in the Latin East: An Examination of the Term "Crusader States"', *English Historical Review*, 135 (2020), 1–32.

[37] This apparatus was later formulated in various treatises that provided it with legal foundations. At times, however, these show a substantial gap compared with the actual practices in the twelfth century. See Reynolds, 'Fiefs and Vassals in Twelfth-Century Jerusalem', 34, 41. For the main structural problems associated with the formation of the Latin ruling mechanisms, see M. C. Barber, 'The Challenge of State Building in the Twelfth Century: The Crusader States in Palestine and Syria', *Reading Medieval Studies*, 36 (2010), 7–22.

[38] See, for example, H. E. Mayer, *Bistümer, Klöster und Stifte im Königreich Jerusalem* (Stuttgart, 1977); Mayer, 'Studies in the History of Queen Melisende'; H. E. Mayer, 'Angevins versus Normans: The New Men of King Fulk of Anjou', *American Philosophical Society*, 133 (1989), 1–25; J. Riley-Smith, 'Some Lesser Officials in Latin Syria', *The English Historical Review*, 87 (1972), 1–26; R. Kool, 'Coin Circulation in the Villeneuves of the Latin Kingdom of Jerusalem: The Cases of Parva Mahumeria and Bethgibelin', in P. Edbury and S. Kalopissi-Verti (eds.), *Archaeology and the Crusades: Proceedings of the Round Table, Nicosia, 1 February 2005* (Athens, 2007), pp. 136–40.

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three institutions mentioned earlier, and the activities of the Frankish monarchy, while archives of many other institutions were lost. Another major caveat is the fragmentary nature of the documentation concerning non-Frankish institutions. Thus, while Frankish documents occasionally referred to members of non-Latin denominations, they often used generalised terms, which does not leave us with an accurate picture of these communities and their role in urban development.[39]

The most important feature that distinguishes the current analysis from previous studies that relied on the same corpus is in our definition of the elementary unit that comprises an entry. Instead of considering each document as an individual unit, the current analysis follows the standards set in studies that engaged with similar types of sources and examines each document as an aggregation of the transactions that it includes. The term 'transaction' refers to any instance in which properties or rights were transferred from one party to another (or reaffirmed existing rights/ownership). A single document often contained either direct or vicarious information concerning multiple transactions. These could have been conveyed in the form of a list (as shown later in the section on 'Types of Transactions') or, for example, through a 'genealogical' description of a property's previous ownership, relayed in order to establish its legal status, from which a set of previous transactions involving the same property could be extracted. Therefore, the main organising units of the database are the transactions that are extracted from the documents. This yields a more nuanced evaluation of the economic activity and social interactions reflected in the documents and permits an analysis of different aspects of this activity throughout the examined period.

Let us consider for example a document from 1137 (*RRH* 170), where the Patriarch William of Messines licensed a person named Galterus de Lucia to sell his house to Robertus Medicus. In the same document, the patriarch also gave his permission to the new owner, Robertus Medicus, to build a vault over the road that connected the house to the patriarch's square, and also leased some wasteland at the corner of the house for Robertus to build on. The document also specified the annual rent to be paid by Robertus to the Holy Sepulchre for the house and additional land.

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[39] For non-Latin communities in Frankish Jerusalem, see Hamilton and Jotischky, *Latin and Greek Monasticism in the Crusader States*; J. Pahlitzsch, *Graeci und Suriani im Palästina der Kreuzfahrerzeit* (Berlin, 2001); J. Pahlitzch and D. Baraz, 'Christian Communities in the Latin Kingdom of Jerusalem (1099–1187)', in O. Limor and G. Stroumsa (eds.), *Christians and Christianity in the Holy Land: From the Origins to the Latin Kingdoms* (Turnhout, 2006), pp. 205–35; MacEvitt, *The Crusades and the Christian World of the East*.

This document therefore contains three different transactions, two of which feature commercial exchanges: the first is the sale of the house by Galterus to Robertus; the second is the license provided by the patriarch to build the vault adjacent to the house in order to extend it; and the third is the lease of an adjacent land plot for the extension of the house.

The database comprises over 900 transactions conducted in the years 1099–1187 either in Jerusalem itself or by Jerusalem-based institutions that operated across the Latin East. The transactions are chronologically organised and analysed according to several clusters of categories, mainly: the legal or economic circumstances in which the transaction was recorded (e.g. sale, exchange, dispute); the details of the properties mentioned; the agents participating in the transaction (e.g. donors, recipients, witnesses); and its institutional association. Another set of categories aims to place this analysis in a spatial context, whether specifically aimed at tracing the development of certain areas within the city or its environs, or engaging with broader issues stemming from Jerusalem's position and status within its hinterland and more broadly in the Latin East. This is conducted both through a close scrutiny of specific documents and through a large-scale comparative analysis of spatial trends that emerge from the data.

Even prior to the finer categorisation of the transactions, the chronological organisation of the data provides noteworthy observations that illustrate some of the processes that shaped the establishment of the Frankish rule.[40] A notable example is the fluctuation in the number of transactions in the first half of the twelfth century: an exceptional upsurge in transactions in the second decade, followed by a fall in the next decade (see Table 1.1). Although this anomaly may be dismissed as a coincidence, or explained by the arbitrary preservation of the sources, it is also possible that it reflects historical circumstances, namely the labour pains of newly established political entities and the transition from a state of crisis to active settlement efforts. While the first decade was marked by internal political tensions and external threats, as these began to subside towards the second decade, more resources could have been directed to the strengthening of ruling mechanisms and the formation of social structures. The sudden rise in the number of transactions reflects a rapid allocation of properties predominantly among the nobility and

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[40] The use of decades as the main units of analysis stems from the difficulty to accurately date some of the documents, for which we only have approximate year spans. In the compilation of the Jerusalem database, I followed the system applied in the *Revised Regesta* in regard to such documents, by arranging them according to their *terminus ante quem*. This also applies to cases where a confirmation refers to a previously unrecorded transaction. In those cases, transactions were dated according to the date of the confirmation, as their *terminus ante quem*.

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1.3 The Database of Frankish Jerusalem

Table 1.1 *Distribution of transactions by decade*

Decade	Number of transactions	%
1099–1109	30	3
1110–1119	119	12
1120–1129	73	8
1130–1139	92	9
1140–1149	102	10
1150–1159	127	13
1160–1169	210[1]	22
1170–1179	137	14
1180–1187	82	8
Total	972	100

Notes: Data from DB of Frankish Jerusalem.

[1] The surge in the number of transactions in this decade stems from the breakdown of rentals, which appear predominantly in this decade, into individual transactions. A more conservative calculation yields a total of 140 transactions for that decade, thus showing consistency with the pattern set in previous decades.

the Latin religious institutions, which corresponded with the process mentioned earlier. Such rapid processes of land allocation can be paralleled to other regions with similar circumstances, for example in the Iberian Peninsula during the Reconquista.[41] The fall in the number of transactions in the 1120s may reflect the crises that occurred particularly in the first half of that decade, which were recorded in the chronicles. Thus, William of Tyre reports that swarms of locusts and mice plagued the Kingdom for four successive years starting from 1120, causing crop failure, while Fulcher of Chartres' third book ends abruptly with a report of another mice plague causing pollution and considerable damages in 1127.[42]

However, while the fluctuations in transactions may provide a general illustration of a large-scale process, a subtler analysis grounded in a more

[41] E. Guinot Rodríguez, 'Arpenteurs en Terres de Conquête: La pratique de la mesure de la terre en pays valencien pendant le XIIIe siècle', in L. Feller and A. Rodriguez (eds.), *Expertise et Valeur des choses au Moyen Âge*, vol. 2, *Savoirs, écritures, pratiques* (Madrid, 2016), pp. 279–85.

[42] *WT*, book 12, chapter 13, p. 563; *FC*, book 3, chapter 62, pp. 822–23. For a discussion of these events in the context of environmental and climate history, see S. K. Raphael, *Climate and Political Climate: Environmental Disasters in the Medieval Levant* (Brill, 2013), pp. 182–83.

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specific context demands extensive cross-sectioning of the data and an examination of the interrelations of different patterns. This analysis of the sources according to their primary elements facilitates the examination of correlations between multiple strands of information. The following sections briefly describe each cluster of information and offer examples of the analysis it can yield.

Types of Transactions

Following studies based on similar datasets, the categories applied in the classification of the transactions aim to reflect the actual objective of the transaction. Often, such an objective does not directly correspond with the stated purpose of the transaction, which is expressed in standardised formulae that may change over time. As these formulae do not adhere to modern economic or social categories, it is imperative to consider the complex socio-economic structures that determined their use. The changing formulae may be perceived either as mere expressions of changing norms of documentation or as reflections of socio-economic processes that were manifested and affixed in legal terminology. Hence, while the setting of transaction types may require the imposition of seemingly anachronistic categories, such typological work helps us to elucidate the nature of economic activities that are otherwise obscured by various legal formulae.

This point is illustrated in the terminology applied in donations, which may stand for various other intricate forms of exchange. While at times these are easy to identify – for example, when the transaction refers to a barter – in other cases, the properties given in exchange for other items will appear as a separate donation and will need to be connected to the initial transaction that prompted the exchange. As Constance Bouchard has shown in her study of Cistercian economic networks in twelfth-century Burgundy, even when donation terminology was applied to reciprocal transactions, the exchange was not necessarily circumscribed by typical economic standards or 'market behaviour'. Bouchard describes a practice of reciprocating for donations with counter-gifts, which were not exchanges of properties of equal value but rather a means to validate the original transactions.[43]

Thus, although the imposition of distinctive categories may help to elucidate some of these issues, there remain additional layers of social meaning that need to be evaluated on a case-by-case basis. This can

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[43] Bouchard objects to identifying this form of exchange as a concealed sale. See *Holy Entrepreneurs*, 78–94.

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Table 1.2 *Distribution of confirmations by decade*

Decade	Confirmations	Total number of transactions	Confirmations (% per decade)	Other transactions (% per decade)
1099–1109	3	30	10	90
1110–1119	25	119	21	79
1120–1129	22	73	30	70
1130–1139	18	92	20	80
1140–1149	27	102	26	74
1150–1159	26	127	20	80
1160–1169	30	210	14	86
1170–1179	24	137	18	82
1180–1187	23	82	28	72
Total	198	972	20 (% of confirmations out of all transactions)	

Note: Data from DB of Frankish Jerusalem.

be achieved through a comparative analysis that draws on parallel cases found both in the Latin East and in regions of the West that featured similar forms of documentation.

Another prominent category of transactions is confirmations, a general term that encompasses several possible cases (see Table 1.2). Thus, for example, a confirmation could be granted by a higher authority than that of the initial grantor, such as patriarch, king or pope, in order to validate previously conducted transactions.[44] In some cases, these would be lists of multiple transactions that required periodic confirmation by that authority, adding to them any new transactions that augmented the rights or possessions of a particular institution or individual. Such documents, also known as *pancartes*,[45] were commonly used in monastic contexts in the Latin West, and their analysis may be revealing in regard to shifting patterns of power and authority.[46] Another form of confirmation was granted more sporadically in order to reaffirm privileges and possessions that may have been contested or disputed, or when changes occurred in the originally donated property. Consequently, such confirmations can represent multiple transactions: an initial donation of property, a later

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[44] On the use of confirmations as a mean to formulate royal status in the Latin Kingdom, see D. Gerish, 'Ancestors and Predecessors: Royal Continuity and Identity in the First Kingdom of Jerusalem', *Anglo Norman Studies*, 20 (1997), 127–35.

[45] On the uses of this term, see D. Bates, *Regesta regum Anglo-Normannorum: The Acta of William I, 1066–1087* (Oxford, 1998), p. 22.

[46] Rosenwein, *To Be the Neighbor of Saint Peter*, 162–74.

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dispute over that property, an additional donation extending the scope of the original one, etc. Furthermore, since in many cases the record of the original donation is lost, a confirmation serves as our only access to the original transaction.[47]

A third group of transactions includes several categories involving various forms of direct exchange – of land, commodities or money – ranging from brief statements to elaborate contracts specifying in great detail the terms of the transaction. These are generally referred to as commercial transactions, and include leases, purchases, sales and exchanges. Grouped together and analysed against the backdrop of donations and confirmations, these transactions reflect the formation of an economic system that complemented the gift-economy of donation networks. The shift to commercial forms of exchange resonates with similar processes that occurred in the Latin West during the twelfth century. Thus, Lester K. Little argued that after 1050, 'what remained of gift-economy behaviour was thus complementary to commerce; it no longer opposed, or restrained, commercial activity'. Later studies further challenged the gift–profit dichotomy, viewing them as two complementary ends of the same socio-economic continuum.[48]

This shift is manifested in the analysis of transaction types during the examined period, which shows a gradual diversification in the types of transactions, predominantly a rise in commercial transactions (e.g. sales, leases and exchanges) towards the middle of the twelfth century (see Table 1.3). While not unique by the standards of contemporary economic systems in medieval Europe, this shift had special significance in the context of the newly established Latin Kingdom and its evolving capital. This category of transactions is particularly valuable for the analysis of Jerusalem's developing cityscape, as it allows us to anchor commercial activities within a concrete urban setting, an issue that is further developed in Chapter 2.

Importantly, this approach permits us to trace interconnected transactions. These can consist of renewals of terms, elaborations or confirmations of past transactions by a third party, etc. In some cases, inspection of such sequences of transactions referring to the same properties in different years reveals changes in the extent of the properties, a renegotiation of a transaction's terms, and so on. Such inconsistencies

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[47] In the case of Frankish Jerusalem, perhaps the most notable example is the donation of twenty-one villages (*casalia*) to the Holy Sepulchre by Godfrey of Bouillon, which has been rendered to us in a later confirmation of Baldwin I from 1114. See *UKJ* 56; *RRH* 74 (*RRR* 147).

[48] L. K. Little, *Religious Poverty and the Profit Economy in Medieval Europe* (New York, 1978), p. 8; Wickham, 'Land Sales and Land Market'; Rosenwein, *To Be the Neighbor of Saint Peter*, chapter 3, pp. 78–143; Bouchard, *Holy Entrepreneurs*, 67–68.

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Table 1.3 *Distribution of transaction types*

Decade	Total number of transactions	Donations	Confirmations	Commercial transactions	Disputes	Privileges	Other (agreements, declarations, etc.)
1099–1109	30	19	3	0	0	3	5
1110–1119	119	81	25	3	2	5	3
1120–1129	73	39	22	6	3	2	1
1130–1139	92	44	18	15	5	1	9
1140–1149	102	38	27	17	7	1	12
1150–1159	127	46	26	32	1	3	19
1160–1169	210	51	30	108	9	0	12
1170–1179	137	43	24	50	9	3	8
1180–1187	82	22	23	16	5	1	15
Total:	972	383	198	247	41	19	84

Decade	Total number of transactions	Donations (%)	Confirmations (%)	Commercial transactions (%)	Disputes (%)	Privileges (%)	Other (agreements, declarations, etc.) (%)
1099–1109	30	63	10	0	0	10	17
1110–1119	119	68	21	3	2	4	3
1120–1129	73	53	30	8	4	3	1
1130–1139	92	48	20	16	5	1	10
1140–1149	102	37	26	17	7	1	12
1150–1159	127	36	20	25	1	2	15
1160–1169	210	24	14	51	4	0	6
1170–1179	137	31	18	36	7	2	6
1180–1187	82	27	28	20	6	1	18

Note: Data from DB of Frankish Jerusalem.

might reflect either formal redefinitions of the properties or changes that occurred in the cityscape and demanded a reappraisal of previous property assessments. Thus, they may yield valuable information concerning the spatial expansion and delineation of a certain property and attest to broader processes of legal regularisation of real estate.

Another category of documents that aggregates information on multiple properties are the rental lists that began to appear in Jerusalem from the 1160s. These rentals are particularly difficult to classify, since they were often considered a survey of properties controlled by the institutions that generated them, produced at a particular point in time in order to keep a record of the revenues yielded by their assets.[49] However, as we shall see in later chapters, in the case of Jerusalem these rental lists often provide the same kind of 'genealogical information' mentioned earlier that, when juxtaposed with other transactions in the database, discloses previous owners, disputes and changes that occurred in the properties over time. Therefore, in the database such lists were broken down into individual transactions, in order to render a more accurate picture of such aspects of urban development as spatial distribution of properties, changing patterns of ownership and institutional influence.

Rental lists also provide a glimpse into another important aspect of medieval property documentation, namely the gap between oral transactions and their written legal affixation. As noted in the scholarship, rental lists drawn up towards the second half of the twelfth century often may have recorded agreements that were originally conducted orally, as a result of an elaboration of bureaucratic mechanisms and the transition to official record keeping.[50] The appearance of such documents in Jerusalem from the 1160s is therefore consistent with processes observed in the West, and indeed reflects the development of legal and bureaucratic systems in the Latin East.

The gap that can sometimes be observed between a legal affixation and the preceding agreements that it was based on touches on yet another facet of the documents that merits attention, namely the performative or rather ceremonial aspect of medieval property transactions. A careful reading of the formulaic language in these documents occasionally provides a glimpse into the rituals that the affirmation of transactions entailed or discloses disputes that arose when previous agreements were recorded, resulting in a change of terms. A case in point, discussed in

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[49] Tabuteau, *Transfers of Property*, 65–73.
[50] On rentals and surveys, see M. T. Clanchy, *From Memory to Written Record: England 1066–1307*, 3rd edition (Malden, MA and Oxford, 2013), pp. 96–98.

more detail in Chapter 5, shows how a collision between the interests of an institution and those of its clientele had direct implications on the cityscape of a key area in Jerusalem.[51]

The classification of transaction types therefore yields a variety of interesting observations concerning the structural and economic changes that occurred in the Latin East and affected Jerusalem. Additionally, it provides a comparative view of legal formulae and their development over time and facilitates an analysis of the social structures revealed in particular clusters of interconnected documents. Yet the implications of this classification cannot be fully grasped without an analysis of other categories, particularly agency and institutional affiliation. The shifts and patterns that can be detected in these categories grant a social, cultural and institutional context to Jerusalem's urban development.

Agency

This category refers to the different parties that were involved in each transaction. Most commonly, these were the grantors and recipients of properties, parties in disputes, relatives who granted their approval to a transaction and witnesses. These could be private individuals, members of different social strata or representatives of various institutions, such as canons, masters of the military orders or abbots. While official roles are usually stated in the document and therefore can be easily assigned, social classifications are harder to establish. An analysis of social structures demands a more detailed identification of each person,[52] his social status, social and familial affiliations, and the different roles he fulfilled in different transactions. The multiple variations that can be found in the documents in personal names and titles, as well as such issues as two family members sharing the same name (usually father and son), make this task particularly challenging.[53]

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[51] On the oral layer of charters, see C. Wickham, 'Public Court Practice: The Eighth and Twelfth Centuries Compared', in S. Esders (ed.), *Rechtsverständnis und Konfliktbewältigung: Gerichtliche und außergerichtliche Strategien im Mittelalter* (Cologne, 2007), pp. 17–30; J. Jarrett, 'Ceremony, Charters and Social Memory: Property Transfer in Early Medieval Catalonia', *Social History*, 44 (2019), 275–95; S. Whitten, '*Quasi ex uno ore*: Legal Performance, Monastic Return, and Community in Medieval Southern Italy', *Viator*, 44 (2013), 49–64.

[52] In the present work these classifications were informed by various studies, including Shagrir, *Naming Patterns* (I thank Prof. Shagrir for sharing her data with me); A. V. Murray, *The Crusader Kingdom of Jerusalem: A Dynastic History 1099–1125* (Oxford, 2000); Tischler, *Die Burgenses*; Mayer, *UKJ*; Mayer, *Von der Cour des Bourgeois*.

[53] For a discussion of these methodological difficulties, as well as some notable case studies for such ambiguities, see Shagrir, *Naming Patterns*, 16–18; C. K. Slack, 'Royal Familiares in the Latin Kingdom of Jerusalem, 1100–1187', *Viator*, 22 (1991), 27–30; Mayer, *Von der Cour des Bourgeois*, 219–20.

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The category of agency is a fruitful platform for several courses of inquiry. Once again drawing on the comparison with similar source materials in the West,[54] it is possible to argue that the gradual emergence of new roles assigned to participants in transactions, which extended the scope of the basic grantor–recipient–witness structure, is an indicator of broader social processes and the elaboration of social hierarchies. The shifts in the roles assigned to the participants of transactions during the examined period reflect evolving notions of kinship and mutual accountability, and the formation of social and legal structures that these notions built upon. Thus, for example, the rising number of transactions in which family members gave their consent to a donation or exchange can be interpreted as a response of the evolving legal apparatus to the transition from a newly established immigrant society to one more deeply rooted in its habitat. This transition was channelled, among many other ways, through the intensification of property ownership mechanisms. In this way, the legal articulation of hereditary and familial rights, for instance, was becoming increasingly necessary.

The data reveal fluctuations that occurred over time in the participation of members of different social strata in economic activity. For example, a gradual diversification of the social groups that initiated transactions occurred in the first decades of the twelfth century (see Table 1.4). These fluctuations reflect some of the general shifts that occurred in the social structure of the Latin East, such as increasing social stratification, associated with the emergence and rising impact of new groups such as the burgesses or members of the military orders. However, as with the classification of types of transactions, the placing of this analysis within a particular urban spatial setting enables us to examine the impact of these broader social processes on the transformation of the cityscape. Thus, the distribution of transactions and their classification informs, among other things, an analysis of the spatial distribution of the population. When juxtaposed with the agents involved in the transactions, the spatial data allow us to address additional questions concerning patterns of social transformation and their manifestations in the cityscape.

The analysis of agency also facilitates a more complex reconstruction of the social networks that were formed in Frankish Jerusalem and its

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[54] The affirmation of donations and the socio-economic function of the *laudatio* is discussed further in Chapter 4. On this, see Bouchard, *Holy Entrepreneurs*, 69–86. On later developments of this practice into more elaborate warranty clauses, see M. McHaffie, 'Sources of Legal Language: The Development of Warranty Clauses in Western France, ca. 1030–ca. 1240', in J. Benham, M. McHaffie and H. Vogt (eds.), *Law and Language in the Middle Ages* (Leiden, 2018), pp. 196–232.

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Table 1.4 *Distribution of primary agency (grantors) according to social groups*

Decade	Number of transactions	Kings/other rulers	Popes	Clergy	Military orders	Nobility	Burgesses	Non-Latins	Other/uncertain
1099–1109	30	27	0	3	0	0	0	0	0
1110–1119	119	42	8	17	0	52	0	0	0
1120–1129	73	17	5	15	0	23	9	1	3
1130–1139	92	25	3	23	4	26	10	1	0
1140–1149	102	32	14	17	6	28	3	1	1
1150–1159	127	33	10	17	10	35	15	3	4
1160–1169	210	32	9	30	13	45	65	8	8
1170–1179	137	43	8	17	27	27	11	0	4
1180–1187	82	21	9	10	12	26	3	1	0
	972	272	66	149	72	262	116	15	20

Decade	Number of transactions	Kings/other rulers (%)	Popes (%)	Clergy (%)	Military Orders (%)	Nobility (%)	Burgesses (%)	Non-Latins (%)	Other/ uncertain (%)
1099–1109	30	90	0	10	0	0	0	0	0
1110–1119	119	35	7	14	0	44	0	0	0
1120–1129	73	23	7	21	0	32	12	1	4
1130–1139	92	27	3	25	4	28	11	1	0
1140–1149	102	31	14	17	6	27	3	1	1
1150–1159	127	26	8	13	8	28	12	2	3
1160–1169	210	15	4	14	6	22	31	4	4
1170–1179	137	31	6	12	20	20	8	0	3
1180–1187	82	26	11	12	1	32	4	1	0

Note: Data from DB of Frankish Jerusalem.

hinterland. An identification of agents according to membership in social groups permits us to trace the connections between these groups and the economic and institutional mechanisms that shaped them. Typically, these networks were enmeshed in the religious institutions that operated in the city,[55] leading us to inspect closely the institutional affiliation of the transactions, their participants and the properties they concerned.

Spatial Categorisation

As shown in the literature surveyed in the previous sections of this chapter, the potential contribution of medieval documents to the reconstruction of historical urban development is widely recognised in the scholarship of medieval urban environments, including Frankish Jerusalem. The traditional approach aims to decipher the relative coordinates that are used in this type of medieval documents to communicate spatial information.[56] Although this analysis facilitates the reconstruction of edifices and, as I show later, sometimes of entire areas, its association with broader socio–economic processes demands an approach that draws on the methodologies established in recent studies of medieval cities, as discussed earlier. This entails a longitudinal analysis of the transactions, detecting not only the patterns of their spatial distribution but also other aspects, such as the agents and institutions involved in the transactions and the changing characteristics of transactions over time.

The current database aims to formulate a wider framework that includes the dynamics between the city and its hinterland, mainly through the prism of the activities of Jerusalemite institutions outside the city itself. The categorisation applied for this purpose separates transactions that involved properties inside the city or its immediate environs from those that concerned properties outside the city, where transactions are further classified based on their relativeness to Jerusalem's hinterland or to other regions in the Latin East. These spatial categories facilitate the systematic comparison of internal municipal changes with various layers of extra–urban development. In order to identify patterns that characterised the activity of different Jerusalem-based institutions in their endeavours inside the city, and to compare them with the patterns of their activity in other regions throughout the Latin East, this analysis relies on an identification of the geographical location of the places mentioned in transactions

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[55] This may also be ascribed to the partial survival of the sources, since most of the extant documents are associated with the activity of religious institutions.

[56] See studies by Pringle, Ellenblum, Kool, Hiestand, Ehrlich et al., mentioned in note 4.

conducted by these institutions outside Jerusalem.[57] We can then root the spatial and geographical expansion of the Frankish settlement (both inside and outside the city) within an institutional context, demonstrating the connection between these spatial patterns and the evolving structure of these institutions, and the impact this had on their involvement in the cityscape.[58] A cross-check with other categories sheds light on a wide array of issues, including the diverse mechanisms that propelled the development of the city and that of the hinterland, as well as their reciprocal connection. Assessment of these issues requires close inspection of the properties to which the transactions refer, both inside and outside the city. Thus, while the expansion pattern of a certain institution may seem to resemble that of another, a close examination of the relevant properties may disclose substantial differences.

Property Details

Another data category consists of the details of the properties that were exchanged. Assets included in the transactions range from land and its affixed properties, different kinds of urban edifices and infrastructure, such as ovens, mills, and storage facilities, to privileges, tithes and rights and – more rarely – money. A close study of this category permits us to trace different kinds of properties throughout the examined period and analyse, for instance, the variety of properties held by different agents or institutions. Furthermore, the distinction between monetary and non-monetary transactions may also shed light on wider economic issues previously raised in the scholarship of the Latin East, such as changing patterns in the use of money versus immovable property or goods, in different kinds of commercial exchanges.[59]

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[57] The spatial analysis relies primarily on the identifications in Mayer, *UKJ*; Pringle, *The Churches*, vols. 1–2, 4, Gazeteer; K. Bieberstein and H. Bloedhorn, *Jerusalem: Grundzüge der Baugeschichte vom Chalkolitikum bis zu Frühzeit der osmanischen Herrschaft*, 3 vols. (Wiesbaden, 1994); J. Prawer and M. Benvenishti, 'Palestine under the Crusades', in *Atlas of Israel: Cartography, Physical Geography, Human and Economic Geography, History* (Jerusalem and Amsterdam, 1970), IX/10, as well as more specific analysis of distribution of properties either in particular locations or belonging to particular institutions; Ellenblum, *Frankish Rural Settlement*, xviii–xx (and additional maps); M. Barber, *The Crusader States* (New Haven, CT, 2012); J. Riley-Smith, *The Knights of Saint John in Jerusalem and Cyprus, c. 1050–1310* (London and New York, 1967), pp. 477–507.

[58] Similar analyses either focused on a single institution or did not aim to examine the implications of these patterns for Jerusalem's urban development. See P. L. Sidelko, 'The Acquisition of Landed Estates of the Hospitallers in the Latin East, 1099–1291' (PhD dissertation, University of Toronto, 1998); J. Prawer, 'Colonization Activities in the Frankish Kingdom of Jerusalem', *Revue belge de philologie et d'histoire*, 29 (1951), 1063–118, reprinted in Prawer, *Crusader Institutions*, 102–42; Ellenblum, *Frankish Rural Settlement*.

[59] On the monetary system of the Latin Kingdom, see Kool, 'Coin Circulation', 136–40; A. V. Murray, 'The Origins of Money-Fiefs in the Latin Kingdom of Jerusalem', in A. V. Murray,

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The properties mentioned in the transactions vary with respect to the amount of descriptive detail supplied in the document. Such detail tends to increase towards the middle of the twelfth century, a tendency that can be observed in documents from the Latin West as well, and was associated with changes that occurred during the twelfth century both in legal norms and customs, reflecting a wider cultural transformation.[60] When these descriptions apply to properties inside Jerusalem, they facilitate the reconstruction of the development of particular areas. However, property descriptions also provide valuable information concerning the nature and scope of economic activity, which supplements the analysis of transaction types and institutional affiliation. Thus, for example, property descriptions allow us to establish the level of involvement of both new and previous owners in the cultivation of a plot or the development of an urban or rural property. On the one hand, we have tithes or annual rents paid in goods, which required minimal involvement in the management of the property from the person or institution who received the payment but were logistically demanding;[61] on the other, we have owners who were directly involved in the cultivation of their land and were closely acquainted with their property.[62] The degree of involvement of different agents in the properties in their possession, or under their auspices vis-à-vis the geographical distribution of these properties, allows us to determine the various cultivation and development policies applied by different institutions and individuals, and to suggest explanations based on the location and dispersal of their assets.

Although it is tempting to suggest that a cumulative and comparative analysis of property descriptions may allow a calibration and, eventually, an establishment of property values, the high variability of property definitions and monetary values makes this a particularly difficult task. Moreover, as further demonstrated in Chapter 4, the shifts in medieval property values did not adhere to modern notions of 'market value'. This last point highlights the need to address the broader methodological challenges of the approach that is laid out in this chapter.

The Franks in Outremer: Studies in the Latin Principalities of Palestine and Syria, 1099–1187 (Farnham and Burlington, 2015), no. 14; D. M. Metcalf, 'Describe the Currency of the Latin Kingdom of Jerusalem', in B. Z. Kedar, J. Riley-Smith and R. Hiestand (eds.), *Montjoie: Studies in Crusade History in Honour of Hans Eberhard Mayer* (Aldershot and Brookfield, 1997), 189–98.

[60] See Lester, 'Crafting a Charitable Landscape', 130–32.
[61] B. Hamilton, *The Latin Church in the Crusader States: The Secular Church* (London, 1980), p. 150.
[62] Bouchard noted the connection between the terminology applied in the description of land plots and the level of direct engagement in the cultivation of the land. See *Holy Entrepreneurs*, 100.

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1.3 The Database of Frankish Jerusalem

The Perils of Methodology

Any database aims to transcend nuances and facilitate general observations, potentially at the expense of historical accuracy and precision in the independent analysis of the sources that comprise it. Clearly, such categories as agency, property type and so on, when applied arbitrarily to the sources that are integrated into the database, will obscure some of the details that are unique to each source. It is equally evident that the adaptation of a large corpus of historical records during their entry into a database may yield certain errors. It is thus best to refrain from relying on statistical significance, especially considering the relatively small number of documents, alongside our inability to assess the volume of lost material. In addition to these technical issues, other reservations, involving the nature of the historical sources and their scope, need to be taken into account. These include the limited scope and time frame of the sources as well as the choice of suitable historical equivalents used as a reference point in the establishment of categories applied in the characterisation of Frankish Jerusalem's urban landscape.

a. The Limited Scope of the Sources

The history of Jerusalem differs from that of many of the cities that served as case studies in the scholarship surveyed in this chapter. As such, the scope of the documents' corpus also differs from studies implementing similar methods on other cities. Where, for example, other works have chosen to focus on a single source, such as the Florentine *catasto* of 1427 or the Parisian *taille* between 1292 and 1313, since such documents provided sufficient data for an independent analysis, the sources preserved from Frankish Jerusalem are of a much more modest scale. Moreover, they are limited to a rather short time frame, deriving from the city's turbulent history, in which the Frankish rule forms a relatively brief episode.

Unlike in some of the European cities that were the foci of the studies cited earlier in this chapter, where the corpus of surviving archival records from the Middle Ages is more comprehensive, many of the sources pertaining to Frankish Jerusalem or Jerusalem-based institutions were lost. Therefore, the fluctuations that we observe in the data sometimes reflect small samples, and as it is impossible to assess the scope of lost sources or the balance between them and the surviving ones, it is difficult to accurately assess the database's level of representativeness. Moreover, the chronological categorisation of decades applied in this analysis, which is a broad categorisation due to the difficulty in establishing the precise dates of some of the documents, does not always

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reflect finer nuances that occurred in shorter time frames and may depict gradual processes as sharp transitions from decade to decade rather than as shifts that occurred over time. The discussion of individual issues aims to compensate for this by paying heed to the specific circumstances of documents that demonstrate certain shifts.

The nature of the surviving sources is also an important factor in this regard, considering that a large portion of the database is composed of documents representing the activity of the city's religious institutions. Thus, although the importance of these institutions in Jerusalem's landscape is incontrovertible, and corroborated by other textual and archaeological evidence, it is still difficult to establish the correlation between their activities and those of other equally prominent, but less documented, institutions, or between private individuals that lived or were located in the city.

b. Periodisation and Limited Time Frame

Another problem stemming from the specific historical circumstances of Jerusalem concerns the time frame and periodisation determined for the present study. Unlike other studies mentioned in previous sections, some of which examined processes of the *longue durée*, the decision to concentrate on the twelfth century brings up questions concerning periodisation, as well as continuity and discontinuity in Jerusalem's history. Although the choice to focus on the period of Frankish rule in the city can be explained in both historical and methodological terms, it nevertheless hinges on the common periodisation, defined by political events and the ethno-religious identity of the city's rulers.

The decision to confine the present study to the period of Frankish rule in Jerusalem ultimately returns us to a key question to be asked in this regard, especially in light of the methodological focus on western European case studies as models for some of the methods applied in the present study. This is the question of Frankish Jerusalem's urban character and the suitability of medieval European cities as equivalents for comparison.

c. The Suitability of Medieval European Case Studies as Methodological Models

This issue is part of a broader historiographical debate concerning the nature of Frankish settlement in the Latin East, alluded to earlier in this chapter and in the Introduction. Several models have been suggested in the past decades. These models delineated a spectrum, one end of which considered the Franks to have imported and imposed foreign European norms within the Levant, while at the other end they were considered

to have assimilated local customs.[63] This debate reverberated in the attempt to establish the character of Frankish Jerusalem's urban landscape and its position in regard to Muslim cities. Prawer's assertions regarding the relative continuity between the layout of Crusader cities and that of their Muslim predecessors have been challenged in recent years, and they demand further revision in view of recent scholarship shedding new light on the structure of the Muslim city.[64] Furthermore, scholarship focused on the Frankish architectural and artistic output tends to see the massive construction that took place in the city following the conquest as an act of 'Latin-Christian capital building',[65] although a closer reading points to diverse cultural influences.[66]

This book offers a more holistic approach to the formation of Frankish Jerusalem's urban layout, by tracing developmental processes and providing an alternative setting for the question of Jerusalem's position betwixt and between European influences and local legacies. In light of these issues, the choice to focus on studies implementing similar methodologies to the analysis of medieval urban landscape in western Europe may seem rather arbitrary. It can be explained by the similarity between the type of sources available from Frankish Jerusalem and those from medieval western European cities. However, one must be wary of deducing that these case studies are necessarily suitable candidates for a structural comparison with the urban development in Frankish Jerusalem. The use of a similar methodology does not imply a direct comparison between Frankish Jerusalem and exclusively western European case studies.

The challenges that emerge from the application of the methodologies outlined in the first section of this chapter to the case study of Frankish Jerusalem showcase the continuities and discontinuities in the city's history; orchestrated versus organic urban development in its unique geopolitical setting; implementation of various models of urbanism in a given time frame; diverse social and economic constructs and

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[63] See historiographical survey in Ellenblum, *Frankish Rural Settlement*, 3–38.

[64] Avni, *The Byzantine-Islamic Transition*, pp. 40–106.

[65] See, for example, Folda, *The Art of the Crusaders*, 130–37, 246, 274–75; D. Pringle, 'The Layout of the Jerusalem Hospital in the Twelfth Century: Further Thoughts and Suggestions', in J. Upton-Ward (ed.), *The Military Orders*, vol. 4, *On Land and By Sea* (Aldershot, 2008), p. 95; A. Linder, '"Like Purest Gold Resplendent": The Fiftieth Anniversary of the Liberation of Jerusalem', *Crusades*, 8 (2009), 31–51; Hamilton, 'Rebuilding Zion', 105–6; Riley-Smith, 'The Death and Burial', 165–75; Murray, 'Constructing Jerusalem'.

[66] See, for example, the architectural and artistic endeavours of the Armenian-origin Queen Melisende, discussed in N. Kenaan-Kedar, 'Armenian Architecture in Twelfth Century Crusader Jerusalem', *Assaph – Studies in Art History*, 3 (1998), 77–92; J. Folda, 'A Twelfth-Century Prayerbook for the Queen of Jerusalem', *Medieval Perspectives*, 8 (1993), 4–9.

their correspondence with the cityscape, and more. The combined use of an extensive database and spatial analysis grants a common ground for the discussion of the city's layout and that of its evolving institutions and economic and religious mechanisms. Furthermore, the examination of spatial development rooted within a distinct historical setting permits the re-examination of such theoretical issues as the causal relationship between spatial and socio–economic development and the periodisation of urban growth.