Size and Surveillance in Conquest Spain: the View from the Tower

Tamaño y vigilancia en la Conquista española: la vista desde la torre

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Abstract

At their conquests in 1236 and 1248, Córdoba and Seville were among the most architecturally sophisticated cities in Europe, with monuments of near unparalleled size and height. I first explore the contemporary chronicles and verses that responded to these heroic cityscapes, understood within a long tradition of urban panegyric and polemics about religious sound. Numerous sources also record that the great minarets in these cities were climbed by their new Christian conquerors, and in the second part of this article I consider intersections of surveying and surveillance in relation to towers, and aesthetic responses to urban and rural views. I conclude with a survey of the tradition of climbing towers in medieval Europe, and consider its possible repercussions for surveying and the creation of urban panoramas in the later Middle Ages and the modern era.

KEYWORDS: Towers, Panegyric, Views, Surveillance, Panorama.

Resumen

Tras su conquista en 1236 y 1248 respectivamente, Córdoba y Sevilla estaban entre las ciudades más sofisticadas de Europa desde la perspectiva arquitectónica, con monumentos de tamaño y altura casi inigualables. En este artículo, examino en primer lugar las crónicas y versos contemporáneos que evocaron a estos heroicos paisajes urbanos, entendidos dentro de una larga tradición de panegírica urbana y de polémica en torno al sonido religioso. Numerosas fuentes documentales también registran que los nuevos conquistadores cristianos ascendieron hasta la cúspide de los grandes minaretes de estas ciudades. En la segunda parte de este artículo considero las intersecciones de la topografía y la vigilancia en relación con las torres, y las respuestas estéticas a las vistas urbanas y rurales. Concluyo con un estudio de la tradición

de ascender a las torres en la Europa medieval, y considero sus posibles repercusiones sobre la topografía y la creación de panoramas urbanos en la Edades Media y Moderna.

PALABRAS CLAVE: torres, panegírico, vistas, vigilancia, panorama.

When conquered by King Fernando III of Castile and León in 1236 and 1248, Córdoba and Seville were among the largest and most architecturally sophisticated cities in Europe. The abandoned cities inspired wonder in their new Christian conquerors, captured in numerous contemporary descriptions of diverse rhetorical ambition. In his *Chronica Latina*, Bishop Juan de Osma, who led the Christian entry into Córdoba in 1236, offered a brief *laus urbis* of Córdoba in verse:

The walls remained standing, the sublime height of the walls was adorned with lofty towers, the houses were resplendent with gilded panelling (*stant menia sublimis altitudo murorum/ turris excelsis decoratur domus,/ auratis liquoribus splendent*); the streets of the city, arranged in order, lie open to passers-by.¹

Lamenting the failure of settlers to repopulate Córdoba after its conquest, the verses may have originally circulated independently as a way to encourage Christian settlement.

There are distant echoes here of the "high fort of your walls" of Isaiah 25:12 and of Virgil's description of the gilded panels in Dido's palace at Carthage.² But Juan's verses are most strongly indebted to a long tradition of urban panegyric that includes, amongst others, the fifth-century *De laude Pampilone epistola* (on Pamplona), Alcuin's praise of the "high walls and lofty towers at York," the extensive descriptions of walls and towers in the *Roman d'Eneas* (c. 1160), and the lengthy accounts of Babylon under Queen Semiramis in the early thirteenth-century Castilian *Libro de Alexandre*.³ Walls and towers also feature prominently in medieval representations of cities, from civic seals to manuscripts or monumental wall paintings.⁴ Architecture, encomium and *imago urbis* worked together to persuade all of the magnificence of the city, and, by extension, its inhabitants and religious and political leaders.

I thank Anya Burgon, Keith Lilley, Herbert Kessler and Paul Binski for their help in preparing this essay.

¹ JUAN DE SORIA, Chronica latina regum Castellae, J. F. O'CALLAGHAN (ed.), The Latin chronicle of the kings of Castile, Tempe, AZ, 2002, 142; L. CHARLO BREA, J. A. ESTÉVEZ SOLA, R. CARANDE HERRERO and G. PÉREZ DE LA CALZADA, Crónicas hispanas del siglo XIII (Corpus christianorum. Continuatio medievalis 5), Turnhout, 2010, 33.

² JUAN DE SORIA, *The Latin chronicle*, 142.

³ F. MIRANDA GARCIA, "De laude Pampilone y la construcción ideológica de una capital regia en el entorno del año Mil", in V. LAMAZOU-DUPLAN (ed.), Ab urbe condita...: Fonder et refonder la ville: récits et représentations (second Moyen Âge - premier xv^e siécle), Pau, 2011, pp. 293-308; S.-G. HELLER, "Medieval Towers, or a Pre-History of the Louvre", L'Esprit Créateur, 54 (2014), pp. 3-18, 11; B. TATE, "Laus Urbium: Praise of Two Andalusian Cities in the Mid-Fifteenth Century", in R. COLLINS and A. GOODMAN (eds.), Medieval Spain: Culture, Conflict and Coexistence. Studies in Honour of Angus MacKay, London, 2002, pp. 148-159; J. S. RUTH, Urban honor in Spain: the laus urbis from antiquity through humanism, Lewiston, N.Y., 2011; B. TAYLOR, "La écfrasis en el siglo xv: maravilla, metatexto y alegoría", Revista de Poética Medieval, 30 (2016), pp. 311-328.

⁴ P. LAVEDAN, Représentation des villes dans l'art du Moyen Age, Paris, 1954; P. D. A. HARVEY, The history of topographical maps: symbols, pictures and surveys, London, 1980, pp. 58-89.

Size mattered. The footprint of Córdoba's Great Mosque, whose prayer hall alone covered over 14,000 square metres, was larger than any church in Christian Europe, while its minaret rose over forty-seven metres, taller than any other tower in Christian Spain.⁵ Archbishop Rodrigo of Toledo, who first visited Córdoba in 1239, recorded in his *De rebus Hispaniae* that it "surpassed all other Arab mosques in ornament and size" (...*cunctas mezquitas Arabus ornatu et magnitudine superabat*).⁶ Seville was no less impressive. Its converted congregational mosque covered 9,000 square metres, dwarfing the vast new cathedral begun in Cologne in 1248, the year of Seville's conquest.⁷ Seville's city walls enclosed an area greater than those newly built by Philip Augustus in Paris, and Jonathan Bloom has calculated that Seville's minaret, transformed into the bell tower known as the *Giralda*, originally rose to eighty metres⁸ (Figs 1 & 2). That would mean that in 1248 it towered over the nearby Torre de la Plata (14.55m tall) and Torre del Oro (36.75m), and was surpassed in height only by the towers of Tournai cathedral (83m), the timber spire of St Paul's in London (possibly 120m or so), the Pharos at Alexandria (approx. 132.5m) and the pyramids of Egypt (146m at their tallest).⁹

Christian writers sought a suitable language in response.¹⁰ The preface to the anonymous *Rithmi de Iulia Romula* (c. 1250) acclaimed the city of Seville in somewhat forced verses,

⁵ Santiago de Compostela probably had the next tallest, the cathedral's south-western tower recently measured as 43m from the square below. I am grateful for the advice of Javier Alonso, architect of the cathedral. For other minarets in Iberia, see L. TORRES BALBÁS, "Alminares hispanomusulmanes", *Cuadernos de arte* (1939-41), pp. 59-89.

⁶ R. XIMÉNEZ DE RADA, *Historia de rebus Hispanie sive Historia gothica*. J. FERNÁNDEZ VALVERDE (ed.), (Corpus Christianorum. Continuatio medievalis, 72), Turnholt, 1987, 9. 17, pp. 299-300. In June 1236 Rodrigo was in Rome, but he went to Córdoba in 1239 to consecrate Juan de Osma as bishop. For the rhetoric of outdoing, see P. BINSKI, "Reflections on the 'Wonderful height and Size' of Gothic Great Churches and the Medieval Sublime", in C. S. JAEGER (ed.), *Magnificence and the sublime in medieval aesthetics: art, architecture, literature, music*, Basingstoke, 2010, pp. 129-156.

⁷ A. ALMAGRO, "De Mezquita a Catedral. Una adaptación imposible", in A. JIMÉNEZ MARTÍN (ed.), La piedra postrera. V centenario de la conclusión de la Catedral de Sevilla, Seville, 2007, vol. 1, pp. 13-45, 14-16. Cologne and Seville cathedrals were compared by Nicolaus von Popplau in the 1480s: F. ROZANSKI and J. LISKE, Viajes de extranjeros por España y Portugal en los siglos xv, xv1 y xv11, Madrid, 1879, p. 49.

⁸ J. BLOOM, *The minaret*, Edinburgh, 2013, p. 174; A. COLLANTES DE TERÁN SÁNCHEZ, *Sevilla en la baja edad media: La ciudad y sus hombres*, Sevilla, 1977, p. 64.

⁹ L. TORRES BALBÁS, "Las torres del Oro y de la Plata, en Sevilla", Archivo Español de Arte y Arqueología, 5 (1934), pp. 121-140; L. DELÉHOUZÉE AND J. WESTERMAN, "Tournai, la cathédrale de Notre-Dame aux XII^e et XIII^e siècles", Congrès archéologique de France, 169 (2011), pp. 179-202, here pp. 190-193; O. LEHMANN-BROCKHAUS, Lateinische Schriftquellen zur Kunst in England, Wales und Schottland vom Jahre 901 bis zum Jahre 1307, 5 vols, Munich, 1955-60, vol. II, p. 109; W. R. LETHABY, "Old St Paul's", The Builder, 39 (1930), pp. 24-26; D. BEHRENS-ABOUSEIF, "The Islamic History of the Lighthouse of Alexandria", Muqarnas, 23 (2006), pp. 1-14, here p. 6. The Cordoban traveller Pero Tafur compared the Giralda with the pyramids, which he visited in the 1430s: M. LETTS, Pero Tafur: Travels and adventures, 1435-1439, London, 1926, p. 78. The incomplete Hassan tower in Rabat (Morocco) – described by al-Marrākushī in 1224 as "excessively tall" – was probably intended to be higher than Seville's minaret: BLOOM, The minaret, p. 177; A. HUICI MIRANDA (trans.), Lo admirable en el resumen de las noticias del Magrib, Tetuán, 1955, vol. 4, p. 219.

¹⁰ See BINSKI, 'Reflections', for high vaults in Gothic churches.



Fig. 1. Pacho Garmendia, view of Seville in 1248 (from J. M. FERNÁNDEZ-PALACIOS CARMONA (ed.), Sevilla Almohade, 1248, Sevilla, 2008)

extensive in its extent, ample in its space, and strongly fortified by the circuit of its walls, protected all around by rivers and swamps, marvellously adorned with towers and thrones (*Turribus et soliis mire decorata*).¹¹

A few decades later an anonymous contributor to the Estoria de España wrote that

It is a noble city...its walls are extremely high and strong and very wide; [with] high and wellspaced towers, large and made with great labour (*torres altas et bien departidas, grandes et fechas a muy gran lauor*)...Then all the glories of the tower of Santa María [the *Giralda*], and how great are its beauty and height and nobility (*et de quan grant la beltad et el alteza et la su gran nobleza es*): its roof is sixty fathoms wide, and its height is four times that much.¹²

Towers are strikingly prominent in many of the *Estoria*'s narratives of heroic construction and conquest, notably its account of the foundation of Seville by Hercules, who was also credited with building two immense towers in La Coruña and Cádiz.¹³ These were in

¹¹ My translation, from GUILLELMI PETRI DE CALCIATA, "Rithmi de Iulia Romula seu Ispalensi Urbe (a. 1250)", in L. C. BREA, J. A. ESTÉVEZ SOLA and R. CARANDE HERRERO (eds.) *Chronica Hispana Saeculi XIII* (Corpus christianorum. Continuatio medievalis 73), Turnhout, 1997, pp. 197-198.

¹² O. R. CONSTABLE, Medieval Iberia: Readings from Christian, Muslim, and Jewish sources, Philadelphia, 1997, p. 218; D. CATALÁN and R. MENÉNDEZ PIDAL (eds.), Primera crónica general de España, Madrid, 1977, vol. II, ch. 1128, p. 768. The Estoria is however notably silent about Seville's congregational mosque – possibly because it was compromised by its associations with Islam, or perhaps because the available literary models were not suited to the task. See Paul Binski's essay in this volume for other combinations of nobleza and alteza.

¹³ CATALÁN and MENÉNDEZ PIDAL (eds.), *Primera crónica general*, vol. I, ch. 5, 7 and 9, pp. 8-11.

fact lighthouses of Roman origin, still much admired in the thirteenth century according to Rodrigo of Toledo.¹⁴ Towers (and walls) also feature often in contemporary accounts of the conquests of Seville and Córdoba.¹⁵ Juan de Osma, for example, recorded that a royal banner and relic of the true cross were displayed from the top of Córdoba's main minaret immediately after the city was triumphantly entered.¹⁶ This must be understood as part of a wider polemic in which the Muslim call for prayer from minarets was contrasted with the Christian peal of bells from church towers.¹⁷ But the story also reminds us that towers were not only admired from below, but were also climbed. That much is clear from Arabic writers, who were no less impressed by Córdoba and Seville. Al-Idrisi, who visited in the 1140s, opined that Córdoba's Great Mosque had "no equal amongst all Muslim mosques...both in its length and width, and its construction and decoration." Its minaret (manara) was "an imposing work, with curious art and admirable proportions," he explained, and was "climbed by two staircases, one on



Fig. 2. Composite image by the author, showing the Giralda today (photo: author) and on the funerary slab of Sancho Ortiz de Matienzo in Villasena de Mena (Burgos), 1499 (from L. TORRES BALBÁS, "Alminares hispanomusulmanes", *Cuadernos de arte* (1939-41), pp. 59-89)

the east side, one on the west, so that two people ascending the minaret separate at the base and only meet one another when they reach the top" 18 (Fig. 3).

¹⁴ See A. VIGO TRASANCOS, "Tras las huellas de Hércules. La Estoria de Espanna, la Torre de Crunna y el Pórtico de la Gloria", *Quintana*, 9 (2010), pp. 217-233; XIMÉNEZ DE RADA, *Historia de rebus Hispanie*, 1. 7, p. 17.

¹⁵ CATALÁN and MENÉNDEZ PIDAL, *Primera crónica general*, vol. II, ch. 1046, pp. 729-733.

¹⁶ JUAN DE SORIA, The Latin chronicle, pp. 132-41; M. NIETO CUMPLIDO, Historia de la Iglesia en Córdoba, II. Reconquista y restauración (1146-1326), Córdoba, 1991, pp. 61-64. A similar phenomenon was recorded at the conquests of Valencia and Granada: CATALÁN and MENÉNDEZ PIDAL, Primera crónica general, vol. II, ch. 920, p. 591; H. MÜNZER, Itinerarium. J. FIRTH (ed.), Doctor Hieronymus Münzer's Itinerary (1494 and 1495) and Discovery of Guinea, London, 2014, p. 65.

¹⁷ See, amongst many others, O. R. CONSTABLE, "Ringing bells in *Hafsid* Tunis: Religious concessions to Christian *fondacos* in the later thirteenth century", in R. E. MARGARITI, A. A. SABRA and P. SIJPESTEIJN (eds.), *Histories of the Middle East: studies in Middle Eastern society, economy and law in honor of A.L. Udovitch*, Leiden, 2011, pp. 54-72; J. H. ARNOLD AND C. GOODSON, "Resounding Community: The History and Meaning of Medieval Church Bells", *Viator*, 43 (2012), pp. 99-130.

¹⁸ A. DESSUS LAMARE (ed.), *Description de la Grande Mosquée de Cordoue*, Algiers, 1949, pp. 12-13.



Fig. 3. Reconstruction of the chief minaret in Córdoba, composite image by the author (from F. HERNÁNDEZ GIMÉNEZ, El alminar de `Abd al-Rahman III en la Mezquita Mayor de Cordoba: genesis y repercusiones, Granada, 1975, Figs 5, 7 & 8)

Who climbed those stairs? In his remarkable eye-witness account of the construction of Seville's new Almohad mosque and minaret, Ibn Sahib al-Sala wrote that

This minaret, the description of which surpasses speech and whose mention comes first for every historian, has no equal among the mosques of al-Andalus in its lofty elevation, its firm foundations, its solid workmanship, brick construction, rare craftsmanship (*gharābat al-ṣan'a*), and splendid appearance. It soared into the air and towered in the sky and could be seen by the naked eye a day's journey from Seville with the stars of Gemini...It was built without stairs, and one ascended it by a passage wide enough for beasts of burden, people and the custodians.¹⁰

From this it seems that it was not only custodians who climbed the tower, and indeed several travellers imply that climbing architectural and natural wonders was common practice in the Arabic tradition. In 1184, for example, the Andalusi geographer Ibn Jubayr climbed Mount Oasioun outside Damascus and recorded that "From this hill [overlooking Damascus] one may look over all the western gardens of the town, and there is no prospect like it for beauty, comeliness, and spacious vista".²⁰ In 1204 Abd al-Latif al-Baghdadi described locals climbing the pyramids in Giza, and from the xth century onwards numerous travellers (including several from al-Andalus) recorded that they had climbed the Lighthouse

¹⁹ F. ROLDÁN CASTRO, "De nuevo sobre la mezquita aljama almohade de Sevilla: la versión del cronista cortesano Ibn Sahib al-Sala", in *Magna Hispalensis. Recuperación de la Aljama almohade*, Seville, 2002, pp. 13-22, here pp. 19-21. This English translation from the Arabic was kindly provided by Amira Bennison.

²⁰ J. C. BROADHURST (trans.), The travels of Ibn Jubayr, London, 1952, p. 288.

of Alexandria.²¹ Visitors to Alexandria marvelled particularly at the arrangement of the stairs in the Lighthouse, and this feature of Córdoba's minaret was also singled out by al-Idrisi and by the author of the fifteenth-century Descriptio Cordubense, who placed Córdoba alongside the other wonders of the world.²²

The Giralda was also regularly climbed after Seville's conquest in 1248 (Fig. 2). Writing in the early fourteenth century, for example, the anonymous author of the *Estoria de España*, recorded that

so wide and so smooth and with such mastery was it made (*tan ancha et tan llana et de tan grant maestria fue fecha*), and so fine is the stairway by which they go up to the tower, that kings and queens and important men who want to go up there on horseback can go up to the top when they wish (*que los reyes et las reynas et los altos omnes que alli quieren sobir de bestias, suben quando quieren fasta en ssomo*).²³

So why did people climb the Giralda? One answer lies in late fourteenth-century evidence that it was used as a watchtower, with views towards other watchtowers near the border with Nasrid Granada.²⁴ But it was also used to survey the city itself. A passage from the *Crónica particular de San Fernando*, committed to writing in the early fourteenth century but based on earlier verbal accounts, describes how, soon after Seville's conquest the *jongleur*, Paja, marvelling at the Giralda's height and beauty, was persuaded to climb it (*e viola tan alta e tan fermosa como es, e vínole á talante de sobir en ella*), and looking out was alarmed to see how much of the enormous city was uninhabited. So he enticed Fernando III and many nobles to climb the tower, and as Fernando admired the view from the top (*cató toda la villa cómo parescia de ally muy bien e muy fermosa*), Paja seized the opportunity to point out how much of the city still lay empty, and thus persuaded Fernando to remain in the city and ensure its security.²⁵

This story resonates with accounts of the partition (*repartimiento*) of Écija, conquered in 1240, in which it is recorded that those responsible divided the city into four parishes by

²¹ K. H. ZAND, I. E. VIDEAN AND J. A. VIDEAN (trans.), *The Eastern Key*, London, 1965, pp. 114-115; BEHRENS-ABOUSEIF, "Islamic History", especially pp. 3-7.

²² M. NIETO CUMPLIDO (trans.), *Córdoba en el siglo xv*, Cordoba, 1973, pp. 67-68. On the wonders, see H. OMONT, "Les sept merveilles du monde au Moyen Âge", *Bibliothèque de l'École des chartes* (1882), pp. 40-59; T. MOMMSEN (ed.), *Epitome ovetensis a. DCCCLXXXIII. VII. Compilatio Cod. matr. F 86. VIII* (Monumenta Germaniae Historica. Auctores Antiquissimi 11), Berlin, 1894.

²³ CONSTABLE, Medieval Iberia, p. 218; CATALÁN AND MENÉNDEZ PIDAL, Primera crónica general, vol. II, ch. 1128, p. 768. The Moroccan ambassador to Spain made similar observations when he climbed the tower in 1779: N. MATAR, An Arab Ambassador in the Mediterranean World: Muhammad Ibn Othman al-Miknasi, London, 2015, p. 40.

²⁴ F. COLLANTES DE TERÁN DELORME and D. KIRSCHBERG SCHENCK (eds.), *Inventario de los papeles del Mayordomazgo del siglo xv*, 7 vols, Seville, 1972, vol. I, no. 154 (31 March 1408). See also A. JIMÉNEZ MARTÍN AND J. M. CABEZA MÉNDEZ, *Turris fortissima: documentos sobre la construcción, acrecentamiento y restauración de la Giralda*, Seville, 1988, pp. 201-310.

²⁵ See R. MENÉNDEZ PIDAL, "Relatos poéticos en las crónicas medievales", *Revista de Filologia Española*, 10 (1923), pp. 329-372, 365; J. GONZÁLEZ, *Repartimiento de Sevilla*, 2 vols, Madrid, 1951, vol. I, pp. 232-33. On this chronicle see M. HIJANO VILLEGAS, "*Crónica particular de San Fernando*: composicón y transmissión", in F. J. HERNÁNDEZ, R. SÁNCHEZ AMEIJEIRAS AND E. FALQUE (eds.), *Medieval Studies in Honour of Peter Linehan*, Florence, 2018, pp. 275-322, and bibliography therein.

surveying it from a minaret and projecting over the city an imaginary cross – prompted, most likely, by traces of Écija's Roman layout²⁶ (Fig. 4). It also has literary echoes. The *Estoria de España* describes Dido's tower in Carthage as being so tall that the whole city could be seen from it, and later recounts how, having conquered Valencia, the Cid and his family climbed the city's tallest tower and gazed out.²⁷ This story is taken from the slightly earlier *Cantar de Mio Cid* of c. 1200 (verses 1610-1615):

My Cid brings them to the citadel, to the very highest place, and they gaze about with their lovely eyes. They see Valencia, how it spreads before them, and beyond it the sea, and all things to delight them (*miran Valencia, cómmo yaze la cibdad,* / *e del otra parte a ojo han el mar,* / *miran la huerta, espessa es e grand*).²⁸

This concern with landscape is shared in the autobiographical *Llibre des Feits* of James the Conqueror, King of Aragon, in which he surveyed the borderlands with Muslim Xátiva in 1240:

And we went to that peaked hill that is at the side of the castle, and we saw the most beautiful *huerta* [irrigated farmland] that we had ever seen of a town or a castle, and there were more than two hundred terraces in the *huerta*, the most beautiful that one could find, and many farmhouses around the *huerta*; and, moreover, we saw the castle, so noble and so beautiful; and such a beautiful *huerta*. And we felt great joy and great happiness in our heart (*tan noble e tant bel, e tan bela orta, e haguem ne gran gog, e gran alegre en nostre cor*).²⁹

Once again, there is a strong emphasis on the beauty of the view, albeit once again in a triumphal context.³⁰ The promise of "supervision" (from the Latin *super* + *videre*, over see) from on high should also be understood in relation to the role of bell towers and bells in regulating daily and liturgical rhythms, and in resounding in times of crisis – at the same time implicitly celebrating Christian identity both within the city walls and beyond.³¹ That point is underlined by the apotropaic formulae inscribed on the *Campana Gorda* that the German doctor and traveller, Hieronymous Monetarius (Münzer), admired in the bell tower of Toledo

²⁰ H. L. ECKER, "How to Administer a Conquered City in al-Andalus: Mosques, Parish Churches and Parishes", in C. ROBINSON AND L. ROUHI (eds.), *Under the Influence: Questioning the Comparative in Medieval Castile*, Boston, 2005, pp. 45-65, here p. 48.

²⁷ CATALÁN and MENÉNDEZ PIDAL, Primera crónica general, vol. I, ch. 59, p. 40 and vol. II, ch. 925, p. 596.

²⁸ L. BYRD SMITH, The Poem of the Cid, London, 2006, p. 64; A. MONTANER FRUTOS (ed.), Cantar de mío Cid, Barcelona, 2007, p. 104.

²⁰ D. J. SMITH AND H. BUFFERY (eds.), *The Book of deeds of James I of Aragon: a translation of the medieval Catalan Libre dels fets*, Aldershot, 2003, ch. 318, p. 250. For Peter of Aragon's ascent of Mount Canigou in 1285, see A. CLASSEN, "The Discovery of the Mountain as an Epistemological Challenge: A Paradigm Shift in the Approach to Highly Elevated Nature. Petrarch's *Ascent to Mont Ventoux* and Emperor Maximilian's *Theuerdank*", in *The Book of Nature and Humanity in the Middle Ages and the Renaissance*, D. HAWKES AND R. NEWHAUSER (eds.), Turnhout, 2013, pp. 3-18.

³⁰ See the classic study by M. FOUCAULT AND A. SHERIDAN (trans.), *Discipline and punish: the birth of the prison*, New York, 1995, especially pp. 195-209. For a striking version of this practice in nineteenth-century colonial India see http://www.surveyingempires.org/ (accessed 10.6.2019).

³¹ See especially N. ATKINSON, *The Noisy Renaissance: Sound, architecture, and Florentine urban life*, University Park, PA, 2016.



Fig. 4. The partition of Écija in 1263 (from H. ECKER, "How to Administer a Conquered City in al-Andalus: Mosques, Parish Churches and Parishes", in *Under the Influence: Questioning the Comparative in Medieval Castile*, C. ROBINSON AND L. ROUHI (eds.), Boston, 2005, pp. 45-65, Fig. 3)

cathedral in January 1495, together with the explicitly triumphal formula "Christ conquers, Christ reigns, Christ commands" (*Christus Vincit, Christus Regnat, Christus Imperat*).³² The same triad was inscribed on a bell made for Seville's *Giralda* in 1400, and resounded across the city on regular occasions.³³

³² T. NICKSON, "Texts and Talismans in Medieval Castile", Art In Translation, 7 (2015), pp. 9-38, here pp. 12-13; 20-21; MÜNZER, Münzer's Itinerary, p. 118.

³³ A. JIMÉNEZ MARTÍN, "Las fechas de las formas", in A. JIMÉNEZ MARTÍN (ed.), *La catedral gótica de Sevilla. Fundación y fábrica de la obra nueva*, Seville, 2006, pp. 15-113, here p. 42.

THE VIEW FROM ABOVE

Iberian accounts of climbing, surveying, and enjoying the view are not without parallel, and in the second part of this essay I will explore this phenomenon in greater depth across medieval Europe. One early example, Lucian's twelfth-century description of Chester, *De laude Cestrie*, also compares the city's plan to a cross, and it has been suggested that he viewed the city from a bell tower.³⁴ Or we can think of the words Orderic Vitalis placed in the mouth of the young Henry I, when in 1090 Henry marched the rebellious Conan to the top of Rouen's highest tower before pushing him off:

Consider, Conan, the beauty of the country you tried to conquer (*Considera Conane, quam pulchram tibi patriam conatus es subicere*). Away to the south there is a delightful hunting region, wooded and well stocked with beasts of the chase.... On the other side see the fair and populous city, with its ramparts and churches and town buildings (*ciuitas populosa menibus sacrisque templis et urbanis edibus speciosa*), which has rightly been the capital of all Normandy from the earliest days³⁵.

Or, we might remember the lines from Chretien de Troyes' *Perceval, the Story of the Grail,* written in the 1180s or early 1190s:

Then he wished to go see the view from the tower. Accompanied by his host (the boatman) He climbed a spiral staircase along the wall of the vaulted hall until they reached the top of the tower and could see the surrounding countryside more beautiful than words could describe (*plus bel que nus ne porroit dire*).³⁶

Poggio Bracciolini's introduction to *On the Inconstancy of Fortune* (c. 1448), in which he surveyed the ruins of Rome from the top of the Capitoline Hill, represents an alternative literary tradition in which contemplation of a view prompted historical reflection.³⁷ The conceit may stem from Virgil's description of Aeneas gazing from his roof at the falling city of Troy (*Aeneid* 2. 302-312), but Poggio's most immediate source was Petrarch's letter to Giovanni Colonna (*Epistolae familiares*, 6.2) in which he recalled how they had together contemplated the prospect (*prospectus*) of Rome's ruins from the vaulted roof of the Baths of Diocletian. These accounts were celebrated by Jacob Burckhardt in *The Civilisation of the Renaissance in Italy* (1860), but he gave pride of place to Petrarch's account of his ascent of Mount Ventoux in 1336, in which Petrarch claimed to have been the first since Antiquity to climb a mountain and enjoy the view for its own sake.³⁸

³⁴ P. Oldfield, Urban panegyric and the transformation of the medieval city, 1100-1300, Oxford, 2018, p. 73.

³⁵ ORDERIC VITALIS AND M. CHIBNALL (trans.), *The ecclesiastical history of Orderic Vitalis*, Oxford, 1969-80, Book VII, vol. IV, pp. 224-225.

³⁶ W. W. KIBLER AND R. B. PALMER (eds.), *Medieval Arthurian Epic and Romance: Eight New Translations*, Jefferson, NC, 2014, p. 181, lines 7954-7962. See also lines 5680-5717.

³⁷ POGGIO BRACCIOLINI AND O. MERISALO (ed.), *De varietate fortunae*, Annales Academiae Scientiarum Fennicae, Series B, vol. 265, Helsinki, 1993, pp. 91-97.

³⁸ J. BURCKHARDT, *The Civilisation of the Renaissance in Italy*, London, 1928, Part 2, ch. 2 and Part 4, ch. 4, pp. 177-180; 300-303.

However contrived, Petrarch's account and its subsequent interpretation underline the fact that the appreciation of views from above is a cultural and historical phenomenon, not some trans-historical human instinct.³⁹ So do such descriptions reveal a genuine appreciation for the beauty of the view, or are they attributable merely to feelings of triumph over "the imperial landscape"?⁴⁰ I think both. In an age before aerial travel those views gave pleasure, presumably, because of the novel perspectives they afforded, for the superior understanding of topography they offered, and for the delightful miniaturisation or "minificence" they conjured. Towers provided opportunities to "step back" from crowded medieval streets, to reflect and to admire – especially in cities that were not flanked by hills.⁴¹ It was perhaps Victor Hugo's wonderful panoramic description of medieval Paris as seen from the towers of Notre-Dame together with Gaspard-Félix Tournachon's early photographs of Paris from a hot air balloon (1858) – that prompted some especially perceptive observations from French social theorists.⁴² Writing of the view from the Eiffel Tower, Roland Barthes explained that "the Tower makes the city into a kind of nature; it constitutes the swarming of men into a landscape...the bird'seye view, which each visitor to the Tower can assume in an instant for his own, gives us the world to *read* and not only to perceive...to perceive Paris from above is infallibly to imagine a (hi)story (*une histoire*)".⁴³ Or as Michel de Certeau succinctly put it, the view from above made it possible "to be lifted out of the city's grasp".44

CLIMBING TOWERS

In this final section I will briefly sketch the unwritten history of tower climbing and of aesthetic responses to land and city views in the European Middle Ages, offering new perspectives on long-standing debates about landscape, vision and modernity.⁴⁵ From Daedalus to Moses, Christ, Muhammad or Alexander, from the tower of Babel to Sinai, Sion and the biblical watch-tower, high places have long been treasured for their promise of proximity to God, dominance over what is below, and for the views they offered – most fully explored in tropes of seeing the world from a tower (*a specula*) or from above (the *kataskopos*).⁴⁶ Conversely, they have also been condemned for excessive pride and superfluity, or for providing opportunities for voyeurism.⁴⁷ Towers have also always been climbed – typically for ritual, military or

⁴⁷ T. G. FRISCH, Gothic art 1140-c 1450: sources and documents, Toronto, 1971/87, pp. 30-33, includes convenient translations of Alexander Neckham and Peter the Chanter's invectives against lofty towers. On voyeurism see D.

³⁰ John Leland, for example, mentions innumerable towers in his *Itinerary* of c. 1538-1543, but apparently felt no compulsion to climb them.

⁴⁰ See W. J. T. MITCHELL, *Landscape and Power*, London, 2002, pp. 5-36.

⁴¹ For which see C. W. BYNUM, "Wonder", American Historical Review, 102 (1997), pp. 1-26.

⁴² V. HUGO AND F. SHOBERL (trans.), *The Hunchback of Notre-Dame*, London, 1833, Book 3, ch. 2, p. 106.

⁴³ R. BARTHES AND R. HOWARD (trans.), *The Eiffel Tower, and other mythologies*, 1997, pp. 8-9, 11.

⁴⁴ M. de Certeau and S. Rendall (trans.), *The practice of everyday life*, London, 1984, p. 92.

⁴⁵ On landscapes, see *Rural space in the Middle Ages and early modern age: the spatial turn in premodern studies*, A. CLASSEN (ed.), Berlin, 2012, pp. 1-192.

⁴⁰ See M. RÉVÉSZ-ALEXANDER, Der Turm als Symbol und Erlebnis, The Hague, 1953. For the a specula tradition, see M. KUPFER, Art and Optics in the Hereford Map. An English Mappa Mundi, c. 1300, London, 2016, pp. 51-167. For the kataskopos, see M. CARRUTHERS, The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200, Cambridge, 1998, pp. 77-81; 231-237.

other functional reasons – and architecture has long been used to frame urban and rural views in the form of belvederes, turrets, leads, sitting-windows, *galeries, miradors, manāzir, altanas* and *gloriettes* or *glorietas.*⁴⁸ But when did the practice begin of climbing *real* towers simply to savour the challenge, survey the city and enjoy the view?

In the early eleventh century Daniel the Abbot recorded that there were 200 steps to climb up the Tower of David in Jerusalem, but accounts of pilgrimage to the Holy Land almost never mention climbing towers for the view.⁴⁹ Significantly, some of the earliest evidence for tower climbing comes from the context of urban panegyric. In 1288 Bonvesin de la Riva recorded in his *De magnalibus urbis Mediolani* that the city of Milan was circular and advised that anyone

who wishes to see and savour (*videre delectat*) the form of the city (*civitatis formam*) and the quality and quantity of its estates and buildings, should ascend thankfully (*gratulanter ascendat*) the tower of the curia of the commune; from there, turning eyes all round one can marvel at the wonderful sight (*inde oculos circumquaque revolvens poterit miranda mirari*).⁵⁰

Evidence for "tourists" climbing towers accumulates in the fifteenth century. A visitor's description of Paris of 1434 alleged that there were as many steps in the towers of Notre-Dame as there were days in the year.⁵¹ *Václav Šašek z Bířkova* recorded that in 1465 he and Leo von Rozmithal climbed the tower of the town hall in Brussels, "from which we could overlook the whole city," and three years later they climbed the tower of Wiener Neustadt in modern-day Austria.⁵² And in the 1490s Münzer claimed to have climbed dozens of towers, giving no indication that he considered this very remarkable. Between September 1494 and April 1495 he climbed towers in Barcelona, Valencia, Murcia, Guadix, Granada, Seville, Lisbon, Zamora, Salamanca, Toledo, Zaragoza, Toulouse, Poitiers, Tours, Orléans, Paris, Amiens, Arras, Lille, Bruges, Ghent, Antwerp, Mechelen and Cologne.⁵³ In Granada, Paris and Cologne he climbed

KEENE, "Tall Buildings in Medieval London: Precipitation, Aspiration and Thrills", *The London Journal*, 33 (2008), pp. 201-215, here p. 210, and C. HOURIHANE, *King David in the Index of Christian art*, Princeton, 2002, pp. 272-276.

⁴⁸ See, for example, H. GÜNTHER, "Utopische Landschaft im Mittelalter", *Das Mittelalter*, 18 (2013), p. 55; D. F. RUGGLES, *Gardens, landscape, and vision in the palaces of Islamic Spain*, University Park, PA., 1999, especially pp. 13-14; 96; 100-109; 119; 126; 143; 153; 157-158; 190-191; 200-209; J. A. ASHBEE, "The Chamber called Gloriette': Living at Leisure in Thirteenth- and Fourteenth-Century Castles", *Journal of the British Archaeological Association*, 157 (2004), pp. 17-40; O. H. CREIGHTON, *Designs upon the Land: Elite Landscapes of the Middle Ages*, Ashgate, UK, 2009, pp. 143-144; 168-175; 180-188; KEENE, "Tall Buildings", pp. 207, 212.

⁴⁹ J. WILKINSON, J. HILL AND W. F. RYAN, *Jerusalem pilgrimage*, 1099-1185, London, 1988, p. 130. This practise is also recorded in A. STEWART AND C. W. WILSON (eds.), *Of the Holy Places visited by Antoninus Martyr, circ. 560-570 A.D*, London, 1887, p. 18, but with no mention of any view.

⁵⁰ OLDFIELD, Urban panegyric and the transformation of the medieval city, 1100-1300, p. 139, citing F. NOVATI (ed.), "De magnalibus urbis Mediolani", Bullettino dell'Istituto Storico Italiano, 20 (1898), pp. 1-188, here 2. 9, p. 72. The earliest map of Milan, from the 1330s, also shows it as round, as did Leonardo da Vinci: N. MILLER, Mapping the city: The language and culture of cartography in the Renaissance, London, 2003, pp. 96-97; 182-183.

⁵¹ E. MULLALLY (ed.), *Description de la ville de Paris 1434: medieval French text with English translation*, Turnhout, 2015, pp. 86-87.

⁵² M. LETTS (ed.), The travels of Leo of Rozmital through Germany, Flanders, England, France, Spain, Portugal and Italy 1465-1467, Cambridge, 1957, pp. 21, 134.

⁵³ MÜNZER, *Münzer's Itinerary*, pp. 20, 33, 43, 51, 56, 57, 58, 78, 87, 105, 106, 118, 136, 143, 150, 156, 165-6, 167, 177, 195, 197-8, 200, 205, 212, 228, 221-222, 224, 230. This translation is taken from L. PFANDL,

more than one tower; in Toledo, Tours and Amiens he admired the bells; and in Granada and Rouen he also climbed a hill for the view. In most cases Münzer counted the number of steps, a common form of description by enumeration, and a crude measure of height. Perhaps encouraged by his friendship with the cartographers Hartmann Schedel and Martin Behaim, Münzer also took the opportunity to survey the city below, typically comparing it in size to his native Nuremberg.⁵⁴ Münzer's account of visiting Seville in November 1494 is quite typical:

ascendentes autem turrim altissimam ecclesie Beate Virginis, que olim erat maxima mesquita, contemplabar ipsam et iudicavi eam in duplo maiorem esse Nuremberga. Et est omnino rotunda et in planissimo sita.⁵⁵

His vocabulary is telling. From a total of twenty-nine climbs, there are fourteen instances in which he employed derivatives of *contemplare* (*con* + *templum*, a temple, shrine or open space), a word he used almost exclusively in the context of looking out from towers. On nine occasions he simply describes himself looking or seeing (*videre*), but he also took the opportunity to judge or measure (*iudicare*, used four times), and deployed related compounds for looking out: *inspecere* (2 instances), *prospicere* (1) and *conspicere* (2). He admired the site (*situm* or *situm loci*, 19 instances) and the view (*spectaculum* or *aspectus*, each used twice), which he found beautiful (*pulcher*, 13 instances), joyous or pleasing (*iocundus* or *placere*, each used twice) and on one occasion marvellous (*admirabile*). Normally he described himself climbing the highest tower (*turris*), but in Barcelona he described himself looking out *ex specula*, betraying his familiarity with this long-standing literary genre.⁵⁶

Münzer seems to have established a trend. In 1517/18 Antonio de Beatis climbed towers at Strasbourg, Ghent and Milan, and in the same period an anonymous merchant from Milan climbed towers in Paris, Rouen, Amiens, Antwerp, Córdoba, and Seville.⁵⁷ In 1521 Albrecht Dürer admired the view from a tower in Ghent, and earlier paid one stiver to go up the tower at Antwerp, which he was told was higher than Strasbourg cathedral's.⁵⁸ Perhaps inspired by these visits, Dürer recommended in his *Treatise on Measurement* (1525) that towers should "be erected in the most suitable spot of a city and placed in the middle of a market square, so that the entire city can be seen from it (*daraus sehen*) and it can serve as a

[&]quot;Itinerarium Hispanicum Hieronymi Monetarii, 1494-1495", *Revue Hispanique*, 48 (1920), pp. 1-179 and E. P. GOLDSCHMIDT, "Le voyage de Hieronimous Monetarius a travers la France", *Humanisme et Renaissance*, 6 (1939), pp. 55-75, 198-220; 324-348; 529-539.

⁵⁴ M. ZUILI, "L'Itinerarium... de Jérôme Münzer ou le témoignage d'un Allemand dans l'Espagne de la fin du xv^e siècle: une écriture entre littérature de voyage et histoire", *e-Spania*, 23 (2016), DOI: 10.4000/e-spania.25260, paragraphs 5-6. Seville, meanwhile, was the benchmark for Pero Tafur in the 1430s: LETTS, *Travels*, pp. 28, 93, 132, 217, 223, 233.

⁵⁵ Trad.: "We climbed the highest tower in the church of the Blessed Virgin, which was once the largest mosque, and I studied the city and judged it to be twice as large as Nuremberg. It is quite round and on a level site". PFANDL, "Itinerarium", p. 74; MÜNZER, *Münzer's Itinerary*, p. 78.

⁵⁶ PFANDL, "Itinerarium", p. 6.

⁵⁷ J. R. HALE AND J. LINDON (eds.), The travel journal of Antonio de Beatis: Germany, Switzerland, the Low Countries, France and Italy, 1517-1518, London, 1979, pp. 74, 95, 181; L. MONGA, Un mercante di Milano in Europa: diario di viaggio del primo Cinquecento, Milan, 1985, pp. 60, 65, 126, 137.

⁵⁸ R. TUMBO (ed.), Albrecht Durer: Records of Journeys to Venice and the Low Countries, Boston, 1913, pp. 73, 79.

guidepost to strangers, no matter which street they may find themselves in".⁵⁹ In 1526 Andrea Navagero climbed Seville's Giralda, comparing it favourably with the campanile of San Marco in Venice, while in the late 1530s it once again became possible to climb Trajan's Column in Rome.⁶⁰ By the early seventeenth century a view of a city's "prospect" from a high tower was an entirely routine element of a city visit.⁶¹

So was it tower climbing that was new, or just the urge to record it? Perhaps a bit of both, though the steep and narrow stairs of most church towers suggests that they were not originally intended for regular use, and descriptions of climbing towers – by an increasingly wide variety of people, and in several different literary genres – multiply exponentially from the 1490s onwards, fractionally lagging behind the explosion in perspectival city views, or "portraits" in the same period⁶² (Fig. 6). The fifteenth and early sixteenth centuries also saw the completion of many towers of ever greater height (fuelled in many cases by *campanilismo*),



Fig. 6. Jan van Eyck, The Madonna of Chancellor Rolin, 1435, detail. Painting on wood panel, 66 x 62 cm. Paris, Louvre. © 2019. Photo Scala, Florence

⁶² Á. GÓMEZ MORENO, "La torre de Pleberio y la ciudad de 'La Celestina' (un mosaico de intertextualidades artísticoliterarias... y algo más)", in *El mundo social y cultural de la Celestina: actas del Congreso Internacional de la Universidad de Navarra*, J. M. USUNÁRIZ GARAYOA AND I. ARELLANO AYUSO (eds.), 2003, pp. 211-236; H. BALLON AND D.

⁵⁹ W. L. STRAUSS (ed.), The Painter's Manual, New York, 1977, pp. 236-237.

⁶⁰ A. NAVAGERO, *Il viaggio fatto in Spagna et in Francia*, Venice, 1563, fol. 13v. Pero Tafur also compared San Marco's tower with the Giralda: LETTS, *Travels*, p. 164. A. CLARIDGE, "Hadrian's Column of Trajan", *Journal of Roman Archaeology*, 6 (2015), pp. 5-22, here p. 5.

⁶¹ P. BURKE, "Urban Sensations: Attractive and Repulsive", in *A Cultural History of the Senses in the Renaissance*, H. ROODENBURG (ed.), London, 2014, pp. 43-60, here p. 55; C. STEVENSON, "Vantage Points in the Seventeenth-century City", *The London Journal*, 33 (2008), pp. 217-232; F. D. R. LEMERLE, *Le voyage architectural en France (xv^e-xvv^e siècles): antiquité et modernité*, Turnhout, 2018, p. 45.

even as, ironically, the growing taste for Italianate architecture curbed the fashion for building new towers of prodigious height.⁶³

A letter of Isabella d'Este from Venice in 1502 captures the modern flavour of these visits:

after lunch we went to straight to San Marco, hoping to find very few people at that hour, but we were wrong as there were a good many, and so as not to leave out anything and to see this singular city properly, we climbed the campanile of San Marco, where we took great pleasure in admiring the setting and the excellent buildings on all sides (*dove pigliassimo gran piacere considerando el sito et ex.*^{tt} *hedificii che vi sono*).⁶⁴

Here the tower is as much an attraction as the church and its relics, one more element of Venice's *mirabilie*. Isabella visited two years after Jacopo de' Barbari created his extraordinary view of Venice, made, it has been shown, by surveying the city from a number of towers, especially that of San Giorgio Maggiore (Fig. 5).⁶⁵ Towers had long been used as landmarks



Fig. 5. Jacopo de' Barbari, Map of Venice, printed by Anton Kolb, 1500. Photo: Minneapolis Institute of Art

- ⁶⁴ A. LUZIO AND R. RENIER (eds.), *Mantova e Urbino: Isabella d'Este ed Elisabetta Gonzaga nelle relazioni famigliari e nelle vicende politiche*, Rome, 1893, p. 309.
- ⁶⁵ See especially J. SCHULZ, "Jacopo de' Barbari's View of Venice: Map Making, City Views, and Moralized Geography before the Year 1500", *The Art Bulletin*, 60 (1978), pp. 425-474; S. BIADENE, G. ROMANELLI AND C. TONINI (eds.), *A volo d'uccello: Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento*, Venice, 1999.

FRIEDMAN, "Portraying the City in Early Modern Europe: Measurement, Representation, and Planning", in *History of Cartography*, J. B. HARLEY AND D. WOODWARD (eds.), Chicago, 2007, vol. 3, pp. 680-704, here pp. 680-689; J. MAIER, "A 'True Likeness': The Renaissance City Portrait", *Renaissance Quarterly*, 65 (2012), pp. 711-752, here pp. 720, 726; J. DE ROCK, *The Image of the City in Early Netherlandish Painting (1400-1550)*, Turnhout, 2019, pp. 255-299.

⁶³ See C. BELTRAMI, Building a crossing tower: A design for Rouen Cathedral of 1516, London, 2016; R. O. BORK, Late Gothic architecture: Its evolution, extinction, and reception Turnhout, 2018, pp. 115-410; B. VANNIEUWENHUYZE, "Les tours urbaines: particularité du Moyen Âge, tabou de la Renaissance? Quelques réflexions basées sur le cas bruxellois", in M. CUNIN and M. YVERNAULT (eds.), Monde(s) en mouvement: Mutations et innovations en Europe à la fin du Moyen Age et au début de la Renaissance, Limoges, 2012, pp. 287-299, here pp. 292-293.

by surveyors, and geometrical treatises and *abbaco* textbooks commonly instructed readers how to calculate the height of towers. But prior to the introduction of new instruments in the mid-fifteenth and early sixteenth centuries (notably the polimetrum), these calculations seem always to have been made at ground level: the Barbari map (together perhaps with the slightly earlier *View of Florence with a Chain*) represents the earliest firm evidence that a city was systemically surveyed from a tower.⁶⁶

Deborah Howard has also suggested that the Barbari map was distorted to make it more like the shape of a dolphin.⁶⁷ This could be perceived only on the map, but draws attention to a longer tradition of interest in the shape of cities, seen in the comparisons of Chester and Écija with the shape of the Cross, or descriptions of Milan's circular shape, cited above. Münzer also betrayed an interest in the *forma urbis*: viewed from above Seville was round, he recorded; Arras "rounded like an arc"; Bruges "built in a circle"; Ghent "star-shaped"; and Cologne like a semi-circle.⁶⁸ It has been suggested that some garden designs were intended to be seen from above; is it possible that such concerns informed urban design in the early modern period?⁶⁹

Commenting on the view over Manhattan in 1980, Michel de Certeau wrote that "Medieval or Renaissance painters represented the city as seen in a perspective that no eye had yet enjoyed. This fiction already made the medieval spectator into a celestial eye. It created gods".⁷⁰ De Certeau's general notion was certainly correct, but in this essay I have sought to show that some did in fact enjoy that perspective before the Renaissance.⁷¹ Together, these striking accounts suggest a complex and largely overlooked relationship in the late Middle Ages between travellers, competitive tower building, urban panegyric, city views and map-making.⁷²

⁶⁰ See P. TANNERY (ed.), *Le traité du quadrant de maître Robert Anglès (Montpellier, 13e siècle): texte latin et ancienne traduction grecque*, Paris, 1897, pp. 75-64 (and illustrations in MS Oxford, Bodleian Library, Auct. F.3.13 (2177)); S. K. VICTOR, *Practical geometry in the high Middle Ages: Artis cuiuslibet consummatio and the Pratike de geometrie*, Philadelphia, PA, 1979, pp. 294-301; K. VELTMAN, "Military Surveying and Topography: The Pratical Dimension of Renaissance Linear Perspective", *Revista da Universidade de Coimbra*, 27 (1979), pp. 329-368, especially p. 344; E. G. R. TAYLOR, "Cartography, Survey and Navigation 1400-1750", in *A History of Technology*, C. J. SINGER, E. J. HOLMYARD, A. R. HALL AND T. I. WILLIAMS (eds.), Oxford, 1957, pp. 538-539; M. TRACHTENBERG, *Dominion of the eye: urbanism, art, and power in early modern Florence*, Cambridge, 1997, especially pp. 223-32; BIADENE, ROMANELLI AND TONINI (eds.), *A volo d'uccello*, especially pp. 39-52; 69-75; U. LINDGREN, "Land Surveys, Instruments, and Practitioners in the Renaissance", in *History of Cartography*, J. B. HARLEY AND D. WOODWARD (eds.), Chicago, 2007, vol. III, pp. 477-508, here pp. 478-479, 483, 486.

⁶⁷ D. Howard, "Venice as a Dolphin: Further Investigations into Jacopo de' Barbari's View", Artibus et Historiae, 18 (1997), pp. 101-111.

⁶⁸ MÜNZER, Münzer's Itinerary, pp. 78, 200, 205, 228, 230. In the late 1450s Alfonso de Palencia described Seville as "forma quasi rotunda": B. TATE and R. ALEMANY (eds.), Epístolas latinas, Bellaterra, 1982, p. 38.

⁶⁹ See CREIGHTON, *Designs*, p. 174; S. DEMETER AND C. PAREDES, "Topographie et représentation d'une centralité urbaine: la tour de l'Hôtel de Ville de Bruxelles", *Studia Bruxellae*, 12 (2018), pp. 255-271.

⁷⁰ DE CERTEAU, *The practice of everyday life*, p. 92.

⁷¹ For aerial views and their association with modernity, see M. DORRIAN AND F. POUSIN (eds.), *Seeing from Above: The Aerial View in Visual Culture*, London, 2013.

⁷² See the partial study in E. LECUPPRE-DESJARDIN, "L'Autre et la ville: l'apport des témoignages étrangers dans la connaissance des villes des anciens Pays-Bas bourguignons à la fin du Moyen Âge", in *Le verbe, l'image et les représentations de la société urbaine au Moyen Âge*, M. BOONE, E. LECUPPRE-DESJARDIN AND J.-P. SOSSON (eds.), Antwerp, 2002, pp. 55-74, here pp. 63-68.

The examples from Córdoba and Seville arguably represent a kind of heroic pre-history to this phenomenon, in which architectural marvels were central to the rhetoric of the city, but also made it possible to view the city anew, and to appreciate its beauty.