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Windows, atmospheres and experience in medieval Cypriot castles

Windows in the Great Hall of St Hilarion

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Abstract

Although often overlooked in archaeology, windows play an important role in past experiences of buildings. In this thesis I am aiming to understand the importance of windows to the experience of medieval Cypriot buildings. To do this I will develop the study of atmospheres as a methodology – initially used as an alternative to phenomenology in prehistoric archaeology, I will show how it can be well suited to historical archaeology, and the study of historical buildings in particular. By using all sources available to us, from historical documents to the standing buildings, contemporary art to personal impressions, we can begin to understand not just what people were experiencing in terms of sensory information, but also what this information meant. Not just holes in walls, windows allow sensory information from other spaces – something which is central in the experience of the spaces in the past, playing a part in social hierarchies, safety and practicality. In order to study this, I have chosen to focus on the medieval buildings of Cyprus, specifically the three castles of St Hilarion, Kyrenia and Kolossi. Experiencing these castles for myself, seen alongside medieval Cypriot, Italian and French sources, I can start to piece together aspects of the experiences of the people who lived and worked in these buildings.

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Additional thanks to the musicians and authors who inspired my section titles: In-a-Gadda-da-vida by Iron Butterfly, Heaven is a place on earth by Belinda Carlisle, Paradise lost by John Milton, Practical magic by Alice Hoffman, Somebody's Watching me by Rockwell and Stuck in the Middle with you by Stealers Wheel.

1 Introduction! Welcome!

Without getting into heavy, wordy descriptions of the nature of human experience, we all know that being alive is complicated. Trying to understand how people in the past experienced the world is that bit more difficult, but there are ways that we can begin to piece things together. With all the information available to us as archaeologists, the buildings which people spent their time in the past become much more than just empty shells – we can read what has been written about them, we can look at things which have been dug up in or near them, and we can experience them ourselves. But we can also learn more about the people who lived and worked in the buildings, what they thought about certain aspects of their lives and the architecture around them. A major part of the experiences of architecture is the understanding of space and its boundaries, as this affects how people act, how they move around and how they feel. Windows, as gaps in boundaries between spaces, are crucial to people's experiences of the spaces they are in. In order to study architecture, experiences and space, focusing on windows is a good place to start, but we also need to address how to use all the information we can. How do we bring together all the material to create an idea of people's experiences?

Aims and questions

The main aim of this research is to understand the relationship between windows and atmospheres in medieval Cypriot buildings, and in doing this I also hope to develop the idea of atmospheres as a tool to be used in historical buildings archaeology. I will be defining what atmospheres are, and how they can be useful in historical buildings archaeology specifically, with the goal of creating a new type of methodology or framework for historical archaeologists to use in order to get to grips with past experiences, rather than just borrowing things off prehistorians. Historical archaeology has the added blessing, or curse, of a lot of information about people's daily lives in documentary and artistic sources, but they are rarely, if ever, used alongside personal experiences of standing architecture. I believe that by focusing on atmospheres rather than just the archaeology, or just the history, or even just certain aspects of experience like the senses or movement, we can start to get a better picture of how architecture affected people in the past. Because there is personal, experiential aspect to my work I am trying to be as transparent as possible in my research and how I write it. There is an important relationship between subjectivity, language and accessibility in academic writing, and I think it we as a discipline need to start rethinking how we communicate with others and if it is doing justice to the research we are doing.

In order to understand experiences, we need to know more than just what people smelled and saw and heard – we need to understand the meaning and culture behind these things because they change how people react and feel. Atmospheres are a way to conceptualise this broader understanding of experience as more than just what is around us, but also what we are thinking and feeling, and crucially how this is related to space (Sørensen, 2015). This is where windows come in – they are important places

of relationships between spaces, signifying a connection and separation which is often a large part of how these spaces are experienced (Siegert, 2012, 8–9). As we shall see, windows allow for sensory connections between spaces which are otherwise completely separate, both physically and conceptually. Because of this, the experience of windows is crucial to the spatial aspects of atmospheres. In order to actually study these atmospheres, we need to have a good geographical and historical context so as to get enough focused information about how people lived in the past; I have chosen the castles of medieval Cyprus.

This thesis has been loosely divided up into two main sections, the first covering the groundwork and basis for the research, and the second looking at the atmospheres of the spaces. In the first section, I will start by going through the theoretical and academic context in which I am writing, outlining what atmospheres and windows are and where we are as a discipline in studying windows, experiences and Cyprus. Then I will show how I brought together atmospheres and historical archaeology, and some justifications on why I am writing the way I am, before starting to describe medieval Cypriot windows. This chapter will describe what evidence there is for the window fittings themselves, before coming to a very general conclusion about what type of windows were in medieval Cyprus. The second section of the thesis is structured thematically, each chapter based around 'types' of atmospheres. Atmospheres of Paradise deals with religious atmospheres based around the active creation of heaven or the garden of Eden on earth, how this is experienced and how windows affect the understanding of these spaces as separate or integrated with the world around them. The next chapter is about the atmospheres of life, and focuses on light and practicality, privacy and builds on ideas of how windows affect feelings of inclusion or exclusion from spaces. The final chapter is about the atmospheres of fear and anxiety, where I concentrate on sieges, prisons and general fear and what role windows have in the bridging of gaps between separate spaces.

Cyprus and its castles

Cyprus is an island off the coast of Turkey with a very long, varied history. It has been known for its beauty, fertility and heritage since the Roman period and it makes the perfect area of study for a project such as mine. Firstly, I had a previous interest in Cyprus and its castles from a course I took in my undergraduate degree and a field school I attended in 2018. Because of this field school I had connections with GRAMPUS heritage, who partially funded two of the three trips I planned. This, along with one of my friends also doing Cypriot based research, meant that it was at the very least a practical choice.

Secondly, and perhaps more importantly, there is a very reasonable number of medieval buildings on the island which are standing in pretty good condition, are easy to get access to (because they're tourist sites) and there is a good amount of documentary sources relating to the medieval period. Out of the possible buildings I

decided to focus on three castles: Kyrenia (fig 1.2)[1], St Hilarion (fig 1.3, 1.4)[2] and Kolossi (fig 1.5, 1.6) (also see fig 1.1). I was originally going to be researching a lot more of the buildings on the island, but sadly because of Covid-19 some of my trips to Cyprus got cut short or cancelled so I only have in depth analysis of these three. But, in the end, I think this is a good number of case studies for a project of this scale and I do touch on the other buildings at certain points in less detail. This group of case studies is also a good cross section of the different locations, owners and uses of castles on the island, covering mountains, coastland and plains in the north and the south; royal and military order owned; and different uses such as an estate headquarters or a military stronghold.
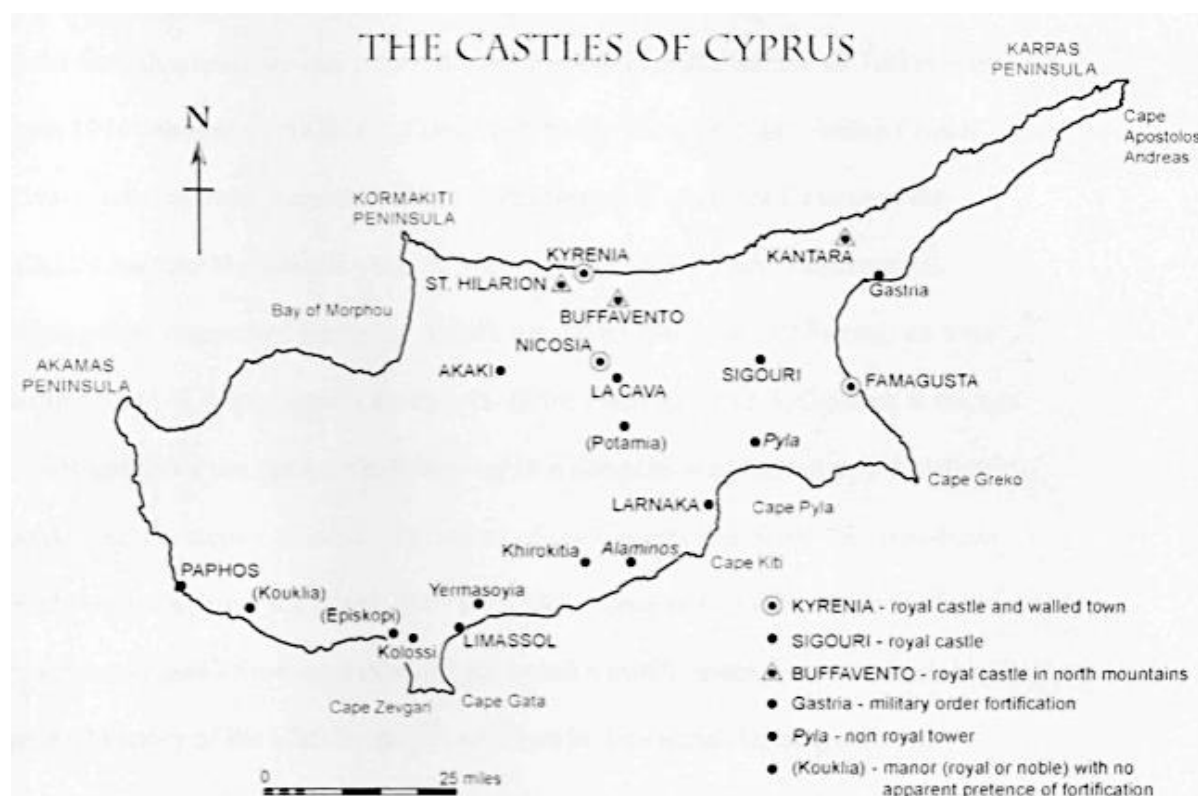
Figure 1.1 -The Castles and fortifications of Cyprus (from Petre 2010, vii). A lot of the castles mentioned on this map have very little or no remains, especially the non-royal castles and towers.

Medieval, in this research, refers to the very broad and varied period between 1191 and 1570. This period begins with the conquest of the island by England's Richard I, and its consequent sale to the Frankish king of Jerusalem Guy de Lusignan. The Lusignan dynasty rules over the island on its own until 1374, when the Genoese forces take Famagusta, and then are taken over entirely by the Venetians in 1489. They then rule until the Ottoman invasion in 1571 (Jacoby, 2007, 65–6; Given and Hadjianastasis, 2010, 44; Petre, 2010, 20–55). During this period, all the castles on the island belonged to the crown apart from Gastria and Kolossi, which were owned by the military orders, and many of them - Kyrenia and St Hilarion included - were

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[1] See this video for drone footage of the Kyrenia coast; Kyrenia castle can be seen between 2:07 and 2:27, as the drone flies east to west, then between 3:25 and 4:08, west to east.
[2] See this video for drone footage of St Hilarion, starting at the Barbican/entrance, moving up the lower and middle enceinte to the upper enceinte, and finally an overview shot.

originally byzantine buildings which were made bigger by the Franks (Molin, 2001, 98–106; Edbury, 2005, 74, 79; Petre, 2010, 16). Some aspects of this research are very specific in their date – for example, when discussing the sieges of the castle it is possible to know almost the exact day that it happened, and therefore you can use other sources accordingly – but other parts are much more vague or broad in their time period. We know that people lived and worked in these castles for hundreds of years, but there are very few specific mentions of what they were doing in them and when, when they weren't fighting or being imprisoned. For these cases, we need to have a well-defined, albeit large, period in order to have some chronological focus for the 'contents' of the atmospheres.

All set?

So – the scene is partially set. We know what I am aiming to do, what questions I am going to ask, and the historical, archaeological and geographical context I will be applying them to. In the next chapter I will start to unpick what has come before me in terms of previous theory and research, as well as really define some of the terms I am going to be focusing on. What are atmospheres? What are windows? What is historical archaeology in Cyprus, and the world? With these understood, we can begin to understand the lived experiences of people in Cypriot buildings in a way which focuses on more than just what they could see, hear and smell by wrapping this up in the cultural and social aspects of experiences.
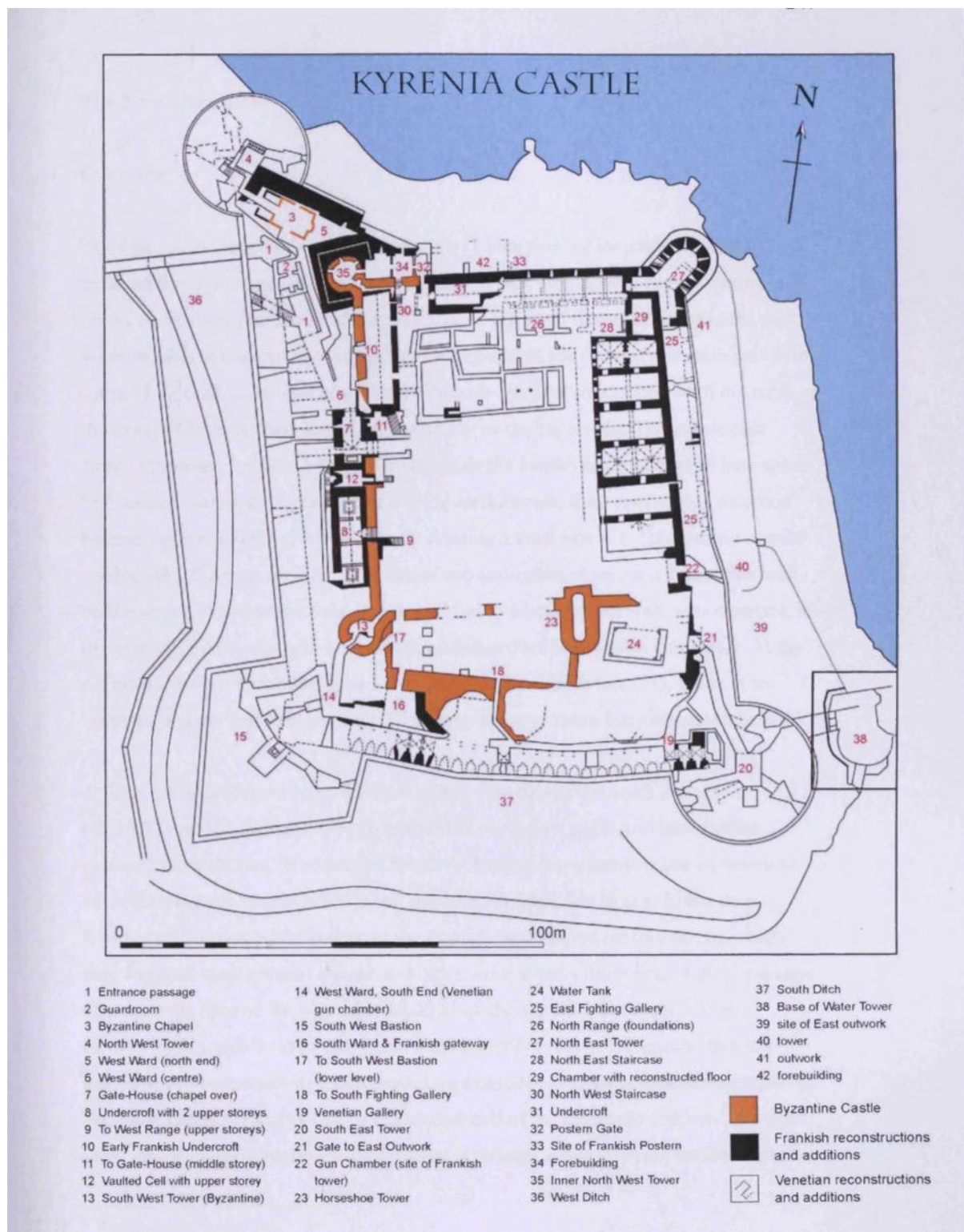
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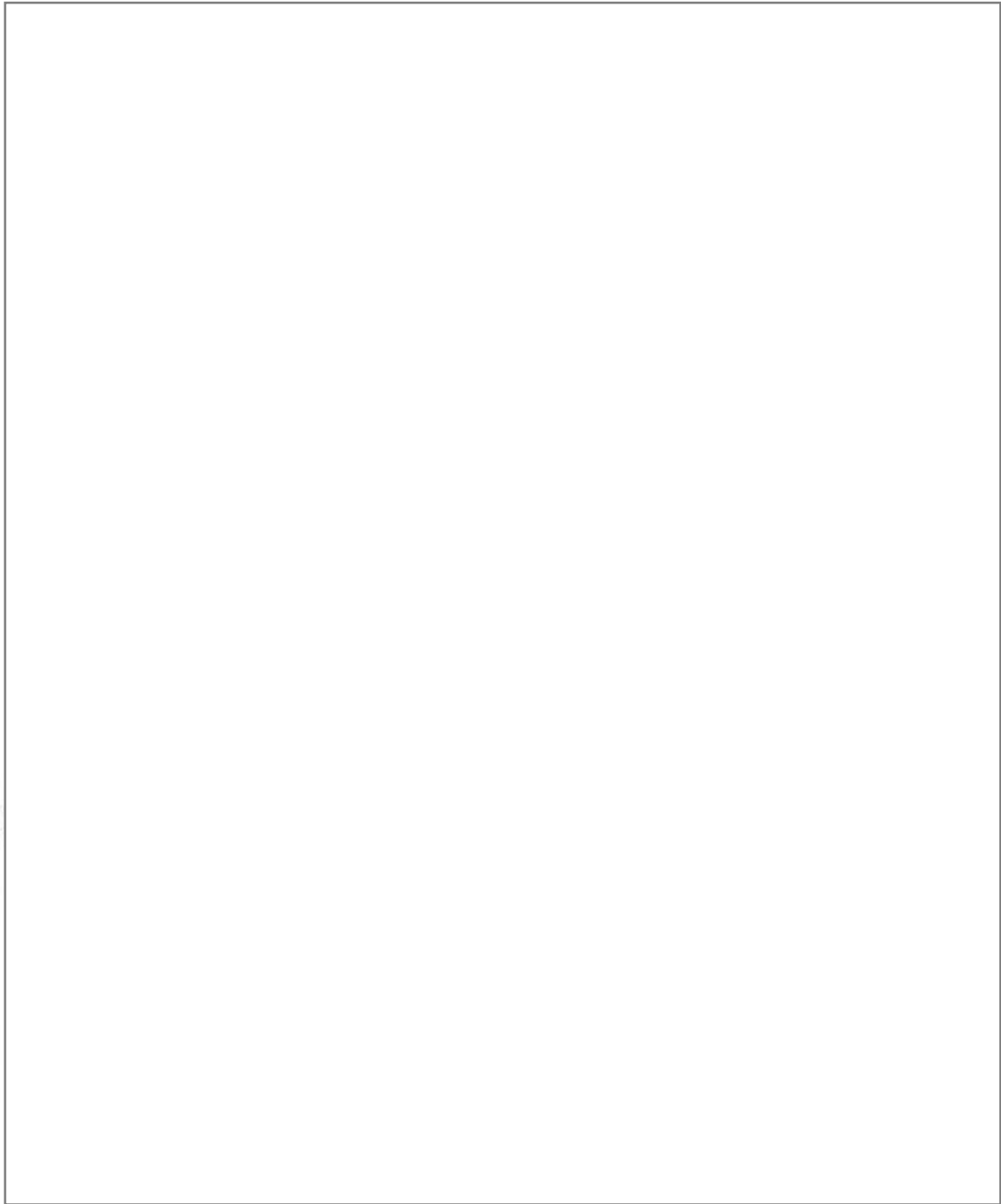
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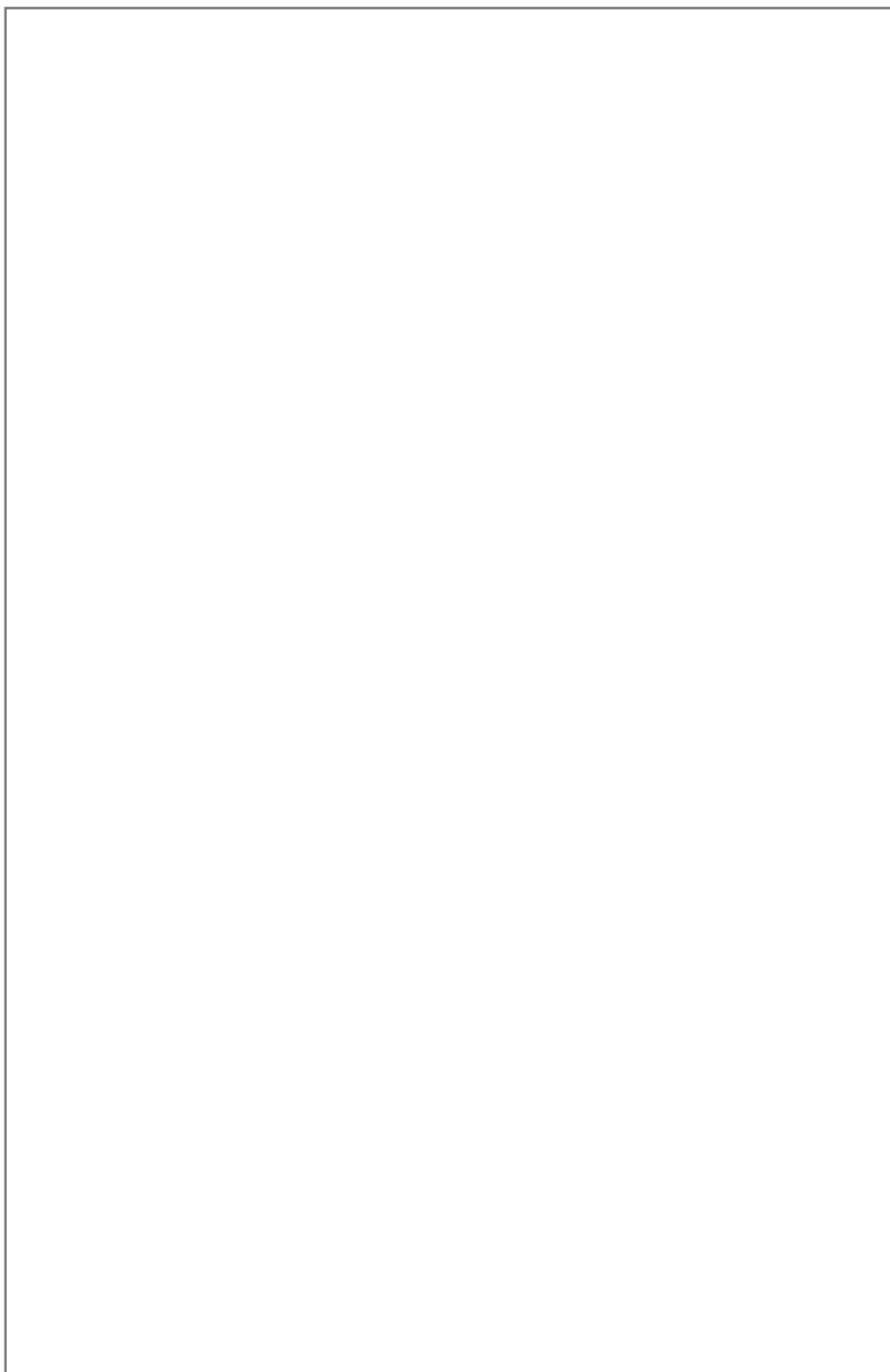
Figure 1.4 - Plans of the upper and middle wards/enceintes of St Hilarion, adapted from Khalil, Çamiz and Khafizova 2017.

KOLOSSI
(Ground Plan)

N

Limit of excavated areas

Square base

Rock platform with rectangular chamber under

Rock

0.65m

Stairs down

Oven?

small windows

0.80m

Oven?

Columns

Rounded arch 1m wide x 2m high providing for inward opening door with slot for draw bar

Arch (now lost) 1.2m wide

Embrasures

Screen of 2 pointed arches

0.8m

1.6m

Tower - 4.5m diameter externally
1.2m thick walls
2.1m diameter internally

Oven?

capped well

entrance 1.2m wide x 1.5m high

small windows

6

G-P 4

G-P 5

G-P 3

Gun - ports with sighting slits numbered 1 - 5

2.4m thick

1.1m thick

10

G-P 2

Entry with drawbridge

11

small windows

G-P 1

Drawbridge

well

14

5

13

0.8m

1.2m thick

4

0.65m

Embrasure for arrow slit

4

0 — 20m

Campaign 1445 - 1454

14th Century tower rebuilt in the 15th century

13th -14th Century

Modern construction (1930 - 1950)

In chambers A & B there are joist holes at 2 levels - the lower is possibly for shelving. In chamber C there is only 1 row of joist holes - where the arching of the vault begins.

Figure 1.5 – Plan of the ground level of Kolossi from Petre 2010, p214.

Figure 1.6 - Upper floors of Kolossi from Petre 2010 p219

2 What's this and what's that? Theory and context

In order to discuss the effect that windows have on atmosphere, I have to start by defining a few things, summarising what kind of work has been done before me, and outlining where this thesis fits in to the grand scheme of things. Firstly, I will discuss where this idea of atmosphere came from and why it is a useful way to think about past experiences. What are atmospheres, where are they, what do they do, and what do they have to do with windows? Surprisingly, perhaps, quite a lot, because of the relationship between space, architecture and experience. Windows as a concept, and windows as a physical part of architecture, also need to be introduced. The difference between a hole in a wall and a window may seem like a technicality, but it is significant because of the important role that windows have in connecting and separating spaces. Without a historical or geographical context, it would be impossible to explore atmospheres or windows.

By focusing on the medieval buildings of Cyprus, not only do we have a reasonable number of structures to study for a thesis like this, but we have the context within which we can study past atmospheres through many different sources, including contemporary experiences. The use of contemporary, personal experiences in archaeology dates back to the 1990's, but its potential in historical building studies has never really been realised, especially not in a way that treats it as a separate methodological undertaking from its prehistoric counterpart and which integrates it with historical sources. The study of past atmospheres and contemporary experiences can go hand in hand, and can be used to understand how space, architecture and people interacted, in this case in medieval Cyprus.

What are atmospheres?

Rather recently, archaeologists have begun to talk about our experiences in the world through the term 'atmosphere'. It began in as a reflection on what makes up the space around us and how it affects our emotions and actions, and vice versa (Anderson, 2009), but it has developed slightly so as to become a different type of experience-focused methodology (Bille,Bjerregaard and Sørensen, 2015; Sørensen, 2015). Atmosphere as a word in everyday use, however, is more to do with the wallpaper in a restaurant, the 'ambiance', than the lived experiences of humans, but it can be a useful term for the study of space and experiences. It is a name for the intangible stuff physically and mentally in and around people and objects (Anderson, 2009, 78); the in-between bits of everything around us (Bille,Bjerregaard and Sørensen, 2015, 32). Atmospheres affect (and are made up of) thoughts, feelings, actions, reactions and the perception of our environment. They are at the same time based in the physicality of space, and the objects and materials it is made up of (such as the architecture), as in the human body and our subjective, changeable and personal minds (Sørensen, 2015). Atmospheres are the stuff in the world around us interacting with us as well as the other stuff around it – what can be heard, smelt, seen, touched, felt, thought and the context for all of these things. It is different from sensory archaeology because it is trying to see the connections between what we perceive, where we are, who we are and what we are feeling.

A method that focuses on atmospheres looks at "the co-existence of embodied experience and the material environment." In other words by engaging "actively and analytically" with as many aspects of the past material world as we can, such as the lighting, temperature, sounds, smells, and arrangement of the world, especially when there are historical sources to consult, we can begin to piece together some aspects of past experiences and past subjectivity through these aspects of atmosphere (Anderson, 2009, 78; Bille,Bjerregaard and Sørensen, 2015, 36). However, unlike other advocates for a study of atmospheres (e.g. Sørensen, 2015), I do not think that we need to throw away our own subjectivity as a source of information. All that we do, in archaeology and in life, is through the lens of our bodies and minds. Just like the people in the past that we are studying, we create personal atmospheres; we perceive the world in certain ways, and we think about certain things that are unique to us and the way that we live. Our own personal, subjective, contemporary experiences of the world around us aren't an issue we need to sweep under the rug, but an important resource for our interpretations. In my eyes, personal experiences are just another source of information that we can use to understand space and past aspects of the world in a human way, alongside other archaeological, historical and architectural information.

Atmospheres are "more than a feeling" (Sørensen, 2015) we get in room; they are an amalgamation of the sensory information that we get from the world around us, our thoughts and the context behind them, rather than what is 'actually' there. Through the meeting of things in the world, be they us, not-us, physical or mental, a kind of smoke around them is created (Edensor, 2015, 333). This smoke is the best way to explain atmospheres – they are spatial, ephemeral, at the same time tangible and intangible, around us and everything else, and constantly moving and almost reaching outwards. Smoke that can mix with other smoke, can reach into other areas, linger for a long time or change in a puff. Atmospheres are a way to envision spatial experiences.

Atmospheres and space

"For the house is not merely walls, doors and windows, but a doorway to things beyond, a "capacity" of the senses and spirit." (Troutman, 2013, 17)

Architectural space, or the built environment, is what most medieval historians and archaeologists use to describe the buildings they work with. Walls here and there creating a house, many houses creating a settlement, many settlements creating a political area or a kingdom - building a structure or settlement is seen as a "deliberate attempt to create and bound space" (Tilley, 1994, 17). But if walls create space, then where do atmospheres fit into it, especially when architecture is an aspect of them?

In the past, space has been seen as a type of container which is created once and then actions are undertaken and things are situated within it. These actions and things are unrelated to the space itself, and it had a kind of neutrality and definiteness to it that allowed it to be modelled and predicted (Tilley, 1994, 9; Parr, 2002, 154, 178–9,

185–6; Barceló and Maximiano, 2013). Space was a given and a constant, not interactable with, just like a bubble you are plopped into. This type of space was, and still is, preferred by many archaeologists because it can be mapped easily and the movement between spaces, which is what is important to most archaeologists, visualised simply (Clarke, 1977, 11; Hillier and Hanson, 1984).

However our interaction with the world and what we personally understand to be the limits or characteristics of space is just as important as movement through it (Parr, 2002, 154, 185–186; Taylor, 2013, x). Bodily experiences and personal thoughts and feelings are, therefore, crucial to any understanding of space because it is only through our bodies and minds that space, and everything else in the world, can be experienced (Brück, 2005, 47). Space depends on who you are and all your social, cultural and biological baggage that you bring along with you at any one moment, not just on the walls around us as though they are static and perceived the same by everyone (Tilley, 1994, 11). Atmospheres and space are related in this way, because the idea of a space, and the mental connections that a certain person makes with this idea, are part of atmospheres. The difference between spaces especially is important to people – a fence, a wall, a line in the ground or even just a mental or social barrier, are extremely significant in how we feel. We need to remember that the perceivable world isn't just what is in a room with us, or what is on our side of a dividing line. We can hear things from another room or completely different area, we can feel a breeze from outside, we can see things through windows that are far away. Sensory perception is not bound by space; things can 'leak' into spaces, like rooms, from a space that is completely different, and this is extremely significant.

Imagine a building which is two rooms on top of each other. Imagine different coloured smoke filling the top room and bottom room – it's easy to imagine here how this smoke is the atmospheres of the room, delineated by the walls of the building but created by what is going on in the rooms. Maybe there is a bird singing in a cage in the top room and someone is cooking their dinner in the bottom room. The sounds and smells, the actions of the people or animal, their thoughts, the other stuff in the room like furniture and lighting, are all contributing to the atmosphere that the people in either room are experiencing. Now, imagine there is a window in the top room and a door in the bottom room. The birdsong can be heard in the bottom room and the smell of cooking can be smelt in the top room; we can think of these sensory 'outputs' as tendrils of smoke reaching outwards or inwards, mingling with other smoke. The perceptible area of the actions has grown because of the gaps in the walls (windows and doors, although they are not the only way sounds and smells can travel); and this interaction and relation between the separate atmospheres and spaces creates distinction or connection. In the top room people may smell the cooking and think of the connection between the spaces, or the person cooking who can hear the bird may feel the separation between the rooms, because the bottom room is quiet compared to the top (Anderson, 2009, 80; Bille,Bjerregaard and Sørensen, 2015, 36). Atmospheres as smoke is an interesting analogy that I think demonstrates how moveable, changeable and interactable atmospheres are. Sensory 'events', like the birdsong and the smell of the cooking, are important spatially because they happen in certain spaces; but they are important atmospherically because they are perceivable in other spaces, and this distinction in itself can become part of the experience of people in the spaces.

This example shows that architecture, especially windows and doors, plays a huge part in the experience of spaces and therefore atmospheres because of the sensory 'sharing' they allow between spaces. If atmospheres are made up of us reacting to and living in the world around us, then windows, which let light, ventilation, colours, smells, sounds, weather into rooms, are an important subject to study. It is through research of these things in specific historical and cultural context, as well as critical engagement with our personal experiences, that we can begin to understand what experiences were had in the past and how windows had an effect on them, and the atmospheres of the spaces.

What are windows?

Windows, and doorways, are gaps in walls, technically, but in being gaps they are much more significant than just a random hole. While doors are seen as important physical connectors between spaces, as we have seen windows are just as important as connectors between spaces in different ways. Any gap in an otherwise solid wall allows for aspects of separate spaces to 'invade' the other, like sounds, smells, visible things – but with windows, it creates a *relationship* between separate, often very distinct spaces, rather than just a connection. If we want to understand their effect on atmospheres, we must first understand what windows do and what windows are used for, as well as what other people have to say about windows.

So, what does a window do? Windows, primarily, connect two spaces, usually an outside one and an inside one, but not always. As we saw in our example earlier, it was doors and windows are one way to extend the area we can perceive beyond the room we are in. They are the breaks in solid walls which sounds, smells, heat can get through more easily, even if the door is closed or the window is shut. However, although they are not the only way in which sounds etc. are passed between architectural space, as noises especially can be passed through floors/ceilings or chimneys, for example, they are significant in how they do it. Windows and doors "initially subdivide living space in order to tie it point by point together again," (Siegert, 2012, 12), because not only are they a gap that allows interaction and connection, they also represent separation between the two spaces. The fact that there is a window or door in a wall, rather than there being no gaps, means that there is something that ties the two spaces on either side of it together, but they are still understood as separate spaces (Teyssot, 2010, 76; Eriksen, 2013, 188–9) - they put "inside and outside into a special relation in which both the outside first becomes properly outside and the inside first becomes properly inside." (Siegert, 2012, 8–9). They create a relationship between the two spaces, which we perceive and act upon when we are in them.

Windows, therefore, are a way to connect two rooms, or two areas, for whatever reason and for whatever use. The key aspect of them is that something is either passing through, or, just as significantly, partially stopped from passing through. This

something can be anything: sunlight, wind or air, smells, sounds, physical things. As we saw earlier in our imaginary building, what comes through the windows is important because it affects the experience of the spaces and therefore the atmospheres, whether it is the smells of cooking, sound of bird singing or even an apple being thrown through the window. But, because windows also separate the same spaces they connect, there is also significance in the 'rejection' of what passes through them, or what could potentially pass through them, so glazing, shutters and bars, or anything that alters this connection, is especially important in our experience of either space.

For many people, a window is the things that are put in the gap – glass most of the time – rather than the gap itself; most likely to do with the majority of western houses having filled windows. When I tell people that I study windows, for example, they understandably start asking me about glass, not about the concept of gaps in walls. Studying the physical aspects of a window is completely different to studying the conceptual understanding of their use and relation to space, but they are inextricably linked because of the 'barrier' they put between the two spaces. A window can be significant in its role of separator/connector without any fittings, but with them it adds a whole other layer of experience that is linked with the agency of the fittings and their sensory and bodily impacts.

Who cares about windows anyway?

There are many different approaches to historical windows throughout archaeology and related disciplines, like architecture and art history. Very few studies focus on what windows do in the sense I have just discussed, but that does not mean that there isn't anything out there that's useful. Just as space and atmospheres can be researched in many different ways, so too can windows.

Perhaps most directly relevant to me has been the work of architects and architectural historians. The work of architects on windows is interesting because, like archaeologists, they want to know how architecture and space affected (or affects) people and vice versa (Palyvou, 2003, 205–6). The description of windows as connectors and separators comes from architectural theory, primarily papers by Siegert and Kenzari (2005; 2012), but other architectural work deals with privacy and other aspects of windows (Teyssot, 2010). Architectural histories of buildings tend to focus more on the typology of the windows – what type of tracery there is, what type of window shape there is, what other buildings have that style (e.g. Enlart, 1987; Olympios, 2013). This is useful stuff to know, especially when discussing the identity of those who were building the structures, and the image they were giving to other people, but it lacks the 'on the ground' understanding of what the windows do (although there are exceptions, such as Moore, 2003). A lot of this type of work sees the window as an artwork on its own, or as part of the general architecture of the building, outside of its human and social context, and therefore most references to the physical windows are either in too much or not enough detail. Architectural historians, and historians in general, talk about buildings that aren't lived in and don't have an interior; castles are seen by many to be an external stone shell that act as a whole

against forces. They may have relationships with other castles, people and places, but they don't have a fleshy inside space where people lived, worked and spent their time.

Another important approach for understanding windows in the past is art history and interior design studies. Art can be a useful resource because it can give a general idea of what was around at the time, so it is one of the main ways that we know how buildings were furnished, what the styles were at the time, how different rooms were used, and what ideas people may have had about windows. It is also perhaps the most fun part of research – online galleries such as wgu.hu and wikioo.org mean that hours can be spent pouring over thousands of artworks, and it is something I will always enjoy. French, Italian and near eastern art from the 13th to the 16th century can all be looked at for 'ideas' and hints towards what Cypriot windows and rooms were like, but as a source, art is not straightforward and shouldn't be seen as definitive proof of anything. The majority of art that survives from medieval Cyprus is ecclesiastical art, such as icons and frescos in churches, but there are a few examples of secular murals and a few manuscripts (Boase, 1977; Weyl Carr, 2005, 2007; Folda, 2008; Toumpouri, 2013). These are not a very good source of information for windows, interiors or space, however, because most of the time these are depicting figures rather than space. This is why art from other countries connected to medieval Cyprus, such as France and Italy, are really crucial to the world that we are piecing together.

Modern conservation studies have also been useful for helping me get my head round the practicalities of windows, even though there is nothing about Cyprus specifically. The book *Windows: History, Repair, and Conservation* (Tutton, Hirst and Pearce, 2007) has been especially useful, as well as a paper by Dungworth (2011). Although much of the conservation is based in Britain and also for windows after the 17th century, a general understanding of how glass is made and how it has progressed is important. While conservationists, generally, want to know what the 'authentic' window was like in the past so they can make the present window look 'as it should', because I am not actually going to be creating any windows, I am free to discuss lots of different periods and iterations of the windows. It is a hard balance to get, especially when we have very specific dates for some information (the month of a siege, for example) and very vague dates for others (an Italian painting or the castles themselves).

Traditionally, archaeologists don't have much to say about windows, either in specific studies or as part of other work. I think this is partly because the majority of buildings archaeologists come across are found as a plan only, showing rooms and doors but very rarely windows. However there are a few notable exceptions to this, like interest in the windows of Greek and Roman architecture (e.g. Ring, 1996; Parisinou, 2007). In medieval buildings, because there are often more windows surviving, there has been a few more specifically window-based studies, the most similar to mine being Richardson's paper *Room with a View? Looking outwards from late medieval Harewood* (Richardson, 2010), focusing on the views of designed landscapes from windows, the recently defended PhD of Linda Qviström on windows and light in medieval Scandinavian buildings (Qviström, 2019), and Shepherds paper on windows and French enclosurd women (Shepherd, 2019). Other than this, however, archaeology tends to deal with windows through the scientific analysis of the glass

itself and interest in the production techniques (e.g. Dell'Acqua, 1997; Wolf *et al.*, 2005; Arletti *et al.*, 2010; Silvestri and Marcante, 2011; Cosyns and Ceglia, 2018), although some work has been done on the importance of glass and light in ecclesiastical contexts (Boyvadaoğlu, 2008).

It is very rare for archaeologists and historians to discuss the use and significance of historical windows or go past the material remains of the stone and glass. These things are incredibly important if we want to understand windows in the past, but there is more to them than just what they are physically made up of. The idea of a window, the relationships they allow between spaces, and the impact that they had on the atmospheres or experiences of spaces also need to be looked into if we want to understand architectures affect on the people that used it. As mentioned, however, a historical and geographical context is needed if we want to know what the atmospheres would have consisted of: what was happening around these buildings, who was in them, why were they there and what were they doing, and the sensual implications of these things.

What is medieval Cypriot historical archaeology?

The study of the medieval period in Cyprus has, so far, gone the way of the majority of medieval studies, with not much integration between archaeological and historical sources, beyond that of gazetteers and site-specific analyses. Medieval Cypriot archaeology does exist, but it is largely overshadowed by the country's prehistoric past and modern struggle, even though it has so much potential to be an important resource for the country, especially with the amount of standing medieval buildings that are left. Because of the size and history of Cyprus, the amount of archaeological and historical material is perfect for a short project like this, while still providing enough to get a good idea of the experiences of the past.

Compared to other places during this time period, like Britain for example, it may seem as though Cyprus is lacking in primary sources, there only being a few dozen dedicated solely to Cypriot history. But in reality, there is a lot of information to be gathered from these, as well as from small bits found elsewhere. One of the earliest sources is the chronicle of Philip of Novara, which is especially detailed about the civil war of 1228-1232 (See Apendix B, Gaston, 1887; Enlart, 1987, 417; Grivaud, 2005, 241). Perhaps the most important chronicle of the period, the chronicle of Makhairas, was written by a Cypriot person who was born sometime around 1380, although it covers events from before this time, especially the Genoese raids of the 1370's (Makhairas, 1932, ii 1-21). These two sources form the basis for almost all the other chronicles, such as the chronicle of Amadi, which was written between 1470 and 1560 for Venetian authorities, and which was in turn used by Bustron (Coureas and Edbury, 2015, xvi–xix, xx). Other important primary sources include *The Assizes*, a 13th century compilation of laws and levies to be paid on goods, which includes lots of information on plants and food especially (Coureas, 2002). Stephen of Lusignan's *Chorography* also contains a lot of important, and also rather human and sweet, information on life

in medieval Cyprus, although it is technically from after the period we are interested in (Pelosi, 2001). Rather handily for me, and other researchers, there are also quite a few compilations of primary sources of Cyprus, the most famous being the *Exerpta Cypria* by Cobham (1986), but there is also a great series of books with translated excerpts about Cyprus by the Greece and Cyprus research centre (Nepaulsingh, 1997; Martin, 1998; Pohlsander, 1999; Roberts, 2000). Although care needs to be taken to remember that these are just excerpts of much larger sources, so are not representative of the whole, and because most of the compilers are not interested in windows, space or experiences there's a high chance that they miss out some information which may be of interest to me. They are, however, the only way I can read such rare and specific sources. These sources are crucial to the understanding of atmospheres in medieval Cyprus – they have valuable insights into how people in the past interacted with buildings and the world around them, and the sensory and bodily experiences this entailed, so without them a study of atmospheres would be almost impossible.

Because of the quality of the primary sources, there is a huge amount of secondary, historical literature on the medieval history of Cyprus. These are histories in their purest form – studies of the primary sources, discussing the demographics of the population, the economy, the changes in power and its affect. They are also split up, generally, into two categories: the history of the Franks and the history of the Venetians, sometimes with an honourable mention towards the Cypriot natives (Edbury, 1999, 2005; Arbel, 2000; Nicolaou-Konnari, 2005; Schabel, 2005; Chamey, 2007; Grivaud, 2007). Although the majority don't focus on the experiences of people in the past, they do give us a good idea of who was doing what, and perhaps why they were doing it, from their analysis of the sources, further fleshing out the world that the people of the past inhabited.

The study of the historical buildings is also an important part of the medieval history and archaeology of Cyprus. Most famous is Camille Enlart's classic book, *L'art gothique et la Renaissance en Chypre* (1987), originally written in 1899 but still one of the most in depth studies of the Frankish buildings of Cyprus. More recently, Michalis Olympios is at the forefront of architectural history, or buildings archaeology, in Cyprus with various in-depth studies into some of the most important buildings on the island (Olympios, 2013, 2014, 2015a, 2015b). However, the most important source that I used during my research was without a doubt James Petre's doctoral thesis *Crusader Castles of Cyprus - The fortifications of Cyprus under the Lusignans: 1191-1489* (2010). A gazetteer of all the castles and fortifications in Cyprus, including detailed plans and analysis of primary and secondary sources, it has truly been invaluable. If these are architectural history or buildings archaeology, it's not too clear, nor does it really matter. They are concerned with the medieval buildings of Cyprus and their place in society at the time, as well as their aesthetic value and physical remains; and they do this in a way that means that, alongside other sources, they can be used by almost anyone with an interest in medieval Cyprus.

The majority of medieval archaeological work done in Cyprus recently has been either large-scale survey work, focussing on settlements and landscape use throughout time

(Given, 2004; Given,Corley and Banks, 2013), on the economies of the country, like the sugarmills (Solomidou-Ieronymidou, 2007; Given, 2018), or consolidation and rescue undertaken by the department of antiquities in the first three quarters of the 20th century (e.g. Megaw, 1939, 1972; Megaw and Mogabgab, 1951). The work of Michael Given is especially important to me because he has begun to ask questions of the sensory and bodily experiences of people in the past, rather than just the documentation of where they lived and who they were. Generally, however, there have been very few excavations or research exclusively focused on the medieval period, meaning that we still rely on the documentary sources for information about the daily lives and experiences of medieval Cypriots (Parani, 2015, 219–22). Excavations do not archaeology make, though, as we all know. Perhaps what Cyprus needs is more 'up top' archaeology and heritage work, which is cheap and easy, yet meaningful, and interacts with the incredible medieval remains, rather than solely relying on lengthy and academic-led quantitative surveys and excavations.

Cyprus is known around the world as a place of rich and popular history, spanning thousands of years. Tourists flock to the island to see the remains of ancient landscapes and buildings, maybe popping to a castle if they have the time, or if their tour bus takes them there. The medieval architecture of Cyprus is the perfect context for a study such as mine, as it allows the development of theories around space, windows and methodology, all which are vastly underrepresented in medieval historical archaeology.

What is experience-based medieval buildings archaeology?

How do we approach the study of the effect windows have on atmospheres? As mentioned, atmospheres are created from the interaction between things in the world – this means people, objects, animals and buildings, and all the sensory experiences of them. To do this, we need to build up the sensory world of the past, which means bringing together a lot of different types and sources of information, from people writing in 14th century France and paintings from 16th century Italy, to 19th century studies and modern research, to the medieval buildings themselves. Tying all these things together is theoretically and methodologically difficult, but possible, if we remember the common factor of all the sources is that we are interpreting, or experiencing, them in the present through our own minds and bodies. A lot of archaeology is now focused on experiences, but it is the contemporary and contextual aspect of them that is so important in medieval building studies, a field that has largely been left out of the experiential turn in the discipline.

Historical archaeologists usually split the information that they use into three separate streams: textual information, archaeological information and oral history (Wilkie, 2006, 14, 23–5). However, these distinctions, and most of the theory for the discipline, were created for a historical archaeology that largely deals with post-medieval, colonial and post-colonial subjects, rather than medieval (Hall and Silliman, 2006, 1–3). There are

interesting theories which can be adapted to each case, but none for medieval history or medieval buildings archaeology specifically.

Personal experiences are rarely used in historical archaeology, perhaps because we feel as though we already have enough 'real' information (Giles, 2007, 109; Johnson, 2012). Since the 1990's, archaeologists have been trying to integrate their own personal understandings of monuments and landscapes into their interpretations. At the start it was a few big-name academics, such as Thomas and Tilley, that led the way in research. Borrowing many ideas from mid-century philosophers, Thomas, Tilley, and others, developed a phenomenological methodology which tried to work out the relationships we have with the world that we are in, and the relationships people in the past had with the world (with not much distinction between the two in some cases) (Tilley, 1994, 2004; Thomas, 1996; Brück, 2005, 46). Moving through landscapes, 'being in the world', engaging with what is around us in an active way, and perhaps most controversially, using our imagination and experiences, as tools "to aid the interpretation of the material remains of the past" (Brück, 2005, 45). In other words, what are *my* experiences and were they the same as people in the past?

Prehistoric experience-based methods barely have anything to 'check themselves' with; the separation between us, the people and the landscapes of the Neolithic is almost impossible to understand and the conclusions drawn from our experiences are missing something that we cannot get from just walking around and thinking in the present. Historical archaeologists have sources that not only tell us about aspects of the world, what people had around them and what they interacted with, but also tell us about past experiences of these things and opinions about them, e.g. what these interactions were like. This means that we can use the sources to be critical of, and add to, our personal experiences of the buildings; we are experiencing the buildings in the present with our own personal, modern minds, and there is no way to get around that. We cannot time travel, we will always be who we are, our experiences are personal and contemporary, and so is all of our research. It is this contextual and contemporary understanding of the different types of sources which is extremely beneficial to studies of medieval buildings. It is not just the interpretation of past remains from the present, in a straight line, it is an analytical building up of all types of information, from all that has come before us and *through* our own minds and modern lenses.

This type of thinking lends itself very nicely to the study of atmospheres because it gives the most rounded 'picture' of the world in the past whilst also understanding our own personal stake in this information. It is not just trying to figure out separated aspects of experience, such as sensory information or cultural and social meaning or spatial relationships, but all of them together. Historical archaeology is often seen 'filling the gaps' of archaeology (Moreland, 2001, 10–12), uncovering things that 'normal' archaeology can't touch, but we know that this is not the case. In the same way I think experiential archaeology has been treated as a way to create interpretation when there is a lack of other information – but it doesn't have to be like that. Personal experiences can be used alongside many other sources and the study of atmospheres is a way to use them all together, as we shall see in the next chapter. In medieval

building studies such as this, atmospheres can be very effective in uncovering the use, significance and effect of things such as windows.

Conclusions

Atmospheres are a way to understand the interactions between things in the world, and the personal and contextual thoughts and feelings that arise from this. Sensory perception is key to atmospheres because the senses are what connect us to the world and the interactions that are happening – we see light falling on an object, we feel a breeze, we hear bird singing. Then our minds run away with this information and we think and feel. All of this together creates the 'smoke' of atmosphere. Windows are vehicles for the sensory perception of the world because they open up our sensory environment to include more than just what is in the enclosed space of the room. The manner and the intensity of how they do this, and this concept of a window, is just as important to the atmosphere as the actual sensory information, which is why a context is needed for the windows. Medieval Cyprus, with its many extant buildings and historical sources, is perfect for studying in this way. With all the sources available to me, including my own experiences of the buildings and their landscapes, it becomes possible to piece together aspects of atmosphere and specifically focus on the effect that windows have. Firmly footed in the present, we are equipped to look through the different, overlapping pasts of the buildings and society that have been created by people throughout the centuries, and start to open up the worlds of these buildings beyond their four walls.

3 Methodology (or not)

But what does the study of atmospheres mean for actual, on the ground research, and how do we approach all this varied information available to us? Historical studies rarely mention methodology – it's just reading! What else do they need to say? – but most archaeological writing has a very definite and clear methodology that slots into the overall structure of the research itself as well as the final published output. You read, you do field work, you write up, you publish. As mentioned earlier, focusing on atmospheres means using a lot of different sources, one of them being our own experiences of the structures, and therefore there is an increased importance in our situatedness in the present. Our own, personal minds are at the centre of all we do in archaeology, so our personality and past experiences should be part of the research we do and also the communication of it. The study of atmospheres may be a way to tackle all these issues.

Atmospheres and doing archaeology

When it comes to historical archaeology it is difficult to know where we stand in terms of what we are doing. There is a tendency to think of the texts and the archaeology as distinct aspects of the past, often because they talk about different things, but also because you do very different things to access their information. One involves sitting down reading, the other physically moving and engaging. However, in a study like mine, this separation does nothing to help with interpretation. The experiential aspect of research is another thing which is often put to the side separate from the rest of the sources, but it is really just a way of understanding the archaeology. I want to know about the experiences of the architecture, the sensory and cultural context to this and generally how windows were used; I am not doing an overview of a site or book.

The idea of atmospheres as the amalgamation of sensory information and its context lends itself well to historical buildings archaeology. Because the focus is on the information about the past, what the sights, sounds, smells etc. were, there is no need to completely separate my research by the source of the information, at least structurally and methodologically. I can learn about the smell of a church from a painting showing an incense burner, a medieval chronicle describing a church service, another academic collating information about it or from experiencing it myself. It is important to note that they are not all 'equal' in the sense that they can be used for the same ends – I cannot say that medieval churches had incense in them because I have been to a modern church with incense in it, but I could use this personal experience to aid in more detailed or nuanced aspects and allow me to ask new questions based on my experiences. How does the smoke move? Is it stifling? Can you see through it? In this way, personal experiences are just as important in the understanding of atmospheres as other sources and should be used in conjunction with them.

Practically, studying atmospheres in the field is probably not that different from other types of methodology. Everyone works differently, so everyone has different ideas on what works best for them – I don't work well with rigid guidelines to my experiences, like lists telling me to go here or there and do this or that, so my methodology on site was to wander around and record things into a voice recorder and onto plans. I had reminders to take certain photos or to check out some things written on my plans, but other than that I had free rein to walk around the castles as I felt like it.

I planned three trips to Cyprus, but sadly the Covid-19 pandemic cut one of these short and cancelled another, so I actually had very little on-site time and as a result I wasn't able to be as in-depth as I wanted to be and don't have many of the pictures I would have liked. I refer to a few Scottish and French castles and buildings throughout because these are what I know and where I have been, and hopefully these examples can help to bolster arguments which would have been settled by further site visits in Cyprus, as well as give some context to my interpretations. Some of the pictures I do have of the Cypriot castles were taken during the organised trip in November 2019, however many of them were also taken in July 2018 when I was in Cyprus for another reason before I started this project. My personal photos are a large part of this research because a lot of the plans of the castles do not communicate visuality or space as well as pictures do, and there is very little academic writing on the castles which include high definition coloured pictures, which is why I have had to use older pictures as references for some things. They are only really used for referring back to, however, as most of the interpretation of the buildings was done on site in 2019. At my desk, researching involved a lot of ctrl+F and raking through indexes for any mention of windows, as well as sensory experiences, but because things like these aren't often indexed I had to do a lot of skim reading too. I tried to be varied in my sources – from different periods, different types, different subjects.

With the physical buildings I have to look at the sum of hundreds of years (Tilley, 2004, 99–100; Carman and Carman, 2012) – there is no way to 'peel back the layers' of a building when I can't excavate, so what I am looking at is a thoroughly modern building with substantial medieval parts. I cannot time travel to see it without 17th or 20th century bits, and I can't ignore them, so while I am focusing on the medieval aspects of it there needs to be some leeway with exact dating of experiences. With the written contemporary sources I generally stayed within the 1196-1570 period, although sometimes I go around a lifetime over or under. This larger period has many sub-periods which have varying influences and features to them, which I touch on briefly where it is appropriate, but otherwise I use quite broad chronological periods because of the nature of historical buildings. I experience them in the present, with all later additions and damages, so I have to be careful in how I project experiences back onto them so as not to equate a specific time with a castle I will never know. Sometimes the documentary sources are very specific in their dates, and I discuss them accordingly, but other sources, like the art from renaissance Italy or medieval France, cannot be specific to these castles or a certain time, so I need to be much broader in my analysis.

Overall, this project seems to be pretty light on formal methodology – and this is partially intentional. Anything with as many variables as this and the use of my personal, modern experiences means that a fluidity is needed. We should be able to go down tangents and get lost in our research, and while I hope that the finished product is coherent and organised, it's important to me that it was not rigidly structured while I was researching and writing it. I didn't know where it was going to go, I didn't know what I was going to realise on site; and in a study like this which is trying to understand how stimuli and feelings connect to the surroundings of people in the past, being engaged and reactive to what I am reading and experiencing is a good thing. Something "vaguer yet more inclusive" (Frieman and Gillings, 2007, 9): in the lack of specificity and expectations there is so much more for us to get involved with.

Figure 3.1 - Example of a plan annotated on site at St Hilarion. Blue writing was done before the visit whilst reading over notes and red writing was done on site. Original plan from Khalil, Camiz and Khafizova 2017.

Why write like this?

As Shanks wrote, "Academic archaeology encourages the creation of particular selves or characters." (1992, 131), and this is an issue because our personalities are connected to the archaeology we do because we are the ones that are doing it. It is part of who we are, and we are part of it. However, a lot of people are still sceptical of personal archaeology, and it is still normal to pose as a stiff, uninterested academic character in all we do – in papers we write about our life's passion, on professional twitter accounts where we only talk about research, or in emails to colleagues we've

known for years – we are taught to write without emotion in a specific, neutral and coded way. Language has always been used by people to enforce hierarchies, consciously or not, and in archaeology it is no different. You are either someone who can understand and is 'in' with the lingo, traditionally higher-educated archaeologists from upper and middle class upbringings, or you are not and you are separated from archaeology, like the majority of the general public and working class people (Joyce, 2006, 54–55). The language used in publications and research should always be appropriate, of course, but I think there is a problem with academic writing that needs addressing.

I believe that academic writing is separating us from our research and the context in which we work – our own bodies and minds – and enforces a separate academic character. In reality, there is no separation between me, the person who walks around medieval buildings, and 'academic me', the person who writes stuff down about medieval buildings. Yet I need to put on my academic hat for official writing, like I should be for this thesis, and write in a way that is not natural for me because 'that's what academics do'. In experience-based methodologies like mine this becomes a real problem because you record your thoughts and feelings in your own dialect, with your own words that are unique to your experience, then you need to translate them into academic-speak, toning down emotions and replacing words, changing meanings. For example, I shouldn't write that a room was "humungous" because that is too informal; but that's what I thought when I walked in the room, so sticking to that gives the reader the most accurate description that I, the experiencer, can give them. Creating information that can be written and communicated is part of the interpretation process – it wouldn't make sense for me to just print out transcripts of the recordings from my visits – so we need to be actively involved and critical of what 'filters' we are applying during this interpretation process, and the need to write 'academically' is one that does not add to my research. It is sterilising our work, making us write down what is 'factual' and 'recordable' and gloss over our own experiences and personalities (Johnson, 2002, 18; Tilley, 2004, 26–9; Hamilakis, 2013, 10–11), which are intrinsically linked to the method and output of our research.

Theoretical implications aside, we as archaeologists should be making our research as accessible as possible anyway, and the language that we use is a huge part of this. In museums and public heritage areas the language of signs and other information is carefully picked so that the largest amount of people can understand it, so why don't we do this in academic settings? In 2005 a study into the disabilities in archaeology was undertaken at the University of Reading, and it showed that 30% of the staff and 14% of the students had a disability; the majority of both groups being dyslexic (Phillips and Gilchrist, 2005, 23,42). Using plain English, or at least being aware of and checking the complexity of our work that we present to other academics, should be just as important as it is in a public setting – it helps those with reading comprehension issues, non-academics, cross-disciplinary researchers and people whose first language isn't what is being written in (Clayton, 2015). It is sometimes difficult to know when we are being inaccessible in our writing, because we are so used to the way that academic writing is laid out and our own jargon in our fields (McCarthy, 2006), but I feel as though we should at least try to simplify the language that we use so that as

many people as possible can understand what we are trying to say, including ourselves.

Why can't I be myself in my own writing? Within reason, of course, but I'm trying to communicate the archaeology *I* have done, so why can't I write like me? I'm not going to start speaking as though I'm in the pub or on the phone to my pals, but letting the tone and language be more natural and understandable. In this research I am going to be personal, I'm going to be subjective, and I'm going to write in a way that conveys what I'm trying to say in a way that I would actually say it, because I feel that is how I can best convey what I have found in my research. I want my language to be my own and my archaeology to be personal, I don't want to be another faceless researcher.

Conclusions

This method, and all the results that are to follow, are inseparable from me and my life. This isn't saying that because I think something it is automatically true, but that my experiences are just as valid in my research because they are the only way this research can happen. It is only through me and my past that I can study the experiences of other people, so I need to be present in the research and communication of it. For atmospheres specifically this transparency is important because we are dealing with varied sources looking at varied subjects; I am the glue which is holding them all together. The other information about the sensory experiences of medieval Cyprus can be placed right next to these, regardless of where it is from, in order to create an insight into how people in the past interacted with the windows and spaces around them.

4 Fixtures and fittings – what's the deal with windows?

Before I begin to discuss the relationship between windows and atmospheres, I first need to give a brief history of windows and their fittings in Cyprus. It is easy to think that the windows we see in the modern buildings are the same as they were in the past – empty, worn stone. However, we have a lot of information available to us which can help us understand what windows 'actually' looked like – what type of glass, if any; what type of shutters; if they had bars etc. All of this will be discussed later on, but I feel as though it is important to set it all out first as a good baseline for the rest of the research. For the history of the production of window glass, I've written a little something in Appendix A. The presence or absence of these things had a huge impact on the overall atmosphere of the space because they limit sensory information, like sound or sights, being passed from space to space, and they are in themselves often loaded in meanings and associations. It is difficult to discuss all of the windows with all of the possibilities for their fittings, so I hope that this chapter can be used as a reference point throughout. I have split it up into sections based on the type of evidence (art historical, archaeological, historical and architectural) only because it makes it easier to communicate the issues with each one, the information from each is being used in exactly the same way.

Art historical evidence

The information that we get about the past from art needs to be approached as could-have-beens, not certainties, especially when the subject of study is not the subject of the art. Even if we did have paintings of Cypriot windows from the medieval period, we still wouldn't be able to say for certain that they were what windows were like, because of the social, cultural and religious symbolism that art often carries. The art historical evidence that I am using here is only tentatively connected to Cyprus, and almost all are heavily stylised and have strong religious themes, but it is the best avenue for getting an idea of what was in peoples windows. Starting with earlier religious artwork like icons and moving through to renaissance masters, I track the development of the window in art as well as trends in window fittings and the depicted uses of windows.

The majority of the earlier artworks, from between the late antique period and the 13th century, do not depict any type of internal architectural space that we would recognise today (Nordenfalk, 1973, 237–8). Figures often don't seem to be inside or outside buildings, more just floating in the ether or near some landscape features (fig.4.1), other than some rare examples (fig.4.2). Byzantine art, for example, show figures set against a backdrop of gold or a coloured landscape, very rarely showing buildings (fig.4.3). This type of art is not limited to before the 13th century, however (fig.4.4), and in fact it is the only type that has survived from Cyprus from the medieval period – icons and painted churches make up the bulk of the medieval art of Cyprus, and the built environment wasn't t a subject matter they covered (Weyl Carr, 2001, 2005).
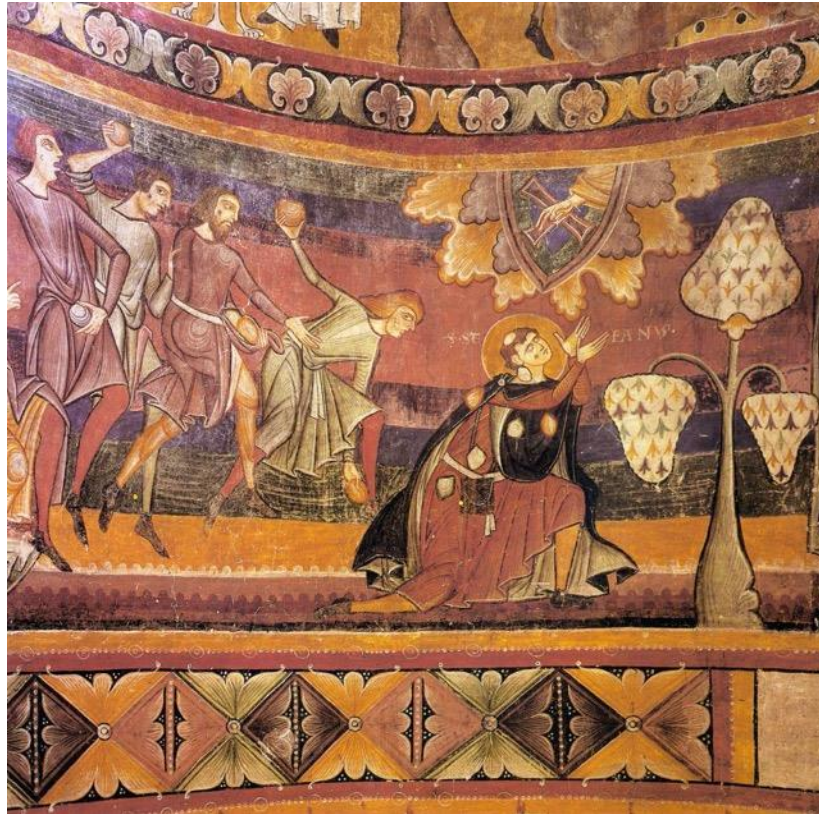
Figure 4.1 – Detail of a fresco of the Stoning of St Stephen in a Swiss Benedictine monastery showing how people were often depicted floating around in space rather than in real internal spaces (12th Century, wga.hu)
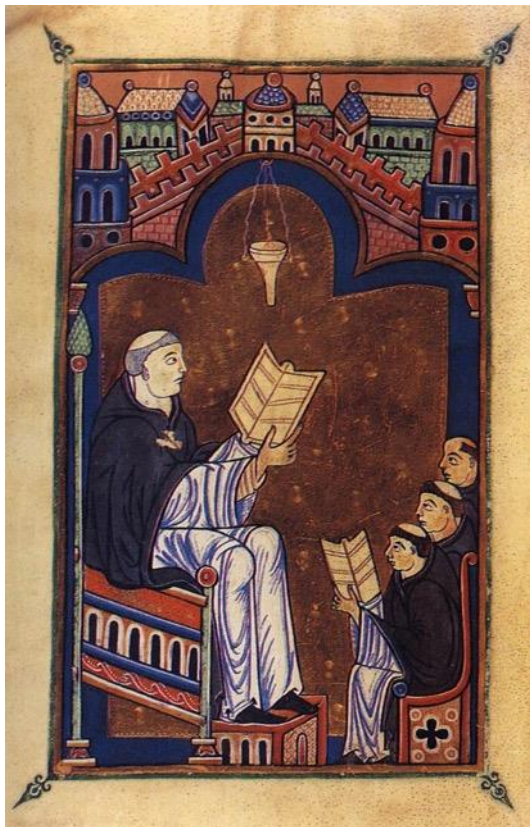
Figure 4.1 – Illustration from The Works of Hugh of St Victor. Very early depictions of external windows which are blacked out; the internal space arrangement doesn't make much sense to us either (French, 1190s, MS. Laud Misc. 409 f.3v, wga.hu)

Figure 4.3 (right) – Typical byzantine style of art; notice how figures are suspended in nothingness (c. 1078, Ms. Coislin 79 f.2v, wga.hu)

Figure 4.4 (left) – The funerary icon for a young Cypriot girl called Maria (bottom figure) who died in 1356. While she seems to have her feet on solid ground, her parents (the two figures either side of her), Christ and the two angels are floating. (McNulty 2010, and see Weyl-Carr 2001)
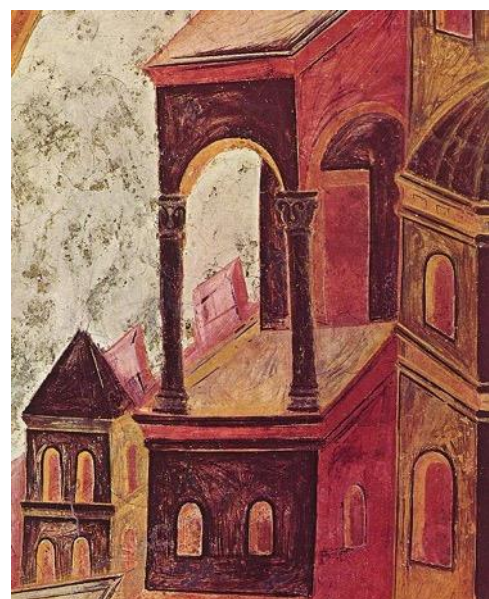
Figure 4.5 (right) – Detail of a crossing vault in the upper church at Assisi by Cimabue, a Florentine painter. There is no attempt to show the internal space through the window (1277-80, wga.hu)

As art develops into the 13th and 14th century, more and more buildings are being shown, but they are all external views, and if they are internal spaces they do not have windows (Nordenfalk, 1973, 233–8). Of the external views of the buildings, interestingly, all windows are almost always shown as empty and often dark holes (fig.4.5, 4.6, 4.7). This can be seen across all mediums, from frescos to miniatures, and across countries too. It was not until the 15th century when windows began to be depicted as more than just holes in walls, with glass and fittings, and from an internal position looking outwards (Nordenfalk, 1973, 233–8). What can we gather from this? We could interpret from these that people did not look out of windows and that glass was not used until the early 15th century, but we know that there was at least stained glass in church windows from the 12th century, and even they are left empty in the art (fig. 4.7) (Boyvadaoğlu, 2008, 103; Bloch, 2010, 75). The more likely explanation is that the glass or contents of the rooms were either too fiddly a detail or didn't matter to the overall composition of the scene. That being said, it is still extremely significant that art that is related to and contemporary with a large chunk of the medieval period in Cyprus depicts windows as dark gaps without glass or space behind them. It suggests a separation between the internal and external spaces which may have been felt by people at the time
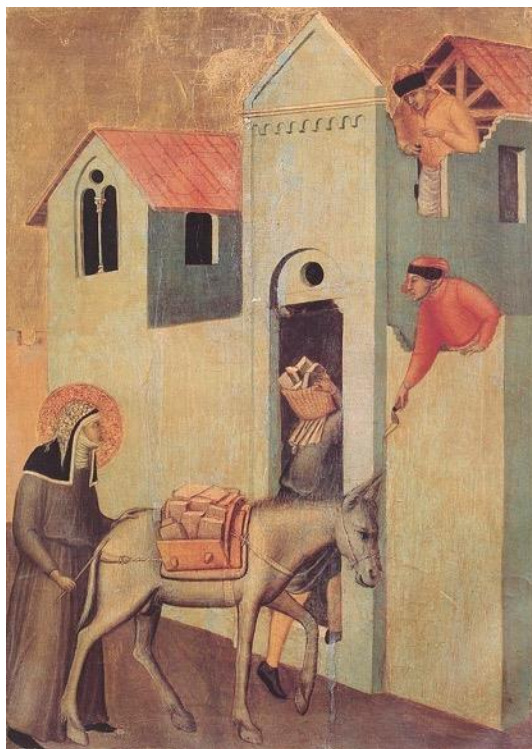
Figure 4.6 – Painting by Pietro Lorenzetti of the life of Beata Umiltà showing dark, empty windows (c. 1341, Italian, wga.hu)

Figure 4.7 – Altichiero da Zevio's Fresco of the funeral o St Lucy. The large gothic windows in the structure would have been filled with glass, but it is not painted in (1378-84, Italian, wga.hu)

Figure 4.8 – Duccio di Buoninsegna's Healing of the Blind man (scene 7). On the left and right buildings, the windows are filled with shutters, although there are still dark empty windows. It shows that shutters could open in many different ways. (1308-11, Italian, wgu.hu)

Figure 4.9 – Detail of Domenico Ghirlandaio's fresco The Conformation of Rule. Washing is hanging on the bar infront of the window, and one of the windows has an *Impannata*. A silhouetted figure looks out the window.(1483, Italian, wga.hu)

The earliest depiction of fittings in windows, as far as I can see, are shutters and external beams. This early 14th century painting by Duccio di Buninsegna, a painter from Siena, shows wooden shutters, one of which is vertically hinged and opening inwards from the centre, and another which has a small section that can be opened independently from the rest of the shutter (fig.4.8). Similar windows and shutters can be seen in this fresco in Santa Maria del Carmine, Florence, which has a much later date of 1426-82 (fig.5.6). The beam across the window, and the brackets which held them, are widespread throughout many 15th century Italian artworks (fig.4.9, 4.10). The beams, which as we can see were used for various different things, from hanging of linen and baskets, also could have an awning attached to them to reduce the light (and therefore the heat) entering the room, like with shutters (Thornton, 1991, 29).

Also very common in the Italian art is *Fenestra impannata* which were wooden frames with paper or linen soaked in oil or turpentine stretched over them, creating a translucent shutter-like barrier (fig 4.9, 4.10, 4.11, 4.12) (Thornton, 1991, 28–9; Dennis, 2008, 10). These often opened like the shutter in (fig.4.8), having a small hatch that opened outwards (fig.4.9, 4.11), and they could even have designs painted or printed onto them (fig.4.12). These let soft light in, but could not be seen through, meaning that they were a middle ground between shutters and having nothing at all. They were even used as far north as Scotland (Gilchrist, 2012, 121).
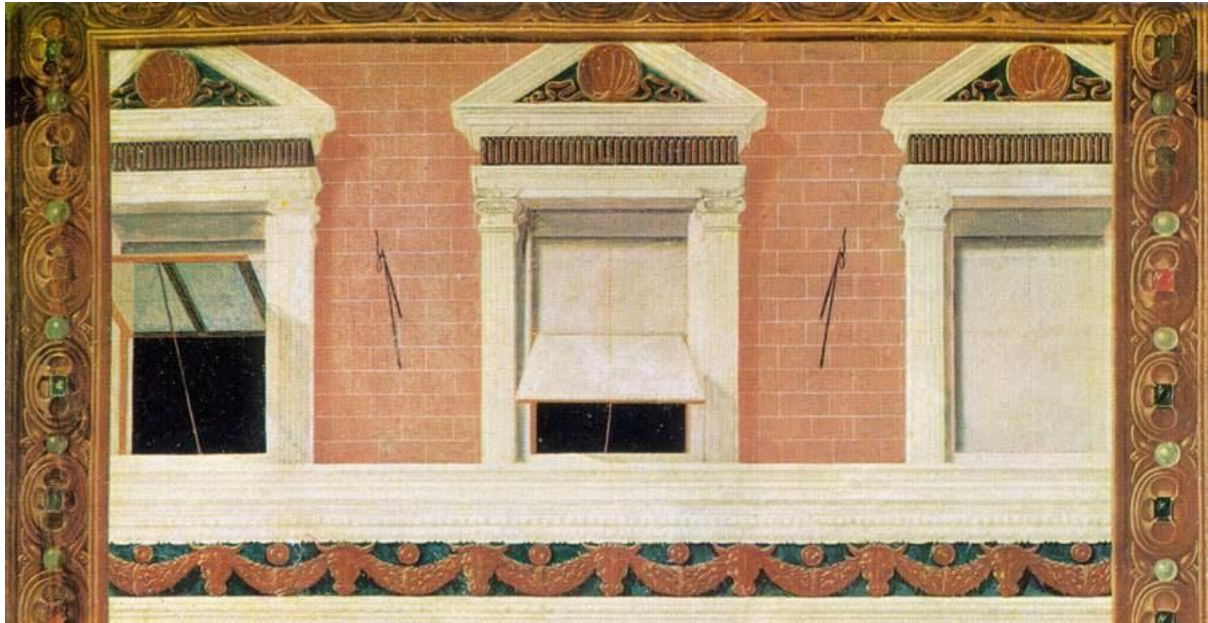
Figure 4.10 – Detail of The Healing of the Mute, part of The Miracles of San Bernardino by Pietro Perugino. This shows how translucent the *impannata* were; they would have let a lot of bright, but diffused, light into a room. There are also brackets to either sides of the windows where a bar could be placed. (1473, Italian, wikioo.org)

Figure 4.11 – Detail of the Resurrection of the Boy by Domenico Ghirlandaio. You can see women looking out onto the street from their windows, some of them fitted with *impannata.* (1483-85, Italian, wga.hu)

Figure 4.12 – Detail from the Life of St Benedict, Scene 32 by Il Sodoma. In the monks' bedroom, their window is partially covered with *impannata* but the lower lights are shuttered. This means that they could ventilate the room much better, but still keep out most of the harsh bright sunlight (1508, Italian, [wga.hu](wga.hu))

During the 15th century there begins to be a lot more depictions of window glass, perhaps because they are showing more internal spaces, and it can be separated into two main types: small diamond or lozenge shaped panes, held together with lead; and small, circular bits of glass, called *occhi* or roundels, that are held together using lead or plaster, sometimes with other little star-shaped bits of glass (Thornton, 1991, 27). The diamond shaped panes are more common in French and Flemish works, like the annunciation depicted by Flemish artist Rogier van der Weyden in the 1460's (fig.5.11); David entrusting a letter to Uriah in the *Très Riche Heures*, a 15th century French book of hours (fig.4.13); this painting by an unknown French artist (fig.4.14); and these paintings by the Master of Flémalle (fig.4.15, 4.17). The glass is usually colourless and see-through, but different coloured inserts were common (fig.4.16, fig.4.17). More common in Italian art, but can be seen in some Flemish examples, *occhi* are small discs of glass with a nub in the middle left from the blow pipe (see Appendix A; Martlew, 2007, 136–7). They can be seen in *The dream of St Ursula* by Carpaccio (c.1490) in the upper part of the window, filling the arch, and also in the circular windows higher up in the wall (fig.4.18); and in these paintings by Van Eyk (fig.4.19, fig.4.20). Both types could have been used in Cyprus, in theory; the Frankish colonising of the island perhaps makes lozenge shaped flat glass more likely, especially for the 13th and 14th centuries. However, the Venetian use of the buildings throughout the 15th and 16th centuries could instead mean that *occhi* were more popular, especially buildings with more Venetian use like Kolossi and Kyrenia. The fact that Jan van Eyck paints both types of glass suggests that both were known as options for glazing and interchangeable to an extent.

What is also interesting to note is that it is common to leave the lower lights of windows unglazed, while glazing the upper ones, and having shutters on both parts (fig.4.13, 4.14, 4.15, 4.17, 4.18, 4.20). In the empty lights there is also often a screen or railing of some sort, made of wicker or wood (fig.4.17,4.18), or metal (fig.4.20). These are also like the carved screens of Islamic households, like the ones at the house of the Dragoman in Nicosia from the Ottoman period (Schriwer, 2002, 213). The barring of lower lights has also been mentioned in other studies of medieval windows (Richardson, 2010, 25), meaning you could light and ventilate rooms easily by just opening shutters, and didn't have to spend as much money on glass, whilst still having some privacy from the screens or security from the bars.

Figure 4.13 – David entrusting a letter to Uriah from the Très Riches Heures du Duc de Berry. In the background the windows are shuttered, glazed with lozenged shaped panes and have internal, horizontal bars (Musée Condée MS.65 f.67v, 1485-6, French, Wikimedia commons).

Figure 4.14 – A panel showing A miracle of St Benedict. He is sitting inside reading by the window, which is glazed with lozenge shaped panes and has open but shuttered lower lights (c.1480, French, wga.hu)

Figure 4.15 – Detail of The Madonna with the Child by a Fireplace by the Master of Flémalle, one of the first artists to depict detailed windows and the world seen through them. In this case, the window is fully glazed with lozenge shaped panes and has shutters on the lower lights (1433-5, Flemish, wga.hu)

Figure 4.16 – St Jerome in his study by Jan van Eyck. The window behind St Jerome is glazed with clear and coloured glass, and it seems as though he is using the light from it to do his work (1442, Flemish, wga.hu)

Figure 4.17 – The Annunciation by the Master of Flémalle – a very early depiction of detailed windows. There are lozenge shaped panes on the upper lights of the main window and in the two circular windows to the side; the main window also has crest designs in the upper lights. There is a wooden lattice screen covering the bottom half of the lower lights. Notice how the light of God is coming in through the glass window (c.1427, Flemish, wga.hu)

Bars are another very common aspect of windows in the art. They can especially be seen in this painting by Gentille Bellini of the miracle of the cross at the bridge of San Lorenzo, in Venice, and interestingly includes the figure of queen Catarina Cornaro of Cyprus kneeling at the front (fig.4.21). This type of 'cage' like window bars can be seen at Kolossi (fig.7.13); they allow for more movement looking out of the window e.g. you can pop your head out more, something that was important to the venetians and especially women (fig.4.22) (Thornton, 1991, 28–9). More common, however, are bars on the internal face of the window (fig.6.8, 4.13, 4.23).

Not only can the art suggest to us how windows may have been filled with fittings, it can also show us how windows were used by people. Most importantly, we see windows as sources of light (fig.4.14, 4.16), with people writing on desks next to or in front of windows. In this painting by Giovanni Mansueti we can see people leaning out of windows with carpets hanging out of them so that they can see a miracle of the holy cross happen (fig.4.22), suggesting that windows were a way to stay involved with what is happening outside of the household (see Thornton, 1991, 28–9). What also needs to be mentioned is the connection between windows and the annunciation. I will go into the connection between religion, light and windows in more detail later, but for now we should note that in art windows are often a crucial part in the depiction of the moment that Mary learns she is pregnant with Jesus; light coming through them in special 'laser beams' along with doves is very common (fig.4.17, 5.11).

Again, I must stress the loose connection that all of this evidence has with Cyprus and its medieval buildings. We cannot take all of this art, made for and by people that had probably never been to Cyprus, and depicting buildings that are not on Cyprus, to represent what type of windows medieval Cypriots had. However, medieval Europe was connected, a lot of the time directly, through the growing trend of travelling (see Cobham, 1986; Martin, 1998; Richard, 2007 for details of travelers), not to mention medieval Cyprus' French and Italian rulers and their courts (Edbury, 2005, 82–3). Historical art is one of the most useful sources for us as we try and understand the effect of windows on atmospheres because it not only shows what may have been around people, it suggests to us thoughts, feelings and cultural connections about windows that archaeological evidence alone cannot touch.

Figure 4.18 – Detail of The Dream of St Ursula by Vittore Carpaccio. Showing *occhi* in the circular window and in the top of the arched windows. There is also a wooden lattice screen in and plants placed in the window (1495, Italian, wga.hu).

Figure 4.19 – Detail of The Madonna with Canon van der Paele by Jan van Eyck. Behind the figures are arched windows filled with *occhi*, held together with lead and small glass inserts. These *occhi* are clear, but you can only see the blurry colours of outside through them (1436, Flemish, wga.hu)

Figure 4.20 (above) – Detail of the portrait of Giovanni Amolfini and his Wife by Jan van Eyck. The window has occhi, or roundels, in the upper lights with coloured glass inserts between them. The lower lights seem to be open apart from a small metal railing at the bottom (1434, Flemish, wga.hu)

Figure 4.21 (right) – Detail of the Miracle of the Cross at the Bridge of San Lorenzo by Gentile Bellini. Queen Caterina Cornaro is the front most figure; above the crowd are windows with cage-like bars on the outside of the window, rather than on the internal face (1500, Italian, wga.hu)

Figure 4.22 – Detail of Giovanni Mansueti's Miracle of the Relic of the Holy Cross in Campo San Lio. There are cage-like bars which people are looking out of, but also windows with regular internal bars. Shutters are being opened for people to peak out from (c.1494, Italian, wga.hu).

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Figure 4.23 – An illustration from the hours of Catherine of Cleves showing bars on windows; this is a school scene, not a prison, but it is a good indicator of what may be seen from prison windows – just blue sky! (1440, Netherlands, MS M.917/945 pp.62-3, themorgan.org)
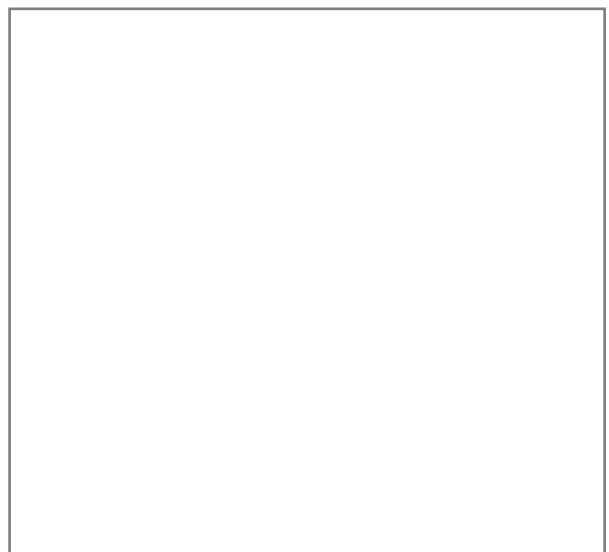
Archaeological evidence

There has been very little windowpane glass found on Cyprus, and what has been found is not published with much detail, and there are no remains of shutters or other fittings to my knowledge. In this sense, the archaeological information – that is, archaeological evidence that is not part of the extant buildings today – is very lacking. The reason I have split up the archaeological evidence between the material culture found through excavations and the buildings is because I can only experience the buildings myself; the bits of Cypriot glass I am about to describe are lost somewhere, and I have only seen a rare picture of one of them.

Between 1935 and 1939, during the excavations and repairs of Famagusta by the Department of Antiquities, there was coloured glass roundels and plaster found in the debris cleared from St George of the Greeks, and excavated from near the windows of the Sinan Pasha mosque (Mogabgab, 1936, 22, 1939, 104; Megaw and Mogabgab, 1951, 177). The only other medieval glass on Cyprus mentioned in publications is small purple and green lozenge shaped Italian glass found in the south aisle of the St Nicholas cathedral, also in Famagusta, by Enlart that date to the 16th century (Enlart, 1987, 243; Boas, 2016, 164). Although pretty vague in their descriptions, and despite the fact these are ecclesiastical contexts, these finds can perhaps be used as a very tentative confirmation that the glass used on Cyprus was like the glass we see in European art. However, it is not indicative of how often glass was used in the buildings, especially the castles that I am studying, because churches were among the most glazed buildings, and especially important ones like the St Nicholas cathedral. Nonetheless, these elusive bits of window glass are all we have.

There has been some domestic medieval crusader glass found on the mainland. Excavations at a crusader bathhouse in Acre revealed hundreds of fragments of circular/oval windowpanes, ranging in colour from light green to bright blue, and in diameter from 20 to 32cm, which they think formed some type of dome (fig.24) (Gorin-Rosen, 2013, 109, 111–3). Smaller roundels with the central nub (more like the *occhi* pictured in Italian art) were also found at the Frankish keep of Beit She'an (Baisan), to the south-east of Acre, and are thought to have come from the second storey windows (fig.4.25)(Boas, 2010, 44). In the chapels of the crusader castles of 'Atlit and Montfort, there was glass of many different colours and some painted with designs: at 'Atlit it was cut into small strips that would have made up a geometric design (Boas, 2016, 164). Again, these are mainly ecclesiastical contexts except from Beit She'an, but still valuable information on what glass was available to and used in the Latin east.

This evidence, although small can be used alongside the art historical evidence: we know that these types of glass, the purple lozenge and coloured roundels, like the ones seen in the art from the 15th century, were available during the medieval period on Cyprus at some point. The earlier examples from the mainland suggest that they would have been available and used in domestic contexts, like in castles, and during the 13th century at least. But what it all comes down to is the windows themselves and the peoples that used them; the remains of the buildings can tell us a lot about what

type of fittings were used, and there are direct references to the fittings of some windows in the primary sources.

Figure 4.24 – Some of the window glass fragments found at the excavation of a crusader bathhouse in Acre (from Gorin-Rosen 2013, 112)
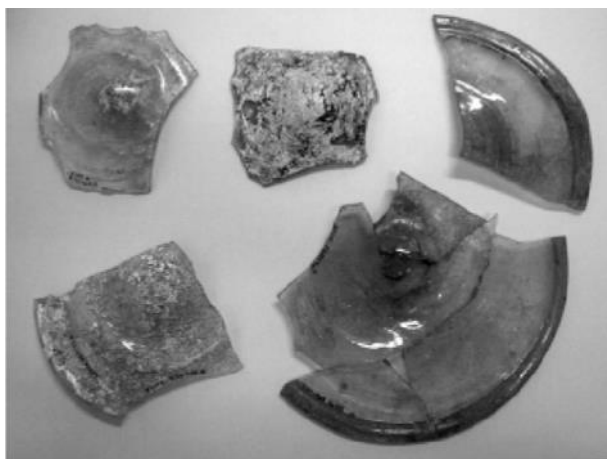
Figure 4.25 – Window glass fragments from Beit She'an (from Boas 2010, 44)

Historical evidence

Although there is a wealth of historical sources from and concerning medieval Cyprus, it may not come as a surprise that there are very few references to windows and their fittings throughout them. The other mentions of windows in the historical sources will be discussed in more detail throughout this thesis, but here I would like to draw attention to the few examples where fittings specifically are mentioned. Historical sources, like the art, are by no means filled with certainties. However, they are discussing Cypriot medieval buildings, and because of this they are much more likely to refer to events that at least could have happened in the buildings, and window fittings that could have existed.

One of the direct references to fittings is concerned with a window in Buffavento castle. Two brothers, Perot and Wilmot de Montolif, were imprisoned in the castle because they didn't accept James I as king; Perot allegedly escaped the castle by "[drawing] aside the iron bars of the window," before sliding down the side of mountain to get to Kyrenia to ask the king's pardon (Makhairas, 1932, §610-11; Coureas and Edbury, 2015, §1013). Whether this means he moved the bars to the side because they were moveable, or if he somehow managed to bend iron bars, what it suggests is that they were present in some windows and also important to the story of the brothers. Were they in all windows, or just ones which were used as prison cells? Was the strength or intelligence of the brother what allowed him to escape, or was it the insecurity of the bars? These things are issues which more varied information can tell us, although sadly because I didn't get the chance to visit Buffavento I cannot comment on which window it was or if there's any evidence of bars. It does show, however, that windows had iron bars and that they got in the way of prisoners trying to escape – something which is very important to how they experienced those rooms.

Another mention deals with glazing. Simon de Montolif, the murderer of the lord of Tyre, was on the run and hid in a monastery in Nicosia. He was spotted on the balcony of the building and the supporters of the lord of Tyre ransacked the place and assaulted the nuns; "They broke open their cupboards and broke the windows and stole many things," (Coureas and Edbury, 2015, §670). Window glass, therefore, can be assumed to be present at this monastery because of this one mention related to the 14th century. What we may also be able to gather from this is, however, not that there was window glass or that it was particularly significant a moment, but that breaking window glass was part of civil unrest and protest, as it has been in much more recent times too. The glass held some sort of meaning to these people, perhaps because it was part of the building sheltering someone they didn't approve of, perhaps because it was expensive, who knows. But it is important that it is something that is mentioned as being destroyed, because it tells us that it was there and that it was something people could act upon rather than just something they looked through.

There are other mentions of windows which I will discuss later on, but these are the ones which specifically mention what the windows consisted of, rather than just 'a window'. The historical sources lack of interest in window fittings could be because there just wasn't very much in regard to fittings in the windows; perhaps most buildings

didn't have shutters or glass. However, I think it is much more likely that they omit details that they may have felt weren't needed in their stories. Why would shutters be important to the life of a king? What the historical sources can tell us, more than the art historical ones, is how specific Cypriot buildings and windows were used by people who were living on Cyprus at the time, even though they are less detailed in their information about what the windows consisted of. It is only by using all the sources together that we can get a full picture.

The case studies

None of the windows in my case studies have what could be called 'glazing marks'. These are thin grooves in the stonework of the internal window face where panels of glazing were slotted in; it can be seen on these windows from Linlithgow Palace, in Scotland, going down the sides of the windows, usually only the top half (fig.4.26). The majority of windows have frame grooves; these are small ledges that would have held a wooden frame for glazing, linen, or shutters. There are also often other marks near the windows or special ledges for other aspects of shutters. This makes it slightly more difficult to understand what was actually in the windows, because any further clues would be in these now long-gone wooden frames. However, we can assume, based on the thickness of these grooves, is whether there was glass and shutters or just one of them.

Figure 4.26 – Glazing marks directly on the stone window frames at Linlithgow Palace. Notice how there are only glass marks in the top lights/halves of the windows, like we saw in much of the art.

Almost all the windows have this type of groove: (fig.4.27, 4.28, 5.16, 6.8, 7.12). However, it was sometimes difficult to get a proper look at these faces of the window panes because a lot of the time they had been fitted with modern glass or wire, and filled with what seems to be concrete or plaster in order to get these modern replacements to fit and stay (fig.4.28). One of the best-preserved and most indicative examples of the fittings of windows in the case studies is the queens window of St. Hilarion (fig.6.8, 7.12). You can see clearly that there is a lip that could have held a wooden frame (Enlart, 1987, 436), and there is also a carved 'ledge' on the mullion that looks like it must have been for some kind of stay-bar or part of the fittings (Rosoman, 2007, 118). Shutters that are separate from the window, and instead shut off the alcove, can be seen in Kolossi in the north window of chamber D (fig.4.30). Because there is other shutters, it suggests that the grooves on the windowsill will have contained a frame with linen or glass, rather than another shutter.
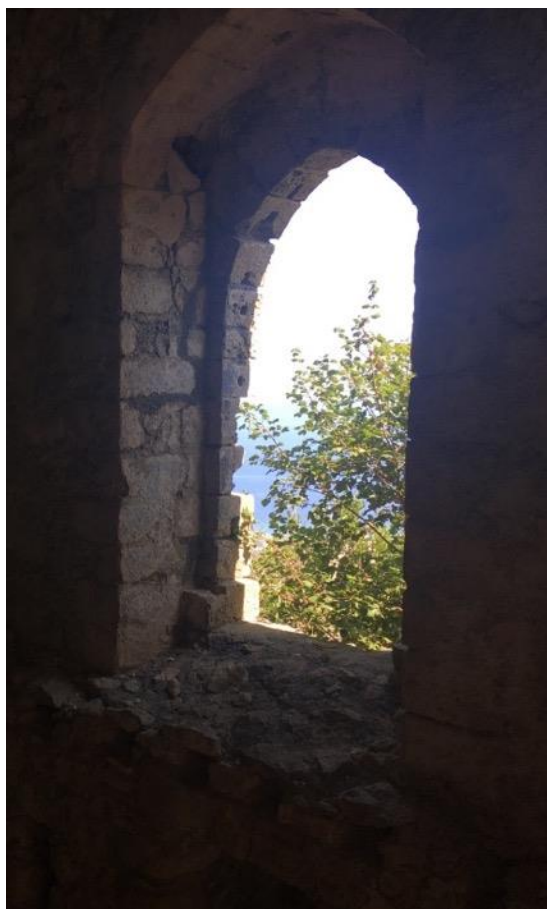
Figure 4.27 – North-facing window in the 'barracks' of St Hilarion; you can see bar marks and a defined ledge/groove where a frame could have sat.

Figure 4.28 – The modern window fittings in a window in chamber G of Kolossi, which looks out at the sugar mill to the east. These modern window frames are not unlike the medieval ones which could have been in them, but they cover up any evidence of other types of glazing marks.

The only exceptions to this are lights or windows that would have had fixed stained glass (for example, the upper tracery in St Hilarion fig.6.8, 7.12), and smaller windows and arrow slits. Small ventilation windows, like the ones on the ground floor of Kolossi, have no bars or grooves where glazing or even shutters could have fitted. Arrow slits and gunports also didn't have anything that looked like frame grooves or bars.

Bars seem to have been present on almost all of the windows, regardless of where they are, but the nature of them varies. At St Hilarion, the large windows of the "barracks", the easterly window of the chapel back room, and the windows in the upper hall are all barred; all on the inside face of the window (fig.4.27, 6.8, 7.12). At Kolossi, although some of the windows now have modern or later bars added on the internal face, there are marks for bars on the external face of the wall around the windows of the second floor. The windows of the first floor don't have these external holes, so I assume that they had internal bars like they do now (fig 7.13). Other than the chapel and range windows, and the arrow slits, Kyrenia barely has any windows that could be studied; the faces of the windows of the chapel are very eroded but there is a possibility of bars (fig.5.16), and on the range windows there are very light remains of bars (fig.4.29).

Figure 4.29 – Windows of the east range of Kyrenia castle courtyard. There are bar marks on the internal faces of the windows (hard to make out), but the modern additions prevent any more analysis. Note the holes above the windows – maybe an awning.

Figure 4.30 – A groove where a shutter would have rested, shutting off the window alcove from the rest of chamber D at Kolossi.

Conclusions

What we can gather from all this evidence is that the majority of windows were fitted with a frame which could probably be opened – this frame could have been filled with glass which was circular or lozenge shaped and could have been of many different colours; a translucent material such as linen or paper; or shutters, which could be opened in many different ways. Like modern windows, then, there are infinite possibilities of arrangements of fittings, depending on what the people using the room want. This means that even if there was glass, most of the time it could be opened, and people could see out clearly or allow more ventilation. Some aspects of the fittings are more significant than others in my discussion – such as the stained glass in the chapels, wicker screens used to ensure privacy and the bars on prison windows. These things are crucial to atmospheres because not only do they have sensorial affects, but also because they are connected to the definition of spaces and experiences in the castles. They can even evoke thoughts of God and Paradise.

5 Atmospheres of Paradise

One of the most prevalent understandings of the world in Christian medieval Europe was nature as Paradise, or the garden of Eden. More than just a biblical garden, however, Paradise was a holy place of eternal life and beauty, and in experiencing aspects of it medieval people could become closer to God and improve their health. Paradise was, according to the 13th century French encyclopaedia by Bartholomaeus Anglicus:

> "planted with pleasure in the East, and that lande is higher then all other lands, and shineth with most tem|perate aire & cleere alway, full of plants, flourishing; and leaues of good smell, and full of light bright shining of fairenesse, ioye, and blisse…" (Anglicus,Trevisa and Batman, 1582, Book 15, chap.114).

In other words, the atmosphere of Paradise was pleasant to all the senses, it was fertile and abundant, it was separate from the rest of the world and it was bright and airy. In Cyprus, and beyond, I believe windows had a large part in how the spirituality and benefits of Paradise were brought inside, into the buildings that people used, and helped them experience god through the reproduction of certain sensory stimuli creating an 'atmosphere of Paradise'.

In-a-Gadda-da-vida baby

Where is Paradise and what does it do? While the importance of Paradise as a garden is known to most people, the idea of Paradise as a place is not the only way it was understood by medieval Cypriots. Paradise as a full-body experience, with all the health and religious benefits, was available to almost anyone in their own homes and outside in nature – it was a way of interpreting the world around them through the lens of religion. Because windows connect inside and outside, they could be used in order to bring Paradise 'in' or used as an element of an artificially constructed Paradise: what you could see, hear, smell and feel, compiled from different spaces and contexts, creating the atmosphere of Paradise.

Anglicus' encyclopaedia, quoted above, was very popular in 13th and 14th century France, so we can safely assume that the Frankish nobility would have at least some idea of what constitutes Paradise (Pleij, 2004, 42). However, the idea of Paradise may have already been understood by the Cypriot natives because of the 12th century Byzantine folk song called 'Digenes Akritas', which tells the story of a nobleman who is trying to build a villa and garden for himself. In describing the land around him, he compares it to Paradise;

> "…In a place of meadows many trees he found,
>
> Standing around, thick shadow they offered,
>
> While the beauty of water streams
>
> Down from the mountain was coming. V.1625

Thus the site as beautiful as a Paradise seemed" (Moraitis, 2018, 5–6).

Together with Anglicus' description, we begin to understand what Paradise meant for medieval Cypriots – green, abundant, filled with trees and plants, with abundant water sources (Pearsall and Salter, 1973, 76–118). The colour green was especially important because it was thought to be healing to eyes, especially those of older people and those who read a lot (Rawcliffe, 2008, 11; Saltzstein, 2019). Interestingly, Anglicus also describes Cyprus itself as "ful of woods and fields, of modes, of viniards, of corne, & of fruit: and it is moist with wells and riuers: and rich of many yriches and liking." (Anglicus,Trevisa and Batman, 1582, book 15, chap. 41). And, many other medieval sources also confirm that Cyprus had a Paradise-esque landscape that could be seen in formal gardens and informal agriculture and wilderness, which covered Cyprus from at least the late byzantine period (Pearsall and Salter, 1973, 62–4; Cobham, 1986, 19, 35; Martin, 1998, 14; Pohlsander, 1999, 144).

Windows are important to the visual part of these aspects of Paradise because they were one of the ways people looked at the world around them; from a window you could look at a garden, or the wider countryside, and you could be connected to the creation of God through what you could see even if you weren't in it physically. This is especially significant because sight was understood as much more interactive and 'bodily' than it is now – some people thought that by looking at something you absorbed it or an essence of it into your body (Rawcliffe, 2008, 11; Weeda, 2019, 52–3), and others believed that looking was the same as touching, which was a very significant part of communication with God in Orthodox Christianity (Binns, 2002, 101; Hunter-Crawley, 2013, 165). Windows which looked upon Paradise-like landscapes allowed users to literally connect with it, feel it, be part of it, whilst still being in the space they were in.

Some windows in the Cypriot castles look out over land which would have been regarded as beautiful and Paradise-like, such as the northwest, north and eastern facing windows of St Hilarion (fig. 1.3, 1.4, 5.1, 5.2), which look out over the wooded mountains and fertile plains of Kyrenia. Almost every 'modern' description of St Hilarion mentions the beauty of these views (Enlart, 1987, 429, 434; Molin, 2001, 116; Petre, 2010, 73, 146), and I think that it is safe to assume that the beauty of them in the past was in part down to this connection between the fertile landscape and Paradise, the most beautiful place in existence (Pearsall and Salter, 1973, 56–80; Howe, 2002, 210–11). At Kolossi, the castle was surrounded by gardens, sugar plantations and vineyards (Cobham, 1986, 35; Pelosi, 2001, §9), all fed by the aqueduct, which created a different but no less significant landscape of 'man-made', formal Paradise, something which has been seen to be very important in the use of windows in medieval England (Creighton, 2004, 81–2; Richardson, 2010) (fig 5.3). The landscape around the castle now is quite similar to how it may have been in the past, with a small garden surrounding and then miles of farmland and orchards covering the plain and could be seen as elements of Paradise. Kyrenia castle may have had an internal garden, filling the courtyard, but there is no reference to it in any sources which describe the castle in detail, although admittedly through its role in various wars. If it did have a garden, then there were many windows which potentially looked onto it, including the now-ruined hall and the eastern apartments (fig 1.2, 5.4, 5.5). It is possible that the hall didn't have any windows (see the St Hilarion hall),

however it is much more likely that there were windows on both sides because it was a functional space for courts (Petre, 2010, 71); the 'chapel' next door has large westerly windows which may have been similar to those in the hall. A significant connection between windows and any courtyard garden is quite likely. The verdure of the view, and the fertility of what could be seen, were important to the experience of the rooms of the castles regardless of how 'natural' or extensive this view was. Both farmland and manicured gardens were part of the visual experience of these rooms and understood as an aspect of Paradise.

Figure 5.1 – View north towards Kyrenia town from the 'Castellan's quarters'. There are wooded hills in the foreground and farmland in the plains, the fertility and greenness of both perhaps reminding people of Paradise.

Figure 5.2 – View north east from a now derelict part of the Great Hall of the upper enceinte, towards the 'queens window'. The green, lush hills of Kyrenia mountains – as Anglicus puts it, "higher then all other lands… full of plants, flourishing." (Anglicus,Trevisa and Batman, 1582, Book 15, chap.114).
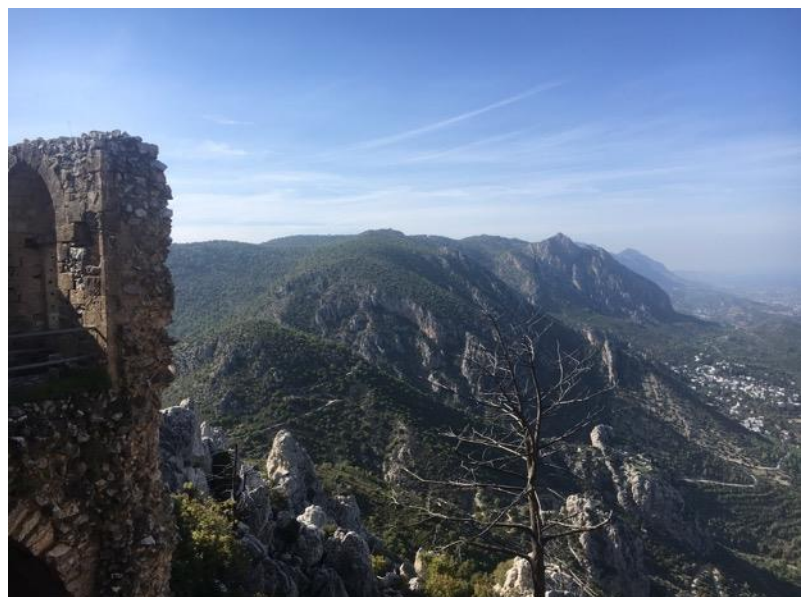
Smells were another important aspect which made up the atmosphere of Paradise. It was said that heaven and saints smelt sweet, almost perfumed, and hell and the devil smelt acrid like sulphur and pitch (Kenna, 2005, 55; Kleinschmidt, 2005, 69–70; Rawcliffe, 2008, 7). Similarly to vision, smelling was a much more bodily experience than it is to us now, with odours being thought of as a smoke which physically goes into the body, so smelling good and bad things had a profound physiological and spiritual impact on a person (Kenna, 2005, 55, 60; Jenner, 2011, 345; Weeda, 2019, 41). Flowers and pleasant smelling plants were an important part of this ideal of Paradise, partly because they were beautiful aspects of nature (Moraitis, 2018, 7), and also because they were parts of god's creation which emitted something which could be 'inhaled' through the nose, so it was as though you were letting God into your body by smelling (Jenner, 2011, 347). Flowers and nice smelling plants were found in the wild or planted in gardens (Cobham, 1986, 37–47; Hadjikyriakou, 2007, 39–41), planted in window boxes and placed in vases nearby (Kleinschmidt, 2005, 73; Rawcliffe, 2008, 10; Richardson, 2010, 42) (fig 4.18, fig 5.7), and I think that this, along with the visual connection discussed, is the basis of the atmosphere of Paradise; by having more than one sensory aspect related to this known idea of Paradise, emulating it either consciously or not, there is a much more effective experience and understanding of it as something divine and powerful.

Figure 5.3 – View to the south-west from the top of Kolossi castle, showing the modern garden in the foreground and farmland off into the distance. Chamber G, the anteroom, has two windows which look out in this direction.

Figure 5.4 – The courtyard of Kyrenia castle from the south-west corner, showing the eastern apartments (right) and northern apartments (north). Both have windows which look out onto the courtyard and onto any garden which might have been there

Figure 5.5 – The corbels which would have held up the balcony of the ruined hall on the western side of Kyrenia's courtyard. Presumably there would have been windows or large doors on this side of the hall which open out onto the balcony and the courtyard, not dissimilar to those in the middle hall of St Hilarion (fig 6.7)

In castles like Kolossi, where there were gardens and greenery nearer the windows, the smells of the plants will have wafted in through windows as you looked out of them, and a connection between what is seen outside the building and what is felt inside is created (fig 5.3). In the case of St Hilarion, where the windows are far away from the land being looked at so it cannot be smelt, 'artificially' added smells such as flowers or perfumes in the room you are looking from create the same affect but from completely separate and distant things – there is still a connection between the external view and internal smell, but they are distinct in context. In other words, it is not the 'space' of Paradise which is created and experienced in these cases, but a piece-meal reproduction of parts of it which can be made up of stimuli from many different spaces. 'Space-less' experience created from the sensory information around people and also the understanding of the information through the lens of religion; in other words, the atmosphere of Paradise (Sørensen, 2015)!

In the same way, Paradise was created through the control and addition of certain sounds. The tranquillity of a space was an important aspect of how it was understood, and this meant the lack of certain man-made noises, such as general hustle and bustle, agriculture and industry, but also the presence of other sounds, like birdsong or trickling water, which were also often added 'artificially' with fountains or tame birds (Pearsall and Salter, 1973, 210–11; Rawcliffe, 2008, 6; Watts and Pheasant, 2015; Saltzstein, 2019). Quietness was healthy, and its presence in a garden helped to ease strong emotions and other unhealthy inbalances in the body (Rawcliffe, 2008, 12, 14). Cloistered gardens, for example, were used as a way to keep the clergy free from the worldly distractions going on outside, allowing them to focus on God and most

importantly the noises of their garden (Biernoff, 2002, 112–5). Birdsong could have been heard from wild birds, like bee-eaters and thrushes, which ate the insects and small fruits, including grapes, around the island (Martin, 1998, 11; Pelosi, 2001, §594), but medieval Cypriots also kept birds in cages, both inside and in gardens. These cages could have been in the garden itself, like in the story of Digenes Akritas, or positioned near or hanging in the windows (Thornton, 1991, 274; Pelosi, 2001, §575; Moraitis, 2018, 8–9) (fig 5.6, 5.7). This means that birdsong was associated with windows, and while alone this is not significant, when put into the wider understanding of birdsong as aspects of Paradise and found alongside the other sights, smells and quietness related to Paradise, is another way that medieval Cypriots could create a full body experience of Paradise inside using windows.

Figure 5.6 – Detail of a fresco in Cappella Brancacci, Florence, by Masolino sa Panicale, showing a birdcage hanging in the window from an external beam. The windows are also shuttered and the lower windows have bars in them (1426-82, Italian, wga.hu)

The quietest, most secluded part of any of the castles being studied is that of the upper enceinte of St Hilarion. Settled in a dip in the peak of the mountain, high above the rest of the castle and the settlement in the plain below, it is extremely quiet and the perfect place to hear birdsong and enjoy quietness. The belvedere, too, and the other north-east facing windows, could have had the combined experience of the lush coastal plain and Kyrenia mountains, tranquillity and wild or caged birdsong (fig 5.8). At Kolossi, the gardens surrounded by vineyards and agriculture are the perfect place for wild songbirds to live and sing, but it doesn't have the 'enclosed' tranquillity and quietness like St Hilarion – it was a working farmhouse, essentially, surrounded by outbuildings and production spaces which were noisy, smelly and busy. Although Kyrenia is a courtyard castle, which means a lot of the noises of the surrounding settlement would have been dampened, the internal courtyard would have still have been busy and noisy from the use of the castle as a court and administration centre (Petre, 2010, 71; McMahon, 2013, 175). Birds could have been kept in cages inside,

so that people could view the garden through their windows if there was one – which means that they did have the quietness and all the other benefits of Paradise while being in a town, in a busy building. Looking at a garden from your window smelling perfume and hearing a caged bird is just as evocative of God as looking at a sprawling view of the landscape with natural birdsong and smelling the plants from your garden below the window. Again, we can see the creation of an atmosphere which is irrespective of the spaces involved (Sørensen, 2015; Bille, 2017, 39); you could be experiencing the sights, smells and sounds from vastly different sources, and it would still allow you to be closer to God and feel the benefits and atmosphere of Paradise.

An atmosphere of Paradise means more than just physically being in a garden or in nature, and it is not just feeling close to God. Full body engagement with sensory stimuli with the overwhelming overcurrent of spirituality is the atmosphere of Paradise; what they are sensing as well as how they understand and react to this. Windows were used to bring in aspects of nature and the external world through the visual, aural and olfactory connections they allowed, and these connections were then interpreted, used and enjoyed by the medieval Cypriots as a beautiful, pious, tangible atmosphere. Paradise enjoyed inside, rather than through physically being there, is significant because of the boundary between inside and outside, here and there; God, and ideas about his creation, can break this boundary and be experienced as inside and outside, here and there.

Figure 5.7 – Detail from Carlo Crivelli's Annunciation with St Emedius. While not comparable in style to any of the buildings I'm looking at, there is a clear connection between the window, birds (wild and caged) and plants (1486, Italian, wga.hu)

Figure 5.8 – The view east from the belvedere of St Hilarion, over the mountains and the plains. There will have been many different types of birds from the different types of landscape – the hills and forests, the farmland, and the sea.

"Oooh baby do you know what that's worth, oooh heaven is a place on earth"

However, creating Paradise in internal spaces was not always connected to the outside world. As mentioned, cloisters are a good example of how separation from the world was a way to emphasise certain things which were holy or healthy for people (Biernoff, 2002, 114–5). In internal spaces such as chapels and churches, heaven on earth was created as a juxtaposition to the rest of the less-than-holy world, and built through the control of sensory experiences and manufacture of a special, colourful, holy space (Kenna, 2005, 61–2). Heaven on earth without connections to the outside world is built on its separation from the spaces around it, like a bubble or capsule, rather than integration with them and appreciation of them. Windows are still an extremely important part of this type of atmosphere, even though they appear to be counterproductive in the separation – what windows do let in, or what connections they do allow, are all used in the upkeep of the separation and increase the distinction between the internal divine space and the external ordinary space.

Windows are needed in churches, and other rooms, in order to let light in, but a visual connection with the outside world meant temptation to many Christians (Grodecki and Brisac, 1985, 13; Jütte, 2016, 624–6; Kuffner, 2019, 144). Medieval and modern churches, both Orthodox and Catholic, often have windows which people can't look

out of or look in to, because they are too high up in the wall, are in the ceiling, are filled with opaque or translucent glass, or a mixture of these things (Boyvadaoğlu, 2008, 99). The stained glass of gothic churches, large, opaque designs of biblical scenes, meant that the outside world did not exist through the windows; instead all you could see was luminous, bright and vivid colours, "walls of light, like the Heavenly Jerusalem of the Apocalypse," (Grodecki and Brisac, 1985, 13,22–4; Boyvadaoğlu, 2008, 100) (fig 5.9, 5.10). Stained glass could be understood as the replacement of the visual, real-world stimuli with that of something holier, as though the church is in fact floating in a bright magical world. This replacement of the view is incredibly important in the creation of the atmosphere in the church, because it separates it and it also replaces it with something 'magical'.
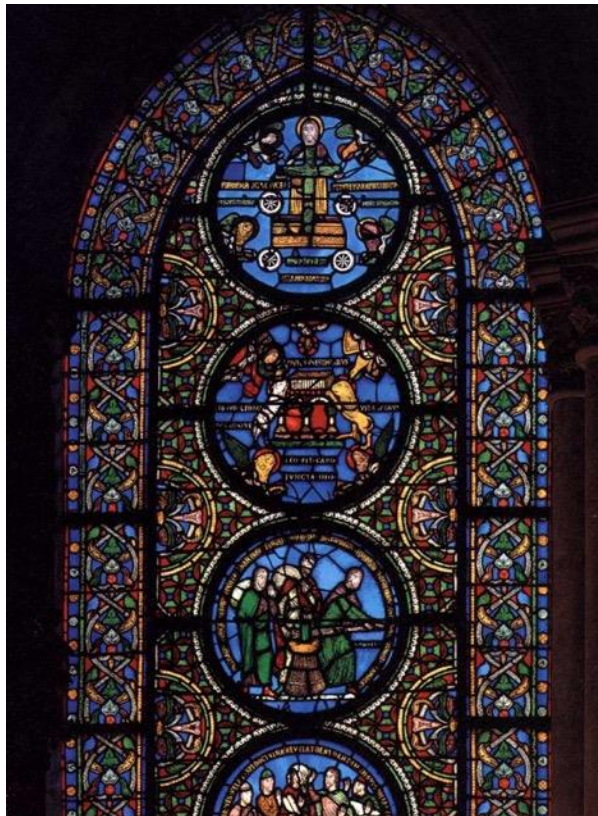
Figure 5.9 – One of the windows from Abbot Suger's remodel of St Denis Cathedral in the 1140s; very busy and very colourful, the imagery was only supposed to be understandable to a select few 'literate' people. However, most of this would have not been visible from the ground where most people were standing ([wga.hu](wga.hu))
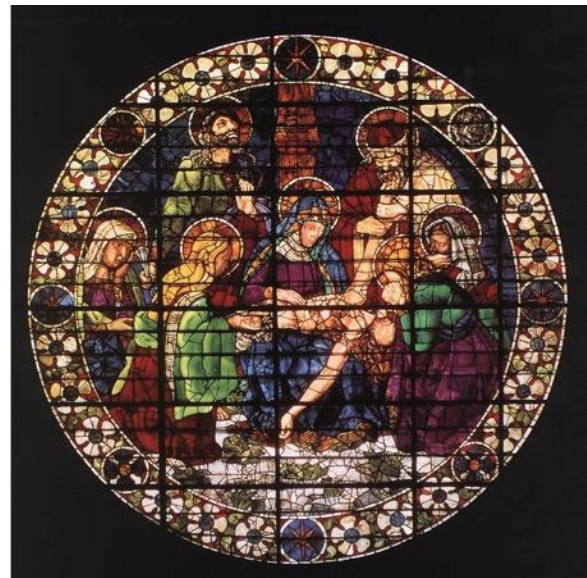
Figure 5.10 - A circular stained glass window from the dome of Florence Cathedral, dating to around 1444. Less busy and colourful than the earlier French examples, but would have still coloured any light which would have come through ([wga.hu](wga.hu)).

The burning of olive leaves and incense, and anointing oil, or chrism, are important parts of Latin and orthodox Christianity, and they, along with the blocking of other outside smells, sights and noises, help to create the sense of a full body emplacement into a divine space (Kenna, 2005, 58–65; McGuckin, 2011, 283–6). Even the architecture of some byzantine churches was designed in order to envelop the participants in noise from all directions (Gerstel *et al.*, 2018). The unopenable windows in the thick walls also meant that very little noise or smells came in from outside, unless

the door was open. External sensory experiences were replaced with things which made people think of, or more accurately be surrounded by, God. They were not just smells or sounds, the were spatially constrained and contextual smells and sounds.

The light that came in through the windows was more than just a means to enliven the glass. Since the 9th century, parts of Christianity have not only seen God as light but have also connected the virgin Mary with glass, and this tradition can be seen to continue through the symbolism and representation of the Annunciation throughout the medieval and renaissance periods. God is the light that is brought with the dove, passing through the glass of a window into the womb of the room, impregnating Mary with the word of God, Jesus (Grodecki and Brisac, 1985, 22; Bloch, 2010, 74) (fig 4.17, 5.11). Glass was a filter which transformed light into something magical that could represent God, and which was much more visible and impactful because of its colour (Boyvadaoğlu, 2008, 103; Bloch, 2010, 74; Bille, 2017, 40). Abbot Suger of Saint-Dennis, who built his cathedral at the end of the 12th century, wrote that the colours that came from the stained glass windows he had designed were very Christian and had a profound, corporeal effect on him (Boyvadaoğlu, 2008, 102; Bloch, 2010, 75) (fig 5.9, fig 5.12). However, especially in older Byzantine and orthodox churches, *occhi*-type circles of glass, like that which was found in Famagusta (Mogabgab, 1936, 22, 1939, 104; Megaw and Mogabgab, 1951, 177), were used to let small circles of light in, which pass over the iconostasis (fig 5.13). The light let in through the windows also works in tandem with the shiny things in the space, like candleholders, relics, icons in orthodox churches, and the metal parts of the liturgy such as goblets and trays for the eucharist (Kenna, 2005, 61–62; Hunter-Crawley, 2013, 164). These things are important in the enaction of religion, not just in how the room looks, so the play of light on them is directly connected to how people experience God in the spaces.
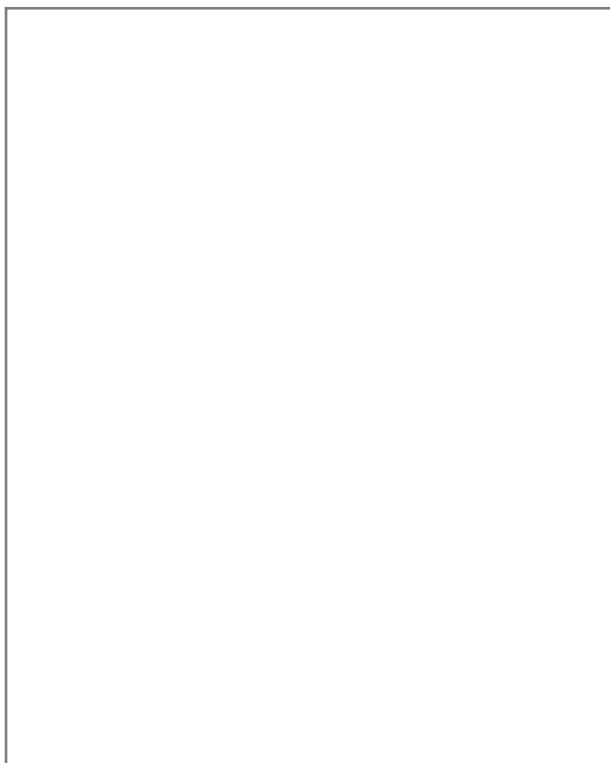
Figure 5.11 – Detail of n Annunciation scene by Rogier van der Weyden; the top lights of the window are glazed with lozenge shaped glass, but the bottom lights are left unglazed but are shuttered. The light of God and the characteristic white dove are coming in through the glass (c1455, Flemish, ArtWay.eu).

Figure 5.12 – Light coming through a stained-glass window in the ambulatory of Bayonne Cathedral.

As mentioned in the fittings chapter, the chapels of the castles were very likely to have stained glass in them (Boas, 2016, 164). At St Hilarion the eastern apse windows being stained would mean the area behind the iconostasis would be lit up with bright colours, and allow the light of the rising sun in, making the gold accents and paintings become animated with the light of God and the colours and shapes of the glass (Giles, 2007, 115)(fig 1.3, 1.4 5.13, 5.14). The dome which sat atop the chapel was also extremely important in letting light in through the small windows in its sides, because light from above was especially connected to the light of God (Binns, 2002, 57; Stewart, 2014, 124). Its position, slightly set apart from the rest of the castle but not overlooked or overlooking anything, backs up the idea of it as a separate, bubble-like space. At Kyrenia, the Byzantine chapel, hidden within the later Venetian walls, is perhaps an extreme case of this enclosure – all but its dome is surrounded, and that is the only place where natural light can get in (fig.1.2 number 3, 5.15).

The windows of the Frankish chapel are very different; they are much bigger, face north and west and have seats in them (fig 5.16). In this case, the stained glass would have been perfect to cut off the room from onlookers and looking out, as you can see into it quite clearly from the entranceway (fig 5.17). The stone seats may have created a place where you could sit and contemplate God, where it was quiet, and surrounded by smells, sounds and light which were all connected to this idea of God. I will say, however, that I am unsure of this room being a chapel. It is not east facing and has no apse, and its location near the great hall and above the entranceway suggests it is more likely to have been an anteroom or study, rather than a chapel (fig 1.2 above

number 7). And while large seated windows are not unknown in chapels, they are rare, and unless they were glazed with full stained glass, would not have offered the enclosure that the chapels needed. In this case, the fittings of the windows are key to how the room was experienced and to how we interpret it now – and serve to remind us that the atmospheres I am studying are made up of what we know, not what is 'true'.

Figure 5.13 – View up the nave of Ayia Kyriaki Chrysopolitissa in Paphos, built around 1500. The light in the centre of the picture is one of the four windows in the dome. The more yellow light to the upper left of the iconostasis is the bright light coming from the southern window. As the day goes by, the light moves over the gold making it shine.

In the case of overtly religious spaces like churches and chapels, the internal space being enclosed is a crucial part of the atmosphere. Using windows, medieval people managed to create a capsule of heaven on earth while still letting in the light of God, and, using other sensory stimuli, placed the entire body inside it. The key difference between this type of Paradise and 'space-less' Paradise, is visuality and connection to the world. Churches are inward 'looking' in their experience (Given, 2004, 177–8), they are not concerned with sensory ties to the outside world other than the light of God, and even that is transformed through glass before it is let in. This could just be practical because the outside was noisy, hot and smelly, but it also had the effect of connecting enclosure and community with the relationship with God. In the church, those who are in it are with you in heaven (Kenna, 2005, 58); those who are not are outside of it and not involved. In their creation of atmosphere through enclosure, churches and chapels are enforcing ideas of community and exclusion.

Figure 5.14 – The apse of St. Hilarion's Byzantine chapel. The dome would have been above the area I am standing when taking this picture, perhaps similar to the Byzantine chapel in Kyrenia (fig.5.15) and having the same lighting affects as fig.5.13.

Figure 5.15 – The Byzantine chapel hidden in the Venetian walls of Kyrenia castle. While it being enveloped in the walls was not the original intention of its design and use, the fact that it was covered up apart from the dome (and a small lightwell) suggests a significance in the light from above even into the venetian period.

Figure 5.16 – The west (left) and north (right) windows in the Frankish 'chapel' of Kyrenia Castle

Figure 5.17 – The Frankish entry into Kyrenia castle, with the gatehouse above and the 'chapel' at the top.

Paradise lost

Although all care is taken to make sure nothing comes into a space and that it feels a certain way, this doesn't mean that things don't 'leak' from the space through the windows. Internal Paradise is spatially constrained to the church or chapel; but that does not mean that the aspects of it are not perceivable outside of this space. People can hear and smell what is going on in the church when they are outside of it, and this is partly because windows and doors are 'leaky', i.e. less sound and smell insulating than a solid stone wall. What this results in is Paradise lost – leaking of the sounds and smells which are used to create this enclosed, capsule-like atmosphere. It shows that atmospheres are not as simple as just a secure, secluded bubble, even if that is what they are trying to create; they are still connected to the world. Experiences of space and stimuli are extremely dependent on who you are and what you know, and this is shared between societal groups, as we can see with Christianity and aspects of Paradise. However, outside these groups, the exact same stimuli means very different things and is reacted to differently. In this way, we can see that atmospheres of experience are personal.

Christian liturgy, both Latin and orthodox, is loud, with singing, chanting and reading being crucial parts of worship, as well as the ringing of bells (Binns, 2002, 47; Kenna, 2005, 61–2; Giles, 2007, 115; Hunter-Crawley, 2013, 165; Gerstel et al., 2018). And, as mentioned, wide use of burning things like incense also means that the smoke and smell from them can escape from the church (Kenna, 2005, 58–62; Hunter-Crawley, 2013, 168–9). Noise and smells were used to mark important parts in the liturgy, and because they could be heard or smelt outside of the church, it meant that people outside could follow along with the service if they knew how it went. Paradise is lost in everyday life, out of context yet still experienced. This has ramifications for the community aspects of Christianity.

Community and religion were not just about space and being in that space, but about knowledge; how you react to certain things, like smells and sounds, depends on if you are 'in the know', if you are part of the religion or group who understand the collective 'meaning' of the sensory stimuli. I will discuss the idea of knowledge as power in more detail later on, but here it is important to note that knowledge means inclusion. The 'atmosphere of Paradise' does not exist, it is a way to describe how people reacted to and understood their environment; and they only understood in a certain way if they were included in that group. Church bells, tsimandros and muezzin calls were purposeful ways that churches communicated with the wider landscape. Most of the time, they were to call people to pray, but they are also used to announce danger or the end of the working day. These noises are nothing to do with the sensory experience of heaven on earth, but they are a way to involve people and let people know what was happening (Dennis, 2008, 8; Given and Hadjianastasis, 2010, 57; Symes, 2010, 297–8). People would hear these noises in their houses or as they were going about their day, and in this sense the idea of religion and the church worked its way into other parts of people's lives. The sounds were to inform the community involved, not everyone who could hear. Leaky Paradise, or Paradise broadcast, listened to or smelt outside of the church, was only part of the atmosphere of Paradise

for those who know those sounds and smells as aspects of Paradise. To others, it may have had completely different meanings.

In our castles, and in Cyprus in general, this means that the sounds and smells of religion, generally incense and bells, was a part of the everyday experience of most of the rooms. The byzantine chapel of St Hilarion and the Frankish chapel of Kyrenia both have windows which open out to other parts of the castles and through which smells and sounds could have passed (fig 1.2, 1.3, 1.4, 5.18). At St Hilarion, the chapel is also close to the belvedere, which is additionally important if we are to understand the use of the belvedere as a place to experience the landscape – the smell of incense, the sound of chanting or singing, from the chapel would work alongside the visual landscape. All the castles, no matter where they are, are connected to the settlement and community around them through their windows. Even from the upper enceinte at St Hilarion, I could still hear muezzin calls from down in the plain; Kyrenia castle was in the middle of an important and busy town where there were multiple churches of different denominations (Enlart, 1987, 201–205); visible from the northern windows of Kolossi castle is a small Byzantine chapel dedicated to Saint Efstathios which is close enough to hear and maybe even smell (fig 5.19). These sounds and smells were, to certain people, connected to their religion and their god. It is a special broadcast you need to be tuned into; you needed to know the 'language' of the sounds and smells to know what they meant, to know what the bell is conveying or what the smell of incense indicates is happening. In this way it becomes clear that the constituent parts of atmospheres are only understood as a whole if you are taught it and live it.

Figure 5.18 – The way in to the Byzantine chapel is to the right of the picture; it was very close to other parts of the castle, for example the roofed part through the arch is the middle hall.

In the end, it is about inclusion and exclusion, if you are 'in on the joke', if you know what these stimuli mean. If you don't, for example it's not your religion, then you will still react to and experience it, but it in a very different context. In this way, the experience of atmospheres is not just to do with where you are and what is happening, but who you are, what you have been taught and what you have experienced before. Meanings of sensory stimuli are taught consciously and unconsciously and are extremely personal. There is no way to know what every person thought about everything, it isn't possible, but we can get a good guess at it from the information about experiences in sources. Atmospheres are not solid bubbles; aspects of them move and leak and spread in and out. Out of context, outside of spaces, the official experience of Paradise is not as a whole but as parts of other aspects of life?

Figure 5.19 – View north from the top of Kolossi castle towards the church of St Efsathios (on the right).

Conclusions

Paradise is heaven on earth, but it is not any one location. Because of windows, atmospheres like that of Paradise could be created because a big part of the experience of them is the distinction needed between separate spaces. The introduction or removal of certain sensory stimuli, alongside the shared knowledge of what Paradise is, meant that Paradise was created as an atmosphere of experience and understanding. It was conscious and purposeful creation in many cases, especially in chapels, but it was also just how many Christians understood and appreciated the world around them. Perception is not bound to spaces as we tend to think in archaeology, and the control and recognition of this boundary was important to the experiences of people living in buildings in the past.

6 Atmospheres of Life

The atmosphere of Paradise is quite distinct and purposeful, and it is easy to think of it as a singular, bubble-like space. But atmospheres are not bubbles, and they are not always as obviously created as that of Paradise. Atmospheres are also a way to describe the general experience of people by including more than just the sensory, physical aspects of life. As before, the connectivity of windows becomes important not only in what we are experiencing, but also why we are experiencing it and what this means for larger social issues. Our relationships with other people are largely dependent on the spaces which we occupy and what connections there are between us and between the spaces; architecture is more than just walls and places where people are, it is part of the large network of power relations which goes far beyond the personal. The experience of this network is a large part of the experience of buildings, and by creating a study of atmospheres we can begin to see how aspects of the world as a whole affect people.

There is, throughout this chapter, a lack of examples from Kyrenia castle. Sadly, this is because almost all research done on it is to do with its roles in warfare, and although kitchens, for example, were definitely used during wars, a lot of researchers don't see them as important and their locations have not been looked into. The lack of public access to the complete rooms of the castle, such as the halls, also makes it difficult for me to comment on their daily use and experience of the castle as a whole, because I have not experienced them myself. Kyrenia castle was lived in, even if we can't see evidence of its more domestic side today, and it would be great to be able to study it more thoroughly to get better idea of it.

Practical magic

I dislike the world practical because it has connotations of utilitarianism, that it is the things we need which aren't frivolous and ephemeral. But there are things in life which we do need and are very practical, such as the basics of light, shelter and warmth. These are much more than *just* 'practical', and actually come hand in hand with much deeper and symbolic aspects of experience. Windows are providers of some of the basics which we need to live; they let light in, they allow ventilation, and if they are glazed or shuttered they can protect us from the elements or other undesirable things (Louw, 2007, 8). In medieval Cyprus, heat and sunlight were very big and dangerous parts of life, but without effective artificial lights, natural light from windows were needed to light the room. However, it was more than 'just' lighting a room, and the 'non-practical' effects of the light from windows were just as important in regard to atmosphere and experiences.

Firstly, lighting is a very important part of how we experience rooms. This is because we need it to see, but also because we connect light and dark, and different colours of light, to certain types of places. Bright, golden sunshine in a room, to me, makes it

feel lovely and summery; grey, dark, diffused light makes the room feel sad but also quite cosy. We can see now how 'practicalities' like lighting are connected to 'non-practical' things like feeling. Windows were where people in the past did lots of detailed, focused work like writing, reading or needlework because that was where the brightest light was (Thornton, 1991, 80; Richardson, 2010, 42; Jütte, 2016, 629–30) (fig 4.12, 4.16, 6.1, 6.2). Although a lot of certain types of work was done outside in the open, the lack of bright artificial light meant that windows and the daylight from them were needed by those who had business inside (Parisinou, 2007, 220, 222). Window seats are the most obvious example of locations where light-sensitive activities were done, and there are window seats in all the castles (fig.5.16, 6.7, 6.8), but medieval Cypriot furniture was mostly movable, so a bench or a desk could have been placed in front of any window to help the user see, and could have been moved around rooms at different times of day (Roesdahl and Scholkmann, 2007, 176; Parani, 2015, 227–30) (fig 4.14, 4.17, 4.23, 6.2).

Figure 6.1 – Carpaccio's Vision of St Augustine. Not only is St Augustine writing at his desk by the window, but looking out of it while he writes (c.1502, Italian, wga.hu)

The direction the window faces is also important because it decides when or if there will be direct light, something which affects both the temperature and the brightness of the room. The anteroom of Kolossi (chamber G), for example, had light throughout the day because it has windows on the south, east and west sides (fig.6.7); the Commanders bedchamber (chamber F), on the other hand, would only get natural light in the mornings and evenings because it has windows on the north, east and west sides (fig 1.6) (Petre, 2010, 220). St Hilarion, on the other hand, has a different use of light in its spaces (fig 1.4). There are only a handful of south-facing windows, none of which are in apartments or fully enclosed spaces, with most of them being full size 'guard' windows (fig 6.3, 6.4). Most of the rooms in St Hilarion only have north facing windows, like the barracks, the castellans hall, and the great hall of the upper enceinte

(fig 4.27, 6.5, 6.8) – these rooms would have all feel very dark, even though the light from outside is bright. Additionally, the hall of the middle enceinte doesn't have any windows at all, other than the doors which lead to the balcony on the north side (fig 6.6). Growing up in Scotland, I was brought up in a cold climate where sunshine is never really a nuisance or a danger, especially in the home, so windowless rooms are strange to me. Light is so often connected to the use of rooms in British archaeology that it is a main characteristic used in feature-analysis of buildings; if there was no windows or they didn't let in lots of light, a room couldn't be a hall, for example (Mathieu, 1999, 122–4). This is obviously not the case in medieval Cyprus.

Figure 6.2 – The virgin Mary using a loom by the window, from the book of hours of Anne of Cleves (1440, Netherlands, MS M.917/945, pp. 146-149, themorgan.org)

Controlling the light let into rooms had a lot to do with controlling the heat of the room, and this was important in making the buildings comfortable to live in. There are many medieval travellers who mention the heat of the country, and the effect that it had on their daily lives. Jacobus of Verona, an Augustinian monk travelling in 1335, wrote that:

"the heat is such that in summer a man can scarcely live, and no one leaves his house except at night, and in the morning until the third hour, and from the hour of vespers [4pm] onwards." (Cobham, 1986, 17; my addition)

And other writers agree that during the summer, a lot of work and travelling was done in the early morning, evening and night in order to stay cool (Cobham, 1986, 31, 49), and generally that it was too hot for the travellers (Martin, 1998, 16, 22–3). Having been on an excavation in Cyprus in July, I know that for those not used to it and those who are unwilling to change their daily routine, the heat is a real struggle and a danger. Direct sunlight was therefore kept out of rooms by not having many south facing windows, or using fittings like *fenestra impannata,* shutters and awnings on windows to diffuse or block out the light (Thornton, 1991, 28) (see fittings chapter). These types of fittings, rather than just no window, were so important because they also allowed for a breeze through the spaces, which was crucial to temperature regulation. William Von Oldenburg (also called Wilbrand of Oldenburg), a bishop from Utrecht travelling in the early 13th century (Cobham, 1986, 13–4), emphasised the movement of air in the Ibelin palace in Beirut:

"The windows of this hall are towards the sea on one side, whilst on the other they look into the gardens which surround the town. Its paving represents water rippling with a gentle breeze… In the centre of this hall is a basin of different coloured marbles… spouting up an abundant fountain of limpid water, which, thanks to the air freely circulating by large and numerous windows diffuses a delicious coolness in the chamber." (Jeffery, 1983, 19)

Although the castles we are looking at are older and less luxurious than this palace, because the Ibelin family were so connected to Cyprus we can assume that many Frankish settlers had similar opinions about breezes and comfort in their buildings, even if they didn't or couldn't obtain them (Folda, 2008, 99).

Figure 6.3 – The south facing windows of St Hilarion, which look out onto the lower enceinte below. From the left there are; four 'guard windows' in the gatehouse; a large window in the chapel, a small window in the backroom of the chapel, the belvedere, small and large guard windows near the 'Royal' apartments (see fig 1.3 and 1.4)

Dark rooms were probably the norm (Thornton, 1991, 276), and therefore we can start to understand peoples' experiences in this context. St Hilarion has been claimed to be the summer residence of the Frankish royal family by many researchers (Enlart, 1987, 429; Edbury, 2005, 75; Petre, 2010, 142), without much backing up of this claim. There is no documentary evidence, anyway. However, I believe that this castle, because of its height in the landscape and the lack of direct sunlight in the rooms, would have been the perfect place to escape from the heat of the lowland cities in the summer. Compared to Nicosia especially, the castle is much cooler and would have been much more comfortable. Kolossi's windows may also be primarily for breezes; because there are windows on opposite sides in each room, a cross breeze can pass through, and especially in the rooms with south facing windows this would have helped a lot with

the heat of the upper rooms (fig 1.6), and in keeping the air moving in the ground floor storage area (Petre, 2010, 218) (fig 1.5).

This is all very practical! It is all about use and comfort; when and where you can do things, keeping out or letting in the elements. This is a very important part of what windows do! These are sensory aspects of experience as you feel temperature and you see light, and also physical aspects because it affects how you use a room. However, atmospheres are not just made up your bodily experiences; there are aspects of our experiences which mean things, which we think about and experience as more than just 'light'. It is the interaction between ourselves and what we are seeing, or feeling, which creates thoughts and emotions and other more ephemeral parts of atmospheres, through the culture and society we are living in.

Figure 6.4 – View from the guard window next to the 'Royal' apartments- it looks straight down towards the entrance to the lower enceinte.

Figure 6.5 – The 'castellans quarters' north facing windows which look out onto the Kyrenia plain. Although it is bright outside, and there are extra upper windows as well, the space is considerably dark.

Figure 6.6 – Outside view of the middle hall. The doors which lead out on to the balcony and the small gable window are the only windows in the room. I couldn't go inside because it is a café now, and it was closed because it was off season. Notice how dark this north side of the castle is and it was noticeably cooler as well

The extra sparkle

At Kolossi, the anteroom was where the Commander of the estate received guests (Petre, 2010, 220). As we have seen, most people in medieval Cyprus avoided the midday summer sun, either by closing their shutters or by not leaving the house until evening time. In the anteroom, with the two south facing windows shuttered, light would only come in from the east and the west windows, in the morning or the evening. The Commander would sit in front of the fireplace, in the centre of the room, and the evening and morning sun coming through the windows would have acted like a spotlight (fig 1.6). This highlights the commander and his importance in the room, by making him bright and visible, as well as having a disorientating effect of a large bright space after the cool, narrow darkness of the stairs (Dixon, 1988, 124–7; McMahon, 2013, 174–5). A technique used to intimidate and impress, it begins with this practicality of being able to see, but it is much more than that. It allows the commander to assert his dominance and power over anyone who comes up the stairs because they will be forced to look at his clothes and surroundings gleaming in the sunlight. Windows could be used to make people see very specific things which have a much more profound affect than just 'visibility'; in reality, there is no such thing as detached visibility. The experiencer is, and always will be, much more complex in how they understand what they are experiencing, and this is the basis of studying atmospheres.

Figure 6.7 – One of the south facing windows at Kolossi castle, with window seats and the bright sunshine coming in.

We can also look at the windows in St Hilarion as more sophisticated than just light providers. The 'Queen's window' in the upper enceinte, with its tracery and expansive view, is generally thought of as window which people looked out of (fig 6.8). However, there is a chance that it, and many other windows, were also used as a backdrop for an important person. Sitting in the seat in the alcove, either in profile or with the window to the back of them, or standing, they would have been framed by the window with a beautiful view behind them. In renaissance Italy, portrait busts were often kept in windows (Thornton, 1991, 268), and in much of the art we can see people standing in front of windows or standing in front of a landscape with a window-like frame (fig 6.9, 6.10). The window frame focuses attention on the person sitting or standing, because it separates them from the space around them. The bright light behind them not only highlights their position in the room, but also creates an interesting relationship between those sitting and those looking – those sitting have their face in shadow, while those watching are clearly visible. An asymmetry in lighting and perhaps power, if the sitter was a king or queen and the viewer one of their subjects. In the same way as in the anteroom at Kolossi, this could be a way to orchestrate what people saw of them and make sure that attention was on them.

Being able to experience sensory information is not all that there is to living. This is not only because often the sensory information is orchestrated and dependent on social factors, but also because there is a person behind the experiencing. We do not see or feel in a vacuum, we have connections to things which affect how we feel about what we perceive (Hamilakis, 2013, 2–6). Feeling the heat of the sun is good to some

but dangerous to others, seeing someone lit up brightly in an otherwise dark room would mean different things depending on your relationship to them. Atmospheres are made up of all interactions, and while this does include sensory experiences, other more personal or social experiences which stem from them are just as important in the lived experiences of rooms. With windows it is no different, and because of all the connotations of light and heat they are especially important in our experiences.

Figure 6.8 – The 'Queens window' in the upper enceinte's hall at St Hilarion. The seats in window alcoves like this were not always perpendicular to the window, with the two sitters looking at each other. A bit of wood could have been placed over the stone ledges to create a seat parallel to the window, creating the backlit effect, or to allow the sitter to engage with the room more.

Figure 6.9 – Portraits of Federico da Montefeltro and his wife Battista Sforza by Piero Della Francesca. They could be sitting in front of a window! (1465, Italian, wikioo.org)

Figure 6.10 – St Clare and St Elizabeth of Hungary standing in front of window-like archways by Simone Martini (1317, Italian, wikioo.org)

 "I've got a feeling, somebody's watching me, and I have no privacy (wooah-oh)"

Privacy is a very important aspect of life, both in medieval Cyprus and now, because it is a big part of our lived experience of the world. It is more than just etiquette and is actually indicative of power structures in society and in the built environment we live in. Windows, as we have seen, are connectors between spaces, and in domestic life spaces are coded to certain people; infringement on these codes is a very serious, and very real, part of the experience of rooms (Teyssot, 2010, 77–8). To watch and to overhear is part of it, as they are sensory stimuli, but the feeling of being watched or being overheard, or knowing that a space is for certain people is also part of the general experience of rooms and therefore the atmosphere. Architecture and people's places within it, both physically and socially, are crucial to their experiences.

Windows are two-way connectors, but these connections are not always equal to those experiencing them. Certain people are expected to act certain ways in certain spaces, and while sometimes a connection one way is fine, the other way might not

be. Usually we think of this to do with class and gender, but there can be any number of labels added to spaces. For example, public versus private space; most modern people would not go to the toilet in front of everyone in the street, they would go to a bush, or better yet a toilet where they are visually (and also maybe aurally and physically) separated from other people. The walls around the bathroom, which create the bathroom as a space, are the most important aspect of its privacy (Ward, 1999, 5). The fact that walls are one of the most definite definers of space means that windows are extremely risky or volatile aspects of architecture (Sipahi, 2016). They bridge the gaps between public and private, mine and yours, inside and outside; separate and often opposite spaces where certain people and actions are either accepted or rejected, and are placed in close juxtaposition to each other (Kenzari, 2005, 39; Teyssot, 2010, 75–6; Netto, 2016). This results in crossovers through the windows which are very socially and culturally visceral because they go against the 'ideal' order of society.

The privacy of women is something which has been part of societies for thousands of years and it was especially prevalent in Europe and the near east in the medieval period (Jütte, 2016, 617–8). It was seen as very important to keep women shielded from wandering eyes looking into windows because vision was seen as a form of real contact. If a strange man looked upon a woman, it was basically as though he had touched her and that was akin to ruin and disgrace to the woman, and lustful sin for the man. A woman looking at a man could also seduce him with her 'unchaste' eyes. When it comes to windows especially this becomes even more significant because windows and doors were seen as metaphorical 'entrances' into the 'body' of the woman; that is where there is the least barrier between the spaces and therefore more chance of 'penetration' (Biernoff, 2002, 47–9, 53–6; Shepherd, 2019, 209). The use of windows as 'advertising' spaces by prostitutes throughout history shows this sexual and accessible nature, which was rejected by most women of 'decency' (Kuffner, 2019, 135–8). Wooden, wicker and even string screens were used to allow all the benefits of windows, especially being able to see out of them, without the negative of being seen (fig 4.18, 4.17, 6.11) (Schriwer, 2002, 213; Kuffner, 2019, 142–3).

For a lot of aristocratic women in medieval Cypriot society, windows were probably their most used space, even with the danger of wandering eyes, so fittings like screens were important. Windows were stereotypically where women would sit and do things like needlework (Thornton, 1991, 80; Richardson, 2010, 42), but also where they could keep in the know about the world going on outside by looking and listening (fig 4.22, 4.11) , a world which they were often officially left out of (Currie, 2006, 20), although, paying more attention to the outside world than your needlework was often a sign of laziness (Jütte, 2016, 629–30). The three castles I am using as case studies are not urban buildings like the ones depicted in the art, so there may have been less of a busy scene for women to look out upon – but as we shall see in the next chapter, women were in the castles during wars and sieges, and looking out of the window would have been their only allowed connection to outside. Windows were a place, then, which offered both freedom and danger to women; and perhaps we can go as far to say that the reason that visual privacy was so important to the lives of women was because their position in the buildings they lived in was in the windows, the closest spaces to the big, bad, outside world. Teetering on the edge of inside and outside,

both their space and not, was central to the lived experiences of many women in medieval Cyprus because it dictated what they did where in rooms and the oppressive feeling of possibly constantly being seen.

Figure 6.11 – Detail from 'Envy' in Hieronymous Bosch's Seven Deadly Sins. It shows a woman and her suitor chatting with a screen made of what looks like string between them. For women, windows were places of communication but also risk (c. 1480, German, wga.hu)

However, privacy is not just about the people inside the castles being seen or heard, but also the people living and moving around them being watched or overheard. Clandestine meetings between lovers, below board deal making, a servant sitting down on the job – all can possibly be seen from windows, depending on where they are and the architecture around them. Makhairas writes of king Peter II "standing sadly at the windows of the loggia," in Kyrenia when he sees the secretary of the Queen, who had just left, and decided to give him a letter for her (Makhairas, 1932, §427). Or, Sir Andrew Corner in his accommodation in Famagusta upon hearing the bell marking the danger of the queen, just before he was assassinated by a rebel group, said:

"'Look out of the window! What's the matter?'

And looking down they saw people entering and coming down." (Coureas, 2005, §157).

The ability to move around, to get on with your daily life, without being seen or heard was an aspect of power and control; king Peter II and Sir Andrew could both use their privileged positions of visual power in order to see and then act (Sipahi, 2016). If they hadn't had windows looking down over other places, they wouldn't have been able to send the letter to the queen or known that people were coming to get him. Knowing what is happening is crucial to how windows were used in power dynamics. Power is less of a thing you have and more a way things are done, part of the relationships and connections between people, and knowledge is a crucial part these relationships (Tilley, 1990, 285–6). Knowledge of what is going on, what other people are doing, is part of how power is enacted in castles. If you were in control of building something,

you could make it so that your personal garden wasn't overlooked by anyone and no one would know who was in it or what they were doing; and, alternatively, if you were in control you could decide to stay in a room which overlooked other people so you could watch them. Windows which overlook other windows or parts of the landscape will always be connected to power because they are how people can stay in 'their' own spaces and still have a place in the power structures created through visual and auditory connections.

Power, privacy, space and windows are therefore crucially interlinked, and architecture is one of the ways it is conveyed. One of the best documented ways of buildings with privacy in mind is courtyard buildings, which have been used for thousands of years in order to stop prying public eyes seeing internal, private spaces, essentially by making the outer edge of the building the edge of space, rather than the very vague barrier of an external garden (Carruthers, 1986, 17). They can then have no overlooked or accessible windows on this wall, either having none at all or only high up small ones, meaning that the only connection to the internal spaces is through the door and then the courtyard – this was how most houses in Cyprus were and still are, from the royal palaces to the sugar plantations to the village houses (Cobham, 1986, 25; Given, 2004, 177–8; Petre, 2010, 240–1). Kyrenia castle is a courtyarded castle, and although perhaps this is to do with siege tactics rather than privacy, the courtyard means that only people allowed in through the castle gates are going to be able to see into the apartments around the courtyard, and they in turn can be seen (fig 1.2, 5.4, 5.17). In this way these types of buildings are more secure and more private than non-courtyarded buildings.

Kolossi on the other hand, does not have the same buffer between fully public and fully private space. Unlike Kyrenia castle, it is open to the landscape around it; you can stand in one of the fields around it and look at the windows and potentially see anyone who is standing by them (fig 6.12). different relationships the castles have with the landscape, including the people in it, mean that there are different approaches to the access and therefore privacy of the windows. Because Kolossi is a farmhouse rather than a siege castle, it has different reasons having external windows – the upholding of power structures through surveillance. Kouklia, a sugar plantation manor similar in function and date to Kolossi, has a similar connection to the surrounding landscape (Petre, 2010, 238). Like Kyrenia it is a courtyarded structure, however because it is there to control production in the land it would not be surprising if it ha external facing windows only, like Kolossi (fig 6.13). In these cases, the ability to look out over the land was more important than the need to keep the castle visually or physically cut off people outside of it.

St Hilarion is different because of its setting on the mountain top, but it is still very showing of how status affects privacy. The 'elite' part of the castle, the upper enceinte, are not overlooked by any windows, and as mentioned earlier are in fact physically and sensually cut off from the other parts of the castle (fig 1.3, 1.4). In fact, apart from the few south-facing windows mentioned earlier and a tower window, there are no overlooking or overlooked windows in the upper two enceintes. The effect of this on the rooms would be very striking, especially if people were used to the business and

close quarters of other castles and urban landscapes, another reason St Hilarion may have been the royal summer residence. This privacy is also an important aspect of the use of the windows as vehicles of Paradise – the personal, private nature of worship through the appreciation of the landscape means that the person doing it should not feel overlooked or watched.

Figure 6.12 – View of Kolossi from the South east of the garden – although you can't see much through the window, at Kolossi because the people using the castle may have been peeking out more, there is still an public to private connection.

Figure 6.13 – View from a window at Kouklia, towards the sugar mill and plantations. Although it is a courtyarded building, because of the relationship between its users and the landscape it still has outward facing windows.

However, sometimes there was power in being seen. Windows of appearances have been used for thousands of years to show leaders and broadcast information. They were ways for those with power to perform their status to the people they controlled (Kenzari, 2005; Letesson and Vansteenhuyse, 2006, 105–8; Jütte, 2016, 632). This is where the south facing windows in St Hilarion fit in (fig 6.3). If you were moving towards the castle, these windows would have been very visible, and you would be able to see clearly the armed and armoured guards standing in the building you need to move through to get to the rest of the castle. Because the belvedere is inaccessible from anywhere other than through the gatehouse, it is another statement of just how powerful the users are; it is also in a location where anyone living and working in the lower enceinte could have seen when someone much higher in status was standing there watching them. This could also be the case in Kolossi, as the Commander watches his land (fig 5.3)(Chamey, 2007, 99; Petre, 2010, 220). In the end, it comes down to control over access to the castle as well as the relationship between watching and watched. Controlling when and where people are seen ensures security for those in power, and intimidation for those who are questioning it (Tilley, 1994, 26–7).

Privacy is therefore about the controlling of space and architecture in order to prevent certain people from seeing or hearing other people; but what is this to do with atmospheres? Atmospheres are not just about sensing but all your interactions with the world around you; this means how you move, how you feel, how you perceive yourself to be. Power structures are part of atmospheres because they affect and structure people's lives and what they are feeling. As we saw earlier with the privacy of women, it was their place in society and their daily routines which meant they had to be in certain places and do certain things, which forces them to understand their presence in the world in a certain way. But the ways in which power is felt in architecture is more than just structuring physical hierarchies and movement, it also uses feelings and has other more ephemeral experiences. The possibility of being watched, for example, is oppressive, and will change both how you act and also what you are thinking and feeling. This is just as much a part of peoples experiences as hearing a bird or seeing a nice view, and through an integrated study of atmospheres we can start to understand possible societal and personal experiences of spaces.

Certain spaces certain senses

The crossing over through spaces, however, is not always a question of privacy. Sensing things in other spaces can also mean hearing, smelling or feeling things which are not supposed to be experienced because of the controlled access of the spaces. Architecture and society together put people in their places: some people are physically allowed in some places, some are not. A large aspect of this is to do with class and status, but sometimes it is not active like invading privacy and watching and is instead passive. In other words, what was it like to experience things in a space you were not allowed to or couldn't be in?

One of the senses I haven't covered yet in this chapter is smell. It is a difficult sense to pin down when talking about practicalities, power and privacy, because you don't really think of smells as invading privacy, even though they can often be smelt in other spaces. There are two types of smells – static and dynamic; static smells are things that are unavoidable parts of life which people get used to, such as the smell of faeces to a tanner or your own perfume, and dynamic smells which "carry new information and influence human decisions," (Bartosiewicz, 2003, 188). These dynamic smells, however, are often not a conscious transmission of information (like hearing speech, or seeing someone), and so are seen as less of a risk to privacy and therefore power.

But, because different spaces mean different things and have different people in them, it is still significant when smells are perceived in other areas through the windows. For example, one of the most evocative type of smells to people is the smell of food, and food is cooked in kitchens and eaten in dining rooms or halls. What is also important is that certain people eat certain foods, and that food has status and power connotations connected to it. In medieval Cyprus, certain spices traded from far-away lands were only available to the wealthy upper classes, such as cardamom, cinnamon, ginger and cloves (Coureas, 2002, i 295, 296; Hadjikyriakou, 2007, 34–5), and whereas eating beef was reserved for the rich, because cattle were draft animals, eating pigs was associated with the poor (Vionis *et al.*, 2019, 261). Because certain foods were for certain people and they were cooked and eaten in spaces which were closed off to many below them, smells become more than just an indicator that someone is cooking or eating; they become a marker of status which can be experienced outside of the space where they are.

For example, chamber D in Kolossi is said to be the kitchen of the castle (Petre, 2010, 220) but there were also ovens found in excavations around the main keep (fig 1.6). Wherever the kitchen was, it was where the owner and master of the land had his meals cooked. If you worked in the land around, in the plantation or in the sugar mill, you would be able to smell what he was eating. To a slave or peasant farmer working on the plantation (Nicolaou-Konnari, 2005, 38–9), the fact that they could smell and recognise the no doubt luxurious meals of their owner or lord meant that they would be acutely aware that they are not the same as him because they cannot eat those things and they are not allowed in the areas they can smell from. In the other castles, because they were lived in by many households and different levels of status, it is a little bit more complicated, especially because it is not always obvious where the kitchens are. St Hilarion's upper enceinte had a kitchen to the north east, shown by the remaining oven, and nowadays there is an extremely small reconstruction kitchen to the south of the castellan's room (fig 1.3, 1.4), but that is it. For a castle with so many apartments in the middle enceinte, there must have been a bigger kitchen, perhaps under the hall (fig 6.7). Either way, in a castle such as this, the smells of certain meals will have been smelt mostly by servants working in the castle, other people staying in it or the civilians in the lower enceinte. The same kind of power dynamic exists between those smelling and those eating, but in this case because who stayed in the castle varied from royalty to just soldiers, the relationship between those smelling and the spaces they smell from changes over time (Khalil,Camiz and Khafizova, 2017, 78).

Another aspect of more passive connected information is that of music. Music was a very important part of court life (Bouvier, 2007), but also just daily life in general throughout medieval Cyprus as Stephen of Lusignan claims that "two thirds of the Cypriot people [knew] how to play a musical instrument." (Pelosi, 2001, §574; Peters, 2012). Court music could therefore be heard outside of rooms like halls through the windows, most importantly by people who are not allowed in the halls, such as servants or civilians living nearby. The sound through the windows highlights the fact that there is activity in that space, but the barrier of the wall shows that it you are separated from it. A less intense connection than something like speaking, but it still highlights the differences in the experiences of people based on their social position and access to spaces.

Like with privacy, there is the juxtaposition of spaces which are occupied by very different people who are above or below each other in power structures. However, in these cases, the information being 'leaked' out of the windows does not invade the privacy of those inside because the information is passive. What it does is solidify experiences of space as places you can go and places you can't, or things you can do and things you can't. As we seen before, understandings of space as aspects of power dynamics is more than just sensing certain things, and the context of them in regard to the experiencer and their place in the spaces changes or adds to the experience. Smelling and food especially are very poignant and also very culturally and socially loaded aspects of life, so the movement of food smells through windows is a massive part of how people would have experienced life in the castles.

Conclusions

The atmospheres of life are quite different to the atmospheres of Paradise. Less complete and purposefully made, the experiences of daily life are much more dependent on interpersonal relationships through the boundaries of spaces than they are the creation of a certain type of environment. The interactions between all the things in the world, including people, things, and spaces, and the attached meaning to them is something which we are very lucky to be able to research in medieval archaeology. We can study architecture and the everyday use of it in a way which includes general sensory experiences as well as the larger, deeper themes of power and status. To watch and be watched, and to listen and be heard, are really important in peoples' everyday experiences because they define many relationships, which are often spatially significant too. The spatiality of experiences, and who can experience what because of them, is key to our understanding of windows, not just in daily life but also in more difficult circumstances too.

7 Atmospheres of fear and anxiety

Fear is a difficult feeling to try and describe, especially in regard to people in the past. Unlike ideas of Paradise, there is no easy equation of thoughts and stimuli which equal 'fear' – it is all about the context in which things are experienced. Historians generally concentrate on the 'known' aspects of fear in the past – frequency of attacks, recorded number of dead, who came out on top in the end (Ellenblum, 2007, 147–9; Petre, 2010, 22–4, 91). But we need to see past 'facts', for a moment, and start to look deeper into the experiences of fear in architectural spaces. The ideas of separation and connection, while sometimes lovely and pleasant, like looking at a beautiful garden, can also apply to horrible, dangerous moments in people's lives. War, imprisonment and worries for personal security all have profound sensual properties, but a large part of them is the connection of opposing spaces – mine vs yours, safe vs unsafe, free vs not free. Understanding the atmospheres of these spaces is not just about knowing what could be sensed, but about the context in which things were experienced.

Putting up a fight

When it comes to war and unsafe environments, there is an important distinction between safe and unsafe spaces. During sieges especially the separation between inside and outside the castle is essential and forms the basis of this type of fighting. Windows are the thinnest part of the barrier between these spaces, and because of this they are central to feelings of fear because of the sensory information they allow in. While doorways are also a source of the same kind of anxiety because they allow physical access, during sieges and most castle warfare, the windows are the most direct connection to the outside world and therefore more significant in general experiences. They are where you can see and/or hear the enemy, where you attack them, but also where they can see or hear you, and where they can attack you, during times of otherwise complete separation. Engagement with an unsafe, hostile environment through a window is a large part of why fear is felt during sieges because it is not only giving you information about the enemy but placing you in the context of a besieged force.

During the medieval period, Kyrenia castle was the most important military castle on the island because it was so close to Nicosia and on the coast, with St Hilarion a close second, guarding the pass between Kyrenia and the capital (Petre, 2010, 1–2, 6–7). Kolossi castle, on the other hand, was more of a fortified farmhouse, "very strong for hand to hand fighting," but not for the defence of the country or the royal family (Megaw, 1977, 206; Pelosi, 2001, §54; Petre, 2010, 211, 216). Between them, these three castles have very different architecture and went through very different types of danger, and in this section, I will generally only be discussing Kyrenia and St Hilarion because they are the ones who saw large-scale external combat. Anxiety and fear was still a factor of the experience of Kolossi, but it was small-scale and more to do with personal protection which I will discuss later on.

Different windows mean more or less of a connection to the outside space and therefore more or less separation from danger, but it is not a simple relationship. Arrow slits, or archières, and gun loops are slim vertical holes in the wall which are used to shoot bows or guns out of. You can see very little out of them, other than a small sliver of the land or sea in front of you, so they aren't very useful for watching or guarding from but you can shoot out of them, and because they are thinner on the outside than on the inside you are less likely to be shot by the enemy through them (Bitterli, 2019). Being able to defend a space whilst staying safe yourself is imperative during wartime, and while many soldiers will have been on the open parapets, the arrow slits and gun loops are important aspects of internal spaces. They usually point towards areas of insecurity of the castle, or in the direction enemies are most likely to come from. In Kyrenia, the northeast tower and the northern curtain wall have arrow slits facing out onto the sea and the harbour in front (fig.7.1, 7.2, 7.3). This castle was usually attacked by external forces, a lot of the time from the sea, so it makes sense that the bulk of the firepower was directed this way. Kolossi castle has gunloops in the outer wall which covers its eastern side (fig.7.4, 7.5), next to an entrance to the castle compound: the windows look towards where the enemy would be coming towards, probably the entrance. At St Hilarion there are only a few arrow slits because there is very little 'near' land at which someone could shoot at; the only ones are in Prince Johns tower, looking out towards the only outer wall of the castle not protected by steep cliffs (fig.1.3, 1.4, 7.6, 7.7). These types of windows were needed to attack enemies whilst at the same time keeping soldiers safe. Keeping the soldiers in separate, enclosed spaces from the enemy seems like a given, but it is a strange relationship to have with the landscape around you – being able to see and act upon a space when you are not in. The soldiers are separated from danger, yet also actively engaging with it through the windows; but what has this got to do with fear?

Figure 7.1 – The north east horseshoe tower of Kyrenia castle from the east side. The small, squarer windows are venetian additions (from Petre 2010 p262).

Figure 7.2 – The northern curtain wall of Kyrenia castle, where there is a lot of arrow slits. The castellated parapet was also where people would have fought from. The floating doors would have led into lean-to structures in front of the castle (from Petre 2010 p263).

Windows are places of insecurity because there is the possibility of connections between the two separate, and vastly different spaces (Troutman, 2013, 18). Being shot at is pretty frightening to most people and the fact that it could technically still happen to you when you are inside makes windows dangerous places during wartime. Large, outward facing windows were closed up with stones and mud during sieges, such as the windows of the Frankish chapel in Kyrenia (fig. 5.16) (Enlart, 1987, 426; Olympios, 2015b, 380) which shows that they were thought of as weak points. Having a 'portal' in a room which allows the danger of outside and presence of the enemy into what is meant to be a safe and enclosed space is the basis of fear in castles. Windows are again at the centre of the communication between spaces, and in this context the communication goes against the distinguishing of space as inside/safe and outside/unsafe – and this is scary. This is not just felt by those on the front lines of defence, like soldiers behind arrow slits; castles held many different types of people during sieges, such as noble women and children (Gaston, 1887, §130; Coureas and Edbury, 2015, §296), and perhaps to them the possibility of attack through these connections were even scarier because they couldn't fight back. The visual aspect of fear in war is perhaps one of the most universally felt over the castle, especially with castles like St Hilarion. Even if you were hidden away deep in the upper enceinte, you could see a lot of what was going on, even if it was things unrelated to the castle and more like boats coming over the sea or forces moving in the plain below. The premise of perceiving all these things, be it arrows or enemy soldiers and boats, is that you are in the castle, you are stuck there, and the enemy is outside the castle. And it is in this distinction where the connections allowed by windows become so significant in the experience of the internal spaces.
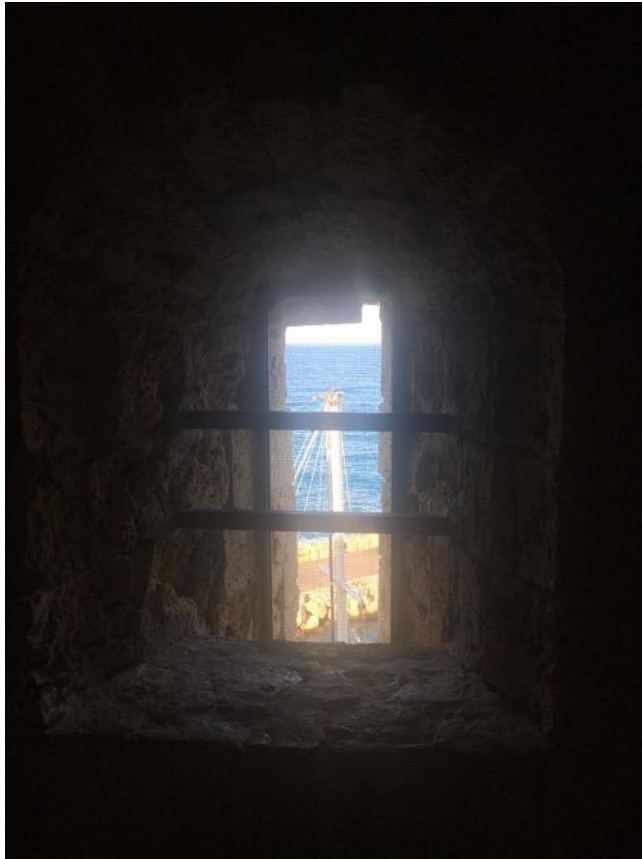
Figure 7.3 – View north through one of the arrow slits in the north east tower of Kyrenia castle. You can see the boat moored right in front of the castle as well as the harbour wall.

Figure 7.4 - One of the gunloops next to the eastern entrance of Kolossi castle. The upper gap is for looking through and the lower square is for the artillery.

Figure 7.5 – The eastern side of Kolossi showing the wall with the gunloops (the square to the right of the archway). The slit is basically invisible because the area behind the wall is well lit – it would have been roofed (see the holes for the beams), so it would have been darker, although it is interesting how well camouflaged it is. The area where I am standing taking the picture is in front of the sugar mill and the aqueduct

Figure 7.6 – An arrow slit in Prince John's Tower, St Hilarion.
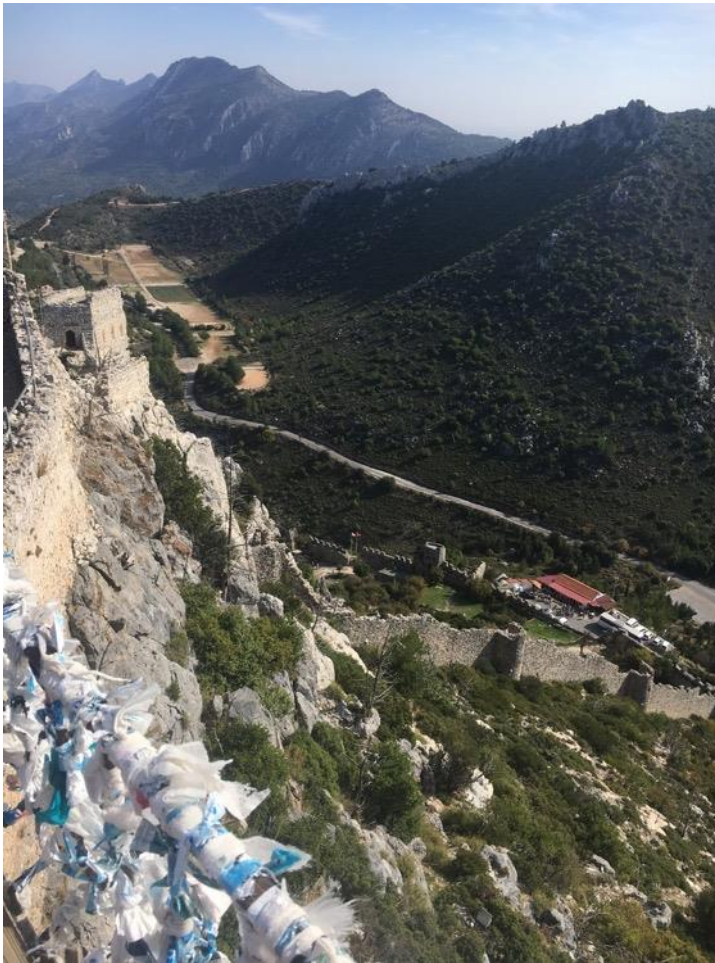
Figure 7.7 – Prince John's tower (the structure to the left), showing the side with the arrow slits and the outer wall going down the hill. The tower and windows are in the perfect position to attack anyone trying to breach that wall.

It's not so great on the inside either

A big part of the experience of castle warfare in medieval Cyprus was being enclosed in a space surrounded by enemies for months or years on end, and this had important sensual consequences. To us now, the thought of sometimes thousands of unwashed bodies together in one space for more than a year (Molin, 2001, 111), some of them badly injured and bleeding, others dead and decomposing, without modern sewage disposal and with animals freely moving around within the same spaces, is enough to make us feel a bit ill. What we must remember is that unwashed bodies, human and animal waste, and even the smell of decomposition were all much more prevalent in medieval life and would have perhaps had less of an extreme effect on people (Bartosiewicz, 2003, 188; Kenna, 2005, 338). However, we can assume that the conditions during these times were a lot worse than what many medieval people were used to. There are recorded instances of people having to eat horses, donkeys, dogs and cats during the various sieges of Kyrenia and St Hilarion (Gaston, 1887, §148; Coureas, 2005, §87; Petre, 2010, 20, 53; Coureas and Edbury, 2015, §267)– all these smells, tastes and noises, although not directly coming through the windows, are linked to them because their inability to leave the castle, and the resulting conditions, need to be seen next to all other connections to the outside space. Desperation, hopelessness, disease all come from the lack of access outside, that's the point of a siege after all, and they amplify any connection to the outside space. Being able to

see, hear, smell what is going on outside of the castle is that bit more significant because of the meanings of the sights, smells and sounds inside the castle.

The most impactful noises and smells, though, will come from outside the castle through the windows, because they are 'dynamic' (Bartosiewicz, 2003, 188). Smells and sounds such as the burning of brushwood in the moat of Kyrenia castle (Petre, 2010, 38), which could be smelt, heard and the heat felt; the sound and vibrations of siege machines being made and placed against the castle walls; of canons being loaded, fired and hitting the walls nearby (Megaw, 1977, 195; Petre, 2010, 45, 49–50); the shouting and screaming of the enemy (fig 7.8, 7.9). These sounds and smells, experienced through a window, highlight the enclosure of the person as well as the reality of the other space. If you hear them, you know where they are, what might be happening, the context of that, and how safe you are relative to the sensory information you just received; you know it is from 'out there', not 'in here', the separation still stands and is important in how you receive it. They can also be sensed by anyone in the castle, not just those who are actively fighting, and are the result of events and activity. It's one thing to know the enemy is there on the other side of the wall, it's another thing entirely to be able to hear and smell what they are doing and know how close or far you are from that.
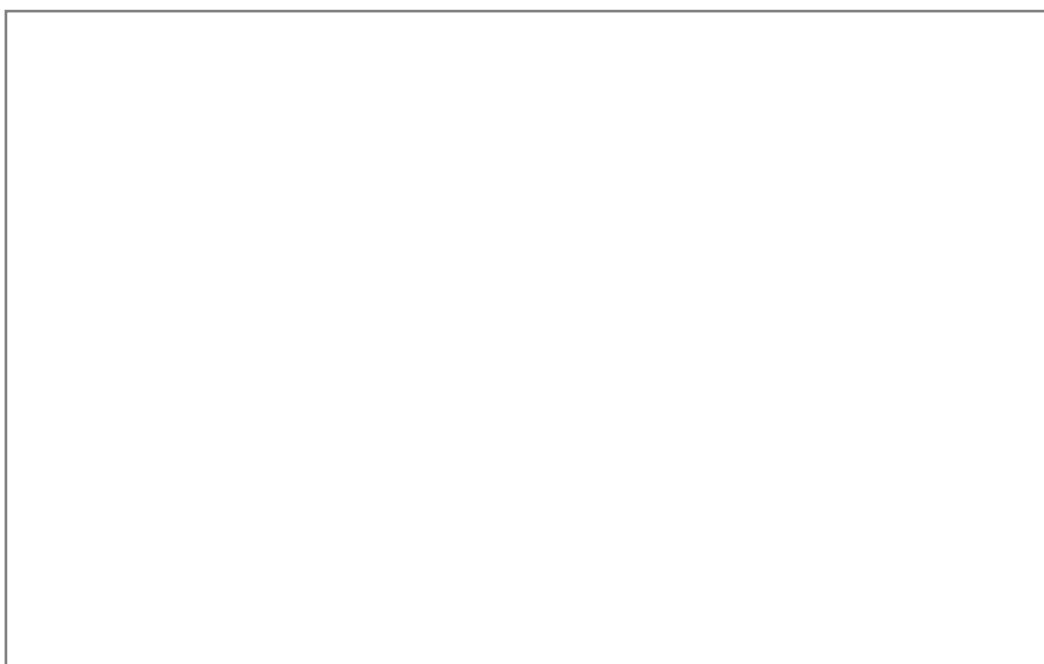
Figure 7.8 – An illustration from the Morgan (Crusader) bible. A biblical scene but dress and equipment is what was available to 13th century Frankish crusaders. The siege machinery could have been used in Cyprus throughout the medieval period, and the portrayal of war and death is a good indicator of how people at the time felt about it – busy, dead bodies everywhere, armour and weapons (1240s, MS M.638, fol.23v, themorgan.org)

In 1229, when the royalist army was laying siege to imperial-held St Hilarion, a soldier called Philip of Novara, an Italian lawyer, writer, and musician known for writing songs and taunting the enemy, was badly injured (Edbury, 2001). He insisted on being carried to a rock outside the castle so that he could continue singing and insulting the enemy (See Apendix B; Gaston, 1887 §149-150 for partial translation of the song in

French; Enlart, 1987, 417; Grivaud, 2005, 241; Coureas and Edbury, 2015, §268). His singing was a way to penetrate the castle and attack those hidden inside; for those listening in the castle, it was to wear them down emotionally by his constant singing, and even when they thought they had injured him he could still affect them by placing himself outside somewhere he could be heard. For a castle like St Hilarion, which is so difficult to attack physically because of its position, auditory attacks to wear down those trapped in siege were the next best thing. Knowing that you are surrounded by an army because you can hear them, not just when they are singing but whatever they were doing, highlights the difference in the spaces and also the inability of those under siege to move, to leave, to be truly safe.

Figure 7.9 – A 1470s depiction of the 1377 siege of Mortagne, near Bordeaux, and more representative of the 15th century. Most of the fighting seems to be by the soldiers on the parapet, but that might be because it makes the most visual storytelling sense. Very similar to Kyrenia because it is on the water and surrounded by a moat. Imagine the noise of the cannons and guns (left), being able to see large groups of enemies and showers of arrows (French, Royal MS 14 E IV fol.23r, wga.hu).

The actual experiences of war in these castles will vary greatly, but fear was undoubtedly a large part of it. We can see that windows played a really crucial part in the transmission of information between 'safe' and 'unsafe' spaces, creating atmospheres of fear from these sensory stimuli and the context of the war. Atmospheres are not just to do with connections through windows – sensory information is from all around, and although windows are significant in how they transfer information from space to space, the context of war and the general experience of it is a very large part of people feeling scared. The experiences of one space is heightened because it is set strictly opposed to the experiences or idea of the other space which it is both separated and connected to; in this case, danger being so closely positioned next to the 'safety' of inside.

Here I am, stuck in a dungeon with you

Nowhere is this juxtaposition of spaces felt so keenly as in prisons or dungeons, of which castles are famous for. To the medieval people unlucky enough to end up prisoners in the Cypriot castles, windows have a very different meaning than just safety and danger of spaces; they are the connection to the outside world, a glimpse of freedom and reminder of their enclosure. The connection and separation of outside and inside, felt through the presence and absence of windows, was a central part of the experience of rooms used as prisons or dungeons. Trapped in a room, unable to leave the normal way through the door, windows highlight the separation between the prisoner and the external space, and intensify feelings of enclosure, helplessness and isolation even though there is a connection to the outside world.

Kyrenia castle was one of the most famous prisons or gaols during this period. If you visit the castle now, you are treated to a reconstruction of some poor prisoners at the hands of implements of torture, and a few down large, deep holes (fig 7.10). Prisoners such as the noble women and children fleeing Nicosia in 1232, king Hugh IV's sons, ambassadors of the sultan of Cairo and the mistress of Peter I were all imprisoned at Kyrenia, (Enlart, 1987, 416–21; Coureas and Edbury, 2015, §297, 845). These cells, none of which are accessible to the public today apart from the oubliettes (or scutella)[3], were horrible, dark, smelly places, with bodies beginning to decompose before they were removed (Coureas and Edbury, 2015, §767-9). However some prisoners had better surroundings, such as John le Miége, who in 1343 copied out the text of Philip of Novara's *Gestes de Chiprois,* causing Enlart to suggest he had a cell which "was evidently better lit,"(Enlart, 1987, 417; Grivaud, 2005, 241). Seeing as artificial lighting would not have been bright enough to write under, especially if it was a windowless room, this suggests that some cells had windows and some did not. In fact, Buffavento castle, another castle in the Kyrenia mountains, had a "dark cell," where the man who informed Peter I that his mistress was imprisoned was starved to death after spending time in Kyrenia (Enlart, 1987, 438; Coureas and Edbury, 2015, §849). While I'm sure there were many rooms which did not have windows, in the context of prisons it was a way to further isolate the prisoner, by severing all direct connections they have to the outside world. Although there are no connections in order to highlight the differences between the inside and outside spaces, this in itself is a distressing reminder of the separation between them.

Many cells did have windows though. Buffavento was the castle where brothers Perot (also called Pierre) and Wilmot de Montolif were imprisoned because they didn't accept king James. According to Makhairas, Perot, "drew aside the iron bars of the window and made a space wide enough for him, and got outside the palace," to beg the King's pardon in Kyrenia (Makhairas, 1932, §610-11; Coureas and Edbury, 2015, §1013). If there were windows in prison cells, they had to be covered or barred in order

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[3] A scutella is a cell with a bowl shaped floor which prevented the prisoner from standing up straight – see (Enlart, 1987, 418; Coureas and Edbury, 2015, §849). I can't find any reference to the use of a cell like this in any other building, on and off Cyprus, however. Oubliettes are 'cells' where the only access is through a trap door and are usually deep in the ground (Petre, 2010, 250).

to prevent the prisoners from escaping – sometimes this was not effective, but the prevention of physical access to the outside space is the point of most prison cells. Even when they were barred, the windows could connect the prisoner in other ways. They could hear things which went on outside, and they may have been heard by people outside; they could smell things, and maybe be smelt; they could feel a breeze; they could see things (fig 7.11). Prison windows may have also been just for light and ventilation, high up in the wall so that escape was even more difficult and not much could be seen through them, but even a small square of sky and the sound of birds or the town around you is significant when you cannot be outside. It is a tie which suggests freedom and entrapment; it is because you are locked away that you are seeing, hearing, smelling that outside space through a window, rather than experiencing it in person.
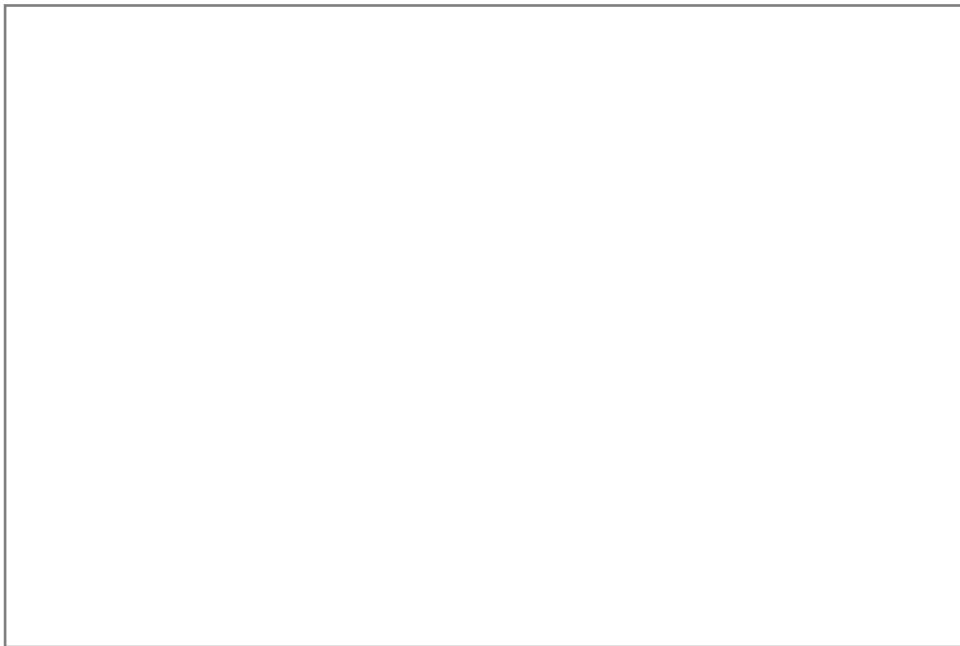
Figure 7.10 – A mannequin in the oubliette (dark, deep hole) dungeon in Kyrenia castle, lit by artificial light – this is supposed to represent king Peter I's mistress. Not all cells were like these. (Gerard Huber, 2016, global-geography.org).

While it may seem a contradiction, both the lack of windows and the presence of windows in prison cells highlight the same thing. They show that windows are crucial gaps in very significant barriers between often very different spaces. In the case of prisons cells, and besieged castles to an extent, it is a matter of where they can and can't go alongside what they can and can't experience. Being cut off from the world, either completely or in a way where you can *only* experience things through a window, is part of being in a prison. The sights, sounds and smells experienced in this context are themselves part of the context, part of the situation of being in the prison cell. There is only isolation if there is a space to be isolated from; prison cells create this relationship, and windows solidify it. It is less about being scared and more about feelings of oppression and anxiety.
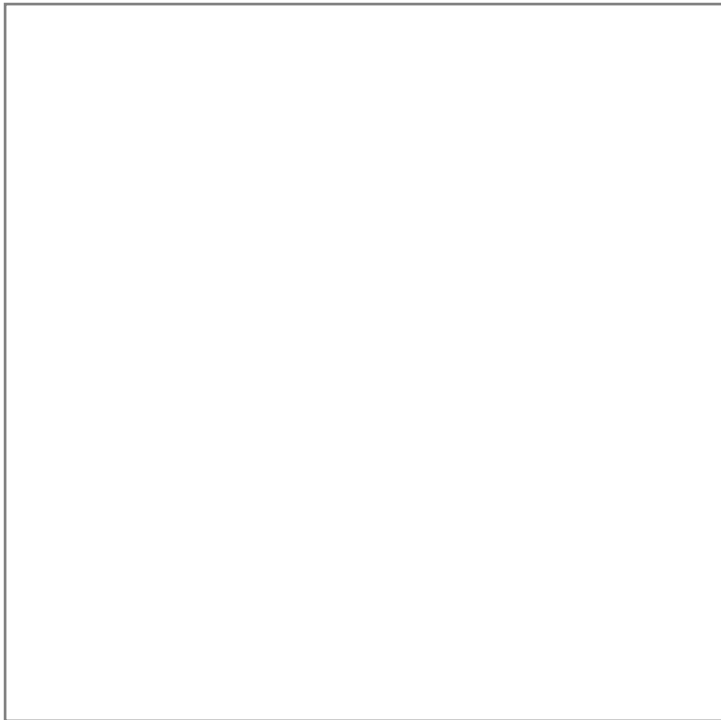
Figure 7.11 – St Margeret in prison, from Tectino's Life of St Margeret of Antioch. While she is a saint who meets Satan in the form of a dragon in the prison, so not the most typical scenario, it shows that the window is where connections happen because the door is locked. It is barred, but she can talk to and maybe even get stuff from her godmother who's visiting her. (1400-1450, Italian, Harley MS 5347 fol.26v, bl.uk)

Things that go bump in the night

Fear is not always a sensible or rational reaction to stimulus, and sometimes we need to look between the lines in the historical record in order to understand how people may have felt. The idea of unknown danger, a kind of constant but fluctuating anxiety, is something I think the majority of modern people will understand. Needing to lock doors and windows, watching the news describe crimes and disasters nearby, hearing police sirens go past. All these things are an unseen enemy, which there is no real 'rational' reason to be scared of, but we are anyway. While people's reactions to anxiety all differ greatly, more needs to be done to understand possible experiences of fear which are not obvious, outright danger.

Locking windows and doors was, and still is, an important part of personal security. It is to do with physical access into your personal, private space and fear for your bodily safety or your possessions. "Privacy went hand-in-hand with security," in renaissance houses at least (Thornton, 1991, 290), so bedchambers were where the most expensive possessions were kept and were often heavily guarded, but other measures could be taken in order to keep people safe. Shutters could be locked with a stay bar (Rosoman, 2007, 118), and windows were more often than not barred, (Thornton, 1991, 29, 290). The image of the window as a dangerous, penetrative space for young women especially meant that bars were used to stop lustful men from getting into their rooms (Thornton, 1991, 349; Biernoff, 2002, 54–6; Shepherd, 2019, 209). Windows were areas of insecurity because they were a gap in the wall, and the fact that precautions were made in order to prevent any infringements on privacy and safety shows that there was anxiety about it happening in the first place (Troutman, 2013, 18).

All the castles had bars on the windows; at St Hilarion the bars are probably more for safety, because there's very little chance of someone breaking in and the castle is very high up (Enlart, 1987, 436) (fig.5.2, 7.12). This was a real risk (fig.4.11) and even if windows weren't completely barred, they may have had a small metal fences (fig.4.20). Kolossi has very interesting bars marks on its windows; the windows of the chambers on the second floor, F and G, have bar marks on the outside which suggests much more movement when looking out and therefore a wider view, because you can lean on the windowsill and look to either side out of the window (fig.4.22, 7.13). For these windows, the bars are needed to stop the viewer from falling out whilst they lean outwards and look around, but for the lower windows, which I presume are barred on the internal face of the window, are more to stop people getting in. They are of course lower down so there is more of a risk of people climbing up, and they are significantly in rooms which are not connected to the Commander. As the owner of the land and therefore preoccupied with its safety and protection, the visual connection allowed by these external bars compared to ones on the internal face is much more important to have in his chambers – the upper floor. The relationship with the landscape is connected to how the windows are used and the physical fittings put into them; different anxieties and needs mean different things.

Figure 7.12 – The 'Queens window' of St Hilarion. You can see the bar marks on the side of the window, but this hall faces a very steep cliff so they probably weren't to do with burglars (see fig 5.2).

Figure 7.13 – The south face of Kolossi; you can see the holes on the outer edge around the upper windows (just), as well as the fancy windowsill. This is especially interesting because the lower window don't have these external bar marks, suggesting different use of the windows.

This is anxiety of things which may not ever have happened and may not ever happen – it is a societal or traditional fear, which is instilled in people through their past experiences and the past experiences of people they are connected to. Like how vision can penetrate private spaces, the fear of an unknown person (or a known one) breaking the 'rules' of the barrier by going through the window is a major aspect of peoples experiences of internal spaces. The possibility of danger is unavoidable with windows and it is enough to colour an entire space with fear, or it is enough to at least change how people act within a space.

Small scale aggressors, large scale fears?

The unknown is not always just a burglar or an assassin. Larger scale fears for the safety of the nation or land as a whole were also part of everyday lives, even if they weren't necessarily grounded in 'truth'. There is a tendency in historical archaeology to focus on what 'actually happened'. For example, some historians claim that throughout the medieval period, there was very little worry of invasion (Molin, 2001, 89, 115–8; Petre, 2010, 22–4). What attacks there were were only small! They didn't cause a lot of damage so why would they be worried? This line of thought is used as a way to explain the purpose of the castles and fortifications on the island, as siege buildings against large-scale external forces because that is 'what happened' (Petre, 2010, 13). The two exceptions to these, according to Petre, were worries about Genoese and Mamluk invasion – there were three small attacks in the early 14th century by the Genoese and a few years of substantial Mamluk raids between 1424-6 (Petre, 2010, 24, 46–7). The fact that there is an acceptance of fear from some raids but not others disregards how generally anxious people are, and if the possibility is there someone is probably thinking about it. If part of the country was attacked by an external force, then I would assume that you would be pretty worried about any external force attacking anywhere, not just that one group again. The fact that many of the castles have extensive views of sea plays into this because it means that from

the castles there was always the possibility of making visual contact with danger (Enlart, 1987, 438–40). Many of the visitors to Cyprus write about how they are worried about pirates or personal attacks. Felix Faber, who visited in 1480, writes about his groups fear of the Turks, and Martin Von Baumgarten, writing in 1508, was actually attacked by pirates (Roberts, 2000, 176, 190–1). This could be compared to 'tourist' crime, and external ideas about the country – like how people think Glasgow is a dangerous place because of the history of stabbings but living here I have never felt scared for my safety. Different people have different reasons to be scared or anxious about things, but I think we should understand much of medieval life somewhere like Cyprus to consist of anxiety or fear of external attack, even if it doesn't translate to the known historical or even archaeological and architectural record.

If danger was spotted, it was communicated to the country in a very visible way – fire beacons were used to inform the capital and the surrounding castles of any threats approaching from anywhere around the island. Manned by freemen at Buffavento at least (Pelosi, 2001, §561; Ellenblum, 2007, 117), there could have been numerous signalling posts that no longer exist, dotted around the countryside, not necessarily on castles or special beacon towers (Enlart, 1987, 438; Petre, 2010, 68–9). They were a visual representation of danger and, how it was communicated across large areas, and because they were bright and a visual connector, they could be seen very easily. From any window of any of the castles, or any building on the island in fact, a beacon could potentially have been seen, but especially from Kyrenia and St Hilarion. One small, bright light seen in the distance from a window is representative of so much more, and while it is likely that it was guards and soldiers on parapets who are 'officially' reacting to the light, it would mean something to everyone inside as well. They would know that there was danger coming, or that something was wrong, and they could act, maybe locking their windows and doors, hiding deeper in their houses. Or, maybe they didn't change how they acted but they still felt scared or anxious as they tried to sleep or whilst they were going about their day. The beacons are a very clear example of a small sensory signal meaning so much more and this deeper meaning affecting how people felt and how they used the spaces they were in. Even if the beacon was a false alarm, anxiety over it would cause fear and panic; people are not as rational or as sensible as we tend to think.

Anxiety can be seen as the fear of an unknown, not-present enemy or event. However just because it is technically imaginary does not mean that it doesn't affect people's actions and experiences. Similar to how the context of war or prison heightens and changes experiences, anxiety is a long-running background context to the actions and feelings of people as they live their lives. I am not suggesting that everyone was constantly scared of break-ins and invasion, but it was a factor in everyone's lives which is tackled through the built environment and the things people used – through window fittings and through the views through windows especially. The distance of the act varies, but anxiety is generally about invasion of space, either into your household space or onto the island.

Conclusions

Fear and anxiety are very important feelings to understand in regard to past experiences because they were huge parts of how people lived and worked in buildings. We can see fear and anxiety as results of connections, or the possibility of connections, between separate spaces. The information which people are experiencing through windows is part and parcel with the context of the situation and spaces they are in – atmospheres are spatial and contextual; space is contextual, and context is spatial. It is all about what is around you, but also who you are and what you are thinking. Atmospheres of fear and anxiety are not always going to be obvious, but they are very significant in how they affect our daily lives; perhaps more so than pleasant atmospheres, because of the threat of danger that they are built upon.

8 Connecting and separating Medieval Cypriot spaces

Our experiences are not constrained by the spaces we are in, because of architectural pieces like windows and doors allowing sensory information to pass through. The significance of this passage depends on the nature of the spaces and their relationship to each other, as well as the nature of the window itself – usually with external walls which have windows on them, the spaces are extremely different. Outside/inside is the most obvious distinction, but as we have seen there is often other significance to these spaces, such as public/private, mine/yours and safe/unsafe. These understandings of space are dependent on who it is experiencing them, the personal and social relationships they are part of, where they are in the social network of the building and the world around them. The experience of the rooms in the building is partly made up of the connections which windows allow between otherwise separate and opposing spaces.

Firstly, I addressed windows in the context of Christian Paradise in Atmospheres of Paradise (Chapter 5). The sounds, smells and sights of lush plants, singing birds and the fertile landscape from the castle windows, when seen in the context of medieval Cypriot Christianity, all point towards well known ideas of Paradise. Windows bring these things inside and they are interpreted, used and enjoyed by the medieval Cypriots as beautiful and tangible spirituality, even if they were not in that space themselves. At St Hilarion and Kolossi castles especially, this type of understanding of the landscape around them could have had a real, significant effect on the people who were living in the buildings. The expansive views across the Kyrenia mountains and coastal plain from St Hilarion's Great hall (fig 5.2, 6.8, 7.12), 'royal' apartments and belvedere (fig 5.8) are an unignorable part of the rooms, and in the case of the belvedere perhaps part of their creation. It is no coincidence that landscapes like that are very similar in description to Paradise as described by French and Byzantine sources. At Kolossi, it may seem as though the landscape was less of a paradise because it was intensely agricultural, but the fertility and bounteousness of it would have been interpreted as a God-given, beautiful, Paradise-like environment. The artificial 'adding in' of aspects of Paradise, like gardens filled with birds and planters with flowers, from many different spaces shows that the experience was focused in the internal space even though it wasn't all perceived from there. The connections, in other words, between outside and in were important because there was an important distinction between the two spaces – they needed to be kept separate, for whatever reason, but connections were still needed.

In the chapels of the castles, I found this separation is even more distinct. To keep the inside of the chapel separate from the outside was a must – a distinction between sacred space and 'ordinary space' was needed. But light was still needed inside, not least because of the connection between God and light which was so prevalent through the medieval period. Windows, and the stained or translucent glass within them, were used as a way to transform everyday light into something religious and sacred (see fig 4.17, 5.11), whilst also enforcing the perceived distance between sacred and non-sacred spaces. The inability to see into, or out of, the windows in the Byzantine chapels of St Hilarion and Kyrenia (fig 5.14, 5.15), would add to their

physical distance from other parts of the castles to create the 'heaven on earth' bubble which was wanted in overtly religious spaces. In many ways it was not a very effective bubble, as the efforts to separate the space often leaked out and into the spaces around it, like the burning of incense or singing and chanting being heard in nearby rooms. But the bubble was not just spatial – it was social as well, which did so much for the further separation of the spaces. Even if you could hear and smell what was happening inside the chapel, you needed to know or be involved in order to understand what was going on. This goes to show that atmospheres, although very spatially situated, are also just as dependant on who you are and what you know. Keeping chapels separate from the world was more than just using stained glass; it was the knowledge of what the light through this glass meant in that space.

Light had a very different role in Atmospheres of Life (Chapter 6). In more domestic settings, although it still may have had connotations of God, light is usually a practical thing which allowed you to see and do things, with windows of course being central to this. Keeping the rooms cool was a large factor in where windows were positioned, as can be seen at St Hilarion, but the later date and more complete building of Kolossi goes against this. Window fittings, I presume, were used to counteract the heat of the sun, and they suggest a need for the windows for other reasons. The use of rooms throughout the day because of the light and heat is important to how we understand them, but the non-practical uses of light and windows in the castles are just as important. The use of light from windows in order to highlight certain people or places can be seen in churches (fig 5.13), but it was also an important statement in places such as Kolossi, where the four windows of chamber G could be used by the Commander to influence those who visit him. The picturesque views framed by the 'Queen's' window' at St Hilarion (fig 6.8, 6.9, 6.10, 7.12) acted as backdrops to the high status, even royal, users of the hall, creating an instant focus and attention on them. These things are less about relationships between spaces and more about the relationship between people in spaces; they are crucial to how the rooms were experienced, and are more than *just* light, or *just* a view. They are understood alongside the art of the period, alongside knowledge of status and intimidation in spaces like castles, to understand better their effects on the people of the past.

Most of the time, relationships between spaces are directly connected to the relationships between the people in them, and in these cases the connection and separation is even more significant. Architectural space and where people are in it are a large part of societal and personal power relations; where you are in society, the relationships you have with the people and world around you, goes hand in hand with the spaces you occupy. This is because spaces and groups of people have actions and behaviours which are coded to space as well as who they are; some people aren't allowed in some spaces, or they shouldn't be seen in certain spaces, or shouldn't look into certain spaces. Because windows enable connections between spaces, they become very significant in the power dynamic of buildings and rooms – being able to see, hear or smell things which are in a space which is completely separate from you, either you personally or one of the many societal groups you belong to, is key in your experiences. I gave the examples of women in medieval windows, behind screens so they could see the world go by but not be part of a potentially unchaste look or glance, and the smelling of the master's elaborate, rich meals by the slaves in the field, but

these connections can be so specific to certain people. It is not just to do with privacy, but with violations of coded space through sensory perception. Without windows, there would not be the same relationship between the spaces; they may still be understood as private and public, or mine and yours, but in terms of on the ground experiences in the buildings, windows are what define and tie together these spaces and the relationships within them.

During wartime and danger, this separation and connection is very apparent (chapter 7). The spaces of inside and outside are extremes and their relationship with each other is defined by danger and anxiety – being able to connect physically with the outside space is needed to defend the building, but it also means that you are under threat. Separation is the basis of the experiences of sieges; being unable to access the outside world, and being kept in by an external enemy, means that there is a significance in all connections to the contrary. Hearing the singing of an enemy soldier, or being able to see enemies approaching, and even the smell of bodies inside should be seen as linked to the enclosure of the building. In prison cells as well, we saw that the separation between the cell and outside is part of what a cell is; the window enforces this separation because it puts the two spaces, inside and outside, in juxtaposition. Being locked in and unable to go outside is what makes a prison cell, so windows which are the only connection to this outside, inaccessible world are important. The relationship between the spaces is created through context and experienced through the windows, or lack of them; experiencing the space, including the sensory information from inside and outside of it, is all to do with the knowledge and reality of the separation between the spaces.

The fear of the unknown, or anxiety and worry, in the case of these castles was generally about invasion of the country or invasion of personal privacy. Pirates and enemy forces coming across the sea was something that may have been a central part of life in the castles of medieval Cyprus, with the views of the sea which all the castles have from their windows. The possibility of danger, or the representation of danger, being visible at any point from the window means that the window itself is a place of worry and anxiety, a place where danger becomes apparent. Windows were also a place of anxiety because there was the possibility of physical invasion through them – as the gap in the wall and the bridge to the other space, windows are the weakest point and therefore the vehicle for danger in the form of external invasion.

Atmospheres are a way to study the experiences of the past in a much deeper way. By focusing on aspects of the environment which may have been perceived by someone, we can go beyond just creating isolated rooms in our minds, and instead create an idea of how architecture was used and understood. The sounds, smells, sights, temperature, and all else which may have been a part of someone's experience of a room can be found in the historical, archaeological and architectural information which we have at hand – information which not only tells us what they are interacting with, but how they are interacting with it. Atmospheres are suited to the research of historical spaces because they allow us to think of rooms in buildings as permeable, real spaces which are used and part of people's everyday lives. Without the focus of atmospheres, windows could just be seen as pieces of art on the wall, or just to provide

light for people to see; but they are much more than that, and their importance as connectors and in experiences is clear through atmospheres.

No building is safe

How useful is this idea of atmospheres really, though, in the big bad world? I hope that this thesis has shown how this kind of methodology can be used in historical archaeology relatively easily; all you need is access to the rooms of the buildings, and to many historical sources. You don't need a trowel, you don't need a university archaeological department, or thousands in funding, or special permission from any government departments. The only real thing keeping it from being truly accessible is the access to historical sources, which in my case meant paying to use a library in Nicosia. It is very important to me that as academics we start to think of more than just ourselves, with almost invariable privileged in our own lives or in the position we have thanks to our universities, when we create methodologies, especially about buildings which are so easy to get to for tourists. It is especially useful in countries like Cyprus, where permission to excavate is extremely hard to get, even if it would be useful, but which also has well-preserved medieval buildings which are almost all opened to the public.

However, in theory, this way of thinking can be applied to buildings almost anywhere. There needs to be historical records, of course, and there needs to be a standing building with almost complete walls; but that is it. It is equally as applicable to an 18th or 19th century English country home as it is to insulae in Imperial Roman Ostia. The main issue is the need of walls with, ideally, all of the windows somewhat intact, which means it is usually medieval and later buildings which would work. The interdisciplinary nature of the study of atmospheres is one of the most important aspects of it, and while there isn't much medieval archaeological evidence in Cyprus, in other places and other eras this will no doubt be a much larger part of interpretation.

Not just useful for research and academic writing, atmospheres can be a good way to think about historical interiors for other reasons. Conservation and reconstruction work in these buildings, usually for tourism, already use many different avenues of information in order to create a realistic or accurate portrayal of the room, from art to documentary sources. With atmospheres, it would bring in another layer of understanding to the room, connecting it to the building and landscape around it, rather than just focusing on the internal space depicted in art. This could be invaluable to the experiences of the visitors, allowing them to better understand and engage with the history of the building and the people who lived in it.

Finally, I think a lot more research needs to be focused on windows and their importance in the built environment. Studies in glass are widespread, but windows are still largely forgotten about in archaeology, even though they were almost certainly present in some form in most buildings. Even if a full, multi-disciplinary, atmosphere-esque study is not possible, I think that a real consideration of the windows of spaces will benefit all projects focusing on the built environment – even for buildings which

are found at plan level only. The more work which is done on why windows are where they are, what they are used for and what they mean to different societies, will help in the interpretation of buildings which perhaps don't have any windows remaining, or any historical information alongside the building or society. Maybe the locations and uses of the non-existent windows of Çatalhöyük will be the next big thing?

Final conclusions

The medieval castles of Cyprus are amazing pieces of architecture and important tourist sites, which deserve much more research and recognition. Their condition makes them perfect for non-invasive studies such as this one, which you only need yourself and a few books to undertake. Through them, I was able to explore this notion of atmospheres as a way to explain experiences and highlight the importance of windows in the use and experience of rooms. Either through the lens of Christianity, showing the landscape as beautiful pieces of Eden and creating a multi-sensory paradise; or as societally important places to see and hear, or to be seen and be heard; or during war and oppression, as places of fear and anxiety for safety and security; windows define spaces, and people's understandings of these spaces and the windows define experiences. In order to try and understand how rooms were used and how people felt in them, we need to become fully interdisciplinary and open to thinking about the deeper meanings of sensory perception. The world is a big place, and we don't just move about within it in little modular bubbles; we flow, our thoughts flow and we interact and react and feel. To me this is the most interesting and important part of archaeology – being able to learn how people in the past lived, not just what they lived with. Experiences become less about just the things in the world with them, and more about what they knew about the things in the world.

9 Appendix A – Making medieval glass

While this thesis does not focus on the creation of medieval glass, it is an important aspect in how windows were fitted because it affects what the glass itself looks like and what size and shape of windowpane can be created. Modern plate glass, that most people in the west are used to having in their homes, comes in very large panes which are basically completely transparent. Most glass now is made using the 'float glass' process, creating perfectly flat and clear panes by floating a ribbon of glass on a large body of calm liquid (see Martlew, 2007 for overview; PilkintonTV, 2011).

Medieval glass makers didn't have anywhere near this technology, and creating big panes was very difficult. They used many different techniques to make windowpanes, the most prevalent being broad glass and crown glass. Broad glass was created by blowing a bubble of glass and putting a hole in the bottom of it, swinging it to elongate it into a cylinder, then separating it from the blowpipe, cutting it down the side and finally flattening it on an iron slab. Crown glass was made by creating a bubble of glass, opening up one end and then flattening it out by spinning and stretching it, resulting in a flat circular piece of glass with a nub in the middle where the blowpipe was connected, and it was then cut up into separate panes which could be any shape (Martlew, 2007, 127–35; Dungworth, 2011, 24–6). Because they were constrained by how big they could blow and how much they could swing or spin the glass, these methods were limited in how big they could make the panes for windows. In order to glaze windows that were almost always bigger than the largest panes that could be made, most medieval windows were glazed with smaller panes that were connected together with lead 'cames', or plaster (Thornton, 1991, 27; Dungworth, 2011, 23–4, 26). The glass could vary in colour depending on what raw materials were used; sand with high iron content made the glass greenish, red glass could be made by adding slag left over from metallurgy (Freestone,Stapleton and Rigby, 2003; Martlew, 2007, 124).

In Cyprus, as discussed, the glass panes could have been either small circular panes called *occhi* or small lozenge/diamond panes. *Occhi* could have been made in two ways which produce different results, but generally the technique is the same as that of crown glass. 'Spun' *occhi* is when a blob of glass is squished into shape, creating a pane which is much thicker and smaller in diameter, whereas 'blown' *occhi* is thinner and much bigger in size. Imperfections such as bubbles and grooves are different in each type, with spun *occhi* having many more bubbles near the nub and more grooves from the smoothing palatte, and blown *occhi* being clearer but with more of a lip on the edge. In this video, they are making 'spun' *occhi*, and in this video, they are making blown *occhi*. Both types of techniques may have been used to make glass in medieval Cyprus, as they both produce very similar panes which are usable for windows.

10 Appendix B – Translation of Philip of Novara's song

Thank you to Ally Banks for helping me make sense of this. We understand that this is by no means a perfect translation, nor that it makes much sense, but it is the translation which was available to me. The version we were translating from is Gaston, 1887, 64–5 and can be found [here](#).

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This is the song that Phelippe de Nevaire sings, when he is in front of the Chateau de Deudemors (St Hilarion) during the siege:

I am angry, but more so I cannot be quiet

In fox and fake country

Who to him are starving and old.

Deden Maucrois, very old and returning.

But the Fox has also grown old,

That they _____ other (vassal of a vassal),

And the sergeant, why does he let him sell?

Like the crazy make them wait.

Just as those at the tanning do.

Knowledge is for mastering the earth,

Each peace will never come.

Better to be honest who is a traitor.

To serve them a hanging, and he does in their false hangings.

11 Bibliography

Most figures are referenced in the table of figures on page iv to make cross referencing and checking easier; all figures from other sources also have their source linked in their captions.

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