



FIG. 6.0 City of Culture of Galicia Santiago in de Compostela 1999-2015 (Photo: Ariel Huber)

6 City of Culture of Galicia in Santiago de Compostela

Peter Eisenman Architects

1999-2015 construction halted

The choice of City of Culture of Galicia in Santiago de Compostela will be explained from its validity as a singular case (6.1.). I will explain the context of this project also in the religious world of the pilgrimage to Santiago de Compostela (6.2.). My impression from the two field-trips in 2014 will precede the analysis (6.3.) and again building this large and ambitious project posed a specific challenge to the merits of a few technical considerations (6.4.).

As my documentation will show, this project is designed in a process of layering - not very different from our own analytical model in principle. However, our own layer model of ground form, spatial form, metaphorical form and programmatic form will alter the reading of the project (6.5.). Exactly these analogies between design architectural process and landscape architectural analysis seem to be worth a specific method of design analysis. I will try to show composition strategies of shifting and shuffling of layers, altering and transforming of scales, stratification and even the inversion of layers as a specific method of this design (6.6.). Composition analysis should show that the specific landscape attitudes in this project are related to the idea of the palimpsest - multi-layered writing or 'artificial excavation' as Eisenman calls it in my interview (6.7., A1.31.).

One can therefore find many entries in landscape architectural attitudes but also a surprisingly contrasting position of the author's denial of landscape influences in favour of what he calls the 'excess of reason' to understand this complex design (6.8.).

“... you (James Corner) are trying to make a dialectic out of this (Laurie Olin’s ‘pragmatism’ and Eisenman’s ‘philosophy dialogue’). Jacques (Derrida, *Philosopher*, 1930–2004) taught me a great lesson when I worked with him. He said, “You know Peter, architects need not be good philosophers.” I’m a really bad philosopher and architecture is bad philosophy. Okay, it’s probably also bad theory. When I say a discipline is made up of problems, I’m not talking about solving problems, I’m proposing to open those problems to inspection, whereas Laurie says that he is interested in problem solving. You can sit here and say that, but you can’t build a building just on air, or theory.”

Peter Eisenman (*1932) ¹¹⁹

6.1 Choice of City of Culture for Architecture with Landscape Methods

The City of Culture takes another particular position in the field of my three case studies. Its choice for analysis has quite a different set of reasons than the two previous ones.

- First, the project, building a city on a hilltop with a shape, formal language, and materiality of a barren rock formation, is an architectural landscape in itself. Anyone looking at it would wonder why this evident landscape form was chosen for this large cultural centre and how its architecture was created.
- Second, in 2008, it was one of the largest building construction sites in Europe, attracting controversy and debate over its prolonged construction (as explained in 6.4). Such a major construction project at such a peripheral location in itself raises the question of the usefulness of such architecture. Does it generate landscape as an excuse or as a solution to the question of such bigness?
- Third, the project has been raising fierce discussions among critics and architects, because of its form and appearance. Anyone visiting this place could ask, what good is a mountain that one cannot climb? At City of Culture we can question if in general such apparent landscape form does have any use in architecture.
- Fourth, the City of Culture offers a different kind of complexity. It is not the complexity of entanglement and critique of context that is a career-long subject of the architect Rem Koolhaas, in apparent relation to Jussieu. It is not the experiential density of landscape phenomenon reduced to the maximal simplicity like we can unravel in Rolex Learning Centre. City of Culture has a complexity from within architecture, one founded on architecture, that turns around architecture itself. Peter Eisenman’s architecture drags the subjects of place, genius loci, and cultural and historical context into creative process as opposed to counterpointing them. The contextual strategy (as it will

¹¹⁹ Answer in Informal Discussion at University of Pennsylvania Institute of Contemporary Art 20.9.2006. In response to an audience question about the place of theory in Landscape Architect Laurie Olin and Architect Peter Eisenman’s cooperation by Landscape Architect James Corner. (Porter 2006, p.94)

be explained in interviews A.1.3.) was to create not a symbol put onto Galicia, but a new part of Galicia itself. The design imitates a process of growth (and even decline) as complex as that of the establishment of a cultural landscape (and its erosion) on the grounds of nature.

- Lastly, the position of Peter Eisenman in architecture theory after 1980 poses a singular impact. Rarely anyone gets around the man who ‘killed’ modernism in architecture (Lynn 2006 p.178) and ‘like no other since Alberti and Piranesi in architecture spread an intellectual, personal and creative chaos.’ (Lynn 2006 p.177).

At any approach since 2008 Eisenman does deny to be interested in nature, and (he sees no difference) in landscape, especially if asked in relation to City of Culture. Asked about the importance of landscape as a counterpart to modern urbanity he says to be scared alone in the countryside: “I’m anti-nature ... don’t ask me about ... nature. I don’t care about nature. If you like nature, be a landscape architect! ... I love landscape architects” (Eisenman 2010, in Response to Matthew Skjonsberg at Berlage Lecture 23.3.2010). With such a statement Eisenman explicitly stresses the same “divide” of the disciplines others question in reference to his work (see Balmori Sanders 2011 p.68).

Eisenman’s relationship to nature in architecture is explicit: “Nature is never used as a reference in my work”. (Eisenman 2010 in Interview Gomez-Martin p.4). Similarly his answers to my interview deny a relation to nature (Eisenman 2014 in Appendix 3.1.). He admits though to be interested in the “fabrication of nature” (Eisenman 2010 Berlage Lecture op. cit.) and refers to the design process of City of Culture creating an “unnatural nature” (Eisenman 2006 in Belogolovsky 2016 p.25). However distinct the foundations of architecture may be in his theory, and however clearly they may be separate from nature, Eisenman obviously undervalues landscape. His statements do not differentiate between gardens, landscapes or nature - which is something I ought to do with this thesis however (as explained in chapter 2.2.). This differentiation will be crucial to our following analysis and put the project of City of Culture into a new perspective. , and cultural and historical context into creative process as opposed to counterpointing them. The contextual strategy (as it will be explained in interviews A.1.3.) was to create not a symbol put onto Galicia, but a new part of Galicia itself. The design imitates a process of growth (and even decline) as complex as that of the establishment of a cultural landscape (and its erosion) on the grounds of nature.

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6.2 Context of Santiago de Compostela

The ancient city of Santiago de Compostela is the third most important place of Christian pilgrimage in the World after Jerusalem and Rome. According to the legend, the body of the apostle James the Greater came to the shores of Galicia after his beheading in the year 42 by Herod Agrippa, Roman King of Judea. Saint James (in Spanish ‘Santiago’) is the patron saint to the Christian nation of Spain that he had evangelised. During the Moorish rule of Iberia from 711-1492, Cordoba was the dominant centre of power of the kingdom of Al’Anaduz.

In the early 9th century, a falling star guided the eremite Pelayo to the forgotten grave of Saint James and Bishop Teodormino of Iria declared the spot to be the grave of one of the apostles. The addition de Compostela, which stands for campus stellae (Latin place of the stars), relates to this mythical event. The Moors had fought the establishment of such an important place of Christian worship in Al’Anaduz as blasphemy to Islam. Legend has it that Saint James appeared to the Asturians on a white horse in the Battle of Clavijo in 844 to defend this sanctuary..

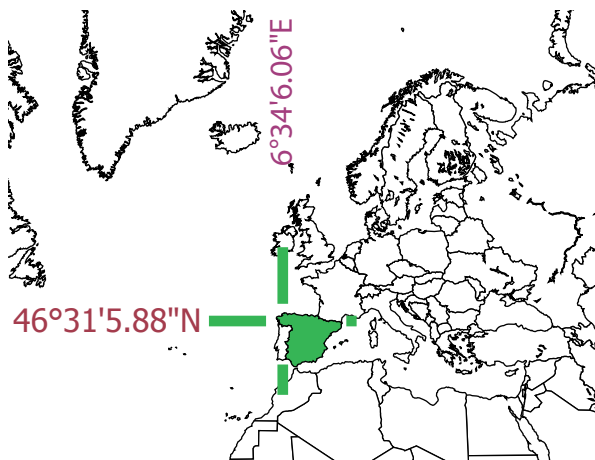


FIG. 6.2.1 Global Position Santiago de Compostela, Spain



FIG. 6.2.2 City of Culture of Galicia in Region Scale: 1.250'000

The Bishop Godescalc of Puy in the French Auvergne initiated the tradition of pilgrimage as early as 950. Through its extraordinary position Santiago was one of the strongholds and symbolic places in the long history of Christian recovery (in Spanish: reconquista) of the peninsula by Christian kings from North to South and the establishment of this kingdom as a nation state. The reconquista and Christianisation of Spain would only be complete 1492 under Isabella and Ferdinand. Thus throughout the middle ages Santiago was an important anchor point of faith and politics of that time.



FIG. 6.2.3 City of Culture of Galicia, View towards Santiago (right) in direction of Atlantic coast (Photo: author)

Today 180'000 Pilgrims per year travel to Santiago and receive the official document 'compostela'. The 'compostela' has been initiated as a proof of liberation while the pilgrimage was used as punishment. But now it is mostly a trophy. In official hostels across the Saint James trail all across northern Spain pilgrims still collect stamps and to date the document is issued only if the pilgrims prove that they have travelled at least 100km on foot or 200km on bike. Many accounts of personal enlightenment or relief from modern life make the trail attractive even to non-religious people. Modern transportation with coaches, highspeed trains, and low budget airlines also fills the place with less sporty tourists. As a result, the medieval city of less than 100.000 inhabitants attracts many more tourists each year.

To discharge the old town from mass tourism and increase the connection with local culture triggered the initiative to start an enormous project of building a secular cultural centre as a counterpart. With a prestige project combining local culture and internationally acclaimed architecture, the government hoped to attract visitors and to interest them in Galician culture, similar to the "Bilbao Effect" (Rybczynski 2002) of Frank Gehry's Guggenheim Museum (1991-1997) in that location.

The Galician project is connected to a key figure of modern Spanish and Galician history: Manuel Fraga Iribarne (1922-2012). Fraga had served under the Franco Regime since 1951. As a minister of Information and Tourism (since 1962) he initiated the promotion of Spain and later received a powerful position in democratic Spain. Galician Manuel Fraga was a leader of the PP when the first conservative President Aznar was elected in 1996. Fraga was probably the last member of a fascist government that was an active and successful politician in the democratic 21st century (Daily Telegraph 16.1.2012).

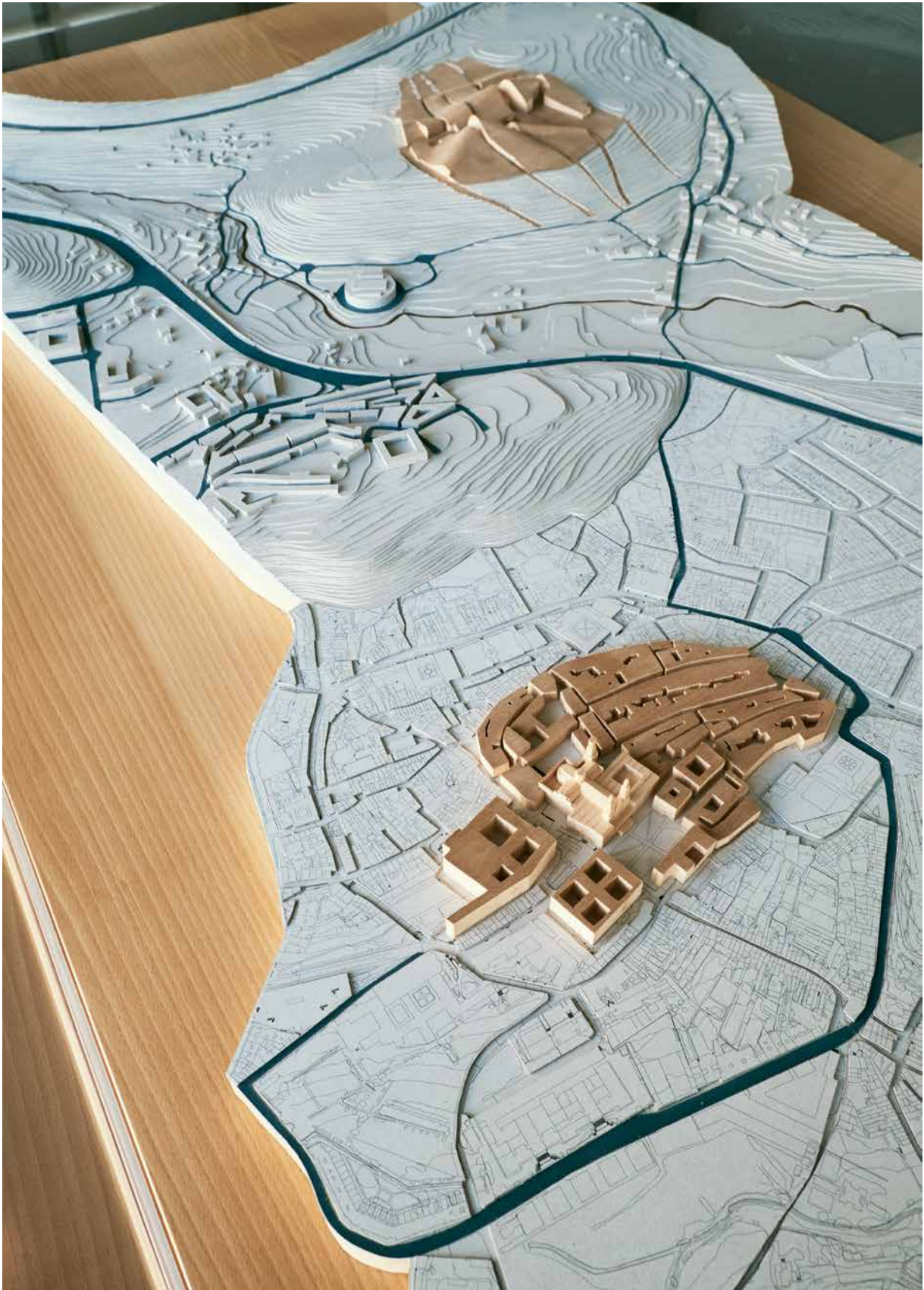


FIG. 6.2.4 Model of the historic centre of Santiago de Compostela and the new City of Culture at the visitors centre (Eisenman Architects, Photo Ariel Huber)

Under Manuel Fraga's office as Galician President falls the decision in February 1999 to start a competition for a Cultural Centre of Galicia. The gigantic cultural project included a traffic transferium with a highway connection outside the city to discharge the historic centre of Santiago from motorised tourism and large bus-loads. As a kind of buffer it would at once facilitate tourism and minimise its negative impact.

The central target of the international competition was that the new complex should be outstanding architecture that would be unique in the world. The eleven shortlisted architects for the competition in 1999 where Ricardo Bofill, Peter Eisenman, Manuel Gallego, Gigon & Guyer, Steven Holl, OMA Rem Koolhaas, Daniel Libeskind, Juan Navarro Baldeweg, Jean Nouvel, Dominique Perrault and César Portella. Two of these (Nouvel and Koolhaas) also competed at both competitions that resulted in our other two cases in Paris 1992 and Lausanne 2004 (ch. 4.2. and 5.2.).

Remarkably all of the competitors for Santiago are either nationally or globally renowned but none of the invited were architects of the comparable cultural building projects in competing Iberian cities like Bilbao (Gehry, 1991-1996), San Sebastian (Moneo, 1989-1999), or Valencia (Calatrava, 1996-2009), or Architects working on major projects in Madrid, Sevilla, Barcelona, Porto or Lisbon. Calatrava was in an initial selection of twelve but "dropped out" (Fernandez-Galliano in Eisenman 2005 p.11).

In the competition OMA presented a futuristic UFO like ring object, including a garden. Also all other international architects designed object architecture, sometimes with elaborate tunnelling operations, cutting through or digging into the hill (Nouvel and Perrault), sometimes composed volumetrically in their respective style (Holl and Gigon & Guyer) or with a huge vertical garden of monumental scale (Libeskind). The Spaniards (Portella, Gallego, Navarro Baldeweg, Bofill) integrated their building compositions more or less subtly into the hill, all in one way or another hiding from the old city towards the highway, thereby "ignoring the symbolic callings of the competition" (Fernández-Galliano op.cit., p.11-13, all entries documented in *Arquitectura future* 19/20 2009 p. 6-37).

The competition was won by Peter Eisenman who most of all fulfilled the client's idea of uniqueness. A long planning and building process follows this initial competition that, as it rose, also fell with the fate of Manuel Fraga (section 6.4.)

6.3 Impression from the Field-Trip and Design

Seen from the city centre and Cathedral, the City of Culture appears like a huge hill, reminiscent of the shapes of the hills all along the West-coast of the Iberian Peninsula. A steep glass facade calls to mind carved or geologically deformed rock formations similar to the art deco glazings in front of many buildings on the outskirts of Santiago.

Unlike the initial plan, the site does not profit from its strategic traffic location between the motorway, airport and ancient sacred city of Santiago de Compostela. The motorway connection was never realised and most visitors arrive now from the old city on the West. On my visit in early 2014, access on the logical foot paths was prohibited. None of the five pilgrimage routes planned by Eisenman - to connect Santiago de Compostela to the Ciudad de Cultura - were realised. The traffic infrastructure is insufficiently realised, and as such, forces visitors on bizarre paths, circumnavigating the entire site. No airport, coach or bus-line transfer takes place, but one single city bus (Nr. 9) comes by once an hour. In Europe's famous destination of hiking paths (for more than 1000 years people have walked up to 1600km to get to Santiago on foot) not one of the five footpaths connects City of Culture to their five counterparts in the Centre.

My predominant personal impression was how overwhelmingly big this project is. The endlessly repeated grids and repetitively proportioned detailing and fragmentation only enhance the impression of bigness, even if unfinished - or maybe because it is unfinished. Public spaces are vast, splendid and complex.

The vast complex is structured into six buildings (a-f): In the southern end the building once designed as a newspaper archive (a 14'149 m2 footprint) is now advertised (and largely empty) as "co-working" spaces. That building is split in two by a passage under the same roof that connects under to the Hejduk towers at the southwest edge. On the other side of the passage, towards the large square, a smaller exhibition space about the architecture and a conference room.

North is the second finished building, the Library of Galicia (b 21'860m2 footprint). Its interior is the most successful space. The freely accessible books are arranged in the lecture hall with a series of shelves that form yet another layer of topography. Rare books are on display in a glass box inside the volume. The library, maybe due to its program, seems to have been most malleable interior space by the architect. In contrast, the other programs like exhibition halls or operas have such firm technical requirements that architecture is hard to realise apart from large, erratic and monumental structures.

Between the two southern buildings and the square and the two northern finished buildings is a huge gap. Here should be built the the largest building of the project, the Opera (c 59'517m2 footprint) and the New Technology Exhibition Centre (d 12'362m2 footprint). Both of these buildings were 'paralysed' by the 2013 parliament decision. The opera would have been the tallest building in the complex, and the stage tower completely covered under the summit of the artificial hill. The under-stage of the opera would have descended down twice the portal height.

North of the impressive central void are the two more finished buildings. Closest to the eastern parking lot is the Central Services Building (e 6'508m2 Footprint). It is now also used for governmental administration (the interior was not accessible during this visit). To the east lies a relatively small auditorium, that articulates the roof and ground in a gentle slope. Containing multi-functional spaces and offices it is (from plan) less spectacular in its interior. It develops an urban



FIG. 6.3.1 City of Culture as found in early 2014 ...



FIG. 6.3.2 ... a worksite abandoned after parliament ...



FIG. 6.3.3 ... decided to stop the unfinished project...



FIG. 6.3.4 ... the opera remaining a big hole. (Photos: author)

scale facade, intended to form a narrow canyon-like alley opposite the designated audience entry to the opera. The museum of Galician History (f 20'000 m2) is placed at the northwestern corner closest to the ancient city - like greeting the site of Santiago that on its own is a historical spot (section 6.2). It is conceived as the most iconic building with its high monumental glass facade. This gesture towards the city is intended (Eisenman interview A.1.3) to produce an effect towards Santiago comparable to the view of the expressively shaped titanium cladding of Frank Gehry's (*1929) Bilbao Guggenheim (1991-1997). In the old town, descending through the pilgrim routes in 19th century suburbs, one sees references to the grid structured glass verandas typical for this area, that also are an intentional reference in the project (Eisenman interview A.1.3).

The giant glass facade at the highest north elevation shows the workings of Eisenman's architecture, combining several overlaid strategies. Besides the previously mentioned reference to local architecture, it unites a complex multitude of structured forms and grids. The result looks like the architectural equivalent to a cliff. Just like the sudden breaking off of a land form at sea displays geology, this cliff exposes the inner workings of Eisenman's architectural composition. It is the face of the structure exposed; it uses more structural steel than a major traffic bridge. That face may seem uncanny, but it symbolises to me an example of the 'excess of reason' (Eisenman interview A.1.3). The giant facade is waved, fragmented, curved and inclined outward and inward. The ground level entry on the opposite south side of the building leads through a passage (under the galleries) through the volume directly to the monumental glass facade. Along the glass facade with the full



FIG. 6.3.5 City of Culture Site Plan 1:2'000

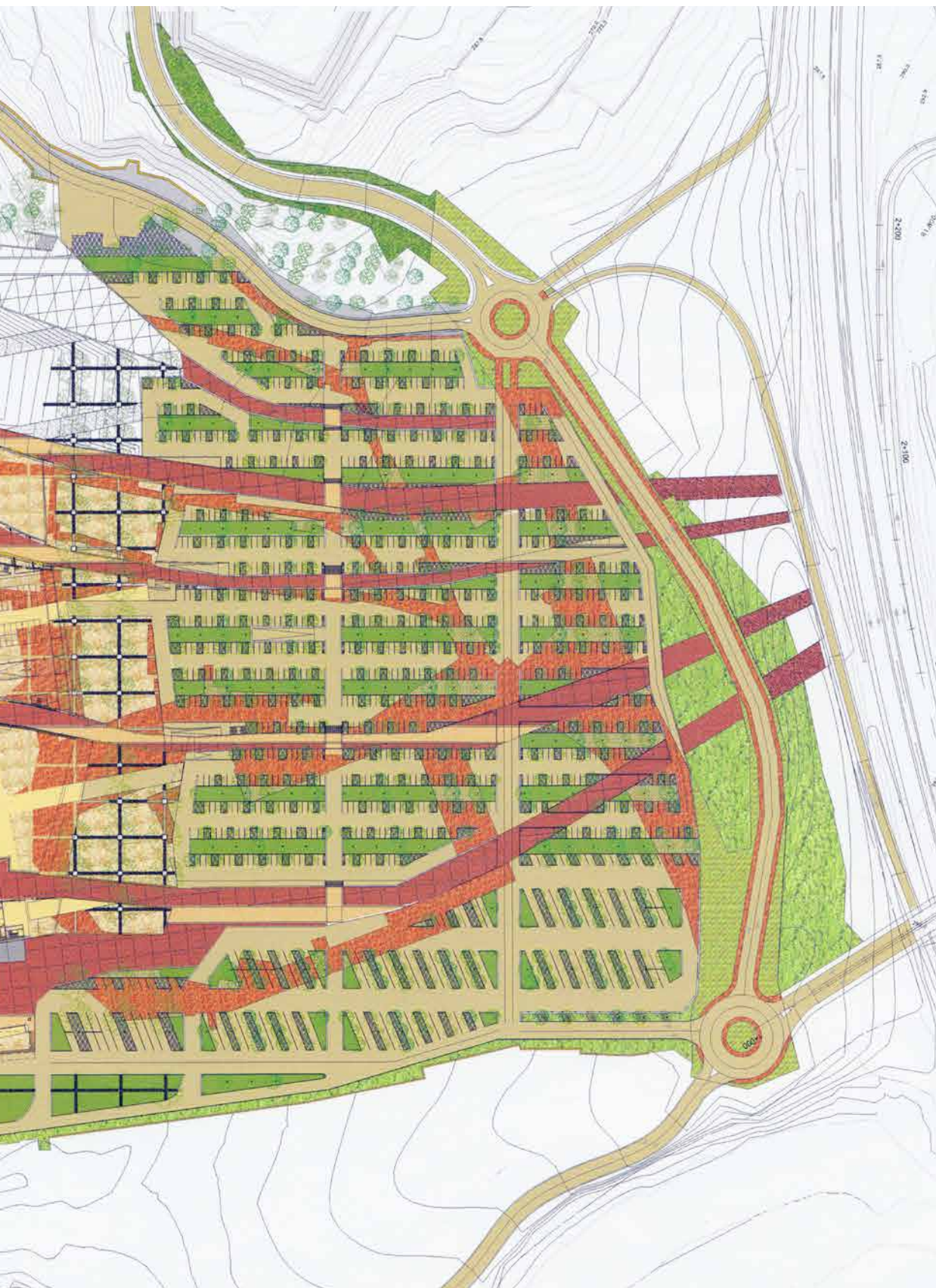




FIG. 6.3.6 City of Culture Combined Floorplans Level +281m 1:2'000
 (Source: Arqfuture, Eisenman Architects, collage by the author)

height north hall is a longitudinal sequence of escalators in a curve along the galleries, which are stepped on four levels under the sloping roof.

In all buildings the soffit (or ceilings) and the roof are detached in two differently sculpted forms of folded planes. At the museum this inner undulation is most extreme, as if the breaking edge of a giant wave across the whole site. This soffit-wave curves through the building from the centre of the lower galleries. It dives down to entry level in the western interior and jumps up to expose almost the full height in the north (Arqfuture p.75). The escalators stick through this wave and make visitors move between gallery levels like surfers through the architectural wave.

In each building the space articulates differently but gets connected to the complex formal systems that spread across the whole city. The architect's analogy of a Jazz sextet as a genre of composition may help in understanding (Eisenman in Interview A.1.3.). Eisenman composed the City of Culture like musicians write scores. When discussing the issue of program or the use of a building with Eisenman in his work, he has a simple view on it: the use of his works is not his primary concern, but the architecture becomes a goal in itself (Eisenman in Interview A.1.3.). In Eisenman's world, architecture is nothing more than its form, and City of Culture reflects that.

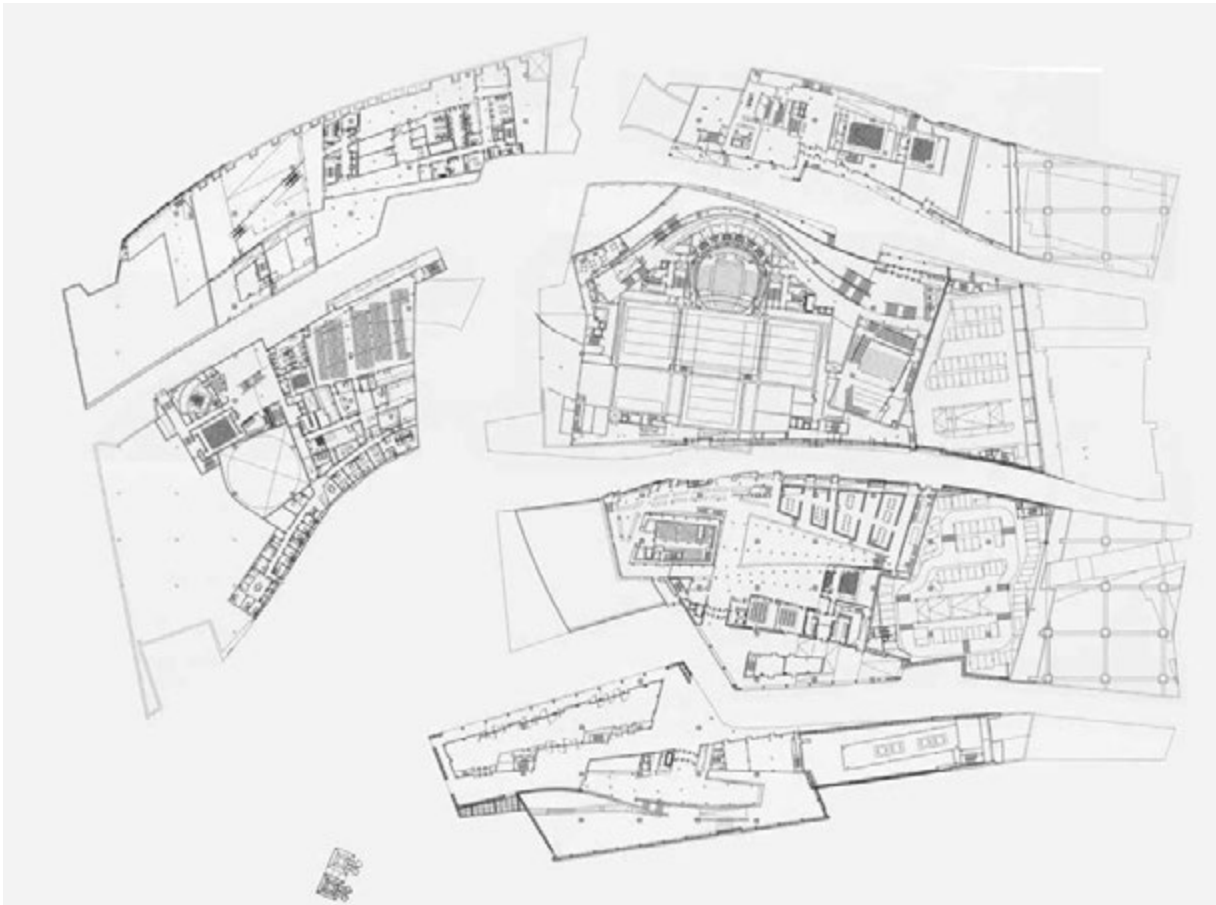


FIG. 6.3.7 City of Culture Combined Floorplans Level +285m to +287m 1:2'000
(Source: Arqfuture, Eisenman Architects, collage by the author)

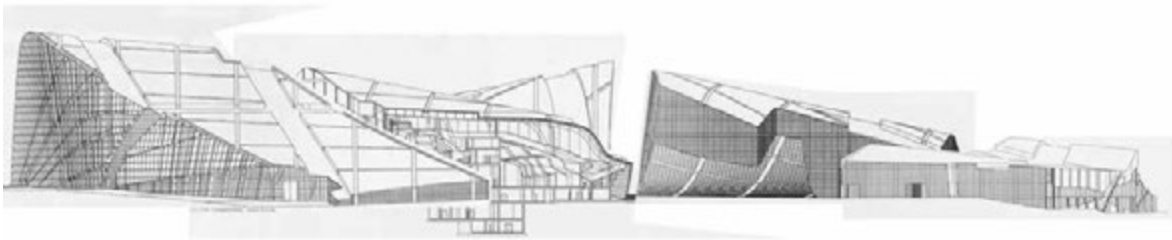


FIG. 6.3.8 Collage of Elevations and Cross Sections 1:2'000
(Source: Arqfuture, Eisenman Architects, collage by the author)

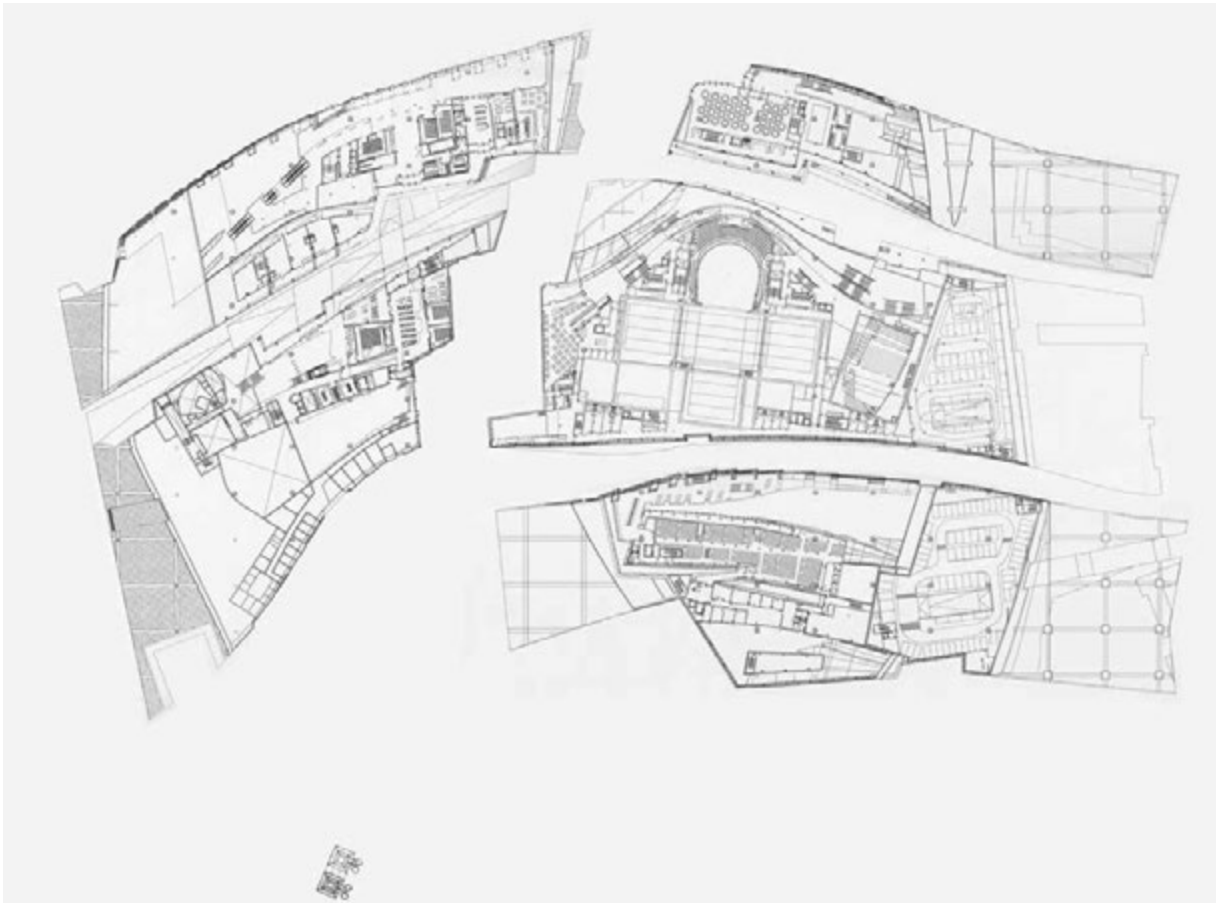


FIG. 6.3.9 City of Culture Combined Floorplans Level +289m to +291m 1:2'000
 (Source: Arqfuture, Eisenman Architects, collage by the author)

6.4 Building the City of Culture

Between the intentionally complex plan initiated by the competition for the City of Culture and the currently less than half finished project, many plans had to be adopted throughout the years. Altered was the initial program that had been divided into ten buildings in 1999 (architecture 12.99 p. 42) into a final disposition of six buildings as of today. Of these six, only three kept their original general program (library, Galician museum, and opera) while two others changed from a newspaper archive to business centre, and from a museum of new technologies to an (unbuilt) museum of international contemporary art. A much smaller central services building today also hosts a governmental institution.

A constructive logic is not the expression Eisenman gives to materials, but rather materials express what he wants them to, to express the design process. White painted plasterboard, glass in aluminium mullions, few aluminium claddings and overwhelming masses of natural stone claddings form the bent and wrapped encrusted surfaces, structured with several overlaid bas-reliefs of complex geometries.

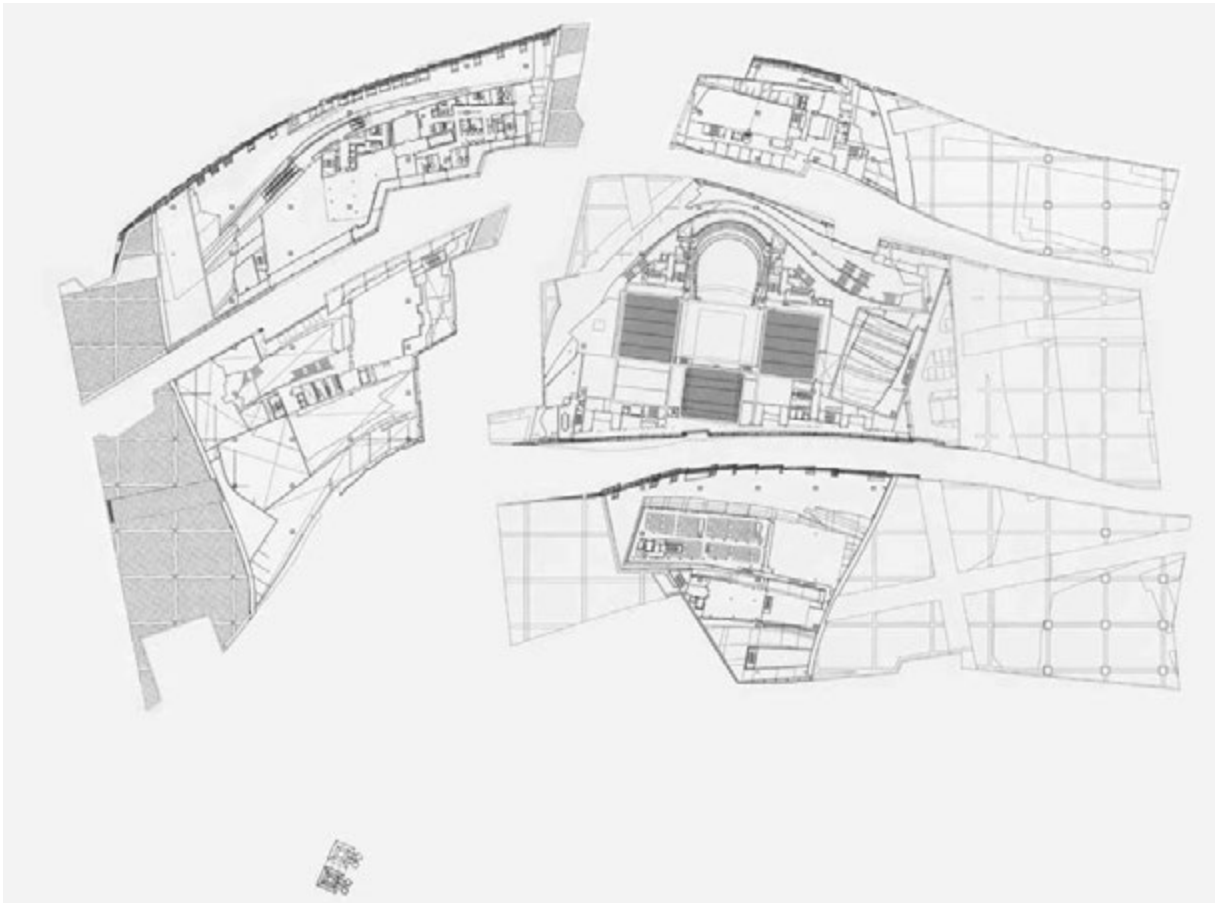


FIG. 6.3.10 City of Culture Combined Floorplans Level +293m to +295m 1:2'000
 (Source: Arqfuture, Eisenman Architects, collage by the author)

The outer roof shell was first imagined as a grass covered hill. Later, local stone seemed more maintainable. It was realised in 5 cm thick Brazilian quartzite in shades of reddish and pinkish ochre of the local rock formations. The roof tiles are all hand broken in the quarry and cut in square pieces of 50 by 50 centimetres, alternating with smaller sized tiles that draw grid-lines across the roof. The outer roof follows an artificial topography that was computer generated, like a frozen moment in an animation of directionally thrown cloth, oscillating in resistance with gravity. Eisenman calls this 'indexation' with 'vectors' - a surface that has fallen onto the site, not erected from it - like the mythical campo stellae. The roof has a metal system of bars which allow the free form (fig. 6.4.1). The waterproofing and insulation layers remain invisible below. Below the slab is a system of crossing steel grinders of 16 and 20 meter spans (fig. 6.4.2)

The outer facades follow cuts of the transposed pilgrims paths, vertical or slightly inclined. The walls use a similar material palette to the ceilings, and also have areas with naturally broken stone alternating with recessed lines and sawed cuts. The thick cladding is reminiscent of archaic dry walls (fig. 6.4.3). There are not window openings in stone claddings but ceiling-high glass facades with aluminium profiles.

Roofs and Facades are structured with the recesses of two massive 80 x 80 m gridline systems. These large grid systems cut across the whole site into each of the buildings in two or three wide recessed cuts of 8 meters in width. These meta ordinates do not relate to any construction, but cut diagonally across the outer facades, repeated in the paving system of the large parking lot. (fig. 6.4.4. & .5.).



FIG. 6.4.1 Roof of newspaper archive under construction



FIG. 6.4.2 central services under construction



FIG. 6.4.3. City of Culture. Stacked Facades and roof



FIG. 6.4.4 Expression of larger grid-lines across ...



FIG. 6.4.5 ... grid-lines across the City of Culture.



FIG. 6.4.6. North Facade form inside museum lobby

(above row: Davidson 2006 p.312 and p.314, lower two rows: Photos: Ariel Huber)

Two smaller grids of 16 x 20 m and 8 x 8 m are both in the facade and act as a vertical column grid though all the inner floors. The larger grid has a north oriented axis every 20 meters and east oriented axis every 13 meters. The 8 x 8 square grid is turned at a 7 degree angle.

Like other ordering systems these grids were not yet as present in the competition scheme, that was preoccupied with a large scale and less rigid structures. The built grids thus implement a certain constructive logic, but also get alternated following programmatic opportunity. The larger system is only interrupted by the opera stage hall. The smaller grid is used for intermediate horizontal floors, while the large grid supports the roof structure and ends up in the soffit. The large grid reinforced concrete columns are clad in stone on the interior. The small columns are clad in stone when they happen to appear in the facade, where at times they form arcades. Inside, they are round with a white finish.

The soffit or ceiling, like the roof, continuously wraps through the whole complex, but is formed more aggressively than the roof, like a second independent skin. It hangs far down from the girders and, wrapping around several floors as it slopes vertically and folds back on itself at the northern end of the space. This articulation is chosen to suggest the shape was a geological ground. "The roof and the interior ceiling slopes are different. This difference is part of the idea of the ground being a series of layers" (Eisenman in Gomez-Moriana 2010 p.4).

The highest glass facades must resist large wind-loads which bear on a interior system of steel trusses in the monumental hall of the Galician Museum, across the whole length of the building (fig. 6.4.6.). Outside the glass facade is broken and fragmented along a double curving cut with recurring interferences of several grids. It is both from inside and from outside a rare momentum where the City of Culture almost takes a figurative expression, reminiscent of a geological collision zone.

The interior, apart from such rare instances of formal expressiveness, is incredibly sober in terms of material expression: polished stone floors in light tones with repetitive grid-lines, white plastered walls, balustrades of plaster or glass. Recesses in the soffit structure again depict the form and binds space across the long surfaces. Lights and technical appliances are all recessed in an unspectacular manner. While Eisenman's former work is more polychromic, mainly to distinguish architectural elements, in Galicia the use of colour is very reduced.

Excavation work began in 2001 and the first four buildings were realised by 2011. With a lack of funds the City of Culture has still not been completed as of 2014, and for some, is a symbol of Galicia's overly ambitious unfulfilled plans.

Manuel Fraga, the initiator of the project, was powerful until the beginning of construction, re-elected as Galician President four times since 1990, and for the last time in 2001. But his Partido Popular lost its overall majority in the Galician Xunta in 2005. Manuel Fraga was still in national politics until 2011; he died in 2012 (Daily Telegraph 16.1.2012).

When Fraga left, the first construction stoppage of the City of Culture occurred in 2006. A second construction stoppage occurred in 2010, due to repercussions from the 2008 financial crisis. Finally in March 2013, the legislature of Galicia decided to officially stop all construction work, after twelve years of construction, without realisation of the Art Museum and Opera.

Instead of a symbol of culture, to many Spaniards the City of Culture is a national symbol of the 2008 credit crunch: a theatrical ruin in a remote region with large unemployment rates among the younger generation (35.4% in 2010 according to OECD 2012). The new role of this ruin as a symbol of decay has developed to a point that it becomes hard to remain objective about the architecture itself - which I still intend to do in the following analysis.

6.5 The 4 Layers of the Landscape Architectural Composition

6.5.1 Ground Form

The formal process of designing City of Culture begins with an operation related to the building grounds at Monte Gaiás. The to be founded secular city is generated out of a series of formal interactions with its spiritual counterpart, the historic City of Santiago de Compostela.

The existing site of Monte Gaiás (fig. 6.5.1.1.) is quite literally used as basic material to derive the shape of the new city. It overlaps the existing natural topography with a new, more complex multi-layered artificial topography. In computer modelling software the designers took the existing topography of the original as source material. They consequently overlaid that site model with a series of parallel 'force lines' (fig. 6.5.1.2. -4.). This term, introduced by the designers, alludes to the Celtic druid culture prevalent during the Roman colonisation on many hills in the western Iberian region (Portera Marques and Curado 2014) and relates to the founding myth of Santiago de Compostela.

On computers these force lines were concentrated onto a smaller shape, dragging along the topography and roaming a seemingly random construction like a folded cloth or unmade bed. I call this creation process "up-folding" of the topography ground form (fig. 6.5.1.8 read from bottom to top). The given site limits of the competition play a role (as shown on the topography pos. 1. in fig. 6.5.1.8.). In the contraction process, the straight grid lines (pos. 2.) are deformed into curved ones (pos. 3.). The site limits of the competition design as compared to that of the new contracted area show the footprint of the new city. These smaller extents of the contracted topography correspond to the size of the historic medieval City of Santiago de Compostela. The transformation process thus compares the new to the old city, as it will re-occur in other layers and elements (fig. 6.2.4).

This transformation of up-folding the existing topography produces a new one, that defines the outer shape of the roof (fig. 6.5.1.7.). At the larger scale the roof defines the complex as one giant ground form. In a series of further manipulations it cuts that form into a series of buildings. The roof topography is derived from the site topography. In this, Santiago is different from the other two cases. While the other two define a relatively traditional volume by cutting out a square or rectangle from a formal operation, they are still placing the architectural object onto the ground. At Santiago, the ground form itself is derived from another, larger ground. There is no autonomous figure of the building. The figure only derives gradually, built up by so many overlapping complex rules, that it is hardly recognisable; this is on purpose, as it is the result of the critique of figure-ground dialectics, an important subject in the architecture of Peter Eisenman.

A second ground form - or more correctly a second reading of the same ground form - is the analogy to the emblematic symbol of Saint James: the Shell (fig.6.5.1.5.). Since the 12th century, the scallop of the Finsterra Shell is a symbol of Santiago de Compostela and its pilgrims. Pilgrims from across Europe carried shells, initially collected on the Galician beaches, in what we would call today a souvenir. Depictions of these shells cover ancient books or greeting cards but also can be found as an ornament of buildings in the old city (fig. 6.5.1.7.); across Europe, they are used as a sign for the pilgrims to Santiago. In the design of City of Culture that symbolic figure is blown up

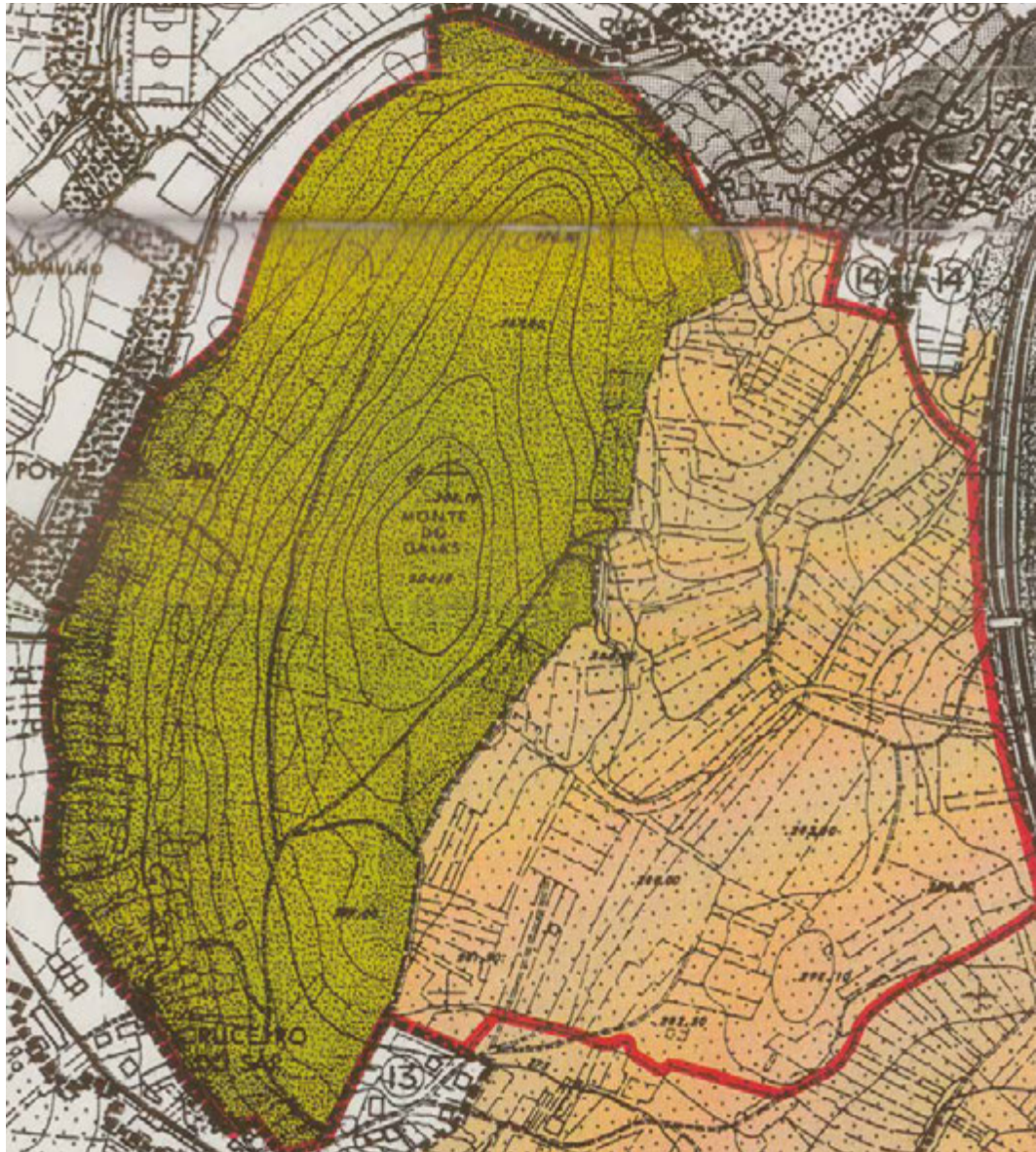


FIG. 6.5.1.1 Site plan of City of Culture competition (source Eisenman 2005 p.41)

to the site of the whole city, defining, more vaguely, a second analogy to the ground form, that of the giant symbolic figure of the hard shell, materialised in the rippled surface of the hard stone roof shape. Out of any recognisable proportion (merely visible from the skies) the figure becomes meaningless as a shape, again overruling the figure ground dialectics of architecture with a large scale metaphorical ground form (pos. 4. in fig. 6.5.1.8.).

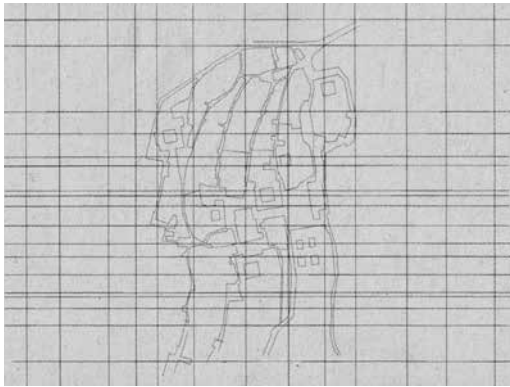


FIG. 6.5.1.2 topography deformation step 1 guidelines

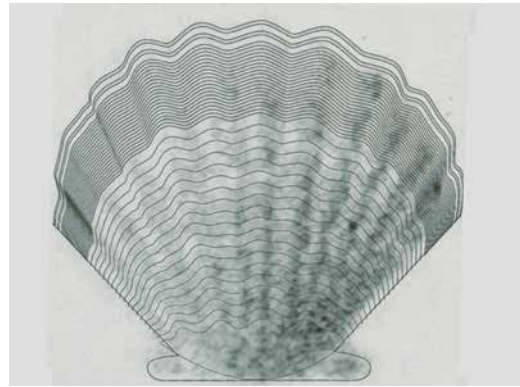


FIG. 6.5.1.5 Shell line drawing Eisenman Architects

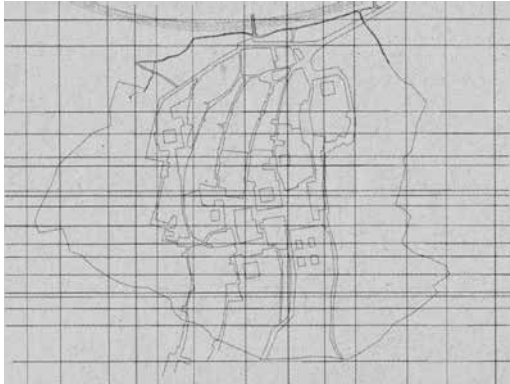


FIG. 6.5.1.3 topography deformation step 2 circumference



FIG. 6.5.1.6 Medieval Santiago c. 1150



FIG. 6.5.1.4 topography step 3 deformed guidelines



FIG. 6.5.1.7 Shells on ancient buildings of Santiago

(Sources: left column and top right Eisenman 2005 p.48, right center p.24, right bottom: Photo: Xan G. Muras)

A third process at work is the overlying of aforementioned structures into this up-folded site or shell construct. Several line patterns serve as a guideline to excavations in the site topography and volumetric cuts in the artificial roof topography. Although my analysis shows 10 separated steps (fig. 6.5.1.10 and 11.) that could be seen as a process logic, in the actual building that order is obscured as it is the density of structures that is targeted, not their clarity in reading.

With the excavation of a new datum level, the project literally chops off the hill. A new topography is installed here drawn as the entry levels (fig. 6.5.1.10 pos. 5). This cutting in the periphery of the complex creates a series of different spaces stepping down into the hill, which enhances the dynamics of movement.

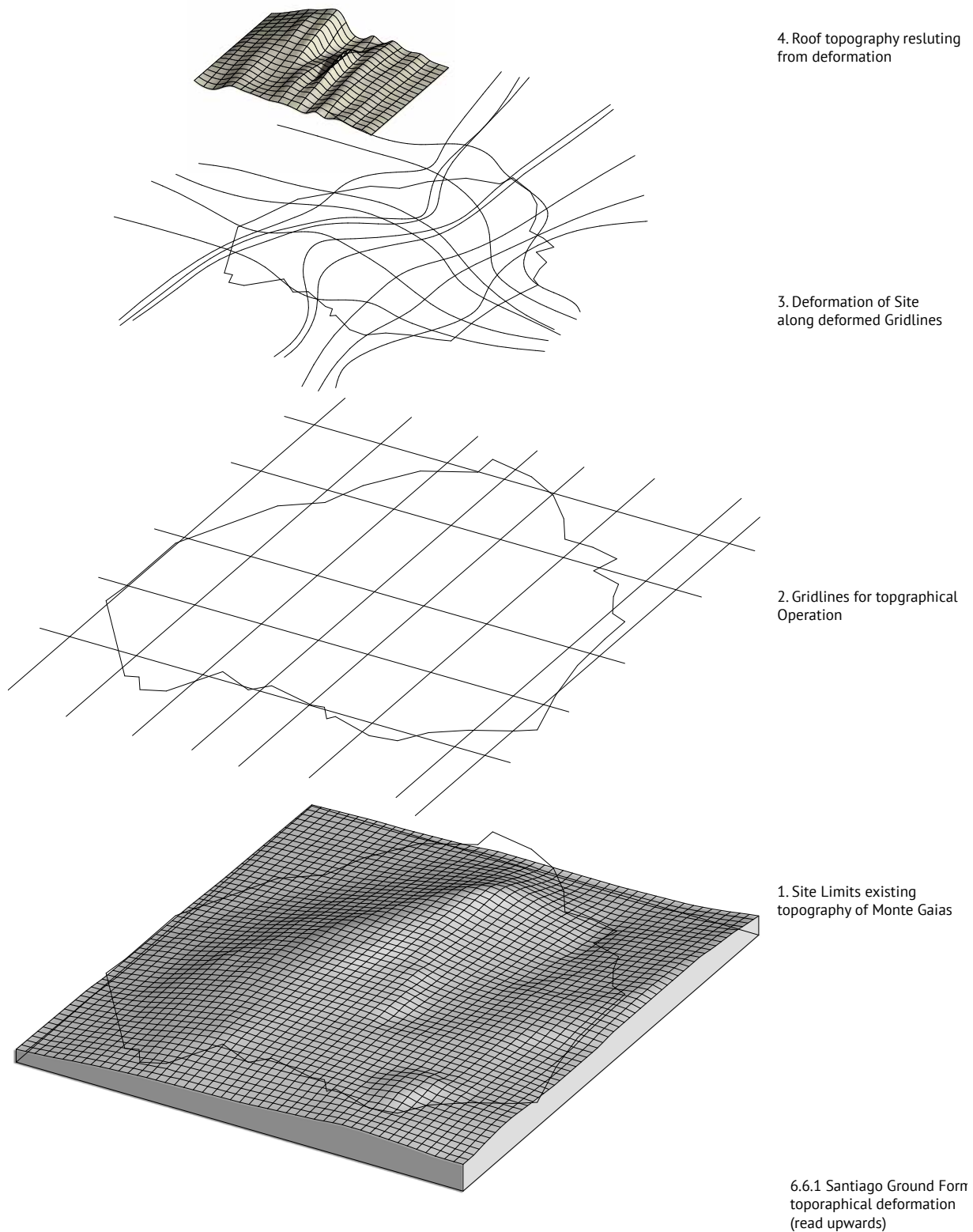


FIG. 6.5.1.8 read from bottom to top City of Culture of Galicia topographical deformation (Drawing: author)
Ground Form

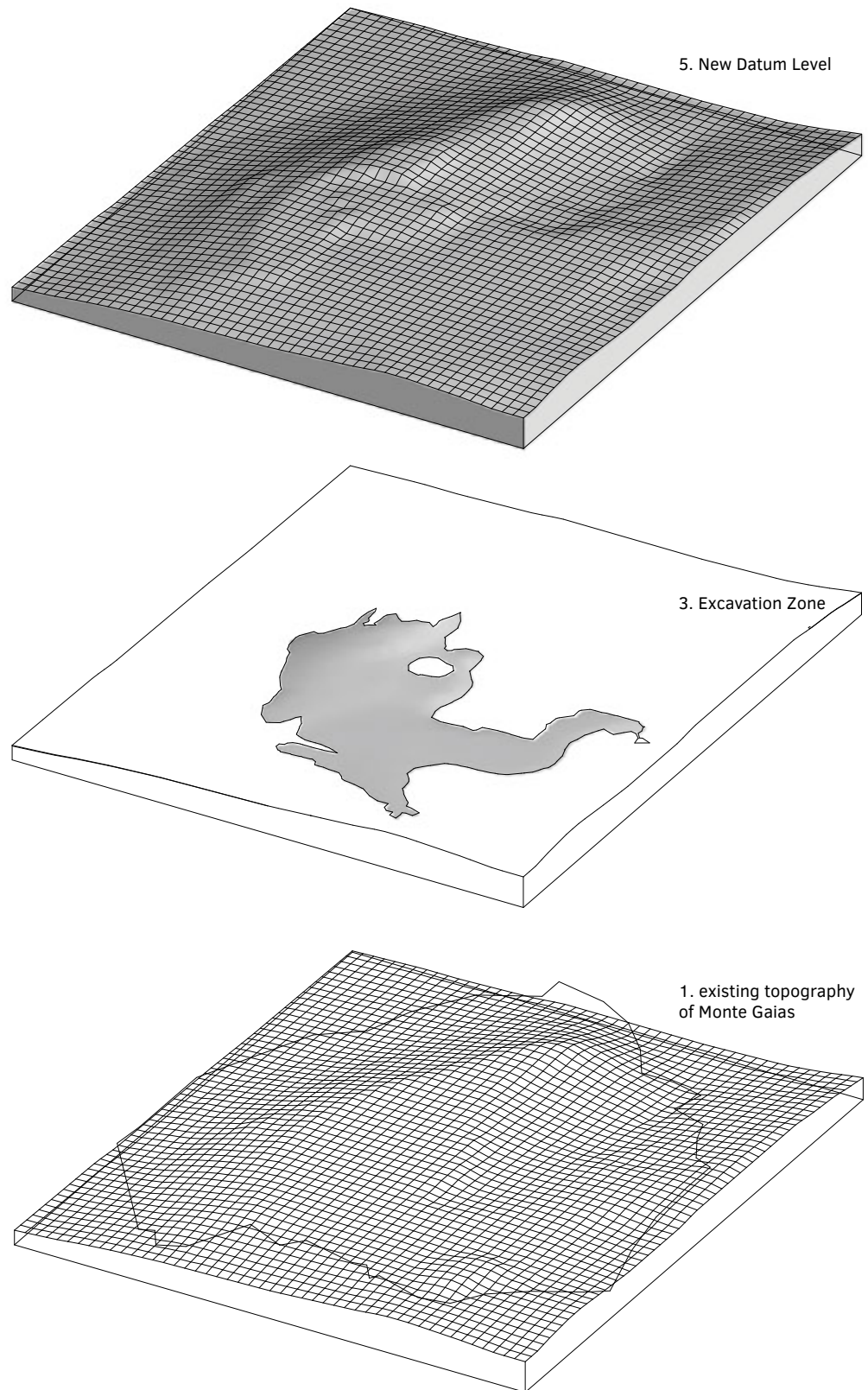
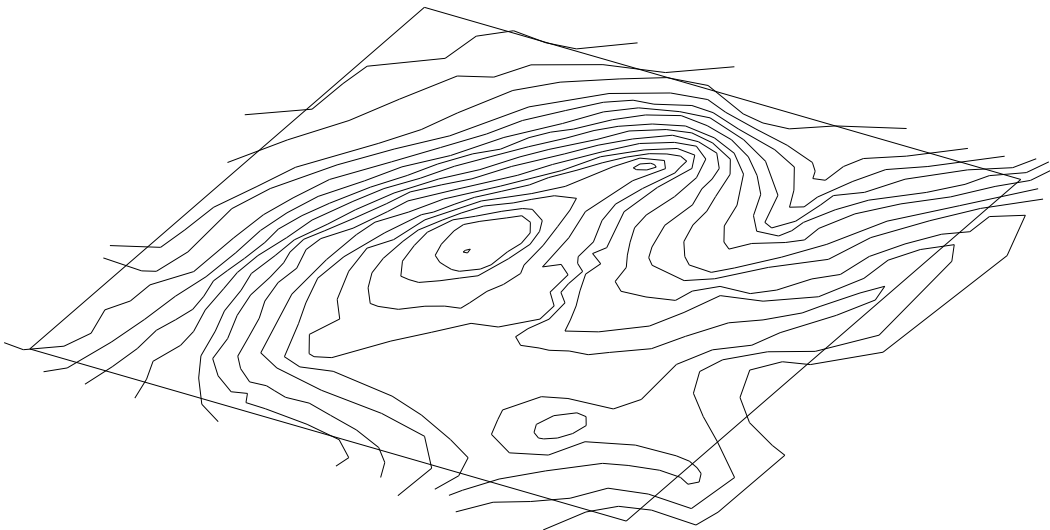
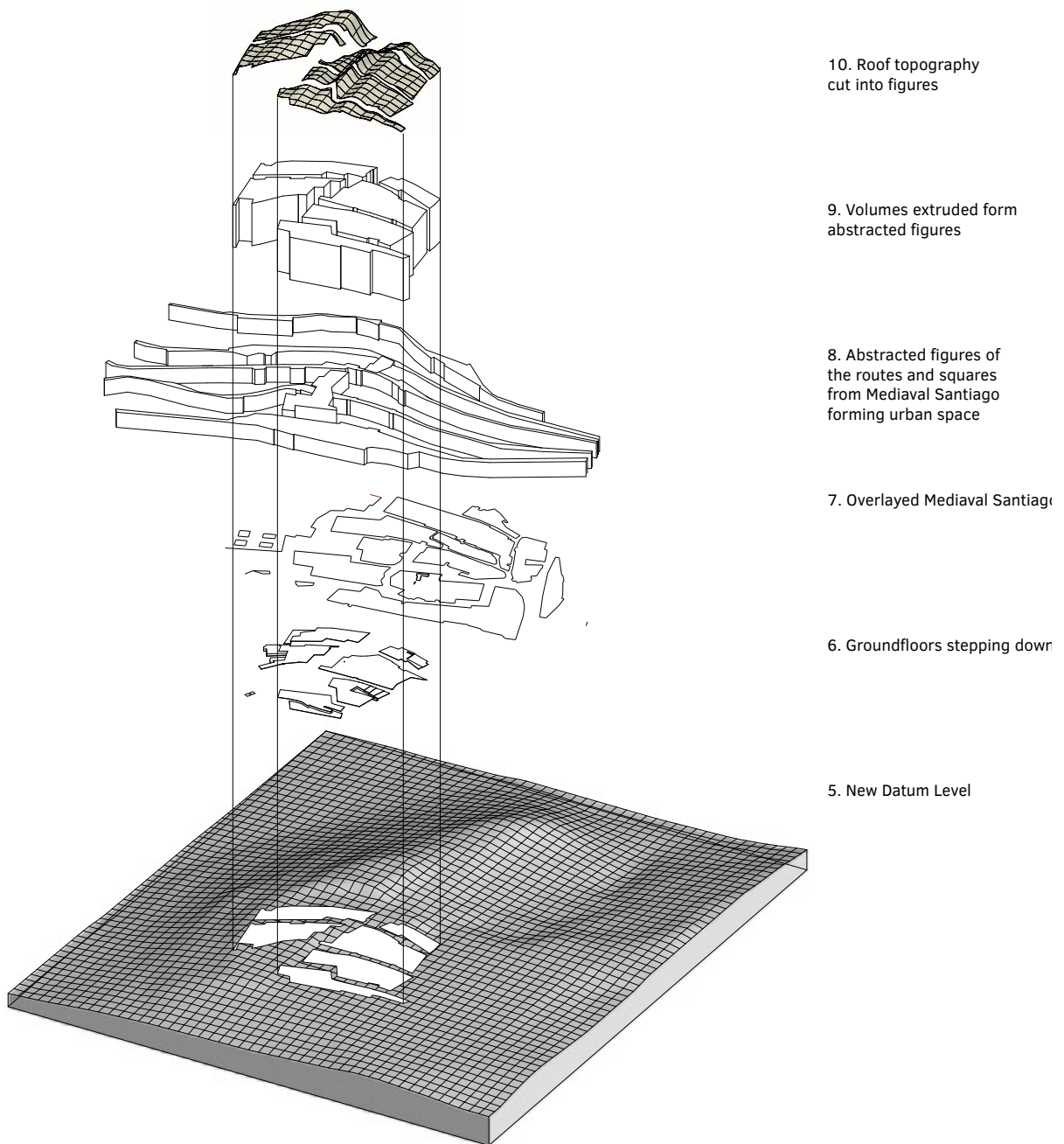


FIG. 6.5.1.9 read from bottom to top City of Culture of Galicia layering process 1 to 5 excavation (Drawing: author)
Ground Form





10. Roof topography
cut into figures

9. Volumes extruded from
abstracted figures

8. Abstracted figures of
the routes and squares
from Medieval Santiago
forming urban space

7. Overlaid Medieval Santiago

6. Groundfloors stepping down

5. New Datum Level

FIG. 6.5.1.10 read from bottom to top City of Culture of Galicia layering process 5-10 urban figure (Drawing: author)
Ground Form

The actual excavation operation on site started in 2001. (fig. 6.5.1.12-14.) Construction work included an underground service tunnel and adjacent facilities. The underground levels are not depicted in the analysis that rather concentrates on the primary public space of the new city.

Like the shape of the buildings, the new datum level is derived from the complex overlaying of structures, different ones recurring at different stages of the process in sometimes altered form. Again a plan of Santiago de Compostela appears, turned 90 degrees clockwise and transposed onto the new site (as before in 6.5.1.7 and 8.). It is abstracted into a longitudinal street pattern and a crossing sequence of squares (fig. 6.5.1.10. pos. 6). It vaguely copies the medieval structure of the old city while a more accurate copy of an old city map also is used as a floor pattern in the new grounds (pos. 5).

In this street pattern, as it is found now in Santiago de Compostela, the main pilgrim routes arrive into the city. By these routes, the new city is connected to its central cathedrals' function as a pilgrim destination throughout the many centuries of its development. As a formal analogy the idea of transposing this structure stems from the original program of the new site, of being a traffic exchange hub. Pilgrims should walk here out of their busses and cars as they would walk in the city on the next hill into the cathedral. The flow of pilgrims is literally formed into the site. It is the founding device for the spatial pattern of the city (spatial form see 6.5.2).

In this overlaying of 'artificial excavation' a series of vertical cuts is performed along the streets into the facades. The building forms are derived from this pattern but also react to local conditions and their inner composition, expressing forces of deformation and spatial form logic (see next section 6.5.2). A complex and multi-fold process hardens as a shell, most visible at the cuts in the roof edges (fig. 6.5.1.10. pos. 8).

The geometry of buildings and even their grid directions are transposed from the old city form into the new ground form of the City of Culture. Typically this process is not rigid but adaptive to single situations that occur in the overlap of existing and new topography.

A last operation is the further deformation of the roof shape into even more complex individual soffit shapes for each building. This formal process was hard to reproduce in drawn analysis, but it is clear to me, that it should emphasise in each building the dominance of the landform process in the spatial impression. All form is derived from a geometrical transposition process and not induced by the structural or programmatic positioning of architectural elements.

The grid lines and bearing systems are of a continuous order, that I will further discuss as the spatial form in the next section (6.5.2). But notable for the ground form is how these completely abstract cardinal systems overlay the whole of the site. A continuous system, like the Jeffersonian grid across the American landscape, it enhances the legibility of the topography.

The program of multi-storey buildings is not piled up on a footprint but added top to bottom from the upper shape defined by the roof. Below it a sequence of stepped terraces mainly developing from the higher North to the lower South works on several different ground levels (drawing fig. 6.5.1.11). Like in the Jussieu design there is no defined datum level for the whole complex. In the City of Culture almost every building has a different level entry and each of them has floors in different levels than the adjacent ones. Like the roof, the outdoor walking space also undulates, independently from the roofs. As a consequence, at the eastern edge, access to the roof is not possible (fig. 6.5.1.17.). Only in one very controlled area at the west of the library, the two undulating surfaces collide. There it is possible to access the roof (fig. 6.5.1.18.).

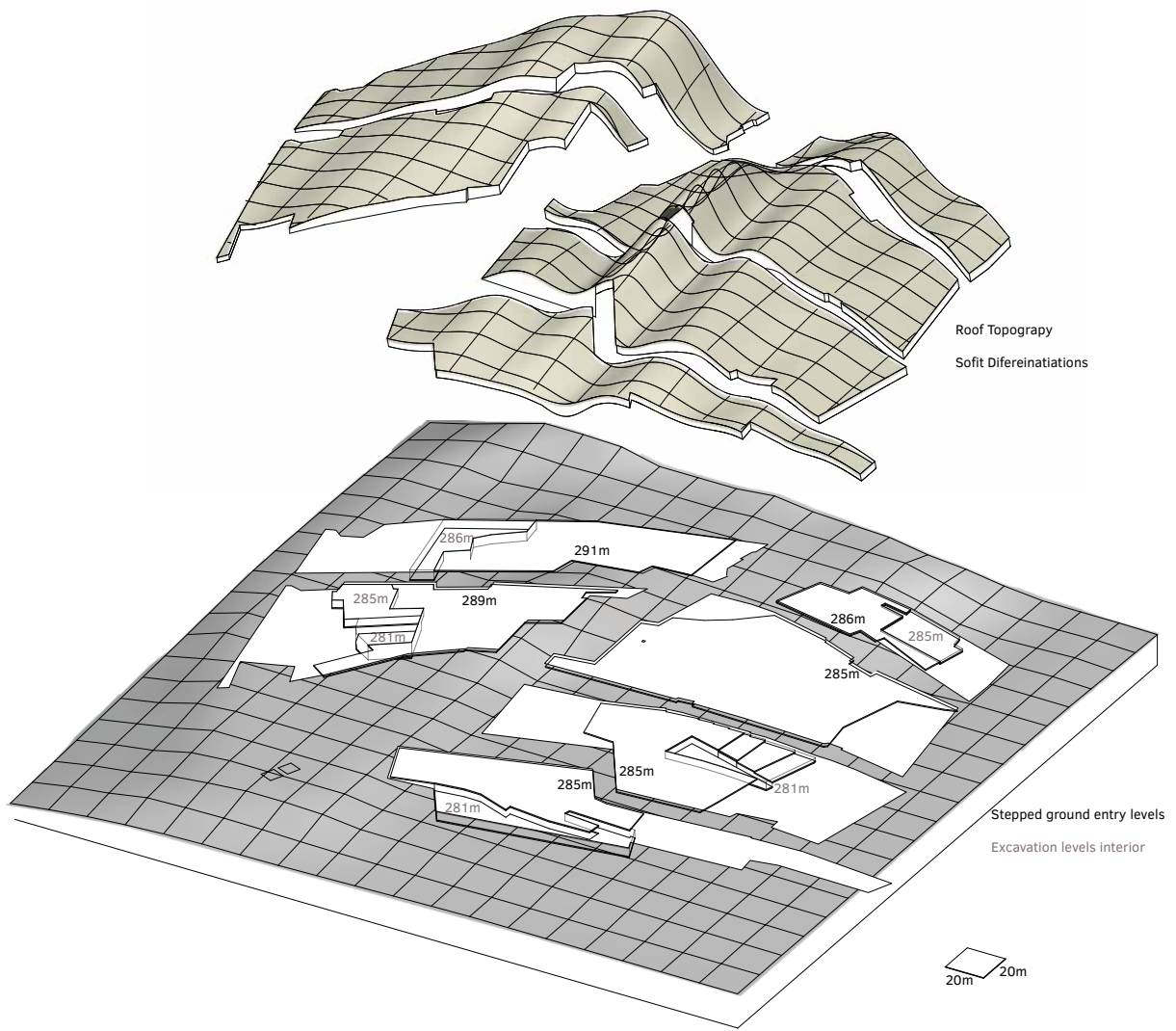


FIG. 6.5.1.11 City of Culture of Galicia layering of topographies at building scape (Drawing: author)
Ground Form



FIG. 6.5.1.12 Site prior to excavation (Eisenman 2005 p.10)



FIG. 6.5.1.13 Excavation w/ tunnel roof in 2003 (arqufuture 2009 p.45)



FIG. 6.5.1.14 Excavation works and deposits for City of Culture in December 2001 (Eisenman 2005 p.249)



FIG. 6.5.1.15 North Eastern edge of Roof (Photos: Ariel Huber)



FIG. 6.5.1.16 Roof raising from central square to library

In total, with these several varying interfering processes, the complex ground form is installed as a system of overlaid principles. Six formal principles overlap: two independent topographic foldings, force lines, the shell analogy, excavation and street patterns. The ground form of City of Culture is at the foundation of a multitude of layers written across each other, the palimpsest that all together makes deciphering this recent architecture as complex as the archaeology of a long forgotten ancient site. Several ground forms connect to the spatial form, or contain symbolic images and even programmatic aims.

There are so many forms overlapping that they are close to illegible. Many structures are introduced into one single design of architecture. By overlapping a multitude of operations - which all derive from the site's context but in many different ways - the ground form of City of Culture artificially creates the spatial density and richness of an ancient town, while still being a completely original creation.

In the ground form of Eisenman's work we find the integration of the material and the theoretical of architecture. The 'excess of reason' (Eisenman in Interview A1.3.1.) is a way of operating as a designer, in which Eisenman propagates this dissolution of figure - ground dialectics. As drawn and explained in the above analysis of the ground form, he also disposes of other dialectics, or any consecutive logic in total, in favour of excessive reasoning for a dazzlingly complex architecture.

6.5.2 Spatial Form

The spatial form that my analysis of City of Culture reveals has no experiential composition. As Peter Eisenman explains he is not interested in particular views taken from one of his buildings (see interview Eisenman A.1.3). Consequently, a spatial system is to be understood differently, not entangling urban views into the multi storey density of a landscape (like Jussieu chapter 4.5.2) nor providing a park-like manipulation of several horizons (like Learning Centre chapter 5.5.2).

The spatial form as layer of a landscape composition is in this case the geometrical result of a fiercely overlaid and intentionally complicated process of form finding. Its elements replace an existing landmass. They could be described as formal "lava" derived from an eruptive process of form finding, frozen in time on this particular site.



FIG. 6.5.2.1 Periodicals archive. (Photo: Ariel Huber)



FIG. 6.5.2.2. Library (Photo: Ariel Huber)

The main circulation spaces through the complex are a series of narrow alleys that cut through the continuous roof landscape form west to east. They are copied from the old city centre of Santiago de Compostela (as described in 6.5.1.) where already their layout was related to the constant and century-long flow of pilgrims towards the sacred space of the Cathedral.

The transposition of this spatial system, with the 90 degree clockwise turn, also responds to a functional requirement in the original competition brief: The City of Culture was originally conceived as a traffic interchange, getting visitors from coaches and private cars into walking and shuttle bus service. Even if this is now missing, one needs a reminder that the constant flow of pilgrims and secular tourists was a basic motive for the spatial layout.

Still, City of Culture is a very walkable city with comfortably narrow streets. The allusion to the medieval city of Santiago is about enhancing well-being, the strategy reminiscent of small irregular urban spaces of complex medieval street patterns and squares, as they have been described and compositionally analysed by Camilo Sitte (Sitte 1889/1945, see i.e. Mashall in Portugali e.a. 2012 pp.191-206) .

The spatial composition combines several free-form and grid structures. It works similarly for the interior. Under a free-form false ceiling, vast public spaces flow through the buildings, connecting various elements that do not occur as blocks but rather as one whole broken into many large fragments. Walking spaces continuously flow through and in between the buildings.

Each building (even with only four of the six realised) provides a different spatial experience. Each has a varied sequence of stepped spaces, leaving each floor different, as a consequence of the continuous roof that changes the limits of every floor. Following topographical determinants, the sequence of spaces once goes from west to east (at the periodicals archive), once develops around a core (at the library), or once orchestrates all vertical flows condensed along a vertical soffit at the highest facade (at the Galician museum). The floor plans have no overlying ordering system that would define walls, floors or ceilings along one principle. Such conventional determinants of architectural space vary to a high degree at City of Culture. What remains constant are the passageways, the different grids, the continuous roof and the materialisation of the surfaces.

An important determinant of spatial form are the grids, as they are made explicit as a structuring element. Eisenman has been working with square grids throughout his career. He understood them as diagram (see interview Eisenman A.1.3) and his work on them, as an essential study and development of architecture.



FIG. 6.5.2.3 Grid directions at Medieval centre of Santiago de Compostela ... (Drawing by the author, map: tourist office Santiago de Compostela)

If compared to the use of grids in the early work of Eisenman's Houses, at the City of Culture the grid becomes looser from the often independent direction of walls in the interior, almost as if the actual organisation of the building is delegated away from this structural logic. On the contrary, a very stringent Cartesian order is laid across the geographic landscape making it readable in its sheer endless continuity. A large grid (16 x 20 meters, B) follows exactly north-south, but then a second square grid (8 x 8 meters, C) underlays the first one at an angle of 8 degrees counterclockwise. In the roofs, facades and floors the grids are materialised differently. Across the roughly materialised fields of the two main grids that also order the columns, some even larger ordinates appear locally. Differently directed ordinates dominate across buildings, like the two opposite entries of the Library and newspaper archive that are on an axis 12 degrees clockwise from the main grid, which direction then appears mainly inside the library. So while most layers and ordering systems are continuous, often from horizon to horizon they change dominance, some other orderings systems seem to have breaks and changes. The whole appears like a complex multi-fold composition where one leitmotiv (i.e. a staircase following a movement) can take over from another (i.e. crossing grid-lines and apparently independent columns). In this articulation of spatial form one established order will be overwhelmed by another. None of them follow function but rather program inscribed into the space as form - instead of, and at the cost of, function - which dominates every aspect of this place.

This superposition of ordering systems is also translated from the medieval city. During research in Santiago de Compostela I found exactly this 8 degree angle between the Cathedral of Santiago and the historically important Collegio of St. Jerome that I traced in drawing analysis (6.5.2.3-4).

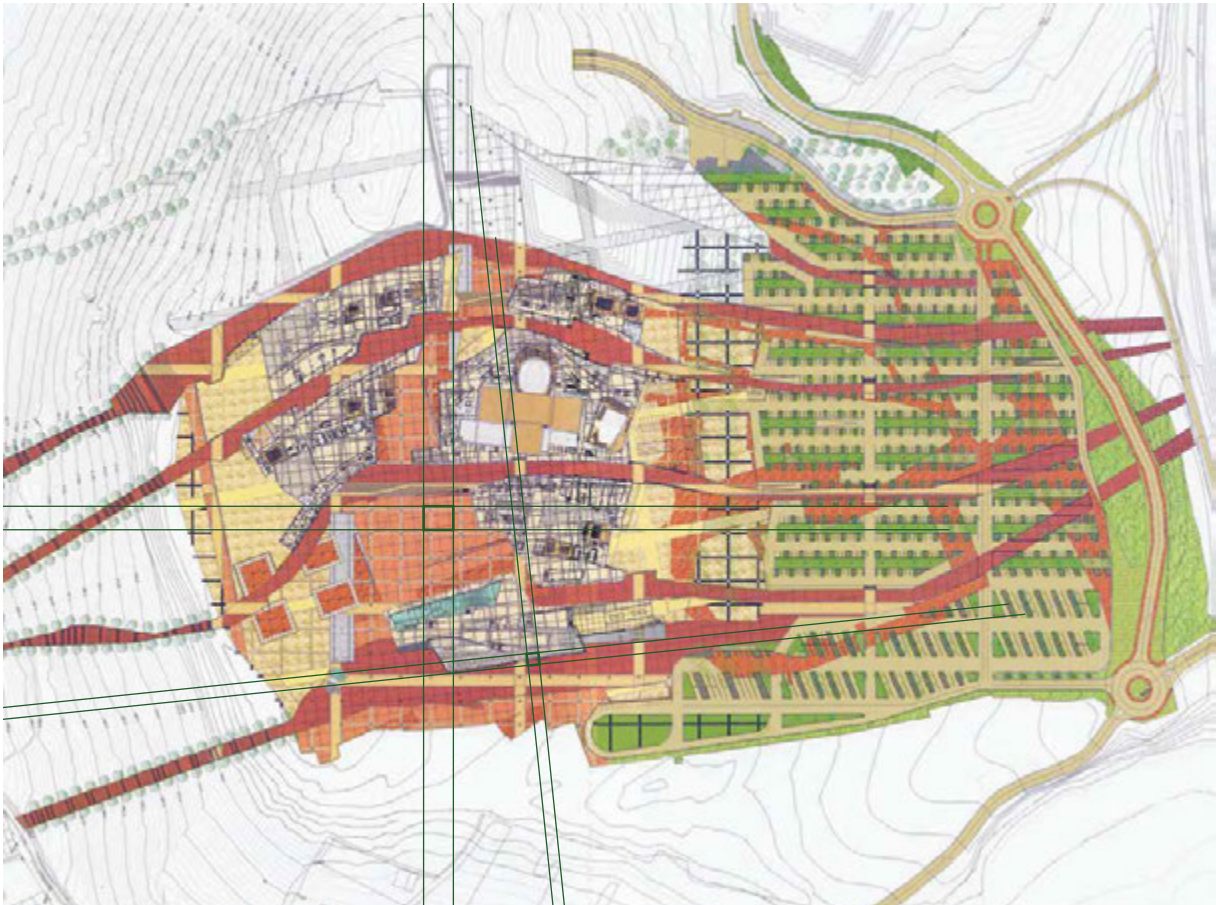


FIG. 6.5.2.4 Grid directions .. at new City of Culture (Drawing green axial lines by the author, site plan Eisenman Architects)

Not a coincidence, as confirmed by Eisenman (in Interview A.1.3). So even the two different directions of the grids are derived from the medieval town, again transposed into a new composition and added as a layer in the many-fold system.

In my analytical drawing of the spatial form (fig. 6.5.2.6.-7.) I reduced the many spatial ordering structures of the plans and surfaces to seven layers. This plan analysis does not reduce the complexity or enable a swift reading of the project. In my spatial drawing (fig. 6.5.2.8.) I show how the grids mark each layer of the ground form and make them legible. Of the four grids (A, B, C, D) one is exclusive for the roof (A) and one for the outdoor areas (D), the larger grid (16 x 20) appears in all layers while the smaller (8 x 8) only on floors of both interior and exterior. Its direction though re-occurs as a tiling for the roof. Similarly, facade tilings and relief structures are derived from the grids, some at exteriors and some at interiors.

Our previous cases (chapter 4 and 5) both had one grid for bearing systems, but the buildings in the City of Culture have four grids. The columns however are not the main determinant of the spatial expression of the architecture as they appear in a classical polistyl-hall (Kröner and Binding 2005 p.371). These grids are in each of the other two cases in Paris and Lausanne reduced, so they may not dominate the architectural expression. Eisenman however uses his excessive strategy to overcome the dominance of the grid. He overlays four grids, that across the design switch roles according to the opportunity with the various programs.

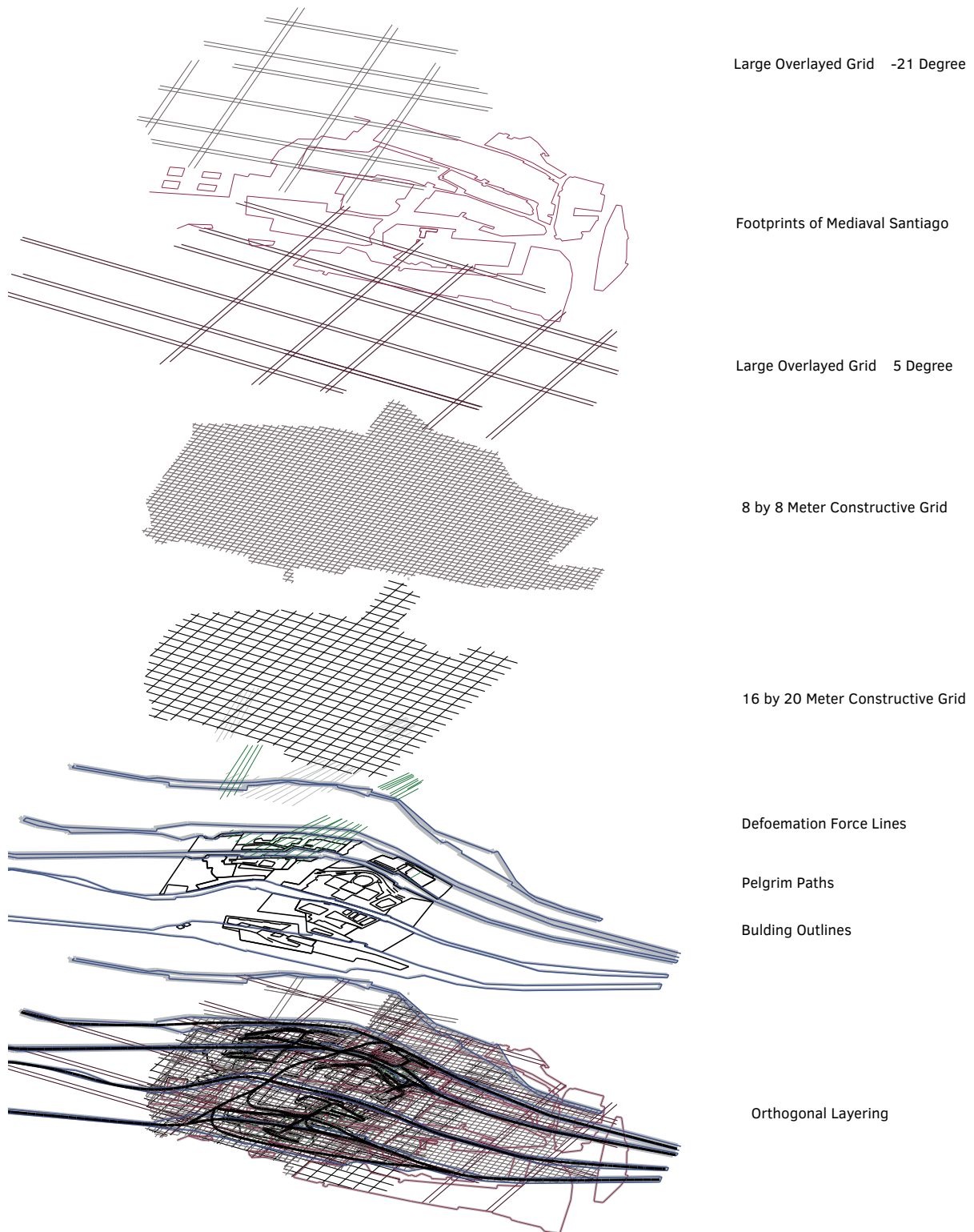


FIG. 6.5.2.5 City of Culture of Galicia layering of spatial ordering systems in plan projection on site scale (Drawing: author)
Spatial Form

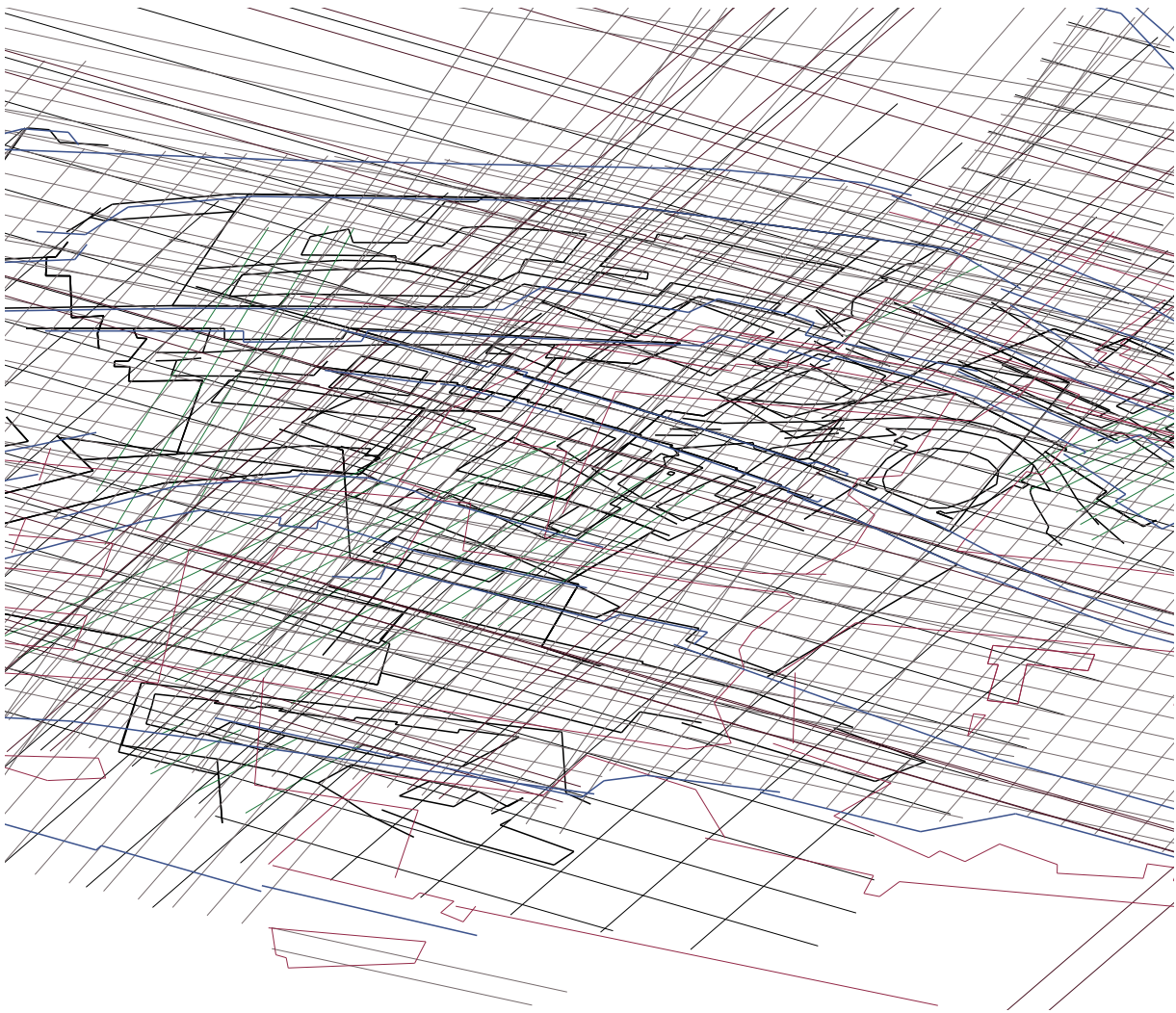


FIG. 6.5.2.6 City of Culture of Galicia layering of spatial ordering systems in plan projection on site scale (Drawing: author)
Spatial Form

These spatial systems of cut alleys, of topographies interfering with horizontal floors, of redundant alternative bearing systems are displayed and expressed rigidly in materials. The grids are dominantly visible throughout the architecture (while our two other projects Jussieu and Learning Centre reduce it). At City of Culture a grid-line can run diagonally across a stair, displayed in a change of material.

It is this combination of dominance and redundancy of the grids, that turns them from a constructive device (of building space) into a conceptual device (of making space). A grid would be a constructive element in architecture, 'a means to a goal'. But in Eisenman's excess of reason the elements are 'a goal to a goal'. To Eisenman the grid is more than a concession to constructive building logic: "The grid is ... the mark of man in nature, you could argue that that mark is not merely conceptual but also phenomenological, in that it marks man as opposed to nature" (Eisenman in Klatmagazine.com Klat #04, fall 2010.).

Roof:
Grids A and B
Tiling C

Exterior Floors:
Grids B, C and D

Interior Floors:
Grids B and C

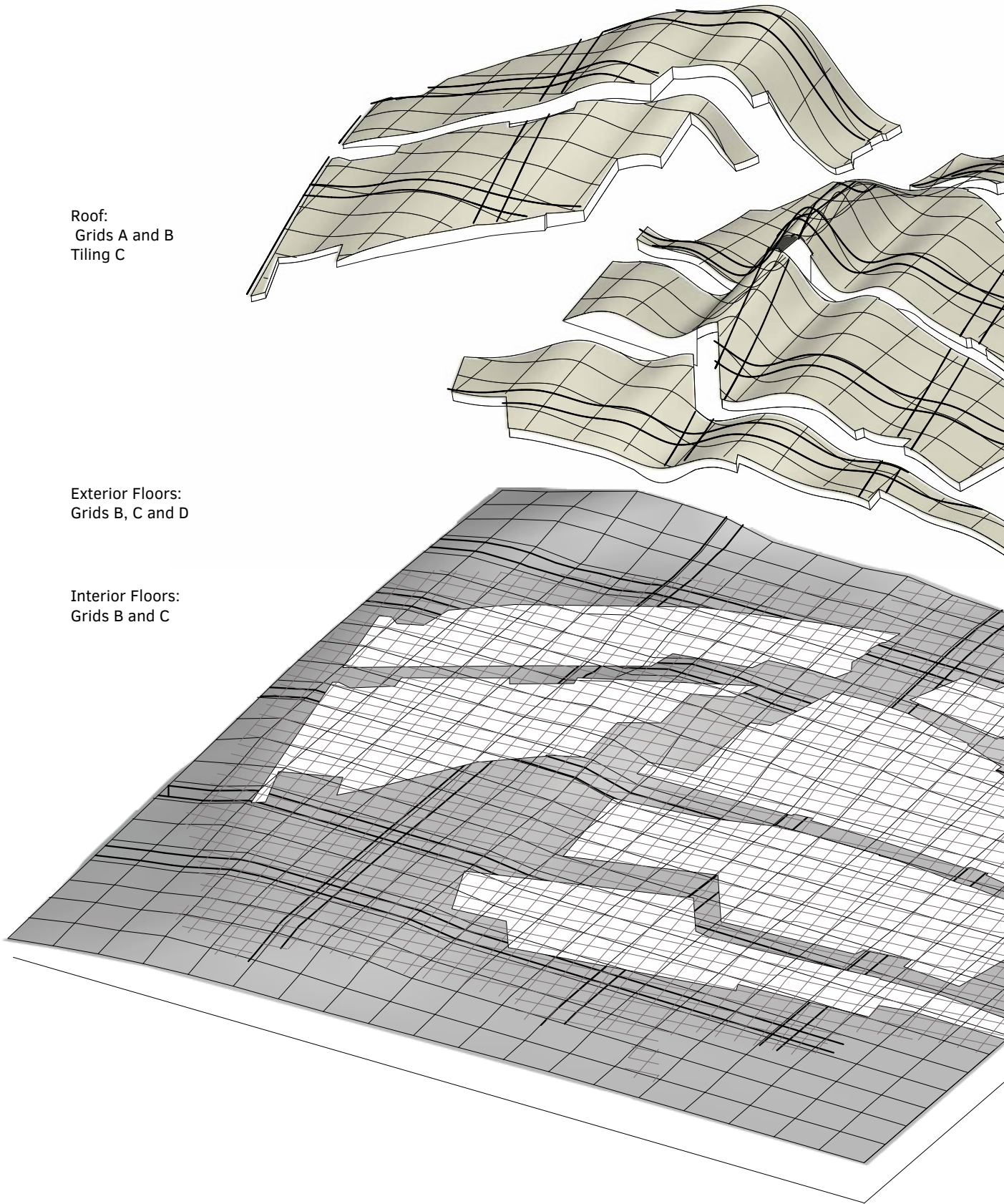
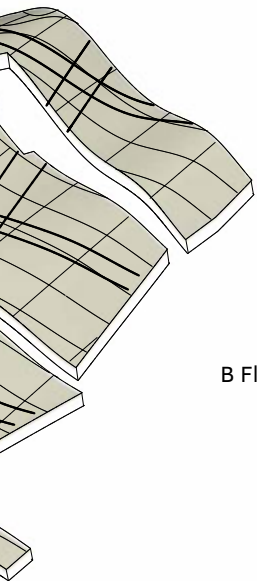
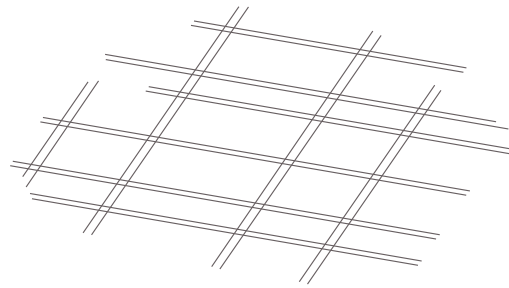


FIG. 6.5.2.7 City of Culture of Galicia layering orthogonal grids onto different Ground Form elements (Drawing: author)
Spatial Form



A Roof:
Strips, Light 8m

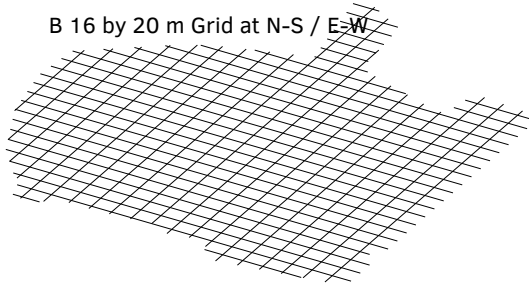


A Major Irregular Grid at 8 Degree W

B Roof:
Strips Light 1m20

B 16 by 20 m Grid at N-S / E-W

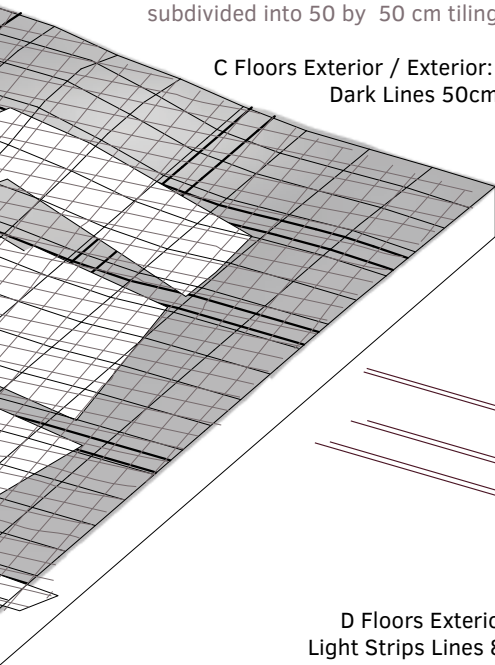
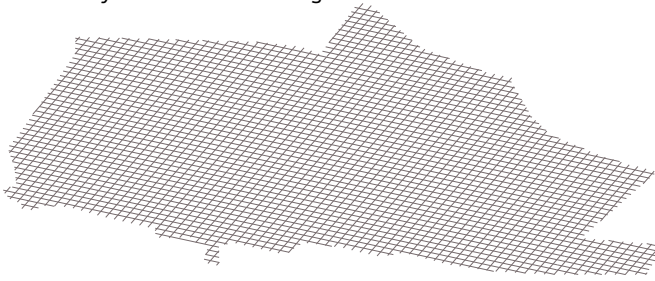
B Floors Exterior / Interior:
Strips Dark 1m20



C Roof:
subdivided into 50 by 50 cm tiling

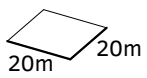
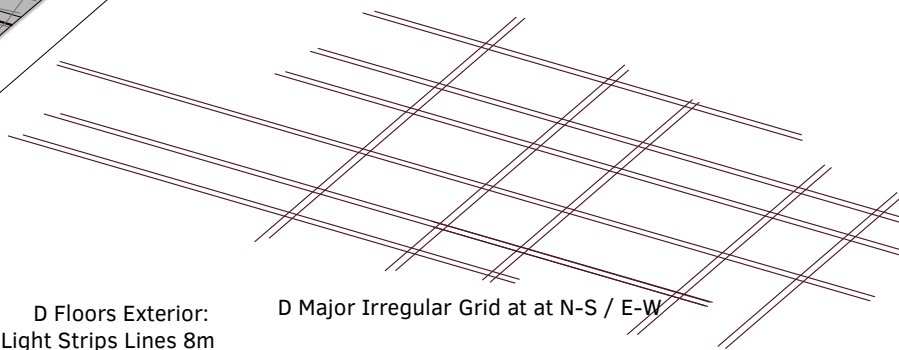
C 8 by 8 m Grid at at 8 Degree W

C Floors Exterior / Exterior:
Dark Lines 50cm



D Floors Exterior:
Light Strips Lines 8m

D Major Irregular Grid at at N-S / E-W



Scale 1:500

6.6.2 Santiago Spatial Form
Layering of Orthogonal Grids ontoent Ground Form elements

6.5.3 Image or Metaphorical Form

“Nature is never used as a metaphor in my work” (Eisenman in Gomez-Moriana 2010 p.4)

“If the hill will not come to Mahomet, Mahomet will go to the hill.” (Bacon 1625)

The complex logic of the design of City of Culture is an independent regulator of form. According to Peter Eisenman, “if you are not interested in form, you are not an architect. Great architects have always been involved in form.” (Eisenman in Interview A.1.3). His detailed score determines forms with a multitude of systems, that are in such a density that the form may seem arbitrary. What Eisenman himself calls “the excess of reason” (Eisenman in Interview A.1.3) is materialised here.

Metaphors of landscape elements could be read from parallels to an artificial hill, a rock formation, and a geological fault. The cliffs and slopes, canyons and creeks run across this artificial landscape.

This section does not count all landscape metaphors in City of Culture. Rather it explores how the designers of City of Culture applied landscape strategies in architecture. As introduced in the first two analytical layers, the basic strategy of the City of Culture is that of artificial overlay and densification of composition principles. The composition stems from neither a collage of distinct elements (as in Jussieu), nor an abstraction of natural elements into building properties (as in Learning Centre). The dominant language at Santiago is the creation of architecture, not as a textual polemic nor poetic representation of nature, but as an autonomous architectural artifact. Throughout his career Eisenman has propagated and defended the disciplinary autonomy of architecture. (i.e. Eisenman e.a. 2014)

I propose to establish Eisenman's concepts of 'Artificial Excavation' and 'Excess of Reason' as combined equipment to create architecture as an artificial nature.

The landscape metaphor at City of Culture does not relate to the image of the building but to the process of its design: The constant overlay of structures and the multitude of formal systems combined into one complex composition at the scale of a whole city is the actual landscape here. While Ian McHarg (1969 as elaborated in 2.3.1) unravelled the existing landscape into its many constituent strata or layers, Eisenman generates an artificial landscape from overlying strata and layers.

Rather than reproducing the image of nature (which would be the gardener's approach), City of Culture provides architectural tectonics like the geology of rock formations. The imagery of the built materials and surfaces reveals its own logic of forces and processes.

To better understand this process as landscape metaphor at City of Culture, a brief excursus into modern geology is useful. Geological forces are today very differently understood from even only a century ago. One famous example is the controversy about the Glarus Nappes in the Swiss Alps. Here an old rock formation overlays a newer one, but the explanation was more than adventurous. For a long time, well established geologists Escher and Heim lobbied and published against a theory evolved by Bertrand (1884) (summary of the controversy in English by Trümpy in Müller 1991 p.385-399, Neuenkirchen 2011 p.6-10, Pfiffner 2009 p.176-9). The elder Hans Conrad Escher had explained the layering of older rocks above younger (fig. 6.5.3.2.) with a complex but elegant double fold theory (fig. 6.5.3.2. above). The much simpler explanation of the Frenchman Bertrand (1884) was that a large part of the crust had been overthrown across tens of kilometres from the southern side. That explanation would only be accepted by Heim after 20 years. Long time geologists could not accept the explanation of thrust of giant nappes. The dynamics that would



FIG. 6.5.3.1 Pangeä (Neukirchen)

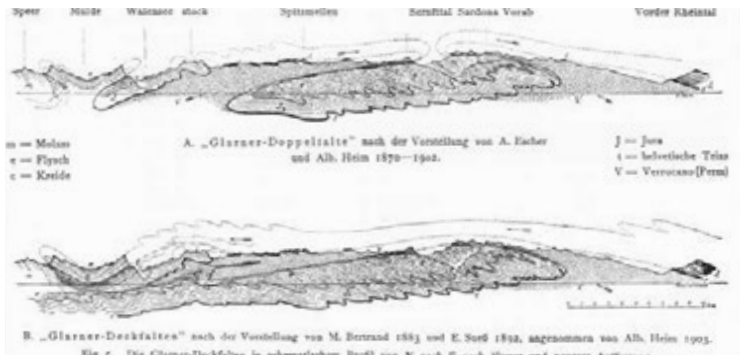


FIG. 6.5.3.2 Theoretical models for the Glarus Overthrust (Heim 1921)



FIG. 6.5.3.3 Zerklüftung (Goethe 1963)

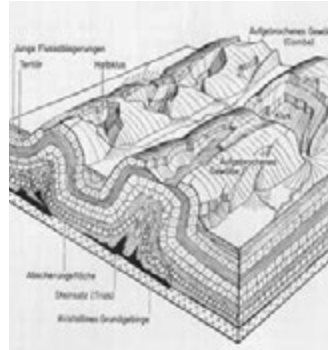


FIG. 6.5.3.4 Faltenjura (Labhart 1992)



FIG. 6.5.3.5 Alps at Elm (Escher)

be able to pull such a giant older stone layer above another could only be explained by the much later accepted theory of plate tectonics. That theory had a similar fate: although Alfred Wegener (1880–1930) had intuitively discovered continental drift from the matching of the continents like pieces of a puzzle in 1911 and first lectured about it, he was ridiculed by geologists and could not establish his theory during his short life span (Wegener 1911 and 1912 quoted after Neukirchen 2011 p. 59). Only in the 1960s modern geophysics, and evidence of magnetic formation and submarine geological probes could explain continental drift with modern plate tectonics, as it is being measured in several centimetres per year (2-10 cm depending on the continental plates, Neukirchen 2011 p. 62).

In former times, natural scientists only could imagine geological dynamics as vertical forces of rock formation caused by inner earth movement of magma (besides Heim and Schmidt 1891 i.e. also Goethe 1811 in 1963 p.114). Modern geology, starting at the end of the 19th century, deduces many formational forces from several layer movements, subduction and thrust-sheets (Suess 1885, today besides above also i.e. Bahlburg & Breitkreuz 2012, Davis e.a. 2012, Gnaägi & Labhart 2015, Labhart 1992).

20th century geological tectonics have evolved into a complex theory of dynamics. In 100 years, we have dealt with a paradigm shift in the field of geology. It seems to me that such a paradigm shift is the transformation of architectural tectonics that Eisenman wants to introduce into architecture. At Santiago he took his chance to build a whole mountain.

In my analytical drawing I explain Eisenman's mountain with the tracing of dynamic geological formations (fig. 6.5.3.4.). In geological tectonics, the folding of the roof is relatively simple, as explained with a contraction in the ground form analysis. It could be compared to a younger mountain formation like the Jura. The roof is folded like a geological nappes with a rough outside

and a soft inside. Stratification of softer layers is shown also at some instances in the glass facades. In other parts, the glass facades form a ragged, cliff-like exposure, which in some cases serves as a landmark image oriented towards the city. On site it is apparent how similar the formations are to the adjacent natural rock, which can be found in many other areas of the Galician landscape.

The closed building skin is formed fully of raw broken natural stone. Its tiling gives the impression of a weathered rock, leaving smaller fractures in a grid-line pattern. The hard crust to the outside is cut in relief by grid-lines of larger fractures that carve onto the surface of the weathered rock like a form of erosion. These fractures represent the spatial system of grids within the hard shell. Several layers of longitudinal and cross-joints cut into the surface. They follow a mathematical logic that does not in itself structure the geomorphic shapes, but only measures them to the rhythm of architecture and construction.

On the interior, suddenly these systems generate a smooth surface. After an analytical approach it seems to be like in the machine room of natural forces- indeed they are rather architectural forces. More than a geological cave it gives a sense of moving inside a dynamic tectonic model. The movement dynamics are revealed in the structure, as they dissect into columns, patterns, claddings and recesses and (it seems only lastly) into walls. Even the natural stone is polished inside. All that is visible of nature here is cleaned and translated into concepts: just a driving force to architectural form.

Concluding this analysis of the metaphorical form, I state that at City of Culture - departing from architect Eisenman's conscious theoretical position - the metaphor to landscape is in the process that generates the form and not in the form itself. Like a geological formation process, forces generated by the architect recede into numerous details of the materialisation and construction of the building. All spatial and ground form appearance is generated by this overarching geological formation process that constitutes the main landscape metaphor.

For Eisenman the relation of City of Culture to Santiago is that of the fantastic and speculative archaeology of Piranesi to Rome, as he said "If Piranesi said he was doing a plan of Rome, then I was doing a plan of Santiago" (Eisenman in Interview A1.3.1.).

For Eisenman the whole of City of Culture represents an "artificial excavation" (Eisenman in Interview A1.3.1.). I explain it as reverse archaeology: Archeologists try to understand life as covered by layers of rubble throughout the centuries, hidden under hills of rubble and new nature. Eisenman at City of Culture reverses that process of excavation into a act of creating architectural space.

The image of the whole of City of Culture represents this "artificial excavation" process: A city that looks like an excavation site and adds many formal layers in a composition comparable to the complexity of a century old city. An artificial city that takes all of its formal components from either that Medieval city of Santiago or from the site of Monte Gaiás itself. A new 'campo stellae', a secular site with artificially enhanced density of the sacred is created in this process. This 'artificial excavation' is a main novelty of City of Culture as a landscape design strategy. It has no visible and easy reference to natural elements as form but a multitude of almost invisible and complex references to natural processes of formation.

6.5.4 Form of the Program

As opposed to the two previous cases of single buildings Jussieu and Lausanne (4.5.4 and 5.5.4) the City of Culture consists of a series of buildings and programs under one guiding architectural composition.

While programming of an individual building, in the other two cases, connects landscape layers, here in Galicia the programming strategy is conventional, unlike the formal gymnastics.

The social, ethical or even political dimension of programming is tucked away. Questions to the societal context or political intentions of Manuel Fraga are seldom addressed but with a simple reaction. The architect at many levels seems uncritical and even servile vis-a-vis the demands of the client. The innovation of this architecture lies in formal and compositional aspects, that merit attention in regard to my research on landscape design strategies, but not in any social or political program.

In my interview, Eisenman explained the core idea of the program as a kind of cultural pilgrimage:

“Fraga’s idea, and it was a very good one, was to make an international place where Galicians could be proud of being on a cultural map, on a pilgrimage map.” (Eisenman A.1.3.1)

Eisenman knowingly takes a different position here than for example Rem Koolhaas. In my interview I specifically addressed the question of relating architectural form to architectural program. And out of position, Eisenman explained himself in contrast to Rem Koolhaas

“Rem talks about program, but in the end, do those programs necessarily give you that form? No, that’s his invention. Anyone that tells you they are interested in program you should be wary of.” (Eisenman A.1.3.1)

Consequently, and as we can read in his projects, Eisenman denies interest in program as a generator of form.

“program, there is no program for most buildings, that defines form in any case. What defines form is precedent. What is the form of a museum? The content, the art to be exhibited, but in the end, is the architecture the background, or is the art? Most painters think that architecture should be the background, and I don’t necessarily think that’s the case. I think architecture is why we go into buildings, and if it’s not interesting, we don’t go, no matter what the art is.

Not every museum can have great art. We go to Bilbao despite that it has no collection; we go to the Guggenheim despite its modest collection, to see the architecture.” (Eisenman A.1.3.1)

In the City of Culture, such programming would be an ad-hoc operation to fill in preconceived forms I compared to a picnic in a park. But Eisenman denies involvement with that.

“I don’t give a damn where the picnic is. If it’s a great garden, people will go there.” (Eisenman A.1.3.1)

The form of each building follows a set of operations to fill in the architectural volume with usage. Functional aspects are followed by the architects, yet the programmatic side of the project raises more questions. Several critics question the use of City of Culture in general like Jakob (2006) in “Werk Bauen und Wohnen” or Curtis (2010) in “Architectural Review”. The program is an expression of cultural optimism, that may have seemed self-fulfilling to its prophets.

In the more limited and professional context of an architectural design, certainly the program requirements have been fulfilled. Firstly this happens in a competition phase, in the case of this design with a filling of the conceived shapes -after their creation- with the program, then represented by coloured cube blocks (fig. 6.5.4.1). Later on in the design process programs have changed, altered. Practical aspects of the use of buildings seem far from the political decision makers and their will to make a cultural statement.

In my program form analysis I interpret this way of programming as filling forms with programs. The way that City of Culture's programming may have fulfilled a need is less interesting in this case study, than the fact that there is actually no need for anything this giant complex proposes - and how it was (partially) built anyhow. This way of programming is indeed very common in Landscape Architecture. Think of the 'need' for the Royal Gardens at Versailles: there was no other program to it than the representation of the absolute power of the King. Projects bound to political representation are at risk with changes of power.

The political importance of large projects is part of their natural risk (as seen with the rise and decline of Minister Jacques Lang that took Jussieu into its state of limbo in ch. 4.4.). The economical crisis in Spain was of unexpected dimension. The current changes and disruptions in Spanish society are of unprecedented scale since the civil war. Those changes not only undermined the economical basis for this giant project, they also interfered with the larger political agenda of creating such a place for Galician culture, in a time where even the definition of regional - and national - culture in Spain is debated.

The program of a new built monument to Galicia at landscape scale was a giant plan. After being conceived and partially realised, the usefulness of its program is a bigger and less answerable question than it may have been at the end of the 20th century, when the plan arose.

While our two precedent projects Jussieu and Lausanne each found a way to organise a program as a landscape - developing a landscape design strategy of composition - in City of Culture I see the form of the program as a shortcoming from a landscape method perspective. This inability is also a symptom of an architecture that does not take control of the crucial aspect of how it is going to be used.

6.5.5 The Composition

The form of City of Culture is dominated by the collision of themes and ordering systems. They are each reasonable, in classical 'ratio' but together they compress the spatial composition to such a density, they appear as a natural 'irrational' formation, like an artificial rock.

Following some of Eisenman's own statements, City of Culture is not a landscape in a strictly formal sense. It is a composition strategy generating a landscape. No doubt Eisenman is not a nature lover, as opposed to Ian McHarg (1969 as elaborated in 2.3.1). McHarg imagined it in his ground breaking models in *Design with Nature* that influenced generations of landscape architects.

As discussed earlier in 6.5.3, the appearance of City of Culture is created by a methodological process of composition that is exactly the opposite of McHarg's (and other authors quoted in 2.3.1.) decomposition into layers. As Eisenman calls his own design operations 'artificial excavations' he acknowledges this reverse process.

Nicolaus Steno (1638–86) first established the principle of layers in soils and thus founded geology. He realised that rock formations are often consolidated sediments, and that such rocks occur in layers in the order in which they were laid down. (Steno 1669 quoted by Lyell 1832 p.31). The layering of different historical strata, or stratification, is used for understanding historical sequences in archaeology up to modern times. Geological sequencing made Charles Darwin (1859) realise how the development of species is related to time in and evolution. Strata or layers have a crucial role in modern thought to understand our world.

City of Culture forefronts this crucial role of landscape formation in a massive composition, that is manifests and freezes its own formative processes in time. It exposes the process of formatting the physical world into a built representation. Ground is ground. The world itself (or at least Galicia) comes into the world (or into Monte Gaiás).

I should like to describe the propulsive act of layering spatial systems across each other at City of Culture as an artificial landscape formation. The spatial form of City of Culture does not imitate landscape's natural spaces or extraction elements, nor does it mime visual landscape experiences. Rather it develops a design strategy to create landscape, that of creating a new nature based on excessive reason.

The design of process in itself is an achievement, including the rigorous transformation of this design process into a building process at an enormous scale and over a significant period of time. The fragmentary results may reflect certain shortcomings, but nevertheless the composition in its integrative working across layers is a significant application of landscape generative processes in architecture.

6.6 Specific Methods of Design Analysis for Santiago

At Jussieu (chapter 4.6) I studied the critical pro-construction. It was a hypothetical executed stage of the unrealised building. At the Learning Centre (chapter 5.6) I investigated the visual space created by the landscape design in architecture, to introduce a landscape space analysis method for understanding architectural space. In the case of City of Culture I chose a strategy more related to the form of the program and its manifestation in the project design. Interpreting the unfinished state of City of Culture as an actual crisis of program, I propose an alternative way of programming with a landscape attitude.

In this section, I explore an alternative program for the two unfinished buildings in the City of Culture. From the methodological position of this thesis, I propose here to make a landscape design based on architectural principles that Eisenman Architects developed for the building program.



FIG. 6.6.1 Gardens around City of Culture 2017



FIG. 6.6.2 Lake Park Isabel Aguirre, Escola Galega da Paisaxe 2017



FIG. 6.6.3 Literary Garden



FIG. 6.6.4 Bosque de Galicia (all cidadedacultura.gal 2017)

In the following, a design landscape experiment should test the systematic of the Eisenman design and show its compositor's logic. For the underused site I propose a temporary Galician Forest Garden.

The proposed Galician Forest Garden (fig. 6.6.10.-13) as a temporary garden should display the natural and cultural riches of the flora of Galicia. The plantings will be related to the subject of cultural production on land, and culture will be interpreted in its primary, landscape related form as agriculture or farming. The alternative core of City of Culture will be a place for temporary urban farming.

During the writing and analysis of this thesis a series of comparable projects have been realised under Isabel Aguirre, principal at the Escola Galega da Paisaxe, belonging to the Juana de Vega Foundation (cidadedacultura.gal accessed August 2017). They consist of a Bosque de Galicia (fig 6.6.4) a Lake Park and a Literary Garden (fig 6.6.2-3.. These recently published and realised projects partially overlap in place and theme with my proposal. (cidadedacultura.gal accessed August 2017)

From an ecological perspective the current state of large parts of City of Culture is a wasteland to be recovered. The site of City of Culture has been excavated since 2001. Fertile topsoil was removed to cultivate architecture. Below it a partially rocky underground was removed for building

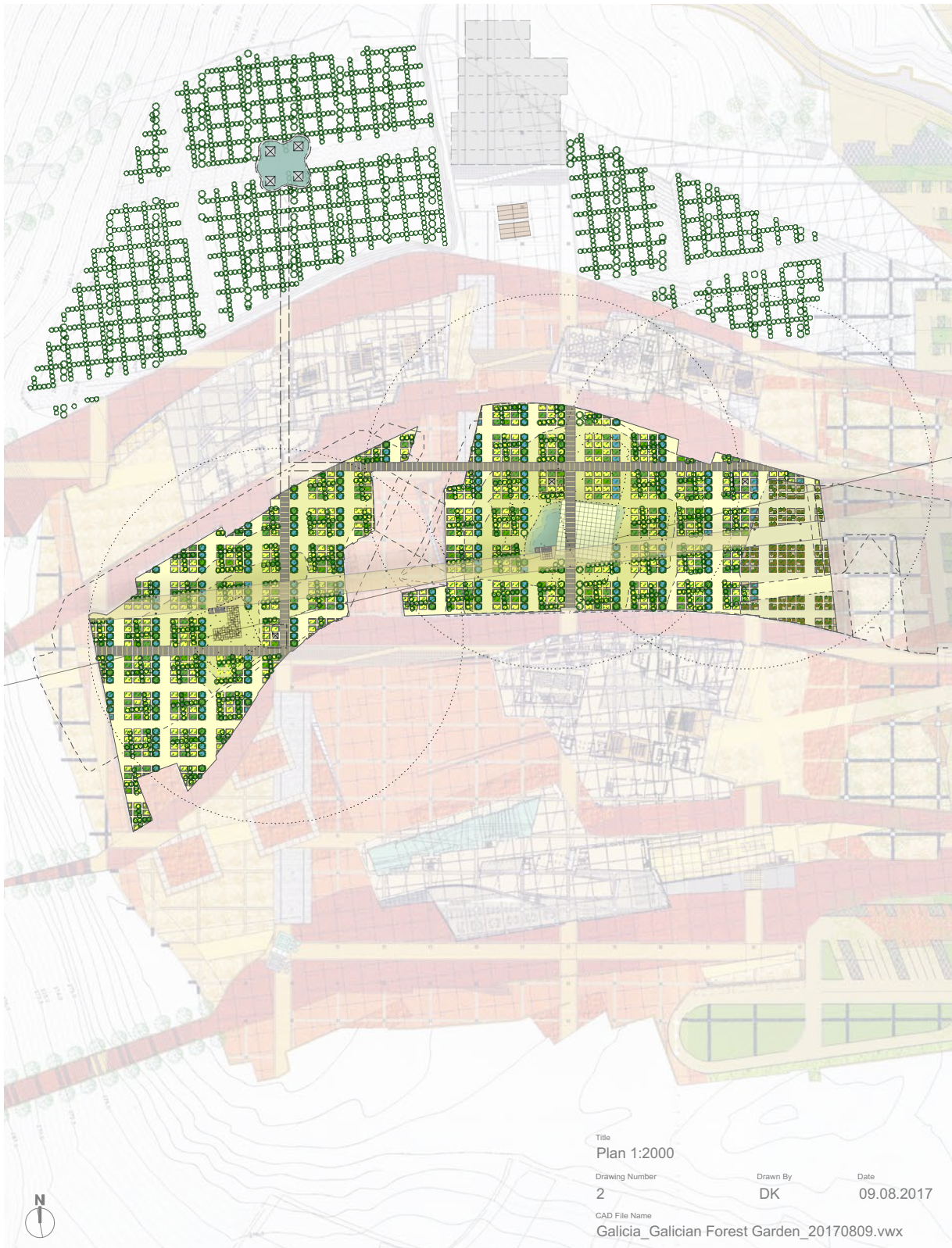


FIG. 6.6.5 Galician Forest Garden
 (Design drawing: author & Daphne Keegstra, DGJ Landscapes)

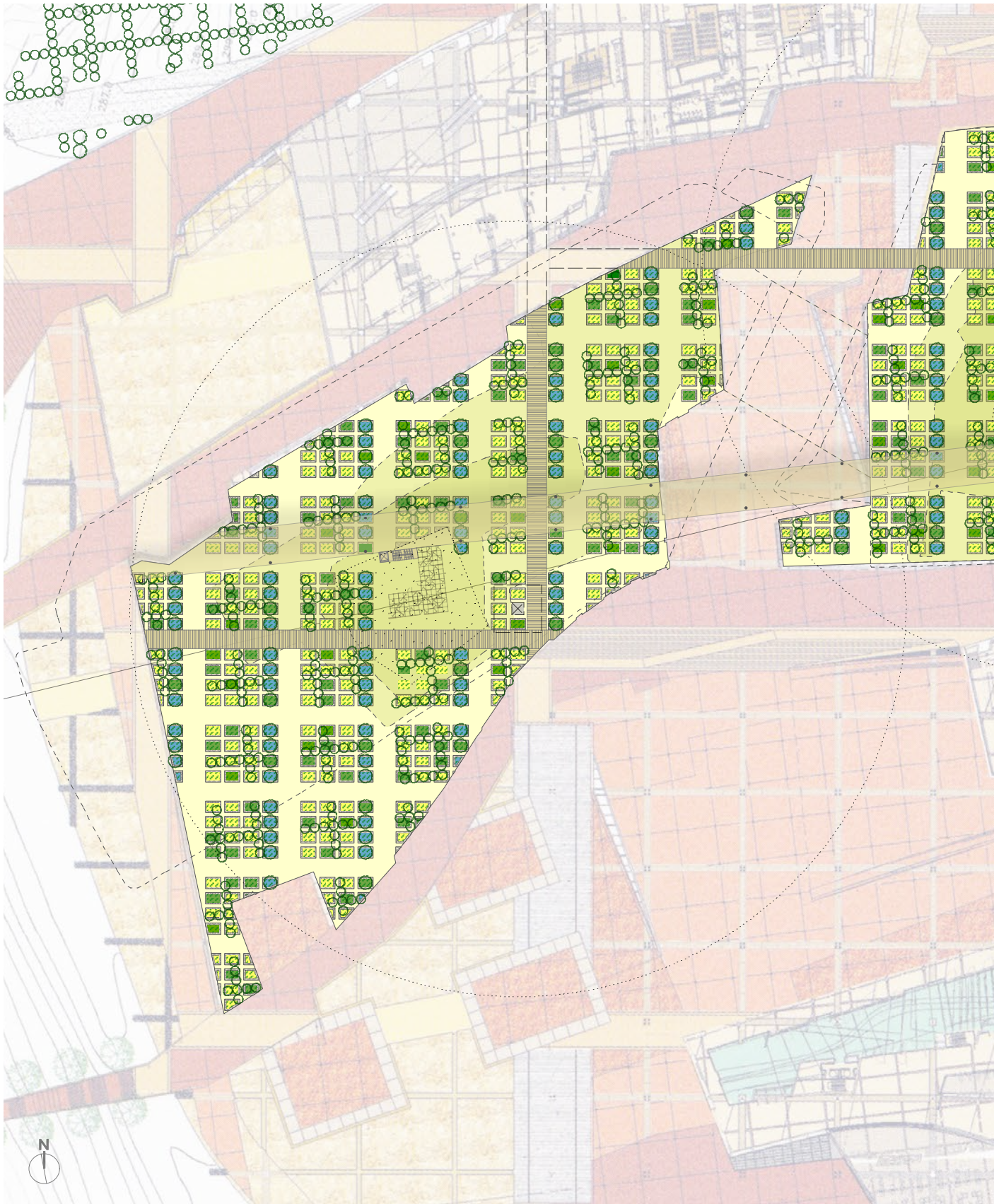


FIG. 6.6.6 Galician Forest Garden
(Design drawing: author & Daphne Keegstra, DGJ Landscapes)



Title
Plan 1:1000

Drawing Number	Drawn By	Date
1	DK	09.08.2017

CAD File Name
Galicia_Galician Forest Garden_20170809.vwx

a tunnel and foundations and largely exposed to erosion. Technically the unbuilt ruin might be stabilised for another couple of years. Nevertheless a permanent construction site is not a good urban environment to live and work in. The bad microclimate (of extreme temperatures and rainfall) will further deteriorate the site and the livability for the City of Culture is severely reduced by the presence of these vacant holes - besides the effects it has on the morale of visitors (see ch 6.3).

Galicia is a region with a large forest and Spain's most dominant timber producer. In Galicia, forestry experts see the urgent need for a regional centre for information on sustainable forestry (Roback e.a 2012). As City of Culture already partially incorporates provincial institutions for sustainable forestry, forestry research with botanical and education services could be adopted here. Moreover, my temporary programming is a public garden to develop how forest cultures can be used for food production.

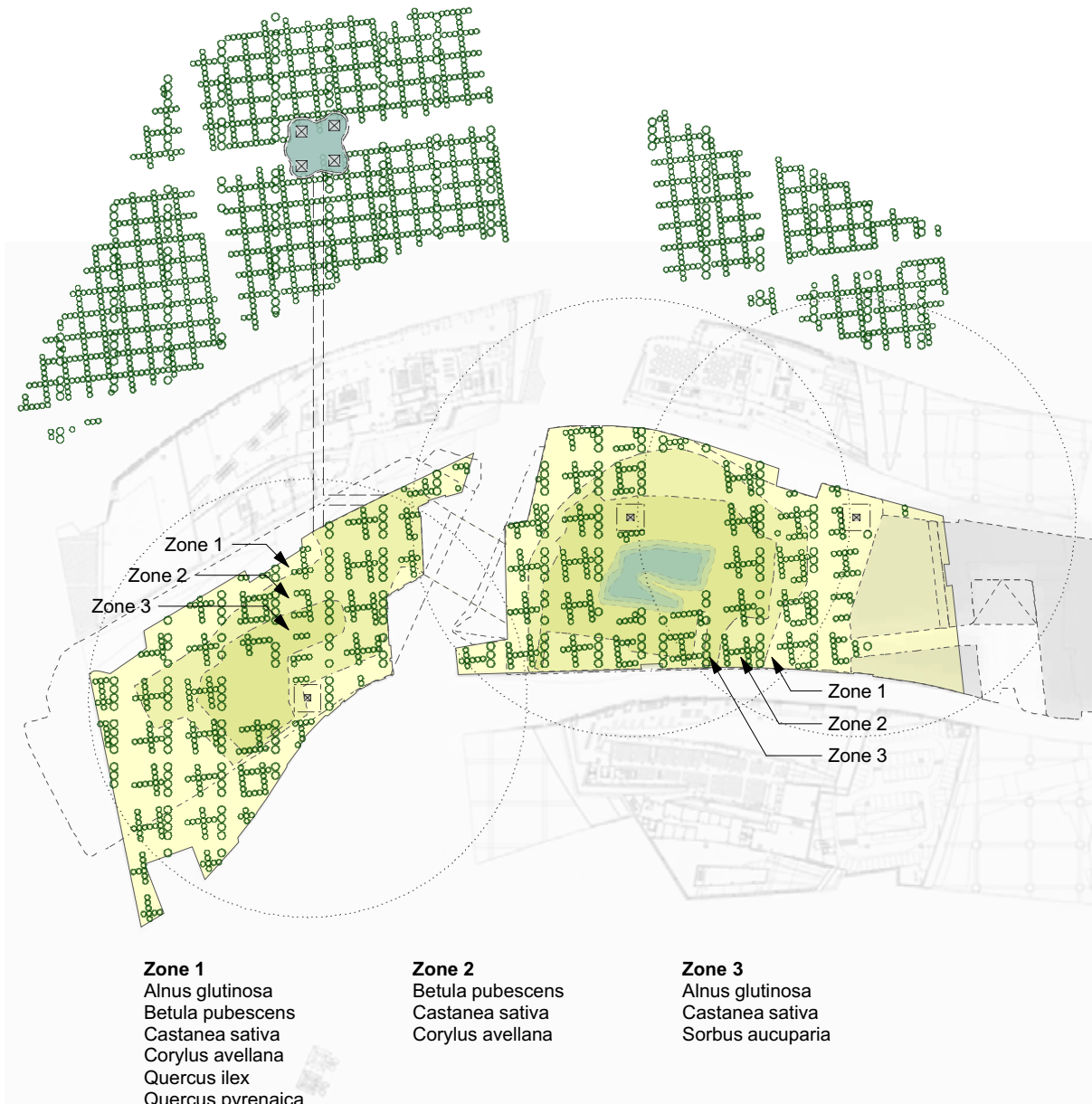
For this thesis the primary purpose of the Galician Forest Garden is a design experiment. The proposal shows the design composition of the overall project - instead of displaying its failure. The tree nursery is like a living park scale walkable landscape methods design exhibition.

The junger trees in the nursery are to be planted in a pattern based on the smaller 8 x 8m grid. Larger trees are put in Lines every 20 meters. Below the crowns I propose a terraced garden to hold the terrain for trees and experiment with forest food cultivation techniques. The tracing follows the 16 x 20 meter grid, subdivided in 4 x 4 with a wide grass covered path in between. Through the overlapping grids the composition will partially lose its artificiality and look at instances more like a wild forest; at others the geometrical order of a cultural landscape will be visible.

Nursing will involve tree cutting and annual or bi-annual replanting and delivery logistics. Therefore I propose to install three large building cranes and use the parking facilities of the designated opera in the east as a delivery bay.

The terraces are materialised with a simple modular gabion system filled with rock-rubble. Large masses of partially still unorganised rubble at the southeast rim of the site can be reinserted into the site temporarily. The pond bottoms of the opera pit will serve as a water reservoir for tree and forest culture irrigation.

The forest is composed of different climatic zones according to depth in the pit, distance to water and height, steepness and light exposure. It contains a series of species that are either naturally grown in Galicia (bosquesdeg Galicia.es) or that seemed to us useful to sustainable forestry in a cultivated form. The forestry plan is based on two locally dominant forest types: the *souto* with *Alnus*, *Betula*, *Corylus* and *Quercus* that is typically cultivated with chestnut since Roman times on the light exposed hills, and the moist forest *devesa* on the shadowy sides. Departing from Galician and Spanish forestry standard documents (Mapa Forestal de España 1:200.000 since 1985, Saura Carballal 2004, Ruz der Castillo y Navascués e.a. 2006) I determined three zones relative to sun exposure, anticipated humidity and the effect of the coastal winds on the local micro-climate inside the two pits at City of Culture. The highest is zone 1 and pest in the pit is zone 3 (fig. 6.6.zones). Each Zone has larger and smaller trees while chestnuts (*Castanea stevia*) return at each zone (table 6.6). In zone 1 we would cultivate a series of oaks (*Quercus ilex*, *Q. super*, *Q. pyrenaica* & *Q. Robur*), alder (*Alnus glutinosa*) and common white birches (*Betula pubescens*). In zone 2 we propose white birches and besides the chestnuts also hazel (*Corylus avellana*). In zone 3 we would find again alder, chestnuts and mountain-ash (*Sorbus aucuparia*).



Zone 1
 Alnus glutinosa
 Betula pubescens
 Castanea sativa
 Corylus avellana
 Quercus ilex
 Quercus pyrenaica
 Quercus robur
 Quercus suber

Brassica rapa
 Lupinus angifolius
 (edible) perennials

Zone 2
 Betula pubescens
 Castanea sativa
 Corylus avellana

Brassica rapa
 Lupinus angifolius
 (edible) perennials

Zone 3
 Alnus glutinosa
 Castanea sativa
 Sorbus aucuparia

Brassica rapa
 Lupinus angifolius
 (edible) perennials

Title
 Zoning plan trees 1:2000
 Drawing Number 3 Drawn By DK Date 09.08.2017
 CAD File Name
 Galicia_Galician Forest Garden_20170809.vwx


FIG. 6.6.7 Galician Forest Garden Planting scheme with microclimatic zoning and loading circles of cranes
 (Design drawing: author & Daphne Keegstra, DGJ Landscapes, planting consultancy Thijs Dolders, Ebben Nursery)

TABLE 6.6.1 Galician Forest Garden Planting scheme

	2025: planting size		2030: selling size		2125-2150: adult size		Crown shape	Density	Image	Application
	Ø stem (cm)	Height (m)	Ø stem (cm)	Height (m)	Crown width (m)	Height (m)				
Zone 1:	highest,ostly flat area, exposed to sunlight (except for shadow of the buildings on south side)									
<i>Alnus glutinosa</i>	12-14	2,5-3	20-25	6-7	6-12	10-20	wide pyramid	half open		- Devesa, high areas
<i>Betula pubescens</i> (<i>Betula celtiberica</i>)		2,5-3		6-7	10-15	15-20	oval, multi-stemmed	open		- Souto,ixed with Castanea - Devesa, high areas
<i>Castanea sativa</i> (high-stem)	12-14	2,5-3	20-25	5	20-25	25-30	round	closed		- Souto, warm areas, dominant
<i>Castanea sativa</i> (multi-stem)		2,5-3		5	20-25	25-30	round, multi-stemmed	closed		- Souto, warm areas, dominant
<i>Corylus avellana</i>		2,5-3		5	4-8	5-10	vase, multi-stemmed	closed		- Souto, high areas - Devesa, transition area - Mixed with Castanea
<i>Quercus ilex</i>	12-14	2,5-3	20-25	5	5-8	5-8	round / egg	closed		- Souto,ixed with Castanea - Devesa, calcareous soil
<i>Quercus pyrenaica</i>	12-14	2,5-3	20-25	5	5-10	10-15	egg	half open		- Souto,ixed with Castanea - Devesa, high/ sloped area
<i>Quercus robur</i>	12-14	2,5-3	20-25	5	25-35	25-35	round	half open		- Souto,ixed with Castanea - Devesa, shadow areas
<i>Quercus suber</i>	12-14	2,5-3	20-25	5	10-18	10-18	round	half open		- Souto,ixed with Castanea - Devesa, flat/cultivated areas

>>>

TABLE 6.6.1 Galician Forest Garden Planting scheme

	2025: planting size		2030: selling size		2125-2150: adult size		Crown shape	Density	Image	Application
	Ø stem (cm)	Height (m)	Ø stem (cm)	Height (m)	Crown width (m)	Height (m)				
Zone 2:	sloped area, comparable to mountains, sunny on the north side, shadow on the south side									
Betula pubescens (Betula celtiberica)		2,5-3		6-7	10-15	15-20	oval, multi-stemmed	open		- Devesa, high areas
Castanea sativa (high-stem)	12-14	2,5-3	20-25	5	20-25	25-30	round	closed		- Souto, low/warm areas
Castanea sativa (multi-stem)		2,5-3		5	20-25	25-30	round, multi-stemmed	closed		- Souto, low/warm areas
Corylus avellana		2,5-3		5	4-8	5-10	vase, multi-stemmed	closed		- Souto, high/steep areas - Devesa, transition area
Zone 3:	lowest, sloped area, mostly wet and moist areas									
Alnus glutinosa	12-14	2,5-3	20-25	6-7	6-12	10-20	wide pyramid	half open		- Souto, moist/wet areas
Castanea sativa (high-stem)	12-14	2,5-3	20-25	5	20-25	25-30	round	closed		- Souto, low/warm areas
Castanea sativa (multi-stem)		2,5-3		5	20-25	25-30	round, multi-stemmed	closed		- Souto, low/warm areas
Sorbus aucuparia	12-14	2,5-3	20-25	5	6-8	8-12	wide egg	half open		- Devesa, steeper areas
Plants	Lupinus angustifolius, Brassica rapa, (edible) perennials									

* TreeEbb

Souto: Castanea forest, mixed with Alnus/Betula/Corylus/Quercus

Devesa: moist forest, North oriented (shadow side)



FIG. 6.6.8 Open-Air Opera on central stage at Galician Forest Garden (Design visualisation author and Aaron Stumpf, DGJ Landscapes)

Lower parts can be planted with extensive soil enrichers like rapeseed (*Brassica rapa*) or lupin (*Lupinus angustifolius*). A succession of a wide variety of preferably edible perennial plants will establish a plant society in a micro-climatic equilibrium according to the principles of permaculture.

A forest like this is not grown in a couple of years, like a building. A park would need at least 20 years to grow to its intended size. I defined three growth stages for each tree: a planting size for a proposed year 2025 with a crown between 2,5 and 3 meters is when the tree would be acquired from the field in the surroundings or a nursery elsewhere and be planted into the Eisenman grids at the Galician Forest Garden.

According to their development in the nursing phases, trees would be re-planted in a new row in the Eisenman grid every one or two years. Older trees might get more permanent positions. While middle aged trees will depart, younger ones will follow.

Accessibility of the halted construction is provided by two access paths that run in the North-South and East-West directions; they must be at times as steep as stairs. With less slope (accessible to wheelchairs) I propose a passageway on scaffoldings to the main entrances for larger visitor flow on one of the large scale grid-lines that cut all the way through the site. Stairs and elevators connect down to the garden, the two deep holes dug for them made accessible to the public.

The project alters the abandoned construction site in the centre of City of Culture into a public space. A periodical pop-up market will develop and stimulate improvised and innovative local garden economy. Take-away kitchens in food trucks and huts invite locals, tourists and pilgrims for alternative recreation to the overcrowded historic centre of Santiago. The services involve the initiative of local residents. The design of the Galician Forest Garden must not overrule the character of a construction site. Everything can remain temporary, be built up slowly and removed



FIG. 6.6.9 Tree nursing and forest cultures at Galician Forest Garden (Design visualisation author and Aaron Stumpf, DGJ Landscapes)

step by step if building recommences. If the opera is finally built, the Galician Forest Garden can move to the north where extensions to the project site were proposed in the initial competition.

The design structure of my experimental programming of a temporary alternative follows the systematic of the Eisenman design. Instead of the ecologically dead site and unachieved Opera, the Forest Garden would be a lively and living display of a landscape transformation process at work.

The same components of the design of the Galician Forest Garden are used for different functions than they had in the City of Culture design, after dissecting them into ground, spatial and image form.



FIG. 6.6.10 Tree nursing footbridge in Eisenmans volumetry (Design drawing: author and Aaron Stumpf, Daphne Keegstra DGJ Landscapes)

The roof as a main element of ground form the buildings would have had, is indicated with the structure of the crossing bridge; in combination with the permanent cranes, it anchors the potential building as a project, but does not let its construction stoppage further paralyse the site.

The spatial forms that are materialised as columns, divisions and claddings in the building are used for planting, terracing and landfills.

The metaphorical form of creating a landscape out of a geological formation process is translated into an ecological succession process. The permanence of a building - frozen time - is replaced by the temporary character of a garden - living time.

The indifference to program that I see as a weakness in the project is used as the chance for my experiment.

As a re-composition, the design experiment of the Galician Forest Garden with landscape architecture reveals the layers of the original composition - a variation on the theme. The design experiment in the framework of this PhD thesis shows how architectural principles can be applied onto garden design. On an identical site I apply the principles in a completely different materialisation.

If Eisenman says (in interview A.1.3.) he never intended to create a landscape, my experiment shows that a landscape could very well be following the rules of composition that Eisenman developed for his buildings.

6.7 Landscape Architectural Attitudes at Santiago

Peter Eisenman's attitude as an architect is ironic and self-critical (Petit 2012). "Ultimately" Eisenman said in my interview "I'm not interested in phenomenology, and materiality is part of what is dominating landscape today, not the conceptual idea of landscape" (Eisenman A1.3.1). Eisenman himself is much too conscious about his form making than that he would use formal analogies. In the above quote Eisenman denies landscape. However I find distinctive landscape attitudes at City of Culture according to my definitions (Marot 1999, chapter 2.3). On the contrary, while the physical, material, and formal reality of City of Culture seems to hinder its characterisation as landscape, the intellectual attitudes of design very clearly connect to it. Design strategies raised by Eisenman for architecture (in the project or in descriptions like the interview) almost read as an alternative definition of landscape attitudes: the anamnesis attitude of Marot (1999, chapter 2.3) could be seen very closely related to Eisenman's concept of artificial excavations. The invention of archaeological sites is a returned process of anamnesis. Eisenman is most conscious of all designers analysed in this thesis about that.

"In my work you can see the shift from a humanist idea to the enlightenment idea to the modern idea to the postmodern idea; each has a level of energy about what the site is." (Eisenman A1.3.1).

At City of Culture the use of anamnesis is the clearest among the three cases. The densification of a several centuries' history of Galicia and Santiago de Compostela, the anamnesis becomes the trigger and framework for the design of this project. The concept of "artificial excavation"

TABLE 6.7 Resume: City of Culture of Galicia in Santiago de Compostela

Landscape Design Strategies in City of Culture Santiago de Compostela			
4-layer design analysis (Steenbergen & Reh 2003)			
Ground form	Spatial form	Image form	Program form
Topographically deformed roof shape, and soffit Shape build the "Ground-Ground" concept. Other landscape elements are deforming force-lines and shell	Routing as flow across that is channeled. Rather indifferent to views - arbitrary but as a result to size and position good views. Inner ravines, break-lines, opening as a vis-a-vis to the old city. Key spatial principle of complex over-layering.	Main landscape image of stratified folded layers, complex carved rock. Landscape imagery elements are: rocky facades, folds, resemblance to excavation, terraced interiors, undulating ceilings, fractured glass facade. Key metaphor is none built, but geological form process	Programming strategy is filling volumes opportunistically "don't care where the pick-nick is" (Eisenman A1.3.1.). Reenacting a new city, with overlaid copies of the old one. Landscape of artificial excavations make the urban form seem derived from a hill
Landscape attitudes (Marot 1999)			
Anamnesis	Process	Sequencing	Context
Artificial Excavation. Invention of archaeological site as returned process of anamnesis. A constructed history as self-inflicted dramaturgy of making architecture. Interwoven with process in Eisenman architecture.	Process is activated and fully controlled by the architecture. Process materialised and displayed in the architecture. Superpositions, jumping across scales and reconfiguration of meaningful urban structures of ancient Santiago. But this intellectual process of "coding" is completely different form a ecological landscape process	Views less relevant, but design of paths along structure of five pilgrimage routes is important. Not fluently interwoven like at Jussieu and Learning Centre but added as yet another layer. Similar experience than old town through transfer of scale and a detail like arcades.	Complete formal control of the context. Abstracted integration. Most layers of composition derived from context. Citation of remote old city disconnects form actual context. Creation of a new independent context.

(Eisenman A1.3.1) provides a constructed history materialised as a monumental form on the hilltop. The anamnesis is introduced in the self-inflicted dramaturgy of architectural form-finding like the 'deus ex machina'.

Similar is the relation to process that is activated and fully controlled by the architecture. The understanding of the design process as a consciously developed part of a building, even materialised and displayed in the architecture itself, is a recurring central theme in Eisenman's architecture. Eisenman's early houses are based on design processes with rules of formal transformation like House IV (Falls Village, Connecticut 1971 in Davidson 2006 p.44) - here the process results in manipulation of architectural spaces and its elements like columns, walls and ceilings, that we can also find in City of Culture's spatial form. In "Architecture as Second Language" he (Eisenman 1988 in Eisenman 2004 p.238) would describe "design process" for example as an "open ended series of superpositions" for the Romeo and Juliet project (Verona 1985 in Davidson 2006 p.118). In this design he introduces jumping across several scales and the process intervenes into the configuration of urban elements in a transposition of Shakespeare's dramatical text set in Verona. A similar process of reconfiguration I describe in City of Culture's ground form. Here the mythical meanings and the urban structures of ancient Santiago de Compostela are superimposed onto the new site. The process combines both the spatial and ground form. Eisenman's design process is displayed very clearly, almost eclectically detailed at the City of Culture.

Process however is understood in a completely different manner from an ecologist, or a landscape architect like Ian McHarg (1969) would understand it. For Eisenman process is not a physical environmental reality to which he would relate his design but rather an intellectual and philosophical process of thought. In "Coded Rewritings: The Process of Santiago" Peter Eisenman (2005 p.27-35) describes how City of Culture adds a new dimension to this process he calls "coding":

“Coding is a process that, in its reorganizing or rewriting of the original, erases the traces of process usually found in an index. (...) the idea of rewriting in the context of architecture and in the project for Santiago in particular signals an important shift in our work, from an idea of index to one of code.” (Eisenman 2005 p. 33)

This “coding” process is intentionally complex, and more complex than earlier designs like the above mentioned Verona project, that could be qualified as “index”. Even with increased complexity Eisenman is still consciously in control of process. It becomes part of his formal categories. A multitude of theoretical reasoning produces intentional dissonances. The dominance of process goes as far as overruling formal criteria for metaphorical or programmatic rules with the determination of process that controls every aspect of the architecture as a formal synthesis.

There is almost no distinction between the two categories of anamnesis and process in Eisenman’s design; they are interwoven. The architectural form is a frozen and complex amalgam of these two, and even more of Marot’s attitudes get integrated in this design.

The spatial sequencing at first sight seems not to be a category of thought in Eisenman’s design process. As he states clearly (A1.3.1.), he is not designing views, and is not even interested in a specific view of the own building. However the spatial sequencing and design of routes is clearly present in City of Culture. Mainly City of Culture is structured with the five pilgrimage routes cutting east-west through the complex. They were directly imported from the those dominant routes of the medieval street pattern of Santiago de Compostela (as described in the Spatial Form analysis chapter 6.5.2). As opposed to Jussieu and Learning Centre (chapters 4,5), at City of Culture the spatial sequencing does not fluidly interweave with the design process, but rather is part of the layering process. An obvious and conscious collision is created between the flow - transposed across place and time from the pilgrims flow formative in the medieval city - and the juxtaposition of buildings on the site. Not surprisingly, the street patterns transferred from the old city - even with the arcades, strange to Eisenman’s architecture before - lead to a comparable urban experience of the street space as in the centre.

Any landscape attitude at City of Culture claims autonomy of the architectural composition; this becomes most apparent in the treatment of context. The architectural formal control over context is extreme in this case. Its integration plays into a complete abstraction. Many, if not all, of the formal layers of Eisenman’s architectural composition are in one way or another derived from the context: a ground form from topography, deformation with force lines and a shell, a spatial form from routes and the ground form itself, a metaphorical and programmatic form dominated by composition principles. The City of Culture is extreme in the creation of its own context. Even though replicating the old, the created context is disconnected from social and political reality, especially after its rapid changes in the economic downfall. The mixed (and sometimes harshly critical) reception of this project often focuses on this point. With this creation of its own context City of Culture also disconnects itself from the actual existing context. Formally integrating a great many elements of the history and formulating them as a vision, City of Culture greatly displays the government vision for the future of Galicia.

Manuel Fraga Iribane wrote in his preface to the first monograph: “The City of Culture will be a symbol of the continuity of our history, set into the landscape and extending over the top of Monte de las Monte Gaiás ... “. (Fraga in Eisenman 2005, p. 7). The creation of its own context is to be seen within a political vision of a very specific time that found an abrupt end with the paralyzing crisis of 2008. It may not be obvious today, after the credit-crunch, how this vision of creating an independent context might be completed.

If the City of Culture appears today isolated, even hermetic, that may well be due to the fact that it is the creation of its very own world, complete unto itself.

Time will tell if this is a dinosaur skeleton of a soon to be extinct species of giant projects, or a predecessor of a new scale and type of project we may have yet to understand.

6.8 Landscape Design Strategies at Santiago

“Look at the light between the trees.” (Eisenman in Interview A1.3.1)

The case of City of Culture does not easily fit into my methodological framework. It is in many ways a sturdy part of the study of the main question:

In what way do landscape strategies change how we understand and create architecture? (Q 1.1.1.)

While the first sight is very apt to interpretation as a landscape, the amalgam of artificial rock was harder, different to dissect, and unexpectedly dense.

The tension between the obvious landscape analogy and the claimed autonomy of architecture (from landscape architecture) touches the core of this thesis. More than in the two other cases, the question of how the architect applied landscape strategies was to be answered here by my own analysis rather than by simple questioning of the author or their documents. None of the authors by the way directly answered my main question, and so I had to investigate each throughout the whole spectre of my methodological framework. To what end in the case of City of Culture? My conclusive dissection follows along the four subsidiary research questions:

How does Eisenman Architects apply landscape strategies in architecture? What are their motives and goals to do so and what do they accomplish? (Q. 1.1.3.)

While Eisenman pointed to this denial of landscape in presentations (i.e. at The Berlage Lecture Eisenman 2010) or in my Interview (A 1.3.1) - the case of City of Culture itself, its popular reception and interpretation by architects seemed on the opposite side to confirm the landscape character of City of Culture. It was fruitful for the thesis in regard to this question that I encounter a position of denial in this third case.

I should state, and demonstrate with the case of City of Culture, that an urban design should not simply be landscaped. The formal composition of material elements in structures, as defined by generations of theorists, and as formulated by a long history of architecture, should not be denied in an imposture of landscape metaphors across the city.

Which landscape elements are applied to architecture at City of Culture, what concepts of landscape are applied in architecture, and how is their formal composition developed? (Q. 1.1.4.)

Any of the four layers of landscape form displayed in City of Culture (sect. 6.5.) cannot be separated from the interwoven, complex amalgam of its composition. The layers are interwoven, ground form and spatial form switch against each other, and the image form is only determined by these two, not referring to landscape as an interpreted category. Nor does the program influence the form, as the form itself is an autonomous creation of Eisenman's architecture. From this consciously formal design process, attitudes are rigorously connected to that same process of form finding: anamnesis and process inflict a form, and spatial sequencing and context are determined again by the dominance of form finding.

The landscape form at City of Culture is mainly related to the first appearance - an artificial topography - of excavations carved in natural stone on the manipulated top of a Galician hill. The ground form and pictorial appearance of City of Culture are that of an amalgam between a city and a mountain.

How does Eisenman himself understand the idea of landscape and its design strategies for application in architecture? (Q. 1.1.5.)

One could think that the denial of landscape and claim for autonomy of architecture by the architect Eisenman is a kind of cocetterie, if reading it or seeing it in academic literature. But as I found at my interview, the 'elder architect' quite simply clarified his position in regard to this thesis research.

Eisenman takes time to explain vividly and in detail his position, and insisted to me that he was not interested in landscape.

"I tried to explain to you why I am not interested in landscape. ... To be interested in landscape, you have to be interested in sensation - how things are, or intuition - that is how the garden might grow, or feeling - how people will love it. ... a thinking type goes into the forest and asks "How many trees are there?" A feeling type goes into the forest and says "How wonderful the trees are!" The sensation type goes in and asks "What kind of trees are these?" And the intuitive type goes in and says "Look at the light between the trees."

"I'm interested in the light between the trees. Not what kind of tree, how many trees, not the lovely bark on the tree. I'm interested in the light." (Eisenman in Interview A1.3.1)

Still I found landscape elements in City of Culture that could be explained as a landscape attitude (in previous section 6.7 and 6.5.). The topographical form of roofs and ceilings, manipulation of the ground with force lines, carving of routes, excavation and use of natural rocks are material manifestations (sect. 6.5.) - many wonderful kinds of trees. The material appearance of architecture seems less important to Eisenman (sect. 6.4.). What really is a guiding landscape element at City of Culture is not these materials, neither collaged (as in Jussieu ch. 4) nor intuitively composed (as in Learning Centre ch. 5). Eisenman's architectural composition, the essence of the work, provides a way in which things are arranged in a structured and complex process. Eisenman is into the "light" (Eisenman in Interview op. cit.), meaning he is interested in the juxtaposition of all these elements. More dominant than the landscape elements is the landscape-like layering, the palimpsest of writings, the self inflicted anamnesis of "artificial excavation"(Eisenman in Interview op. cit.). If, like

in Piranesi's fantasies (as Rome in Eisenman 2012¹²⁰), this world of the City of Culture is completely artificial it may well substantially not be a landscape. It may not consist of the trees in numbers, character and sorts. But the links between the layers, the ties in the construction, the interferences in the palimpsest are there.

What kind of landscape strategies are successfully applied to the design of the Santiago case of architecture? (Q. 1.1.6.)

I think dealing with time is key to Eisenman's theory most of all, and this is where I found a hinge that breaks open the defensive system of his autonomous architecture: City of Culture was looking for perfection in disregard of its own limits of time.

I could maybe better understand its connection to the Galician landscape not in renderings of unfinished buildings but when visiting the existing site. I propose to accept the decay - embracing complexity with enjoyment. The 'artificial excavation' of Eisenman is a highly cultivated approach. Eisenman imposes complexity too, but vis-à-vis the current state of the site, City of Culture as consequence of a seemingly open process is determinist. At City of Culture I found decay, but that is not wanted and may only be endured with either reluctance or equanimity by the architect.

Time seems to be running out to complete this project. This is why my specific analysis (sect. 6.6.) suggests to complete City of Culture in an alternative way. My speculative counter proposal of a temporary Galician Forest Garden instead of the unfinished opera is about a fundamentally different way of the relationship to time of the architectural project. If we think that Eisenman masters (folds, disjuncts or otherwise quasi-philosophically manipulates) time in architecture he needs all instruments for big gestures. My proposed little urban garden - small in it's ambitions, irrelevant in architectural history, but persistent - could establish a connection with real people and real culture. A side show - off the large planned gesture. One stone at a time with no financial resources it may remain an urban fantasy for many years. Meanwhile the large project that bleeds the funds of the province of Galicia has lost support and awaits completion.

Santiago de Compostela, with its centuries of enduring Christianity in an enemy state seems to me a good place to ask: How much time is needed to found a city? My different time-perspective on the project could let City of Culture grow one day into a fusion of culture and nature that architecture could not have imagined, had it not adhered - first in vain and later patiently - to be a landscape.

Eisenman engaged more in the process of architecture itself than in the real conditions of the site. He pursued the becoming of form, in an outstandingly complex way. Eisenman cherishes complexity - but with a drive to control it.

What is needed in architecture most, as a landscape approach, is a new view onto time. Architects need to learn to design not only the product but the process in the time it takes for their designs to become complete living environments. At City of Culture, Eisenman touches upon this time dimension - but an incomplete project of doubtful success also leaves fundamental questions open. City of Culture shows how in architecture, the mastery of the time of becoming is a landscape strategy still to be explored.

¹²⁰ Peter Eisenman built a model of Piranesi's Rome for Exhibition at Venice Biennale of Architecture 2012

