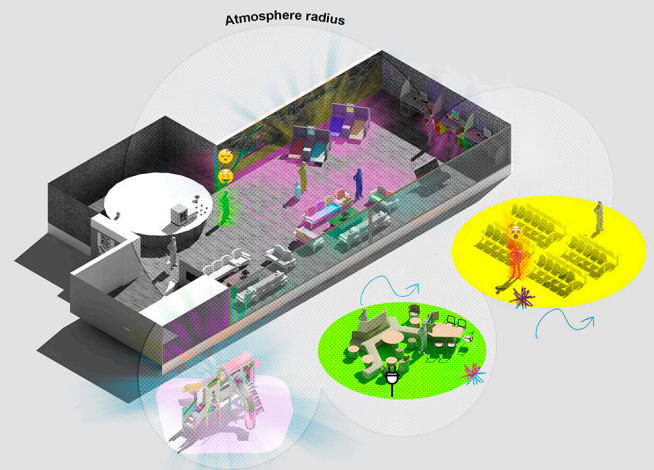
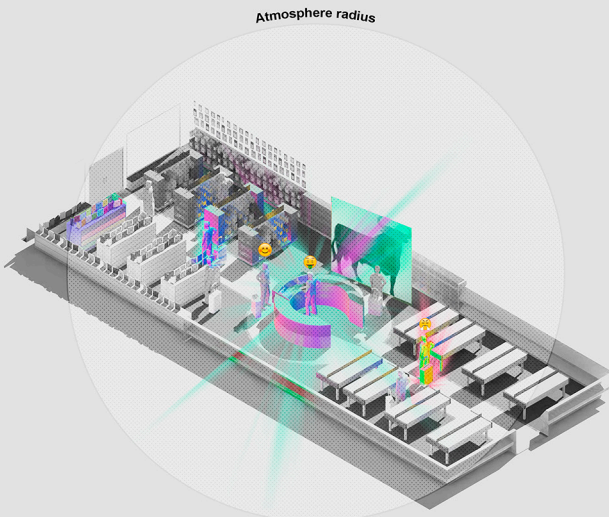
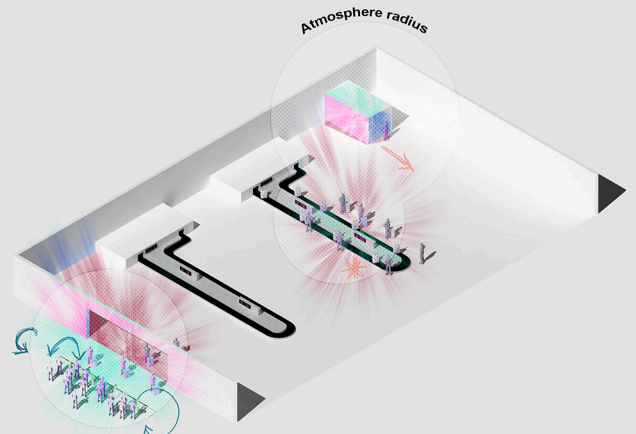
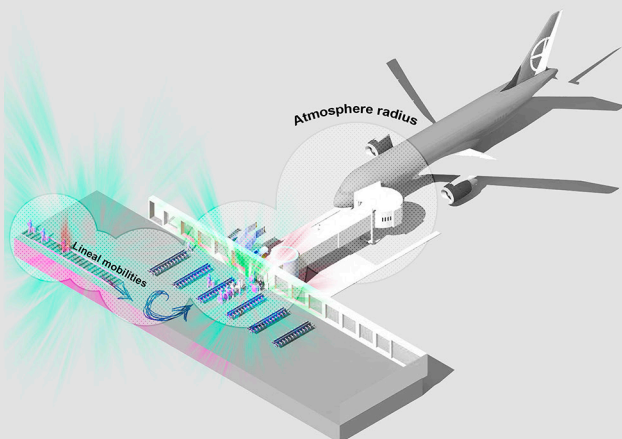


# Bestiary of airport geographies

## An inventory of situations.



Master Thesis in Mobilities and Urban Studies  
 by Jorge Alonso Albendea  
 Aalborg University  
 May 2018  
 MSc04 MOB  
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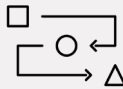
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## **Abstract**

The present project is a master thesis of the Master in mobilities and urban design at Aalborg University. It represents an affective approach to the airport as a psychogeographical situation (McDonough, 2002) which believes that the airport is not only a blank space but a juxtaposition of atmospheres (Adey, 2008b) described by subjects, objects, and contexts. The methodology used in this thesis consists of a mixture of qualitative and quantitative methods from the pragmatic point of view. Surveys, visual ethnography, mappings, observations, netnography (twitter analysis and analysis of web pages and forums), and architectural analysis have been made. Some of these methods have been applied in the case study of this project which is the Adolfo Suárez Madrid-Barajas Airport (MAD airport). The literature review is structured in three parts, 1) Place, design, and passenger. 2) Affective atmospheres and 3) Situations in airports. Following this, the analysis and results show the concluding marks as airport situation illustrations that talks about the different atmospheres happening from the check-in area to the boarding gate. Moreover, a concluding chapter and recommendations about future research is shown.

## Motivation

To start with this thesis, we have to move for a moment to 2016, specifically to December 8th, when Shelley Smith taught a class in the subject “Technology and Infrastructures of Mobilities” in the first semester of the Master of Mobilities and Urban Design in Aalborg University.

*“To mention airports is to talk about time, information, and how are we becoming more mobile. However, it is also related to stories of human scale versus giant machines and historically, it is also talking about a ‘new thinking’ related to the future of design.” (Sheller, M. 2016. Unpublished)*

The class topic was “Airport Stories” and since that moment, the airport imaginary start to create big interest in me because the lesson opened my mind in order to think airport more than just a building that process people with millions of laws and policies. Airports have stories and this thesis is just a storyteller.

**1.**

**THINKING**

**ABOUT**

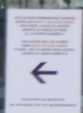
**AEROMOBILITIES**



Welcome to  
Bienvenido a

T4

Departures  
Salidas



Bienvenido

Bienvenido



## Thinking About Aeromobilities

### Aero + Mobilities

Through this section, I want to show how the 'mobilities' perspective or the 'mobilities turn' can enrich the understanding of the airports imaginary, moreover, how mobilities include and influence, without a doubt, the aeromobility field in its studies. Throughout this thesis, it will explain further the main concepts of this introduction.

At this moment, there are more than 1,2 million of people flying over our heads in 9.728 flights on average. (FlightAware, 2018) There is no surprise in saying that in the last two decades the airport usage and sources have been increased exponentially in almost every part of the world. Therefore, there has been also an advent in the studies field, with an increasing number of scholars that focus on aeromobilities and its key agents such as the airport, the regulations, the policies, the passengers, the airports, and so on. This is happening due to the fact that aeromobilities contribute in more than \$2,5 trillion in economic activity, or what is the same, the economical 8% of the world domestic products.

The same way that mobility is intrinsically plural *"Mobility is never singular but always plural. It is never one but necessarily many. In other words, mobility is really about being mobile-with."* (Adey, 2010, p. 18) Aeromobility in the singular cannot exist in a socialized society.

To explain this, let me show you two different examples. A car driver alone in his own car is not a singular mobility, the driver and the car are becoming a hybrid which negotiates with the other hybrids in the roads. Furthermore, signage, material affordances, technologies and everything around the driver, is becoming a plural negotiation of actors in a mobilities scene.

Another example regarding the passenger experience would be the way that an adult controls a stroller that carries a baby. The hybrid here is a relation between the baby performance, the stroller as a technical infrastructure, the adult as the driver and a conscience of groundedness. Here, the similarity with the aeromobilities is that the subject which uses the transport (Baby or flight passenger) is not controlling the situation. *"Some people are dependent on other people in order to move"* (Adey, 2010, p. 23)

However, aeromobilities is different from the rest mobilities due to the highest speed and the altitude. These two concepts have been the image of the early days and have shaped the society turning it into a more globalized concept. As Urry states *"Geographical proximity in most countries no longer shapes social relationships"* (Urry, 2009, p. 26) Nowadays, there is no need to live near to



someone to have a social relationship with that person, the shrink of the world due to the speed have rebuilt the socialization from head to toe. The need of altitude implicates the criticised concept in behavior by Tim Ingold which called 'groundlessness' (Ingold, 2004).

Nevertheless, aeromobilities belongs to the mobilities field because they share so many key factors. Neither mobilities nor aeromobilities can fit in a box. It is not possible to think about mobilities if you are thinking about moving from A to B. Mobilities allows different forms of coordination between people and embrace a different kind of disciplines from transport research to social sciences and design. The statement that automobility (Public and private transport) only shape the organization and socialization on the road is just scratching the surface. Automobility, first, is a male and patriarchy seed which was created and postulated to move men to work whereas the women were relegated in homes, thus, it includes familiar, gender, cultural and economic issues. Second, it opens a way of thinking in the development of technology, into a new way of modernity thinking and aesthetics. Social studies and art combined in one artifact. The car.

The same procedure happens with aeromobilities, the early years in airports were seen as theatres of the new millennium. Historically, airports have been considered object of inspiration in diverse disciplines, from Fashion and the "Space age" collection of Courrèges in the sixties to the design itself of the airport. Airport and its world were the images of the future, the '*liquid modernity*' (Bauman, 2000) was represented by an infrastructure. The airport as the '*situationist project*' (Gray, 1998), which reflects the desire of a new world in just one building.

Even in the designing field of aeromobilities, there are rules and standards to follow. The airports are classified for different purposes regarding approach speed, wingspan, tail height, the characteristics of the physical facilities and runways, the capacity and the main character (Local or global). For these design rules, three phases plans are implemented, the Airport Site Selection, the Master Plan, and the Airport project.

Nowadays is commonly known that the airport is seen as a big mechanism or machine that absorbs people in order to automatize activities and procedures and create data and information from that. However, this thesis stated that airports and aeromobilities have changed in a radical way the socialization and the patterns behavior. Mobilities sew behaviors influences by incalculable factors and generate complex and almost indiscernible gossamers that are seen as a by-product of the society and not linked to mobilities studies. In words of Urry and Mimi Sheller, "*The mobilities paradigm indeed emphasizes that all places are tied into at least thin networks of connections that stretch beyond each such place and mean that nowhere can be an 'island'*" (Sheller and Urry, 2006, p. 209)

Talking about mobilities and aeromobilities is talking about nomadism and sedentarism, mobilities need immobilities or apparently immobilities. Several scholars argued that mobilities need the immobility of the infrastructures to succeed, however, the 'mobilities turn' believes in an amalgam of people, mobilities, and places/structures. Materialities forms hybrids with mobilities that



produce situations. Therefore, cultural, economic, social, gender, age, etc. factors are modifiers of these hybrids, thus, they are modifiers of the situations.

*“I must move. My body must be mobile and things must be mobile around me, for me. In this sense, although we may be always on the move, we are also always differently mobile.”* (Adey, 2010, p. 3)

In this quote, Peter Adey refers to the differences between everyone and how this can be seen in the different patterns of mobilities. Hence, is it logical to use such a huge quantity of statistic data and information in order to develop, manage and construct aeromobilities situations? If Peter is right, there are no categorizations in aeromobilities but a possibility to understand the qualitative aspects of the discipline.

The qualitative methodology opens a sensual relation between the body and the objects, a sensual geography because it is not inside the bodies mover or the objects but it floats in between *“sensuous geographies are not only located within individual bodies, but extend to familial spaces, neighbourhoods, regions, national cultures, and leisure spaces with particular kinaesthetic dispositions”* (Sheller and Urry, 2006, p. 216)

Therefore, airport is not a dead machine but a living structure that enables people to connect together, it is a place in a meaningful way, it has *‘space narratives’* (Augé, 2006), where families reunite and say goodbye to their beloved ones, where workers passed day after day, where tourists run their corridors and try to find the boarding gate. Definitively, it is a place where atmospheres, perturbances, codes, passengers, material affordances, and mobilities come together in harmony, or maybe not.

### The Early Days

In January 1909, the “futurist manifest” by Filippo Marinetti was published. This would be the starting point of the futurism in the vanguards. The publication and art of Marinetti is not a coincidence. The first decade of the XX century was characterized by velocity, machines and modernity development. The first practical fixed-wing aircraft and flight by the Wright brothers and the evolution of the Futurism ended up into a branch of a new art called “Aeropittura” or Aeropainting.

The painting in the next page (Image 1) is called “Reaching the sun”. It makes us think about the feeling in those days. A moment in movement can be frozen in one image. In the design, the strengths of Eero were the sculptural dynamism and the recreation of movement flows. He did not care about the use of signage or how is going to be performed by the passengers, the paramount factor was to make real the concept that the society had in mind regarding aerial spaces. The airport opened in 1962 and closed in 2001 regarding his low capacity to manage big flows of people. In 2015, the Wall Street Journal mentioned that the airport



## THINKING ABOUT AEROMOBILITIES

would be reconstructed into a new hotel for passengers and it will be open in 2018 with 505 rooms, 1000m<sup>2</sup> of balcony and 4000m<sup>2</sup> of meetings space.

It was in the 70s where the airport and aeromobility started to be more closed to the concept of globalization than the futuristic conception of mobilities (which right now can be considered the space-mobilities). Aeromobility has been understood by society as another mode of transport, but with the characteristic that can offer more distance in less time, increasing the time-space compression and the shrink of the world. The airports are classified now by its networks instead of its design: hub-and-spoke or point-to-point network, local airport or hub.



Image 1. Tullio Crali (Italy 1910-2000) Raggiungendo il sole - Reaching the Sun  
Source: Pinterest



### Research Question

As I have mentioned before, in the last two decades, there has been an advent in the field of the aeromobilities owing to several facts: First, it represents the '*supermodernity era*' (Augé, 2006) or the '*situationist project*' (Gray, 1990). Second, it is a relatively novel field of study.

The researchers have mainly focused management, political and economic resources and the relation of aerial networks (Burghouwt, 2014). Notwithstanding, several studies have researched and discovered a gap and a lack of knowledge regarding aeromobilities and passenger's behavior, or in other words the affective experiences in airports. (Adey, 2008a; Adey, 2008b; Budd, 2011; Kalakou et al, 2015)

The thesis hence proposes to study this gap regarding affective experiences (Adey et al, 2007) inside of an airport. Has the airport 'situations' related to the concept made by the Situationist Internationale? Is an airport layout a psychogeographical map, influenced by sensuous triggers, perturbances, and atmospheres? Has the "theory of affect" (Anderson, 2006) something related to aeromobilities? Are the airport's spaces, non-places, places, blank spaces or something in between those concepts? (Augé, 2006) Moreover, papers that investigated affective factors are never describing those situations in a graphic way but theoretically.

Therefore, the project will have two objectives: First, to investigate, analyze and reflect about the theoretical aforementioned gap in between the mobilities theory and the design and how this cooperation is crucial in the present. Second, to elaborate a 'bestiary' in order to illustrate the several encounters between physical design and passenger behavior.

Besides of all of these facts and questions, the main and core question to ask in this thesis will be.

**How can we describe airport spaces from an affective point of view due to its influence on passenger's behavior?**



## Structure

The thesis consists of seven chapters, the first chapter which is right next to this section that put a starting point and shows the relationship between mobilities, aeromobilities and its early days. Moreover, the research question will be presented here. The second chapter will place the literature review and the theoretical framework stating the key concepts that will help later in the analysis and conclusion. The third chapter will present the theory of science concerning the thesis project and the chosen methodology. Chapter four will introduce the analysis and the case study which is the Airport Barajas in Madrid. Here, it will unfold the empirical data and the main analysis following the methodology explained in chapter three. Chapter five will conclude with the discussion of the project with the bestiary, the concluding marks and the future research.

Following Urry in his five strategies regarding aeromobilities (Urry, 2009), the focus of this thesis will be transdisciplinary, with multiple empirical fields and with a connection with the mobilities world. Now we will move to the second chapter which is the literature review.



**Boarding gates**  
**Puertas de embarque**

and boarding card  
**Sólo con equipaje de mano**  
**y tarjeta de embarque**



**2.**

**LITERATURE**

**REVIEW**



## Literature Review

This theoretical framework and chapter are divided into three big sections, 1) Place, design, and passenger. 2) Affective atmospheres and 3) Situations in airports. In the first section, I will set a framework regarding airports key points: First, how the '*supermodernity era*' (Augé, 2006), the world of the instantaneity have transformed the message (Kholeif, 2014; McLuhan, 1967); Second, the way that they are pre-designed in order to create a universality (Horonjeff, 2010); and third, how can we classify the different passengers looking at their behaviours, from the well-known 'passenger as a code' or PAX (Adey, 2008a; Fuller, 2009), to the business men (Lassen, 2009), or the '*planeur*' (Adey, 2010b). The next section will mention the state-of-the-art regarding the '*theory of affect*' (Anderson, 2006), the calculative and affective architectures and spaces (Adey, 2008a; Adey, 2008b; Budd, 2011; i.a.) the concept of atmosphere (Edensor and Sumartojo, 2015; Urry et al., 2016; Ash, 2013) and the psychogeography point of view of the Situationist Internationale (Gray, 2008; McDonough, 2002). The last section of the theoretical body will enumerate and explain the different situations in airports that are related to affective experiences and atmospheres. (Augé, 2006; Small and Harris, 2014; Adey, 2008b; Lu, 2014, Small, 2014; i.a.)

### Place, design, and passenger.

This section is structured regarding airport as a supermodernity example and a discussion of place, space and nonplace will take place, afterward, a brief explanation of the different steps where designing airports plans will take place. Finally, a categorization of airports passengers is made.

#### Airport as the *supermodernity* building

*"Supermodernity (which stems simultaneously from the three figures of excess: an overabundance of events, spatial overabundance and the individualization of references) naturally finds its full expression in nonplaces."* (Augé, 2006, p. 109)

Marc Augé is a French anthropologist who hypothesized about an existence of nonanthropological places which he called the non-place. Non-place is the spatial configuration that lacks meaning, identity or history and they are key concepts in order to understand the supermodernity era.

Supermodernity can be understood as the era of *liquid modernity* (Bauman, 2000) when the individualization, the instantaneity of communication and information, the ephemeral, and the overabundance of space are the characteristical features.



Therefore, the non-place is the place that we encounter there.

Zygmunt Bauman writes about spaces in his 'liquid modernity'. He discusses the mental maps and the places that compound them. To him, mental maps have places and empty spaces. The empty space is in the "eye of the beholder and in the legs or the car-wheels of the city-goer" (Bauman, 2000, p.104) In other words, when someone does a trip, they cannot remember the whole series of sequences as a movie, they recall the memorable places or situations because they were affected in some way that they can link the memory with their emotions.

Tim Creswell defines the place as a 'meaningful location' where "Location, Locale, and Sense of place" (Creswell, 2004, p.7) are the basic components. This means that the material setting of the location is important. Moreover, they create relationships with people generating a meaning. The 'non-place' concept developed by Augé refers to the opposite polarity, being the airports or motorways his examples. In his book "Non-Places" he referenced Merleau-Ponty who stated that what transform places in spaces and the other way round, is the narratives. "*Space narratives*", *the place that is constituted by the writing of the narrative, by a system of signs*. (Augé, 2006, p. 84) Merleau makes the difference between space and place referring to the subject experience of seeing or doing respectively. To Augé, the people that enters in non-places, they become just in what he or she does as a passenger, as a participant of the tourism field, as a part of the spectacle.

Guy Debord in 1967 wrote "The society of the spectacle" stating that the modern society had lost the social life and it was substituted by its representation. The consumer society has eaten the social society and consequently, society is not anymore about living but about having. Debord draws on the indiscriminate mass media and the capacity they have to create images, a society full of 'advertising spaces' (Augé, 2006).

There is a similarity in between non-place concept of Marc Augé and the concept "JunkSpace" defined by the architect Rem Koolhaas. To Rem, Junkspace is the final outcome of the modern society, and its defined by the chaotic and individualistic flows, "*Junkspace is the spiderweb without the spider*" (Koolhaas, 2002, p. 179) It splits the society instead of unifying. For Augé and Koolhaas, these spaces include a false anonymity for the 'customers' who cross them. To explain that let's put an example. When someone wants to take a flight to somewhere, the first thing they have to do is to buy the ticket, and hence, to write their identity information. Afterward, when they go to the airport, nobody asks for his credentials, they just check the given information with the identity documentation. Airports breathe an atmosphere of anonymity but actually, nobody has it there.

Airports, therefore are seen as these definitions of non-place and junkspace. However, the designer, and scholar of contemporary performance and dance, and performance studies Justine Shih Pearson stated in his book "Choreographing the airport" in 2018 that non-place and place may overlap, passenger moves from space to place in an unstable way. She mentioned this as the "Thirdplace" (Pearson, 2018)



*“Thirdspace is where the very meaning of culture—always unfixed and continually changing—is located.”* (Pearson, 2018, p.46)

Airports are a place without a place and a non-place with a place, they are both and none, they have spaces, places, and non-places inside of itself. Like a matryoshka doll, an airport is more complex than it may appear at first sight. Tuan in 1974 wrote “space and place: humanistic perspective: and he differentiated the space to the place in the way they take place in time. Whereas space is defined by its movements, the place is a break in time, a stillness that enables the meaning and turn space into a place.

Hence airports are a series of multiple synchronized systems implanted in spatial configurations like a complex of gears or as a ‘*large technical system*’ (Graham and Marvin, 2001) which functions rhythmically precise. The rhythm of these place is so characterized that in words of Pearson: “*airport confront habitual rhythms of eating and sleeping.*” (Pearson, 2018, p.63). The synchronicity sense was called also by Tim Edensor in 2010 when he stated that rhythms in temporal and spatial location create pathways to cultural patterns. Furthermore, rhythms are one of the characteristics that make us aware of the size of mobilities. “*It is often when rhythms break down that we become aware of the scale and scope of these mobilities*” (Adey, 2010a, p. 29)

This conception of the reality brings to the table Lucretius’ atomic theory which stated that the world is seen as a mechanistic and atomized way, thus, is in constant mobilization, there is no such thing called immobilities. On the same side, John Urry draws on Henri Lefebvre statement of the relationship between immobilities and mobilities and he called it ‘moorings’, which is a kind of immobility or permanency that enables new mobilities, e.g. the mooring of the roads enables the automobiles. The physical airport, the runways, and the surroundings are the moorings of the aeromobilities.

Peter Adey corroborates this affirmation and supports the existence of immobilities in physical environments referring to the etymology of the word ‘building’: *‘It means both the action of the verb build and “that which is built.” Therefore, while buildings might appear permanent and immobile, they are ‘always building and rebuilding.* (Adey, 2010a, p. 27)

### **Design and categorizations.**

We saw that airports are an overlapped complex systems and markers of globalization, these structures need thus, a flexible design to be able to adapt those continuous changes. Magalhães, Reis, and Macário, suggest a flexible approach focusing on a gradual expansion in order to deal with peak periods. An airport can’t be designed from once striking, the design phase has its own times, and it is structured as follow:

The site selection project is the first step in the design process, here the identification



of potential sites that meets the needs of the airport evaluation by professional, community and users is the first thing to do, afterward an identification and a screening of the selected sites should be conducted finishing in the selection process which will decide the most recommended site.

Following the site selection project, it is the master plan which *“are prepared to support expansion and modernization of existing airports and guide the development of new airports.”* (Horonjeff, 2010, p.139) Finally, the airport project phase is decided. Here, the specific details, objectives, and drawbacks of the project are drawn. This phase includes the architectural drawings, the environmental effects, the financial planning, and the time schedule regarding its construction. Horonjeff established two tables to show the classification of airports depending on their category approach speed and the dimensions of tail weight and wingspan. Therefore, airports dimensions are designed following aircraft rules, then, airports that need big aircraft will need indeed a wider separation between runways or boarding gates, hence, bigger empty spaces would be occupied with non-aeronautical services. The space of airports are also occupied with runways which are one of the most important things, they are designed regarding the orientation, weather conditions, wind, topography, etc. The basic configurations in runways are single runways with 50 to 100 operations per hour, parallel runways separated from 700ft to 4300ft and with 60 to 200 operations hour; intersecting runways designed to be adaptable to strong winds; open-V runways with 60/80 operations per hour.

Airports are categorized also regarding its aerial services: Origin/destination airports and Hub airports. O&D airports are used as the gateway of the local place with a point-to-point network and usually one peak of flows at day. The hub airports or mega-hubs which use hub-and-spoke networks and they are used as an advertising building and the first image and claim of their country.

### Passengers

Agrupation of technical systems, activities, and situations generate different identities, air travel workers are usually considered as a cosmopolitan identity (Cidell, 2016);

*“the airport not only transforms a body on the ground into a body in the air, but it also involves the incorporeal transformation of the traveling body into a series of processing categories, like a citizen, passenger, baggage allowance, threat or innocent”* (t8, p.86)

To Pearson, being passengers involves a transformation in different categories. There is no one type of passenger but several, with the capacity to evolve from one type to another. Now, I will discuss different passenger's categorization from the literature framework regarding work-leisure, consumerism, spectacularity, and efficiency.



## LITERATURE REVIEW

The typical distinction in airport passenger is the dichotomy between the touristic person and the business being. Inside the box of tourism, we can find other categorizations. In one of the extremes, we have the migrator (Unger, Uriely, and Fuchs, 2016) passenger who usually is living outside his native country but he is still a 'tourist'. In other words, these passengers don't have a strong feeling of identity with the country they are living. They use the airport to return to their country. In the opposite side, there is the typical tourist who crosses the airport carrying a camera ready to enjoy the 'outside' and forget about the long waiting times. In the middle area of these extremes, it exists the VFR (friends and relative) type of traveler, his/her travel "is conceived as a nexus between tourism and migration and as an experience that blurs the dichotomy of "home and away" (Unger, Uriely and Fuchs, 2016, p. 143)

The other part of the dichotomy is for business issues. Uriely in 2001 differs in 4 groups of workers: "traveling professional workers" the most skilled and rewarded, they are used to work during travels and the airport places are their routine; "migrant tourism workers" This group travels orienting themselves for work, they are usually individual beings and they considered themselves as a permanent tourist; "non-institutionalized working-tourists": this group is a worker in different labours than the professional workers, they don't travel to work but work with touristic purposes. Therefore they are not going to use the airport as a place to work but as a medium for that.; Finally the "working-holiday tourists.", the most closed to the tourists, they travel for short periods of time, hence, they don't get used to it, so, they see the travels as a recreational part of their job.

One important thing to take into account regarding work-related-passengers is the "*Mobility competence*" (Unger, Uriely and Fuchs, 2016). This concept refers to the skilled and efficient airport performance. Therefore, "*their "know how" of where to go and what to do at the airport involves the attention given to small detail*" (Unger, Uriely, and Fuchs, 2016, p. 148)

Besides work-leisure dichotomy, one of the most commented 'types' is the *flâneur*, (Adey, 2010a) the person who randomly walks without taking care of what is in the surroundings. The *flâneur* is a modern nomad that finds unexpected situations. The *flâneur* represents the serendipity state of mind of the passenger.

One of the opposites of the *flâneur* would be the consumer passenger, this type of traveler instead of walking randomly, they experience the airport from a commercial point of view. They kill their time buying stuff inside the airport, the non-aeronautical revenues are the most important for them.

Peter Adey in 2008 explained how the airport was not only a place to travel or to claim the modernity but a place for spectacularity, he exemplifies this with the balconies of the airport where people went there to enjoy the atmosphere of the place and to socialize, learn, and even stargazing (Adey, 2008b). Therefore, we have here the 'voyeur' passenger. The passenger transforms into a spectator and the airport into a theater. "*The early airfields were themselves theatrons of the early twentieth century*" (Pearson, 2018, p.85)



Finally, we have the PAX passenger, this is not a categorization of the traveler depending on themselves but their statistics. PAX is “a unit regarded as being of a basic standard, usually minuscule in size, somewhat lacking in both intelligence and general ability to find his way about” (Adey, 2010b, p. 121) In other words, PAX is the transcription of the passenger in an understandable language. This ‘passenger’ is used to create models of predictions in order to improve design and management in airports.

After talking about airports design and its passengers, it turns to move to what the passengers feel, to the affective zone.

### **Affective Atmospheres**

Here, a framework on affective atmospheres is provided. First, the connections with sociology, philosophy, and design regarding the affective concept. Following this section, a broad literature review depending on atmospheres is revised and ending the section with an approach to the Situationist Internationale and the psychogeography.

### **Affective**

*“Affective: connected with the emotions. Relating to moods, feelings, and attitudes.” (Cambridge, 2018)*

As it is stated in the dictionary, the affective concept has three connections. First, it is related to feelings, thus affective “things” will be in relation to the emotions, senses, and perceptions. Second, is connected to moods, so affective is open to making bonds between more than one being, object or place. Lastly, it is referring also to attitudes, so it will be influenced by performances, activities, and behaviors of the agents that are affective.

Georg Simmel, a German sociologist, and philosopher wrote in 1971 “The metropolis and mental life” and he stated that ‘...*the whole complex system of our feelings which is in constant flux, adaptation, and reconstruction.*’ (Simmel, 1971: 52).

Simmel makes us think about the complexity of perceptive relations. This can be linked to Raymond Williams, who coined the concept of “Structures of feeling”. Through this concept, Raymonds explains the different qualities of experienced life. Experiences influence *a posteriori* and frame the relation between subject and object/space. Furthermore, the American psychologist James Hillman suggests a similar statement drawing a relation between mind and object, for him, a person influenced by an affective object or place is not a unique being but both, a hybrid.



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Benedict Anderson writes about the theory of affect. He suggests that the space and the material affordances in time are always affective, what is to say, there are relations between bodies and spaces and it is not a 'posteriori' event but a simultaneously effect. The scholar Ahmed studies how feelings influences mobilities, he refers to fear and the capacity that this feeling can restrict mobility.

From another point of view and naming one of the most influencing scholars regarding affective situations, we have Peter Adey. He argues about the gap and necessity of the relation between mobilities and affective interaction. For him, *"Affect and mobilities are inseparable. The smallest movement of the body convokes a qualitative difference. It beckons a feeling"* (Adey, 2008a, p.440). The factors that take part here are the body, technologies and the cultural practices.

Furthermore, Peter thinks of the architecture as the medium of the production of affect. *"I explore how affectual cues such as texture, feel, lighting, are designed-into spaces to create ethological capacities and potentialities of affectual expression."* (Adey, 2008a, p.441)

He stated that architecture influences capacities of affection, Adey exemplifies this mentioning the architects Zumthor and Tschumi. For Tschumi, every time a human enters a framed and built space, there is a violent relationship between them because there are different orders in play. He designed the Villette park where he designed three different orders: First, the surfaces which represent the gardens, then we have the lines which are the galleries and recreate the movement of the visitors and finally, we have the dots, which are the architectural representation as *"follies"*. Therefore, Tschumi represents different orders to recreate a promenade of situations between architecture, human movement, and space. (Image 2)

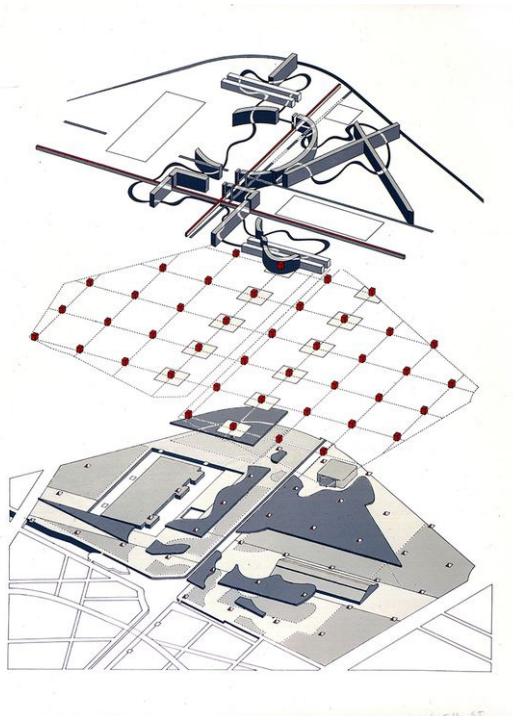


Image 2. Bernard Tschumi (1982) Axonometric drawing Parc de La Villette  
Source: Pinterest



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Moving to Zumthor, Adey refers to him by relating him to architecture and mood. His iconic project is the Therme Vals constructed in 1996. He designed the space as a cave (Image 3.), the stone refers to the place and acts as a healing envelope, this is what we will call later the atmosphere. Besides the stone, the light and darkness are the guides of movement of this building, the layout modeled different circulation paths with sensuous capacities and airy sensation of disorientation, the 'Gruen effect' (Healy, 2014) that it will be explained later. Thus, the design lets the visitor explore areas by their own.

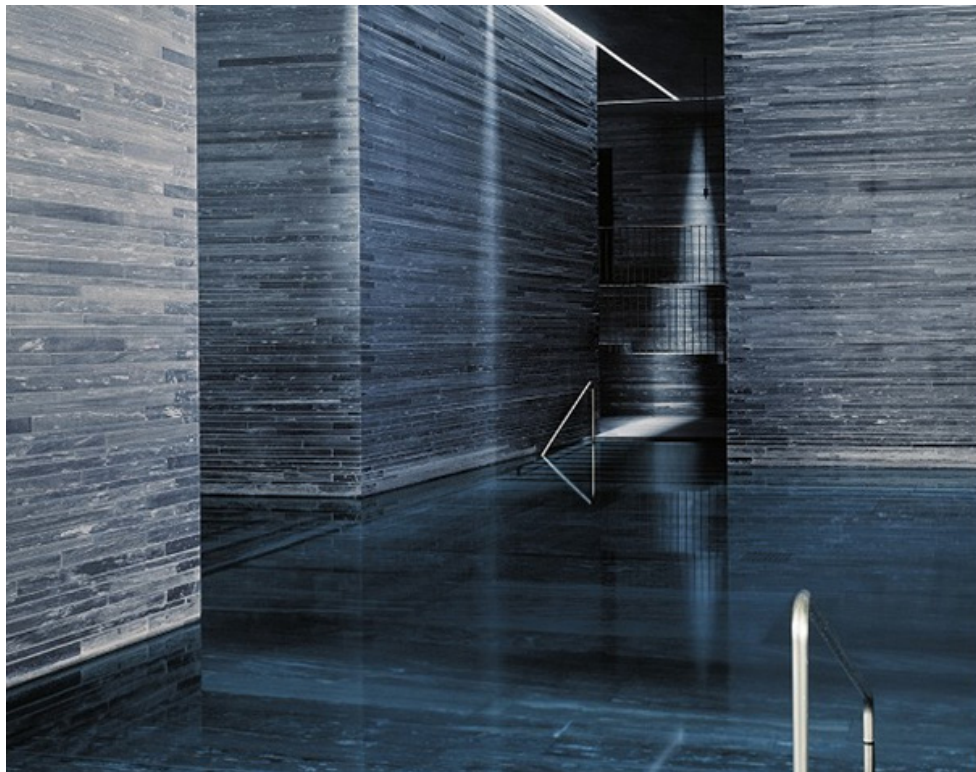


Image 3. Peter Zumthor (1996) Photograph of Therme Vals  
Source: Pinterest

To Adey, what Zumthor is describing on these places is named as atmospheres and they are *"the moving materialities that can engender and communicate certain kinds of feeling, affects transmitted by the 'molecular energies' of sound, light, and heat"* (Adey, 2009, p. 202)

Despite this examples, the majority of buildings are designed to us to perceive them just visually. They are almost sterile spaces with a very low capacity of interaction and a lack of sensuous atmospheres, Healy called this zones 'thin places' on the opposite side of thick places characterized. (Healy, 2014) Places with affective structures or thick places are what we are going to discuss right now.



## Atmospheres

Anderson in his “affective atmospheres” defined the term atmosphere in his etymological sense, ‘atmos’ means steam or gas and ‘sphere’ which refers to the geometry figure. Therefore, “*Atmospheres are interlinked with forms of enclosure – the couple, the room, the garden – and particular forms of circulation – enveloping, surrounding and radiating.*” (Anderson 2009, p. 77)

Atmospheres are not something fixed and anchored in a place or in time, they evolve and transform into something else permanently, moreover, atmospheres are not influenced by, showing, or involving personal feelings due to they are collective and personal situations

For Marx, there is nothing that cannot be described as atmospheric due to are related to affective situations and therefore, human and non-human actors have always a relationship when they encounter together. This link to the concept of Aesthetic object talked by Anderson in 2009, aesthetic comes from aisthesis which refers to the sense experience, thus an aesthetic object will be the materiality that has an affective quality generating an aesthetic experience of bodies and objects.

This relates to the Actor-Network theory which “*linkages between technologies and social worlds*” (Graham and Marvin, 2001, p. 184) across time and space. This theory focuses on the socialization includes technology in order to configure geographies, hence, ANT approaches to the relation between objects and subjects. The scholar Ash in his paper “Rethinking affective atmospheres” agrees and includes the concept of perturbation. Perturbation is what can afford the creation of the atmosphere, is the communication between objects affecting people, or in words of Ash “*What humans experience as the ‘flow’ of time is actually the accidental qualities of that object changing as it encounters the qualities of other objects*” (Ash, 2013, p. 23) Deleuze defined it as the capacity to be affected and affect.

Although people are always related to atmospheres, it is not an obligatory condition. Atmospheres don’t need humans, Ash exemplifies it with a case of a rainstorm influencing the vegetal areas under the rainstorm. (Ash, 2013)

To Small and Harris, the atmospheres stays ethereal in the air, therefore it is more a quality of ‘air’ or environment that a palpable situation. Moreover, “*they, blur the boundaries between them. In exploring atmospheres, such boundaries should be ‘amorphous and elusive*” (Small and Harris, 2014, p.252 ) Therefore, designing atmospheres is a hard task, no one can be confident about the result of an atmosphere until it is tested because of they are open to continuous changes regarding the unexpected factors that can appear in the contexts.

Examples of atmospheres closer to the ordinary thinking could be the Danish word or quality of space called ‘hygge’ that means coziness or what usually people say: Hygge it’s sitting in front of the fireplace on a cold night, cover with a woolen sweater while you drink a hot wine with sugar and spices and caress



your dog lying next to you. This definition is not an explanation but a description of a situation with physical, affective, environmental and human factors. Another example can be the old and Japanese philosophy called “Feng Shui”. This concept refers to an old knowledge that focuses on the harmonious distribution of the spaces, a good feng shui influences in the well-being of the user or in the opposite, a bad feng shui is seen as a not comfortable space to stay.

On that note, atmospheres have been defined as the sense of place, or the ambiance or what is moved by the perceiving personas. Atmospheres “*define moments for individuals as well as for human collectives*” (Bille, Bjerregaard, and Sørensen, 2015, p. 31) However seems to be related to sociology, the majority of studies have focused on the philosophical term.

Nevertheless, atmospheres are susceptible to human activities among other factors, (*architecture, colors, lighting, humidity, sound, odor, the texture of things and their mutual juxtaposition*. (Bille, Bjerregaard and Sørensen, 2015, p. 36)). Mayblin et al. discuss of ways that people interact with spaces by saying that children and young people need to recreate the spaces they inhabit due to a sense of ownership. They talk about the group or individual interaction being the adequate number of people between 3-5. Teams of more than five tend to decrease the permission of sharing and listening. And individual beings usually feel too insecure to share or engage with others.

Furthermore, the repetition of a behavior or activity is named habit, however, Schwanen et al (2012) agree with Bille et al. and state that it is depending on the context or atmosphere as a prelude of the sequence. Therefore, the person would be the trigger of the behavior that will become a habit. They differ two ways of thinking about habit. On one hand, the first one that relates to Descartes way of thinking where the habit is made because of a repetitive and mechanical action. On the other hand, the also traditional statement made by Aristotle who identifies habit as a consequence of virtuosity.

The habit concept leads to the experience, which “consists of all events that occur between sensation and perception” (Wattanacharoensil et al., 2017, p.125). This scholars in 2017 write a paper published in the journal of hospitality and tourism management where they categorized the experiences, and specifically, airport experiences into three phases or stadiums. The first one is called process which is related to the functionality and the technology, the most numerical categorization and point of view. The next stadium is the phenomenon which contains the subjective performance. The last one is called outcome and represents the collective mind, the outsider.

Laurence et al. talks about the experience of privacy in spaces caused by architecture stating that a lack of architecture and private work “*enhances the pressure on them to divide their mental attention between pursuing work assignments and handling the distractions*” (Laurence, Fried, and Slowik, 2013, p.145)

Moving to the theme of this topic, although the airports have been seen for



several years as blank spaces, they have atmospheres. *“Today my favourite kind of atmosphere is the airport atmosphere”* (Andy Warhol cited in Urry et al., 2016, p. 13) Inside the airports, we can find spaces like shopping spaces, check-in technologies and procedures, the system of surveillance and power, material affordances and physical assemblages that can force and influence passengers’ behavior. This relation of affects will be what change the physical environment into a psychogeographical situation (Stracey, 2014)

Urry et al. affirm that *“The atmosphere of airspace is of excess information.”* (Urry et al., 2016, p. 16), a juxtaposition of emotional situations, technological devices, architectures, languages, negotiations, and so on. Regarding airport planners, they tried to design a space close to a home, to a private space (Laurence, Fried and Slowik, 2013). Besides this attempt to grant comfort in airports, they are also designed to seduce passenger through ‘transient’ objects (Bauman, 2000) in order to consume.

Airports atmospheres are like any other atmosphere, a negotiation between mind, body, tangible and intangible entities. It is common in airports that atmospheres have the ‘Gruen effect’ (Healy, 2014). Gruen effect is the disorientation that suffers a person when enters in a shopping mall created by the thermal monotony, the absence of clocks and the indiscrimination of signages and brands. The same situation happened in airports, people feel disoriented and can’t remember the whole process of traveling through an airport. They feel the travel as a sequence of jumps and situations, the same way as a psychogeography map.

### Psychogeography

Before Anderson stated the theory of affects in 2006, there have been studies in spaces influencing behavior, e.g. Constant in 1959 stated: “creating environments and their psychological influence is one of the tasks we are presently undertaking” (Constant, 2002: 101). Constant belongs among others to the situationist international that was a multidisciplinary organization of revolutionaries with big importance in Europe from the 50’s to the 70’s. They were artists, politics, theorists, geographers, etc.

Guy Debord was another of the integrates of that group and one of the most famous creations is the “naked city”.

The naked city is a map collage created by several cuts of Paris urban areas and put it together with psycho-geographical relationships. Guy Debord thinks his map as a congregation of patterns behavior and blank spaces.

Debord differs three differentiations (same as what Tschumi did in La Villette park). First, we can see the different patterns of the city or what he calls “unities of atmosphere” or “synecdoche” represented by cuts. This spaces can be understood also as thick places (Healy, 2014) or as the definition “place” by Marc Augé. Next to the “unities of atmosphere” we have the arrows or “Asyndetum”.

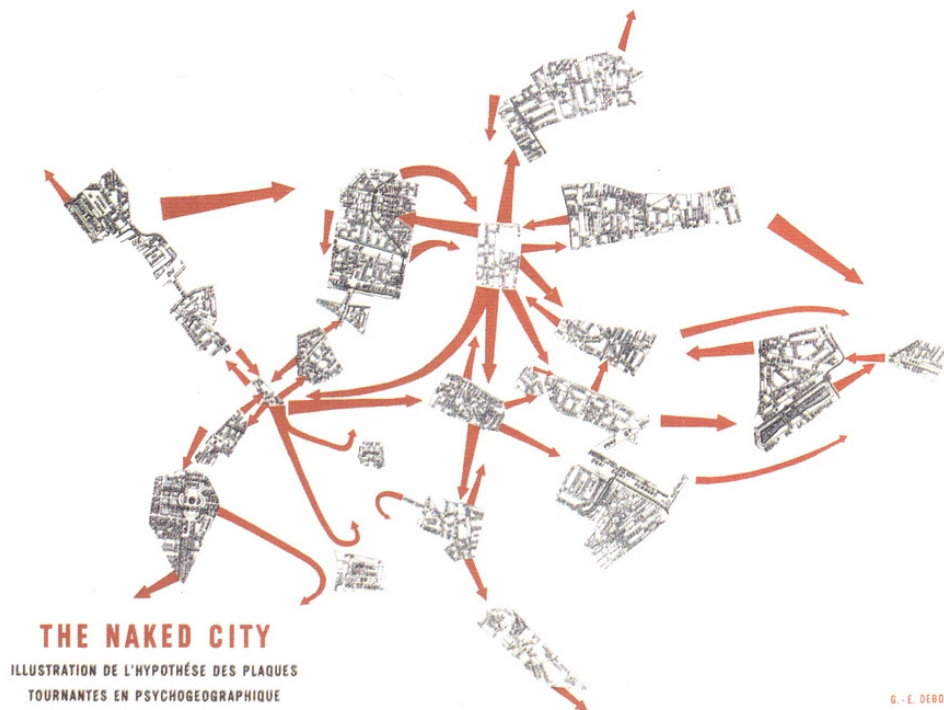


Image 4. Guy Debord (1957) The Naked City

Source: Pinterest

*“The arrows describe “the spontaneous turns of the direction taken by a subject moving through these surroundings in disregard of the useful connections that ordinarily govern his conduct.” (McDonough, 2002, p. 243) The arrows are the pathways drawn on the map, the trajectories of people, similar to the galleries in the Villette park of Tschumi. The map is organizing trajectories of users through psychogeographic hubs. These users are considered as a derives or flaneurs. The last configuration in the map is what is not drawn, is the empty spaces (Bauman, 2000) or blank areas referring to the distances in between the atmospheres. The map is, therefore, a representation of the discourse of a city, almost a script of situations.*

On the whole, the situationist wanted to construct ‘situations’. *“Thus, the situationist project, as originally outlined, was the liberation of desire in the building of a new world” (Gray, 1998, p. 2) They stated that this method of situation was going to replace the theatre, with modifiable surroundings, changing landscape and smart architecture that would change in minutes in favor of the users.*

We have talked until now about what is a ‘place’, how affective spaces exist and coexist with architecture, people and so on generating atmospheres, how these atmospheres are perceived and how situations can be described as a psychogeographical way of thinking, now we are going to introduce to airport imaginary, with its different areas, zones, airside and landside and how the theoretical framework is regarding at mixing these aspects.



## Situations in airports

This section will be the final part of the theoretical chapter. Here, I will discuss first the atmospheres and situations in airports and the design in a general way with a few examples. Following this different zones will be structured in sections, these are: Security, retail and shopping, check-in and queues, technology, and finishing with different aerial experiences.

### General

Airports are designed for people and planes, they are a mixture of micro and macro mobilities that generate situations in very different scales, from the scanning security to the flight behavior. Pearson discusses the different thresholds that an airport has. He stated *that “these borders stretch out into choreographies of unfolding portals”* (Pearson, 2018, p. 52) People moves through or in between arrivals and departures experiencing many déjà vu as repetition of patterns. The ‘gruen effect’ (Healy, 2014) explained before to produce a sense of lost generating a visual behavior in passengers. The lost passengers start to look around trying to aware where they are or trying to find a staff person to ask. This feeling of passengers reinforces the thought that airports are considered ‘non-places’ (Augé, 2006) due to its lack of identity in many places.

However, the interesting part of airport places are the ones with identity, or meaning where *“feelings, motions, and emotions are predicated by a form of airport control”* (Adey, 2008a, p. 443)

The places where people use their body as the medium of social performances, affective situations. As Pearson states, normal behavior is very rare in airport environments because there are many factors that act as triggers from the consumption zones to the security lanes.

In airports, aeronautical revenues are becoming less and less decisive in airport economy, especially in hub airports. Hubs try to compensate the high budget of their infrastructures by integrating new and non-aeronautical incomes such as commercial stores, retail, eating zones and even sleeping places. The key concept in airport design in order to influence behavior is the automatic design, what is to say, the procedure to design spaces and material structures that invite to the passengers a automatic behavior in response of the situation that they experienced, e.g. the temporal barriers in airport to guide people through certain pathways avoiding others.

Therefore, the design in airports as a power from above limits the movements of passengers, they anesthetize behaviors (Adey, 2008b). Architects focus on a utilitarian way of thinking for spaces like airports such as natural materials to



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provide calm (Seoul's Incheon airport) or the sincerity in the structural design with the exposed beams, and installations like Adolfo Suárez Barajas airport in Madrid to recreate a safe space.

Watson identifies three groups of elements that are relevant to design practice: materials, competencies, and meanings. The design is relevant because as it has been studied (Adey, 2008a; 2010) people were more into expending money when they feel safe and when their level of comfort is high. Materials are referred to every built thing, space or infrastructure, competencies are the ability to understand and manipulate and meanings is the symbolic representations, here we can find the signage, that actually is a very important factor to take into account due to the useful information and indications they provide. Signage should be easy to read or understand and follow, this would produce a relaxation in the passenger (Adey, 2008a)

Airports design are also more than following rules to obtain money, there are also special cases that need to shout out.

In New Zealand, the Wellington International Airport (WLG) was designed by the architects at Studio Pacific Architecture with the leitmotiv of the center of Middle Earth (Eiselin, Frommberg, and Gutzmer, 2016). The airport design is influenced by myth tales of nature in New Zealand and the famous Lord of the Rings movies. The design, therefore, would provide to the visitors a flashback to the middle-earth. The airport is seen as a giant rock that arises from the ground. (Image 5)



Image 5. Studio Pacific (2010) Wellington International Airport  
Source: Pinterest



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King Abdulaziz international airport (JED) in Jeddah is another exceptional example regarding design. This airport gathers millions of people to fly to Mecca, thus this airport is the gateway to pilgrims around the world. The architect Fazlur Rahman Khan designed a not very spectacular building but a message. The building is open to the outside due to the climate of the country, and 21 tents are grouped forming five modules that recalled the Bedouin dwellings in the desert. Here passenger can cook, sleep and pray before their ending phase of the pilgrimage. The airport as a message. (Image 6)



Image 6. Rahman Khan + SOM (1981) King Abdulaziz international airport  
Source: Pinterest

Paris Charles de Gaulle airport (CDG) by Paul Andreu is an urban symbol of the city and one of the best providers of luxury goods. It has been the object of staging in films. (Image 7). Finally, the John F. Kennedy international airport (JFK) in New York (which has been mentioned previously in the introduction) is the summum example in a sculptural design by Eero Saarinen. (Image 8)

Besides exceptions in airport design, there are several zones that all the airport share in common, such as security areas, consumption zones, check-in, lounges rooms and so on.



Image 7. Paul Andre (2003) Paris Charles de Gaulle Airport  
Source: Pinterest



Image 8. Eero Saarinen (1962) John F. Kennedy international airport  
Source: Pinterest



## Security

Since 2001, airports are increased heavily their security controls in order to maintain the calm. The way that designers went to grant security is creating atmospheres of pressures (Adey, 2010a). Controlled ambiances press the bodies provoking automatic responses and a mechanization of the behaviors by e.g. building a low ceiling to recreate anxiety. This automatization in the activities allows a high control in security lanes avoiding waiting time with interruptions and misbehaviors: *“airports need passengers to be compliant in order to process them as quickly as possible”* (Adey, 2008a, p.445)

Kirschenbaum investigates about the negotiation that happens in the security process differentiating passive agents as the passengers and active ones which are the security staff and technologies. To him there are four behaviors here: 1) passing without incident, 2) the passive agent is ordered to remove some items and accepts without any problem 3) The passenger tries to negotiate and fail or succeed with is attempt 4) The passive agent refuses and acts negatively against the airport. The time average is from 15s (behavior 1 or 2) to 60s per passenger (behavior 4) (Kirschenbaum, 2013)

On that note, there are studies (Urry et al., 2016) stating that atmospheres seem to have a very high level of pressure and the staff profiles usually are closer to police profile. This increases, even more, the level of anxiety. Therefore, they proposed to redesign the atmospheric experience by hiring hospitality-based staff in order to provide a closer and smoother relationship with the passengers.

Kalakou and Moure in 2015 used the Lisbon Portela airport as a case study to collect preferences of passengers before the security check point. They discovered that the majority chose to perform a discretionary activity such as visit the retail area or the relaxing rooms. This was followed by people focused only on aeronautical activities such as dropping the luggage; the third big group chose to go to the security control at the same time they arrived at their airport.

Finally, talking about security is talking about surveillance and Zygmunt Bauman. Bauman in his book *Liquid Surveillance* talked about how the society has changed into a panopticon or ban-opticon where the anonymity is dead. The architectures as ban-opticon now have technologies to ‘provide’ safety by killing the anonymity of anyone and having the right to ban any person that ‘They’ consider a threat. To Bauman, surveillance technology has two fronts: *“confinement (or ‘fencing in’) on one front line, exclusion (or ‘fencing out’) on the other.”* (Bauman and Lyon, 2016, p.58) Bauman defends the point made by Urry et al. in 2016 that the security in the airport is excessive. He stated that not only passengers are affected but the aircrews due to the ten times inspections they are obligated to pass.



## Consumption spaces

As I have mentioned earlier, Peter Adey wrote about the evolution of concepts of motivations and needs. This study talks about how people and in this case, passengers have an affective and hierarchical need, what is to say, they have some kind of pyramid of necessities. The lower the need is in the pyramid, the more important is. Each stage is related to processes inside the airport and retail and consumption is in the top. Therefore, to grant people to spend money in this spaces, you have to satisfy the lower levels. *“If the correct state of mind is induced in passengers, and all their needs met, then they will spend, spend, spend”* (Bates cited in Adey, 2008a, p.443)

General assumptions say that a 50% of the total economy at airports comes from non-aeronautical activities (Kraus and Koch, 2006) and is expected to increase in a few years. Passengers that use these zones are usually in the air-side, in other words, they have crossed the security gates, thus, they have all the waiting-time to spend their money in the retail areas. Bauman thought of the human condition as a compulsive buyer. He discusses the temple of consumption (Bauman, 2000) like a floating piece that is not part of the city but belongs to it, a place without a place where the reality of society is in the inside and it recreates a feeling of community. This is what Urry et al (2016) call ‘worlding’. The retail spaces are worlds where the objective is to inscribe the consumers to them.

The duty-free shopping is located before customs in many airports, this has stayed almost as a rule because, in this way, passengers are forced to pass through it seeing the products and prices and even in peak times, the control queues reach the shopping areas. The visual input in these zones is extreme. (Pearson, 2018) These decisions affect passengers in many different ways, Lu talks about three different types: mood shoppers who are the most related to the pyramid of needs theory (Adey, 2008a), apathetic shoppers who plan their purchases and shopping lovers who enjoy the shopping behavior. (Lu, 2014)

Several scholars have talked about the designing factors that influence and enhances the shopping atmospheres. Suzianti and Larasati (2017) included variables such as *“flooring, wall textures, lighting, scent, music, temperature, cleanliness, and color”* (Suzianti and Larasati, 2017, p. 2) They concluded that passengers would prefer windows display with cold tones and entrances made of glass because they prefer the shopping area that is visible from the outside. Regarding lightning, people put the highest value in this factor and they prefer the high intensity of light to grant a good buy.

On that note, van Oel and van den Berkhof in 2013 examined too the architectural design factors on customer behavior. They discuss the monumental complex buildings of airports and how wide open areas would encourage passengers to spend money due to the sensation of relaxing. For them, the most important factors that influence passenger behavior were the shape and the color being the curvilinear roofs and cool tones the preferred characteristics.



### Technology

Due to the advent of the technologies in these last years, it has become a necessity when we talked about airports. Wang et al. discuss the use of the smartphones in passengers. 76% of travelers carry a smartphone (Kalakou et al, 2015). They stated that information and communication technology (ICT) have to change the meaning of travel, and they are a great source of information. Twitter, which is a social network has become one of the most important netnography sources regarding travel activities.

Another way of obtaining information is through GPS. This has a two side effect, on one hand, helps every traveler to reach their places in the less time possible and on the other hand, all the information is uploaded to the cloud, thus there can be tracked and analyzed.

Technology is used to improve airport areas, Kalakou et al. have mentioned some of them: First, Near Field Communications which allow storage and transfer data. Second, Big Data that can analysis enormous volumes of data at the same time. Third Biometric systems which are used to security procedures in order to verify the identity of the person. Self-services and virtual queues are included in the improvements of airports through technology.

### Experiences

Airports are places to experience in many different ways, Peter Adey exposed his thinking about the airport as a spectacle: Adey drew different practices of spectacle through the balconies of the airport. 1. Relaxation, when people enjoy the vision of the planes and the industrial character of the airports; 2. Stargazing: People in the past used balconies to see famous people, nowadays people gather around in the arrivals to see their idols. 3. Spotting: When people appreciate the design of planes. 4. Playing: To Adey, balconies and airports are places to play, especially in children behavior 5. Learning: The interaction between people allows different ways of learning. (Adey, 2008b). Here Adey understands the airport as the opposite concept of the panopticon of Bentham and paradoxically confronts with the idea of the continuous surveillance in security procedures.

The airport is a 'public' place for the socialization of the community, it has business meetings, gatherings, reunion, romantic farewells. Definitively, a place to perform. What is more, activities enhance the concept of airport becoming it into a place with identity: *"The performances appropriated the space and exceeded the intentions of the airport designers and planners as playing children became a perpetual disruption to the efficiency of the terminal system."* (Adey, 2008b, p.42)

Small and Harris (2014) argue that airports are not non-places exposing the example of crying babies in airports and planes. This example highlights the



fact that airports are sensuous places where aural, and haptic sensations are relevant. They conclude with recommendations to solve this issue by relocating passengers or a new way of distribution similar to the trains that have familiar wagons, normal and silence ones.

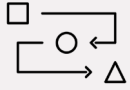
To conclude with the last section of the chapter, it is good to notice that airports not only have these spaces that we have talked before, there are airports with prayer rooms to get out of the stressful flow in order to find calm and peace, VIP hotels to sleep, gardens, playgrounds, wellness spaces, casinos, etc. Kalakou comments about the categorization of ten groups regarding purposes: information service, cash service, major relief, basic relaxation, social connectivity, fast self-service, shops, tax return and religion-related service and 4 different patterns of people behavior: group, concurrent, individual and personal.

This has been the theoretical framework of the thesis, now we will move to the methodology used and the reflection upon the philosophy of sciences. The theoretical inputs are going to put into practice in the analysis chapter.

**3.**

**THEORY  
OF  
SCIENCE  
AND  
METHODOLOGIES**





## Theories of Science and Methodologies

In this chapter, I will draw the position within theories of science and the methods used in this thesis to obtain empirical data and to analyze it. The research question needs a broad point of view and a variety of methods, thus American Pragmatism is the chosen philosophy of science.

### Theory of science

Because of the research question, a position in the philosophy of science is needed. What is more, to say, it needs to have both qualitative and quantitative methods in order to cover the broad extension possible.

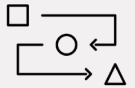
The use of different methods leads to an approach to the American Pragmatism. To Dewey, pragmatism “*consists in looking away from first necessities; and of looking towards last things, fruits, consequences, facts*” (Dewey, 1927, p.31) and so is my understanding of the key point of this thesis. Airports studies are always looking at their management, economy, and statistics which can be considered as the first necessities. However, the affective side is not studied in depth, therefore this thesis proposes to look towards the last things, towards the affective side of the airports.

American Pragmatism is directed to action-oriented approaches and considers alternatives in each phase of the project. What is to say, theories are useful tools but they are not the absolute truth. This approach need of action-methodologies to understand the processes of the world, or in this case, of the airport.

This philosophy of science requires the abduction as a key tool of analysis. Abduction is linked to the what if...? question. This process requires the redescription and redefinition of contexts to work in possible explanations in uncertain situations through hypothesizes. Therefore, abduction will be a useful tool to understand the ‘bestiary’ of situations in the airport regarding affective factors in airports.

The pragmatic approach doesn’t interest in the absolute truth, but it seeks results measured by their usefulness by looking from different perspectives. The techniques that this approach usually use are situational cases, qualitative data, the abduction way of thinking and the speculation through experiments. In this thesis, I don’t seek a truth or statement that can answer every doubt about the research question. I seek different situations and cases in order to provide various points of view to understand the affective situations in airports.

Despite all of these characteristics, the main factor in pragmatism to this project is the primacy of situations. Dewey talks about situations and their peculiar qualities because they are uncertain, ambiguous, and doubtful. This is quite a



similar definition and approach as the atmospheres theoretical concept which is something vague that floats in the ambiance. Furthermore, body and mind in pragmatism and inherently together opposing the conventional western philosophies, thus, the approach that this thesis has in the whole project is a pragmatic one.

Now, we will discuss the chosen methodology and explained one by one. Here, the methodological section will follow the pragmatic guidelines and are considered necessary to obtain empirical data to analyze.

## Methodologies

The chosen methodology is based on a mix of a quantitative and qualitative methods, data and analysis, in order to provide a considerable amount of information and a wide scope moving from the personal information to a statistical data, in other words, it provides a versatility that fits with the pragmatism point of view of the world as Healey mentions:

*“The pragmatists, then, emphasized a relational view of the world, without losing a deep understanding of its material solidity.”* (Healey, 2008: 281)

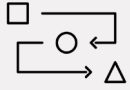
First, I am going to show the qualitative methods such as the survey, the visual ethnography and the observations following with the case study. After that, the following methodology is applied to the case study: The netnography methodology such as websites and software analysis is shown. Finally, a mapping and analytical drawing methodology are exposed in order to cover the whole scope of the project.

## Survey

Regarding qualitative methods, this thesis use first a brief questionnaire directed to two types of people: People who studied and are related to architecture or spatial design, and people who are not related to design and architecture. The survey is structured in 5 parts: personal data, type of passenger, inside the airport, activities, and experience.

The goal of this survey is to provide quick questions to answer in a few words This was thought in order to obtain a greater possibility and scope. The last section (experience) is the exception which is recommended to explain a little more, but it is not an obligate section.

The structure of the survey is the following (The detailed structure can be found in the appendix): 1) Personal data: Email, name, age, background studies, current city and current job. 2) Type of passenger: Preferred modes of transport, the



number of flights, the purpose of flights, time in advance to go to the airport. 3) Inside the airport: General atmosphere, waiting time, security area, commercial areas, resting areas, boarding gates. 4) Activities: Type of activities 5) Experience: Share your experience.

This method had a response of 36 people and was created by Google Forms, the questionnaire was put in social networks, travels forums and airport reviews websites.

## Observations and visual ethnography

*‘visual ethnography enables us to attend to elements of the ways that people experience and give meanings to their environments, and in this sense also enables a focus on the sensoriality of place’ (Pink, 2013, p. 81).*

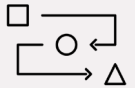
Visual ethnography is important in this thesis for two reasons. First, it is a way to obtain visual data that can be analyzed *‘a posteriori’*. Pictures and videos are a great source of information because the researcher can put the attention to the details and discover new information that it is not possible to obtain with direct observations. Second, it is a way to show results and patterns of behaviors in an effective way. The photos and videos were taken at the Adolfo Suárez Barajas Airport in Madrid (MAD) because is the case study of the thesis. It was made in 3 sessions at different hours to grant a bigger scope. The days were 7, 14 and 21 of April of 2018.

Furthermore, there has been conducted direct observations in the airport in a parallel time where the pictures and videos were taken. The observations were done to see and write the behaviors that people perform in different areas of the airport from the land-side to the air-side. The main point of these observations was to not disturb the passengers to obtain the most ‘natural’ behavior.

The key points of interest in this methods were: the different behaviors of passengers related to the main zones of the airport; the relationship between passengers and how they socialize; the negotiation between passenger and technology; the performances between the staff within the airport and passengers.

## Case Study

This thesis carries a case study to put into practice the theoretical framework and to be able to analyze the different situations that happen in an airport in the first person. The chosen airport is Adolfo Suárez Madrid-Barajas Airport (MAD) in Madrid, Spain which has 4 terminals being the 4<sup>th</sup> one the icon and image of the airport designed by the architects Rogers + Partners and Lamela Studio. This airport is going to be the basis of the following methodology, and it will have a section in empirical data to explain further the chosen airport.



## Netnography

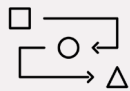
Netnography is a method formulated by Robert Kozinets and it gives various levels of contact, immersion, and participation (Rink, 2017). Netnography is the online ethnography which allow everyone to wide their scope thanks to the internet advent and the *“decentralization and democratization of tourism information within the virtual moorings of social networks”* (Small and Harris, 2014, p. 30)

Through netnography methodology, in this project can be divided into two sections, from one side, the empirical data of customer experiences, travelers and so on obtained through forums, websites, and reviews. From the other side, the use of the software's to obtain 'real' data of people who usually don't post anything in official pages but their social networks, therefore, Twitter is chosen as the social media to obtain empirical data.

In the first body structure of netnography, the chosen website can be categorized into two different focuses. The official websites of airports that are: Airports council international (ACI) which is considered as the voice of the airports, they have and airport service quality (ACQ) to understand passengers point of view and what they want from airport services; International Civil Aviation Organization (ICAO) which promotes the rules and regulations to ensure safe and orderly growth; Air Transport Research Society (ATRS), that exchange ideas and results, organize conferences, interact with other official webs and provide forums; AENA (Spanish Airports and Air Navigation) is the public company which organize the airports in Spain. The second group of websites is the non-officials websites: Los Viajeros (The travelers) is a forum portal of travels made and for passengers and is the biggest community of online passengers in Spain with 21 million of visits in 2014. They declared themselves as independent of the touristic companies, thus, they put the focus on the traveler experience; Websites of reviews is also taken into consideration, webs such as Yelp are relevant in order to see the comments that people have after their experience in airports. Finally, the famous website of videos Youtube has been a great source of information also due to the massive number of videos that people upload there, from the passenger's point of view to the designers'.

The second body of netnography a quantitative methodology due to the importance of this kind of data in the 'real' world of airports and its management. I will show the abstract of the analysis that I did in January as a starting point of the master thesis. Here, a statistical computing free software called 'R' was used with a specialized package which is able to create tables to organize data from Twitter. The phases of this methodology were four.

First, an overall search with 70.000 tweets divided in 3 days, the 11<sup>th</sup> of January with 30.000 tweets analyzed, the 14<sup>th</sup> of January with 10.000 tweets and 15<sup>th</sup> with 30.0000 tweets. The programme used the word “airport” to find the last tweets that contain that word. After that, the programme selected only the words that have been repeated more than 20 times regarding fields of airport's spaces,



design, emotions, and feelings.

Second, another finding is run with a second categorization in the programme. I included the rule of existence of at least, one word of the following ones: Area, space, waiting, love, reunion, corridor, surveillance, sad, happy, tired, angry, confused, plane, gate, finger, screen, arrival, departure, security, queue, bathroom, shop, shopping, restaurant.

Thirdly and last, the program redefines the searching of the words to provide a better understanding of the analysis. Then, I used ClikSense, that is a software programmed to export graphical information from tables and data. Then, the data obtained is exported into analytical graphics.

Furthermore, another finding is carried out with the words “Aeropuerto Barajas” in Spanish in April in order to analyze the case study under the same premises that I have mentioned before.

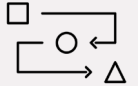
### **Mapping**

Once I have the empirical data collected, in order to show the analytical results and as a medium of analysis, the thesis include mapping techniques such as edited photography, digital drawings and studies of airport layouts. The edited photography is used to focus parts of it to highlight the analysis. The study of airport layout has some difficulties due to the almost impossibility to obtain a good quality layout of any airport owing to security reasons. However, it is possible to analyze spaces and relation between spaces that is what am I looking for with this methodology. Finally, the digital drawings will show the conclusions of the whole analysis. There is a series of drawings as a “bestiary of situations” when the main conclusions will be drawn and represented in order to understand the psychogeographic situation in a full circle and complete way.

### **Limitations**

The thesis has a strong numerous of methods to recruit data and analysis, however, there have been some limitations in methodology due to policies, context, language, and subjectivity.

First, the policy limitation refers to the difficulty that people have to take photos and videos within the airport. I have contact AENA by email (appendix) trying to make a contractual agreement to be able to walk freely through the airport. However, they responded me negatively because there is no link between AENA and Aalborg University, therefore, it has been more complicated to take photographs and videos and it was not able to pass the security lane to the air-side in a condition of a scholar. This limitation also influences the mapping



methodology as I have mentioned earlier because airports don't provide technical layouts, floor plans or elevations in good quality. Therefore, I have used than the layout that I have been able to find and the floor diagrams that airport provides to passengers through their ICTs.

Second, there has been a limitation because of the context of the case study. This project talks about affective situations in airports in a universal point of view, but it is not possible to analyze universally those situations, thus, a case study is proposed. Notwithstanding, this will influence the results limitation because there will be the results regarding the case study, not a universal truth that can be applied to every airport. Albeit my goal with the thesis is not provide a universal truth to each airport, I reckon is a limitation due to context and the character of the thesis.

Thirdly, regarding the surveys, it may be lack of credibility to a bigger analysis because the questionnaires are always biased by the respondents and the number of respondents is not that big (36 respondents).

Finally, the fact that there has been only carried the Twitter analysis in one language can reduce the scope of the data, and the way that the software works (through programming language) can de-focus the object of the paper because of a minor mistake in the language programme.



HERE

← Baggage Claim →  
↓ Security ↑  
KAYAK  
PARKING

**4.**

# **ANALYSIS**



## Analysis

In this chapter, I will expose the empirical data obtained through the applied methods and the analysis that has been carried out in this thesis. It will be divided into three different sections, airport analysis, case study description and case study analysis. For the first section, the results of the surveys and the analysis of Twitter through “R” software will be provided and the data of other airports that have taken into consideration. The second section will describe Adolfo Suárez Madrid-Barajas Airport as the case study mentioning its characteristics and why is a great example of this thesis. Finally, moving to the last section of the analysis chapter, the analysis of the case study will be carried out. In this section, the results of the netnography methods regarding the case study, the observations and media analysis and the analysis of the layouts will be commented.

### Airport analysis

Here, a general analysis of airports is made, the methods supporting this analysis are surveys and Twitter analysis.

#### Survey

In this section I will provide the analysis of the surveys in a general way, the detailed analysis of the survey will be presented through the different section as a supportive data in the case study analysis section. All the detailed survey questions and response are in the appendix.

In the qualitative results, the most of people support the idea of the existence of affect situations (Anderson, 2006) inside an airport. This is logical because the questionnaire was directed to feeling and emotions inside and airport, therefore, qualitative data would support Adey’s point of view regarding airport and affective.

It is interesting to mention that plane is the second best mode of transport regarding travel time – price – comfort for the surveyed people. This is relating to the new advent of Low-Cost airlines and the increasing number of hub airports. This also affirms that the majority of people is into air transport because 23/36 responses clicked the plane square. Moreover, almost the have of the respondents (17) have taken more than 30 flights in their whole life.

Regarding the type of passengers, the sample shows that a great 80% fly because of tourism, a 28% due to VFR (visiting friends and relatives) reasons, this assumes the dichotomy of tourism and business in the typologies of passengers stating that tourists have the supremacy.



## ANALYSIS

When the respondents are asked to answer about the atmosphere or ambiance of the airports, the responses can be divided into 4 different types of answers.

1) The atmosphere of pressure: The majority of the responses state that the airport breaths a stressful, uncomfortable, anxious and hustle atmosphere: *"Bustling, people are stressed to catch their flight and are on hurry"* (Respondent 25, appendix), it represents the atmospheres of pressure (Adey, 2010a; Urry et al., 2016).

2) The non-place: People in this group categorized the atmosphere of the airport as sterile, unnecessary, transition, impersonal, cold or bland. The adjectives, steriles, transition, and cold refer to the airport as an infrastructure to move from one side to another, these respondents reckon the airport as a pure procedure of their trip, they will confirm the non-place concept (Augé, 2006). *"it's usually just a place where you have to go in order to go somewhere better and more beautiful"* (Respondent 16, appendix) They will normally go to the boarding gate after the security control and they are travel-oriented and would rather save money instead of spending money in the commercial areas. The architectural and affective inputs are rarely influencing these passengers. Furthermore, they see the airport as a waste of time *"There is no greater feeling of a waste of time and discomfort"* (Respondent 14, appendix). It is worth to mention that some people define the airport as cold or bland, adjectives related to senses, a respondent label some areas of the airport as "inhospitable", therefore it is a paradox when people try to identify an airport as 'nothing' when it is actually effecting in some way (negative in this case) to them.

3) Extreme atmosphere: Here, the respondents feel overwhelmed when they are in airports. *"Difficult. I guess it's a mix of people being excited because they travel somewhere new or to meet a loved one and business people who just wanna get it over with,"* (Respondent 16, appendix), other respondents think the airport as the beginning of the travel, *"an exciting experience, an adventure"* (Respondent 31, appendix), differing from others who qualified airports as boring places. They experienced a *"Mix of emotions, happiness, sadness, stress"* (Respondent 7, appendix) confirming the statement that mobilities and affect are inseparable. (Adey, 2008a) and qualifying the airport as a thick place. (Healy, 2014)

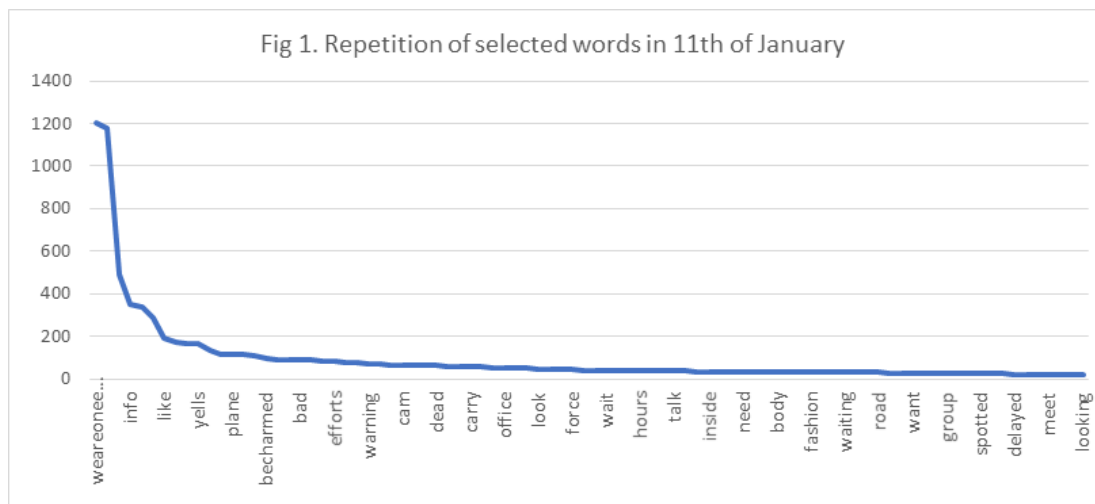
4) Supermodernity: There is one philosopher respondent who wrote that airport is *"the architectural concretion of Modernity"* (Respondent 35, appendix). This links directly with the 'supermodernity' (Augé, 2006) concept and with the 'liquid society' (Bauman, 2000). This way of thinking about a representation of the society into one building is similar to the psychogeography believing of creating a project which represents the era. This definition does not provide a sensuous character in a literal way but it carries all the features of modernity within.



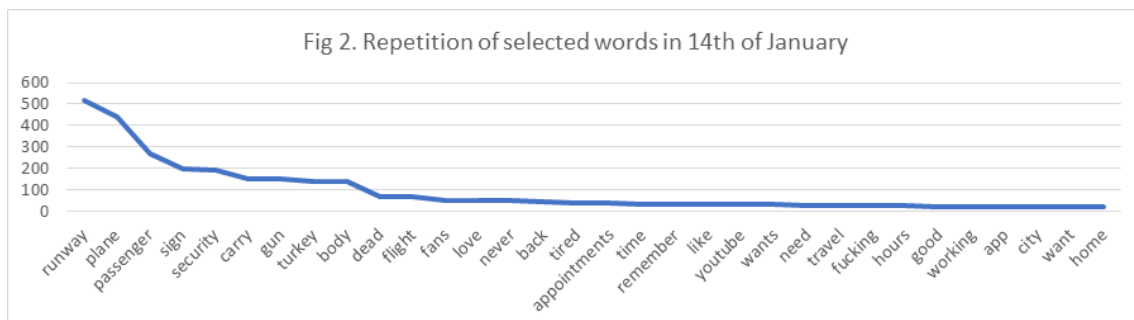
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### The Twitter analysis in general.

Here, I will show an abstract of the first analysis of Twitter made in mid-January. To check the analysis in its totality, check the appendix. Here I will mention the 10 most repetitive words besides the airport which is a mandatory word in every tweet. In the first day (11<sup>th</sup> January) 326 words were tracked of the 30.000 tweets being the ten most repetitive are: weareoneexo, iheartawards, exo, info, fire, security, like, near, gays, yells.



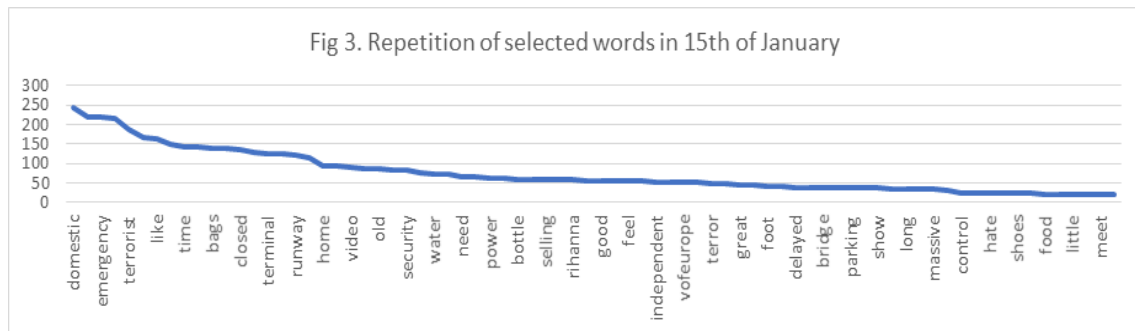
In the second day, (14<sup>th</sup> January) 136 words were tracked of the 10.000 tweets. The selected one for the analysis are runway, plane, passenger, sign, security, carry, gun, turkey, body, dead.



In the last day (15<sup>th</sup> January) the number of words was 495 and the list of 10 words was domestic, media, emergency, photos, terrorist, wanted, like, walks, time, bravely.



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The words that the software has shown after the analysis can be identified in four packages: News, security, feelings, and spaces.

News: here, the words with the highest number of repetition were EXO, fans, love, yells, and Turkey. This explains and linked with the theories for two reasons. First, EXO is a pop music group in South Korea which is worldwide famous, therefore it can be guessed that specifically in 11<sup>th</sup> of January the group arrived at an airport and hundreds of fans came to them to meet them. This result links directly with Peter Adey conception of spectacularism in airports, the concept of Stargazing (Adey, 2008b) when he explained that people usually went to the balcony to see famous people of society and to enjoy of that atmosphere of glamour. Nowadays, with almost no differentiation, the airport is used by the EXO's fans as an infrastructure that gives the possibility to meet their idols. They are passengers categorized as 'voyeurs' and transforming the airport into a theatre. (Pearson, 2018). The second explanation of the news package, the word Turkey is represented in the tracking because it shows the last news. On 10<sup>th</sup> of January, a plane fell over into a cliff and the new turned into a viral in every social media and tv schedule. This represents the modern representation of the airport and the possibility that the technology has to influence everything. This result relates airport and technology (Kalakou et al, 2015).

Security: In this package, the most repetitive words are cam, security, warning, police and flight radars. All of these words are related to surveillance and control. This follows to the idea of the airport as a panopticon (Adey, 2008b) or as a ban-option (Bauman and Lyon, 2016). This represents the liquid surveillance coined by Bauman on the airport. The word warning also suggest the assumption in airports that everyone can be a threat and the stamen that airport atmospheres, in general, have an extreme level of pressure (Urry et al., 2016) or what Adey calls, atmospheres of pressure (Adey, 2010a).

The third package is feelings and the words selected in the three days of analysis were love, meet, liberty, laughed, thanks, waiting, kindness, fuck, bad, need, good, like, ill, sorry, feel, warm, delayed. This is, the package with the biggest number of words, therefore it relates directly to the main core of this thesis, that passenger in airports has affective relations with the environment (Adey, 2008a; Adey, 2008b; Budd, 2011; Kalakou et al, 2015). Moreover, the words love, meet, relates to VFR (Unger, Uriely, and Fuchs, 2016) or business passengers (Lassen, 2009) when they are expecting to meet someone in the airport and not just a



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place of transition from one city to another. On that note, it can be also related to the design of the airport when architects situate meetings points in order to provide spaces to meet. To continue with this package, with the words delayed, waiting refers to the long periods of time that passengers wait, maybe until their departure or in the queue. Hence, it affirms the necessity of non-aeronautical activities to kill that time.

The last package is related to spaces when we can find: check, huge-runway, bathroom, place, meal, sing, appointments, sitting, bags, service, traffic, gate, roof, parking, area, show. Here once again 'appointments' relates a business activity in the airport. Furthermore, these words state that passengers care about the physical environment of the airport, (Adey, 2008a; Adey, 2008b; Budd, 2011; i.a.) and how their affordances can be trending among the passengers. (Bille, Bjerregaard and Sørensen, 2015) Owing to all of these facts, the concept of non-place (Augé, 2006) starts to distance from the concept of the airport in the passenger's eyes.

### **The Twitter analysis in Adolfo Suárez Airport Madrid-Barajas. MAD airport.**

Regarding the second study looking at "Airport Barajas" words the main words are "suspect", "liquid", "boarding", "aena", "alone", "worried", "runway", "food", "come back". This study was run in Spanish in order to provide a closer statistic to the project. Suspect, Aena will be included in the new's package due to the suspect of the murderer that happens the day of the analysis was taken.

The liquid word is in the security one. It mentions due to the several procedures of security that MAD airport does to their passengers.

Alone, worried, and come back is related to feelings, the feeling of solitude is a common feeling after crossing the land-side. The preoccupation is felt along the different tasks that the passengers have to overcome and come back is not a feeling by itself by it is intrinsically related to past experiences and returning to a country, reunion with related ones, it is definitively, an emotional action. Finally, food, boarding, and runway are mentioning spaces. Food is related to commercial places and it is logical due to the famous places that MAD airport have. From the typical Spanish tapas to the commercial and impersonal restaurants.

### **Case study Description, Adolfo Suárez Airport Madrid-Barajas. (MAD)**

It is a public airport owned by AENA ubicada 21 kilometers far from the city center. It is the most important airport in Spain, the fifth in Europe and is situated in the 24<sup>th</sup> position in the world regarding the number of passengers. In 1929 the selection phase was done choosing the Barajas area as the best position to



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project the airport. It was in 1931 when the airport was inaugurated. However, it is in 1944 when the first runway was built, before that, a big circle unpaved was the landing area. In the 50's five runways are added due to the continuous flow of passengers. In this decade, the airport is considered international and the second terminal is built. With the tourism advent in the 70's and the 1982 FIFA World Cup, the airport is reformed, and two new terminals were constructed.

This situation was projected to remain still until the new millennium, but it is with the Olympics in 1992 that the airport got saturated. Different solutions were proposed but finally, the government decided to create an infrastructure plan and an extension plan in order to provide service and capacity until 2005 with their 3 finished terminals. However, once again the airport got saturated before the plan, therefore in 2000, it starts the construction of a macro project which consists in the terminals T4 and T4s, designed by the famous architects Richard Rogers and Lamela Studio. This project will be converted into the iconic image of the airport. (Image 9)

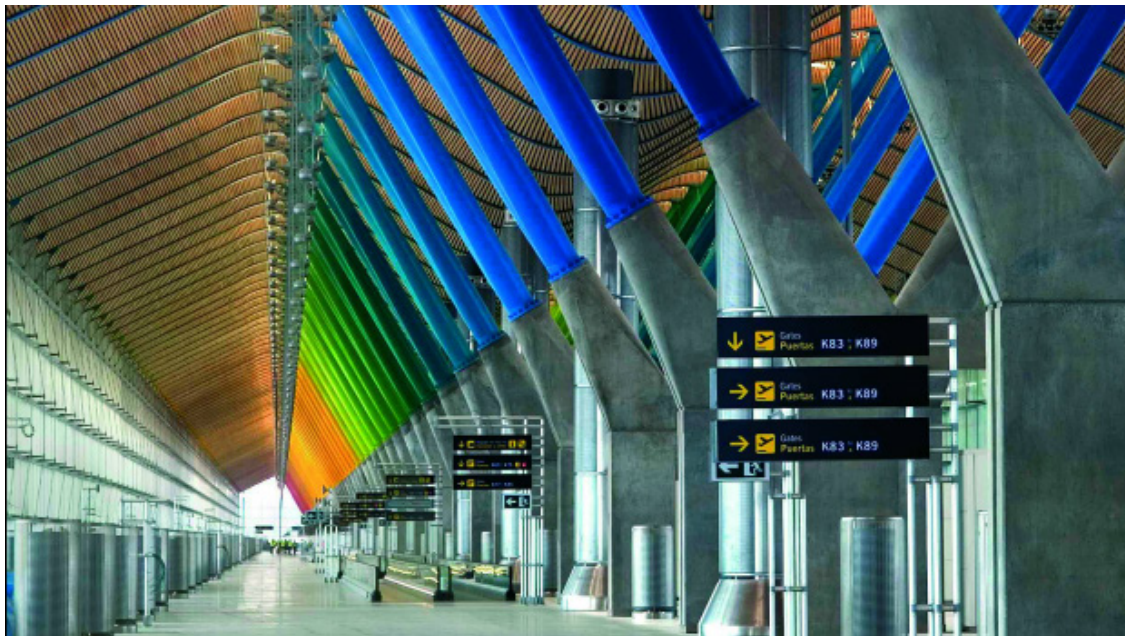


Image 9. Richard Rogers + Lamela (2000) Terminal 4, MAD airport.

Source: Pinterest

In the last decades, the airport suffered a terrorist attack in the Terminal 4 which generated a collapse with tens of deaths and incalculable material damages. In 2014 changed its name including Adolfo Suárez in order to honor the first president of the democracy who passed away in the same year.

Nowadays, the airport carries more than 53 million of people with almost 15 million of national flights and 39 million of international flights (Fomento, 2018)

The physical structure of the airport is divided into four terminals: T1 with 22 boarding gates, T2 with 16 boarding gates, T3 with 30 gates, T4 with six floors, and 76 boarding gates. Finally the T4s, with three floors and 67 gates. Regarding



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runways, the MAD airport has 4 pairs of parallel runways with a simultaneous use of 4 in total.

Following all of this expansion, the Adolfo Suárez Madrid Barajas airport is a major European hub which is specialized in flights connecting the historical Spanish nod: Latin America. The design of the Terminal 4 shows an undulating roof following the recommendation of a curvilinear roof as the best shape to influence passengers (van Oel and van den Berkhof, 2013) and lively rainbow colored steel supports. The interior of the terminal is structured in parallel volumes separated by glass runways in various floors.

### Architectural Description of MAD Airport.

This physical structure talks about the airport functioning in several points. First, studying the layout in section, the floors are separated regarding their use, on the lower floor there are the arrivals volumes, in the higher floors we can find the departures. This is because of two reasons, on one hand, gravity helps to luggage control if departures are higher. On the other hand, departure spaces are where the passenger waste more time due to their waiting procedures. Hence, if the departure floor is designed in the higher levels, it is easier and cheaper to expand upwards.

Second, the study of their floor plans provides a similar scheme, the project (terminal 4) divides their uses into different parallel volumes. The first volume and closer to the entrance is where the counters are, the second volume is the place of the security control and a few commercial and restaurant spaces. After passing the security control, the third and last volume is on the aerial side, the duty-free, the consumptions areas, the resting areas and the boarding gates. The three volumes are connected by glass runways (Image 10)

The spaces of the airport are wide and open to a natural light with enormous windows. These windows act like the balconies in the early days (Adey, 2008b) generating a spectacular view of the planes and the functioning of the airport from

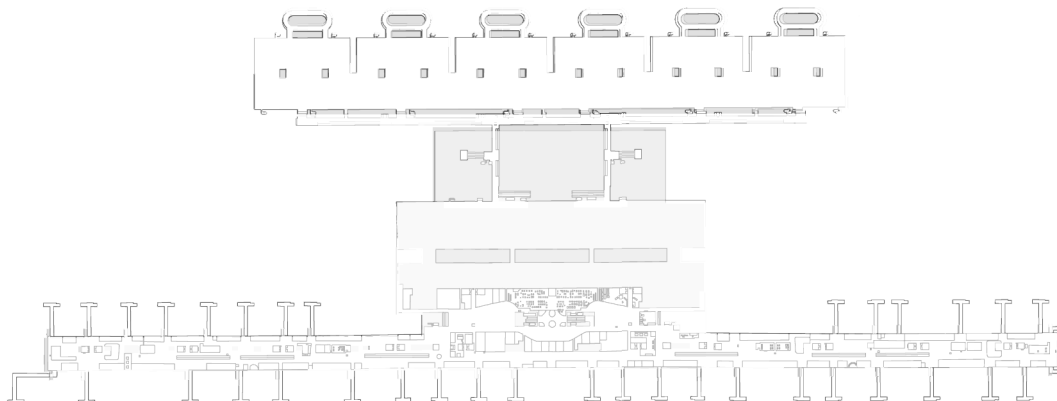


Image 10. Richard Rogers + Lamela (2000) Terminal 4, MAD airport.  
Source: Bing Maps



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within. Wide open areas are proved to be more security and relaxing that smaller area (van Oil and van den Berkhof, 2013)

Regarding all the airport as a whole with the 4 terminals (Image 11). While people see the T4 as an *“artistic feeling inspired by architect and designer Antoni Gaudi”* (Reviewer in Yelp, 2017) and give compliments to its *“architecture, feel, and use of space.”* (Reviewer in Yelp, 2017) Others passengers with less luckily, arrive at T2 and described it as *“the saddest airport terminal I’ve ever been to in my life, dust off your polyester, cuz it’s the 1970s all over again! Floors are old linoleum, some of it peeling. Ceilings are low, and the stylings are minimal and dated. My wife says it feels like a giant airport bathroom: “low on looks, and easy to hose down”* (Reviewer in Yelp, 2017) The great difference between T1, T2, T3 and T4, T4s is shocking, while the newest is an icon of modernity and airport sites, the others are one of the oldest and ugliest hub terminals in the world. Furthermore, what people are more concerned in the “Los Viajeros” forum is on the time they have to spend transferring from one terminal to another. *“Prepare to walk! Leave the heels in yo carry on for the night life. It’s a lot of walking”* (Reviewer in Yelp, 2017) stating that from T4 to terminals 1,2,3 is 15 min bus ride, this, if it not planned in advance, can cause serious problems. *“it nearly gave us a panic attack when we had to make quick connection between Terminals 4 and 2.”* (Reviewer in Yelp, 2017)

Therefore, all of these factors, the MAD airport is a good case study to analyze it. The analysis will include a mixture of the methodologies used and it is structured through different areas of the airport, similar to the passenger pathway from the landside to the airside.

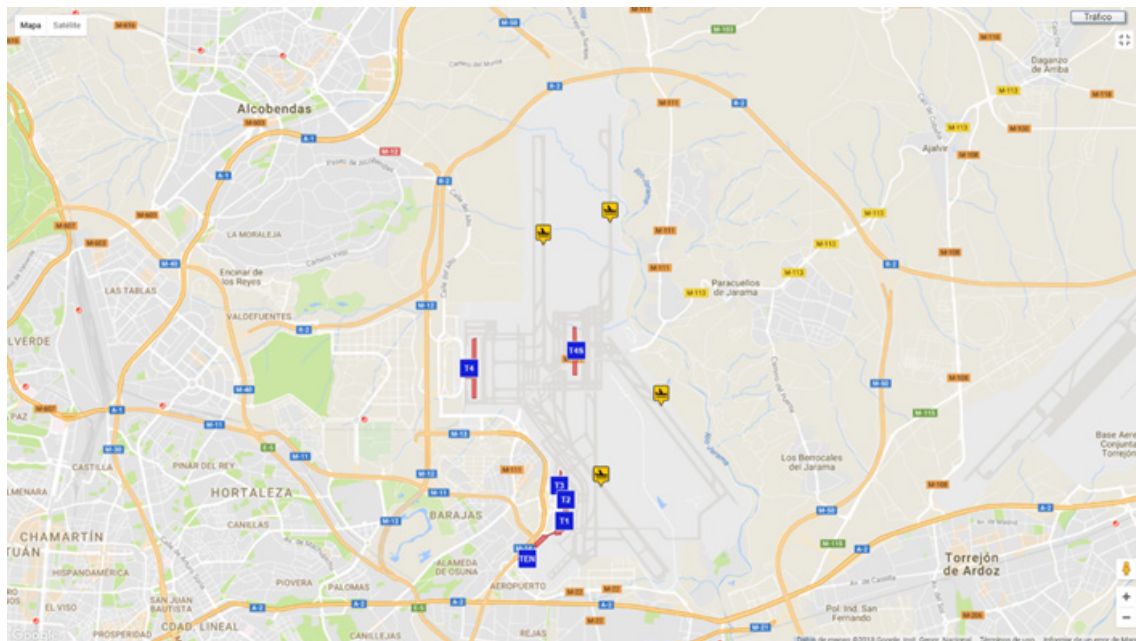


Image 11. Richard Rogers + Lamela (2000) MAD airport.  
Source: Google Maps



## Case Study Analysis (MAD airport)

### Check-in areas

These areas are usually one of the first things that passenger see in the airport and are usually the first activity in the aerial behavior. However, with the low-cost airline's advent, people are starting to eliminate this activity and carry their bag.

Through the observations, the check-in area in the MAD airport has the widest square meters and dedicated zones for passengers regarding aeronautical activities. The usual procedure here is: *"The passenger arrives at the airport with their luggage, he moves fastly his head from one side to another, not sure if he's looking something. His eyes stop looking something, I follow his gaze and he is looking at the screen information. He stops and stares at the blue screens for a while, then he takes the phone and glimpses it (maybe to check the hour) and starts walking with the luggage to the counters."* (Observation in MAD airport)



Image 12. Screen information

Source: Photography taken by the autor of the thesis

Afterward, the passenger usually negotiates with the staff at the desk to weight and drop their bags. However, before this performance, the passenger usually has to wait for the queue. As one reviewer mentions:

*"Just make sure you give yourself plenty of time... The check-in lines can be quite long and move really slowly. And when they tell you luggage for your flight would be on Carousel 2 and then they all appeared on Carousel 4 instead. And your flights never take off on time. Just don't panic and breathe. This is Spain"*



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*after all..*” (Reviewer in Yelp, 2016). This reviewer relates the waiting time as a trigger mechanism of panic feelings and anxiety, the changes are also triggers in behavior regarding his opinion. These situations are talking about the ‘input’ factor (Lange et al., 2013), the others two are service and discipline.

As Kitchin and Dodge states, it exists the self-service procedure in check in. The passenger, in this case, check online, thus, they don’t have to wait. Nevertheless, this ‘new’ method is actually a problem among the passengers. A reviewer in Yelp comments about the good functioning of the check-in online, but the majority of the opinions in MAD airport check-in online follow this path: *“When leaving on international non-Schengen/EU flights, it may be better to check in at the counter. I didn’t do this because I checked in online using the United App (because I live in the 21st century, and had no checked bags). when it came time for boarding, I (along with a few other people who had checked in online) were asked to step aside for another security check and interview.”* (Reviewer in Yelp, 2016) Technology, hence, is important due to the dichotomy ability to help passengers or even creating more problematic atmospheres.

Continuing with the observation, once he enters into the queue. *“he waits for the 5 first minutes standing just looking at the counters, from 5-20 minutes of waiting, he starts to use the mobile phone in order to ‘kill’ the time. He calls someone. After 40 minutes of waiting time, the passenger put the mobile in his pocket and approach to the counter. They start talking, both shows smiles on their faces. The passenger grabs the wallet and shows the identification and ticket. The staff guy asks for the luggage. They weight the bags and after that, the passenger leaves the area.”* (Observation in MAD airport) Lange will explain this as a good level of ‘discipline’ (Lange et al., 2013), in the check-in area. Reviewers also mention this ‘discipline’ factor in the airport, on one hand, an online reviewer says that *“The check-in staff is among the absolute best I’ve encountered! Very helpful and friendly.”* (Reviewer in Yelp, 2018) This negotiation between passenger and staff clearly affect positively to the passenger air experience, on the contrary, another reviewer state: *“The check-in process was long and they ask a lot of questions, like “where are you flying to today?” “why were you here?” where did you stay while you were here?” and so on and so on.”* (Reviewer in Yelp, 2017) The almost interrogatory on the check-in process is annoying to this passenger. First, because the passenger here feels that he has to prove some kind of innocence without any sign of threat. The passenger as a category of threat (Pearson, 2018)

Architectonically, the spaces features are amplitude, height and clean. Due to these factors, several situations happens here. The pattern of mobilities here is the slowly zigzag framed by the long queues and the free moving, which enables multi situations in the same place. E.g. some teenagers use the space as a stage (Image 13) to perform some kind of human-figures or dances creating the airport as a theater. (Pearson, 2018)



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Image 13. Check in area as Stage  
Source: Photography taken by the autor of the thesis

To MAD airport, the check-in area fills the first volume with the multiple counters. Here we also can find the sculptures that help the way findings and can act as a meeting point. Furthermore, in both extremes, the airport opens to its surrounding with enormous windows generating an elongation of the space and a balcony (Image 15) for a passenger to spot and look at the great technology and functioning of the airport. (Adey, 2008b)

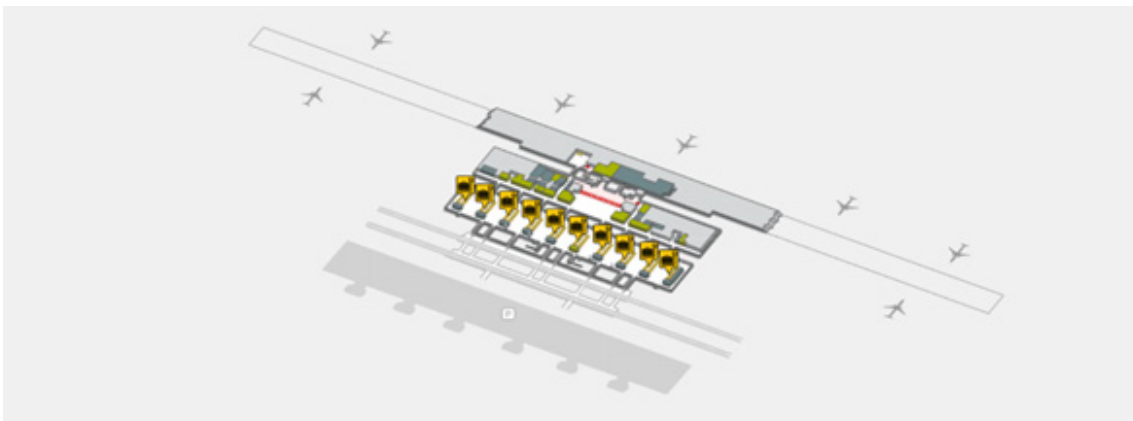


Image 14. Check in spaces in Terminal 4  
Source: Edited drawing



Image 15. Balcony experience  
Source: Edited photography

The passengers once they have checked in and dropped their luggage, they cross the glass catwalk and move into the second volume, the volume where commercial, restaurants and security controls appear. The last step until the passenger moves from land side to the air side.

## Security

Security areas are one of the most dreaded zones, in MAD airport, we have several security lanes in each terminal, and on the whole, people rate security queues as way easier than in other countries. One of the main reasons for people to feel security areas as not that hard as they guessed is the staff people. *“the security and passport control people are so nice and welcoming I was freaking out.”* (Reviewer in Yelp, 2017) and signage *“First rate! Got through security in less than 10 mins! Signage here is very good”* (Reviewer on Yelp, 2017)

Another reviewer discusses if it is good to cross the security lane in just 10 minutes. On one hand, it is just a breeze of time, and on the other hand, is it enough security? This reviewer states the same concept that the respondent number 26 who says “I think airports have to have more or better security procedures” (Respondent 25, appendix). These people will represent the first or second behavior of Kirschenbaum (2013) which mention people who don’t



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discuss with the security staff and cross the lane without an incident in 15 seconds on average.

However, the security in MAD airport is easier than other airports, they have problematic situations that passengers want to highlight. 20 out of 36 respondents mention the security atmosphere as uncomfortable, cold, “not well organized”, stressful among other adjectives. *“I feel like a delinquent while I think that I have not taken the liquids out. I don’t know what else I have so I smile and pray to not get a routine control of drugs, because it has happened to me several times.”* (Respondent 16, appendix) This is a good example to explain the feeling of stay inside of a ban-opticon (Bauman and Lyon, 2016) and how these atmospheres are charged with so much pressure that people already feel like they did something illegal. (Urry et al. 2016) To these type of passengers, removing all the electronic devices in separate boxes and putting their clothes such as boots, belts, jackets off is an annoying and uncomfortable procedure which trigger and amplify the pressure and anxiety. On the opposite side of this passenger profile who is annoyed by the security procedures, we can find people who feel unprotected when there is not enough security. Here, a reviewer explained a situation in the airport:

*“There were so many moments during our four visits to this airport where we thought to ourselves, “so this is how terrorists find their way into the US”. You mean you don’t want to see my passport? How do you know it’s really me? ... My flight doesn’t even go through here and you stamped my passport without looking at my ticket? There are so many gaps in security that I felt my American tummy churning with anxiety.”* (Reviewer in Yelp, 2017)

Here this passenger is concerned about the security in the airport, it is representing the security staff behavior into her. In other words, she reckons that every person can be a threat in the airport, therefore an equal language to every person who travels is the best option. Passengers treated as a PAX profiles, where everyone has to prove their identity albeit they stay in the “anonymity”. A good solution to this would be the biometric security systems (Kalakou et al, 2015)

I have talked about the technical services and procedures, the negotiation between passenger and security staff is a paramount factor regarding the atmospheres sensations.

One person in the forum “Los Viajeros” talked about the security staff in MAD airport had changed. Years ago the staff who control the security lanes were police people and now a private security company has taken the control. Now they are not policed and to this passenger *“They are more fussy, how about opening the suitcase, the shoes, the questions about the things you carry, whatever... I get so angry when I have to cross the security line”* (Los Viajeros, 2018) On the contrary, we have the respondent number 3 who says that *“On the whole, I go with everything prepared and packed in order to spend the less time possible*



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*in the security control (no boots, no belt, liquids packed in a plastic bag, etc.)”*  
(Respondent 3, appendix)

Furthermore, people usually think that just because they are guards, they are going to be rude therefore some explanations for these atmospheres are given due to the rudeness of the staff. This links and supports the idea stated by Urry et al. in 2016. They mention the possibility to hire staff oriented more to health areas than security and police-oriented because of the treatment of the passengers, this solution will calm down the atmosphere.

Regarding architectural analysis, here I will show how the security lanes are ubicated in two different terminals, T1 and T4.

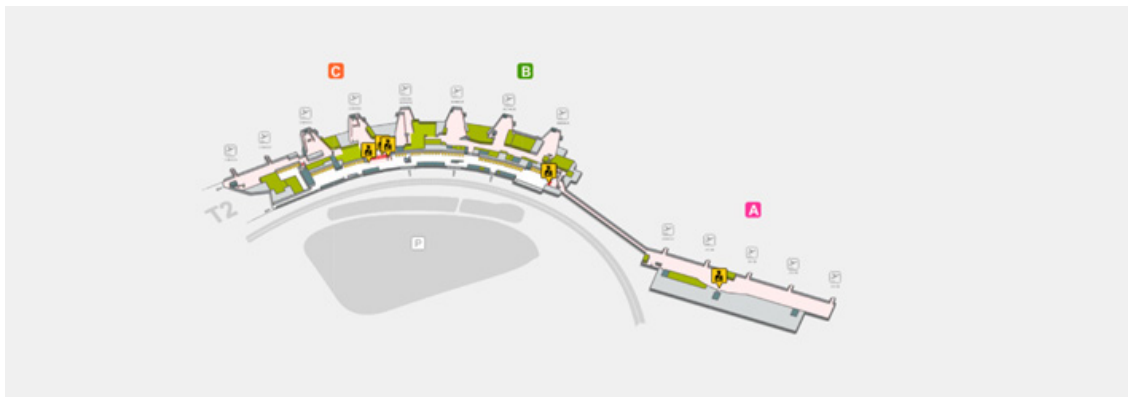


Image 16. Security spaces in Terminal 1  
Source: Edited drawing

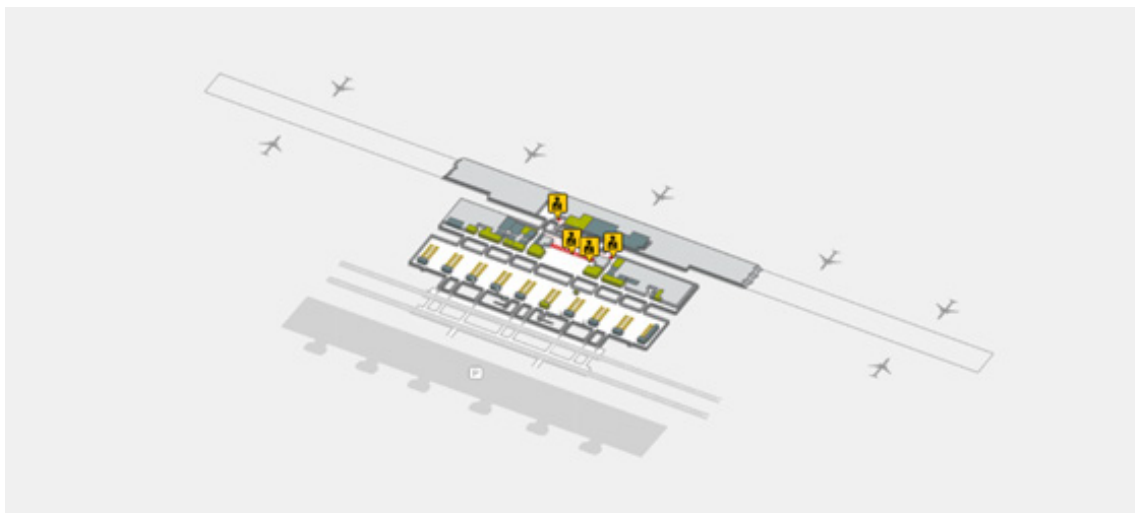


Image 17. Security spaces in Terminal 4  
Source: Edited drawing



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We can differentiate several points of security due to the versatility that MAD airport has. Here we can find three types of security lanes regarding their function and two types of them regarding the design. Functionally, the three types are standard, family, VIP. What is to say, the standard security is the zig-zag lane that everyone crosses to get to the air side. Family lanes are available in the MAD airport to use by families with children, they can pass with food and it is usually children-oriented with staff that helps them. The third type is VIP which is the fast track of security lane (Image 18), this is used normally by business people who are used to travel a lot and they “know how” to do it, they have a mobility competence (Unger, Urieli and Fuchs, 2016).

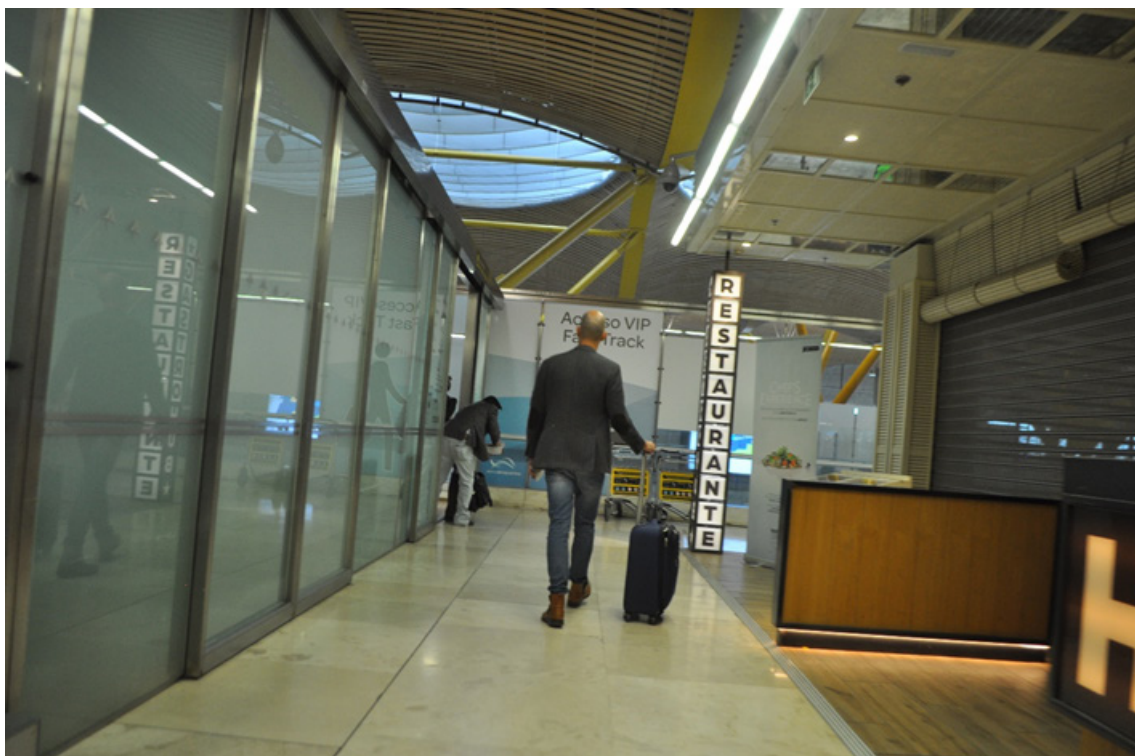


Image 18. Security spaces in Terminal 4  
Source: Photography taken by the author of the thesis

Regarding the design, I can differ two types. The first one is represented by the security lanes in the fourth terminal. Space is wide and open with a high and curvilinear roof made of bamboo wood and colorful and metallic supports. This plus the sincerity of the space which say “this is not going to collapse” is paramount in security atmospheres because they act as a preamble of relaxation and prepare the passenger to a smoother security process. The second type is the opposite, we can identify them in the old terminals of the airport which are T1, T2, and T3. These environments have low ceilings, polystyrene materials, and neutral tones. The juxtaposition of these factors (Bille, Bjerregaard and Sørensen, 2015) is what creates a high-level pressure atmosphere or a smooth ambiance.



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Image 19 and 20. Wide and lower design  
Source: Photography taken by the author of the thesis

Finally, it is worth to mention that security zones are the last area that passengers and related people are together owing to the fact that these spaces are the doors to the air-side. They split the airport into two different and general spaces, airside and landside. Therefore, it is going to be a space of *“encounters of feelings”* (Respondent 20, appendix). In the observation process, I noticed that a couple went together to the security lane in the Terminal 2, and afterward, she entered to the queue (which it was empty) and kiss their boyfriend. He scrutinizes her until she passed the security control and then he waved his hand and sent kisses to her as a sign of goodbye. These romantic-sad situations are usual in this zones.

After security process, the passenger is in within the air-side, then thousands of commercial signs and duty-free with high-profit sales are starting to appear and to influence passengers. Therefore, the next section to study will be the commercial areas.

### Commercial Areas

Once the passenger enters to the airside, the duty-free (Image 21) is the first zone that passenger usually cross. Duty-free represent the temple of consumption (Bauman, 2000) where all the highest profit in sales are in the front line. This is a marketing choice design, what is to say, the airport takes advantage of the passengers. They have just passed a situation with so much pressure that facing a situation with high luminance, indiscriminate brands, and the indefatigable commercial staff seems so artificial.

*“You can’t buy a magazine or a book. You can’t buy a neck pillow or any common travel accessory (my friend asked and the worker told her people*



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*to ask for them all the time). There is a large duty-free where you can buy stinky perfume and whole hams though.” (Reviewer in Yelp, 2017)*

We have here a passenger utility-oriented in commercial areas in airports, in other words, they try to find useful things to buy to use it in their waiting times. However, the majority of space is for products with high sales and useless regarding discretionary activities. (Kalakou and Moure, 2015) On the opposite side, we have a respondent of the survey who mentions that buying stuffs like makeup in the duty-free, helps to overcome the sadness of having left the family behind. *“when I am separated from my family at the airport I like to spend time there and buy cosmetics, because it makes me not to feel sad.” (Respondent 25, appendix)* Here, a direct connection is drawn between commercial activities and emotions and filling their emotional needs with material buys. This is controversial and slightly opposite to the hierarchical pyramid described by Peter Adey when he states that people will be into buying when they have fulfilled their basic needs. (Adey, 2008a) The respondent describes here a situation where commercial areas enhance atmospheres due to their ability to transform sadness into happiness, at least momentarily.



Image 21. Duty Free area  
Source: Photography taken by the author of the thesis



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Another respondent states that *“At the end, one goes through the obligatory shops with the relief of finding oneself in a place more accessible than those infinite. Relief that one accepts reluctantly due to the impossibility of choosing an alternative path.”* (Respondent 34, appendix) This is a critique and a compliment to these spaces. Commercial spaces for this respondent are better than security controls or empty corridors but it annoys passengers due to the imposition of the space.

The MAD airport is well known of the commercial areas because it has a variety of food on the air-side. This was the most commented among the reviewers *“There are some Spanish tapas restaurants in different terminals with decent options.”* (Reviewer in Yelp, 2018). After the ‘decent’ variety of typical food in the MAD airport, the aspect and design of the shops are highly commented also, whereas in the Terminal 4 the comments appreciate the modern design, the openness, and the cleaning, the terminal 1 and 2 is lack of possibilities and good design. *“In Terminal 1 food choice is limited and expensive. Hope you like burger king or a grossly overpriced burger or sushi. I mean I guess you could always opt for a bag of M&Ms from the Duty-Free.”* (Reviewer in Yelp, 2017)

In this analysis, the most typical types of passenger regarding their consumer behavior is a step-back profile who don’t need to buy in order to enjoy the time in the airport. Respondent number 14 mentions that she feels the obligation to pass this area in the fastest way looking for the exit. However, if she is returning to her country and in the country, she traveled there is another coin, maybe she will try to find something cheap in order to spend the last money she has. Here, we can see another type of utility passenger in consumption areas.

The number 16 respondent opens up a discussion related to how the airport treats passengers: *“it always feels like you are taken advantage of because I think most people just go to the shops and buy something because they are bored out of their mind so everything is better than doing nothing, so instead being offered some fun or relaxing things to do you are forced to walk through a good staged area where they hope you spend your money”* (Respondent 16, appendix)

This passenger complains about the fact that airport cares much more about taking money out of the passengers that serving good amenities to enhance their time in the airport. This is a strong critique due to it is going to the core of the capitalist structure of airports which represents modernity, hence, capitalism. Should Hub airports act more like local airports albeit they have the enormous scale?

Furthermore, other passengers mention the way that this area is designed, while respondent 13 believes that *“it is thought to pass lots of time in there, with a calm and cozy-ish atmosphere.”* (Respondent 13, appendix) respondent 33 criticizes the strong light (Suzianti and Larasati, 2017) and the narrow corridors of the duty-free that is not thought for the big amount of people with luggage.

Nonetheless, commercial areas are not only used to spend money. Maybe they are designed to do that but it is difficult to guess what is going to happen with



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different areas due to the character of airports environment. An online passenger mentions in the forum that she had to pass a night in the T4 of the MAD airport and there was only shop open 24 hours which was Starbucks. She recommends that *“If you need to spend a night at the airport and want to get some sleep your only option is to huddle around Starbucks’s seating area.”* (Los Viajeros, 2018)

This opens two discussions, first, that the airport doesn’t provide free spaces for travelers to relax and even sleep during the night because of the long waiting times of the scales that some people do. Commercial areas in this case, highlight the fact that MAD airport is not fulfilling the needs of their passengers and following Adey, this will create a rubberband effect in which passengers will not buy anything or buy less due to their needs are not filled. Second, it highlights the fact way that people design-oriented can think in a phenomenological way of the architecture but it is impossible to design with that perspective because atmospheres are unpredictable, therefore when one area is designed to one purpose, maybe the people who use it will give another, creating an unexpected atmosphere. 24 hours Starbucks is designed in order to provide food and drinks without a stop, but it is now also a space and a calm atmosphere to huddle and sleep.



Image 22. Starbucks Area  
Source: Photography taken by the author of the thesis



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Architecturally, we can see how the commercial areas (green volumes) are predominantly presented in every terminal of the MAD airport. Therefore, this links with the position that many people enjoy to shop while they are traveling (Lu, 2014)

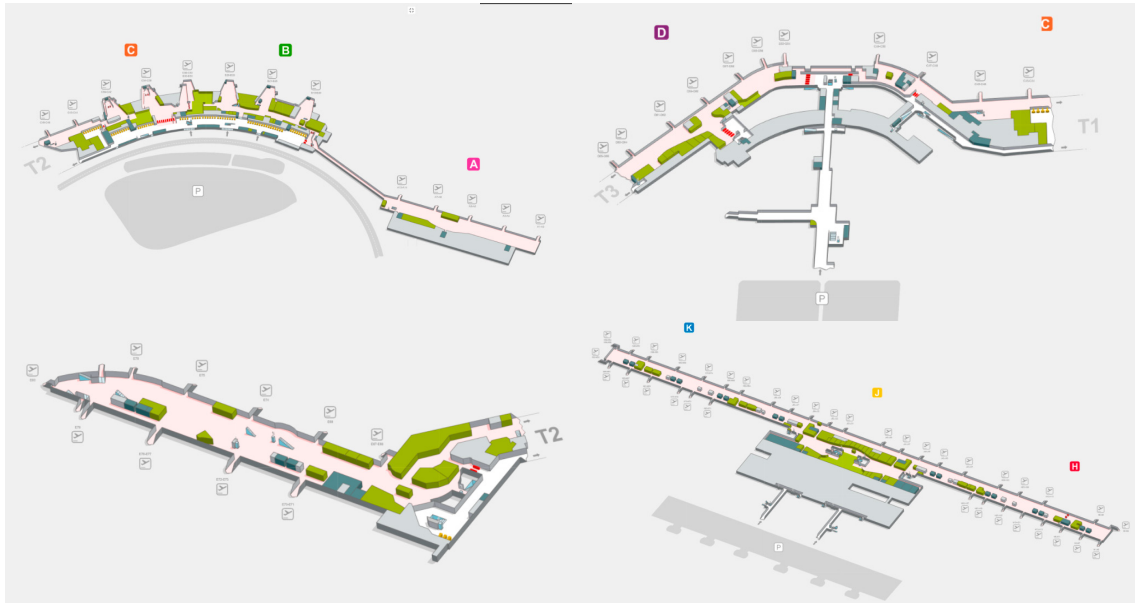


Image 23. Commercial areas in T1, T2, T3, T4.  
Source: Edited Drawing



Image 24. Typical food stand in Spain  
Source: Photography taken by the author of the thesis



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To conclude with this section, commercial areas also are used as the traditional input of the airport, in the MAD airports there are these “tapas” zones or selling oil in the very best quality of even ham, airports want to create a “real” atmosphere of what is going to be outside in the city center (Image 24). For me, as a Spanish native, these atmospheres are totally artificial and they have not any similarity of what is happening outside, but it is effective in a marketing point of view because airports are the first image of the country, therefore, they need to sell the country brand.

After the commercial shops, people rather go to the boarding gate or chose to relax in resting areas, therefore these will be the last sections of study on the air side. After that, a general overview again of the airport and the analysis of arrival zones will be shown.

### Resting areas

Here, once again the comments about T4 are about its modernity and cleaning airy atmosphere are typical. We can find also the positive compliments about the resting areas in the middle of the halls with live colors, tables, and chargers for all those who want to work (Image 25. The zones serve well as the dichotomy type of travelers work-leisure.(Unger, Uriely, and Fuchs, 2016)

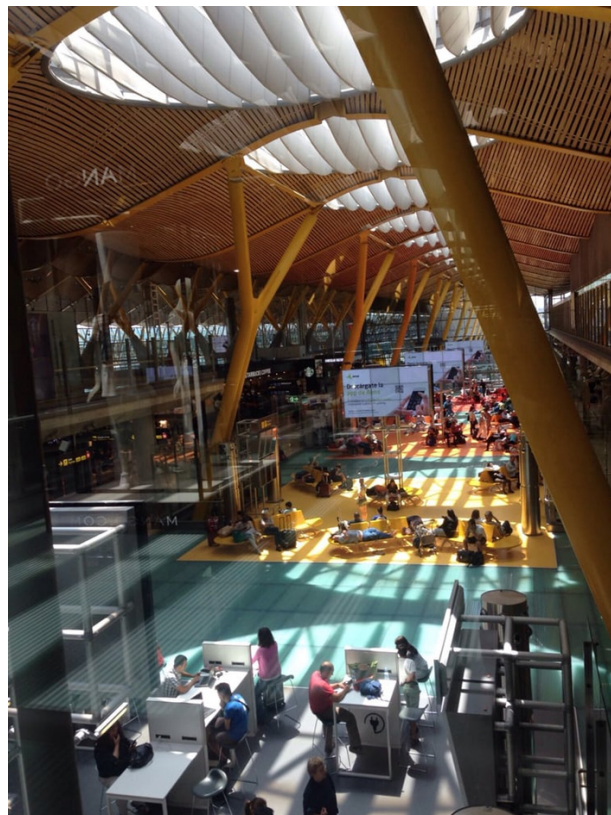


Image 25. Resting areas in the middle of the hall  
Source: Photography taken by the author of the thesis



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The chosen design and the difference of pavement material (Suzianti and Larasati, 2017) when there is a resting/working area or the hall.

Furthermore, resting spaces not only are used to relax but to provide familiar situations. *“There is also a wonderful children’s playroom with sections for younger children (including a special breastfeeding area and nice restrooms for charming diapers) with toys and small slides, and one area for older children with cool slides and climbing possibilities.”* (Reviewer in Yelp, 2018) (Image 26)



Image 26. Playroom  
Source: Photography in Yelp

The size of these playgrounds talks about the scale of the airport and opens up a variety of atmospheres depending on the age, from the temporal atmosphere of tranquility where the parents are alone enjoying each other for a while to the playroom atmosphere oriented to the kids, an atmosphere of joy, happiness. Surely the kids will complain when the parents tell them to leave the playroom due to time constrictions.

O to be uncomfortable in order to create a continuous flow of people standing and sitting. Respondent 16 mentions that *“most of the times for the real good resting areas you need to pay extra or need to travel business class, which I never do because I don’t have the money”* (Respondent 16, appendix)

These areas of what he is talking about are the called VIP lounges (Image 27), and the MAD airport has one in each terminal, you have to book the room



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and show your ticket before entering to a person. This person later will check you when the time to your flight departure is getting closer. Inside the room, we can find comfortable sofas with spectacular views to the runways, there is also drinking storages, magazines, newspapers and bathrooms. A whole little world with all the amenities inside the airport.



Image 27. VIP lounge in T4.  
Source: Photography in AENA.

Some reviewers and online passengers mention that there is a spa inside the T4 but I couldn't check if it is real or it was projected but non-constructed. Moreover, there are no hotels to rest so if someone wants a hotel to sleep, he will need to go outside the airport area or contract a shuttle service. (Los viajeros, 2018)

When people want to relax, they also aware of general details because they calm down all the craziness that the airport carries while going from check-in to security control and commercial areas.

A reviewer mentioned the heating system in a negative way: *"I experienced on a very cold day was that the heating system was working at full capacity, I guess. To the level of feeling uncomfortable and burning my nostrils."* (Reviewer in Yelp, 2017). Another experience is related by other reviewer mentioning like sometimes a smell of cigarette smoke appear, doubting of the policies in Spain. Here, the heat and scent are represented as a crucial factors in atmospheres when the subject is in a calm position and it links with the molecular energies. (Adey, 2009)

We are getting closer to the flight departure, and to accomplish that, we need to move on to the boarding gate area.

### Boarding gate

Boarding gate is the last step in the passenger script, therefore it will be the last lived experience that passengers would have of the airport.

The atmosphere here is characterized by the highest level of anxiety, even more



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than security controls. In the MAD airport there are several complains about the difficulty to find the gates. *“Super architecture, gorgeous interiors, friendly people - but terribly confusing system of gates for someone not familiar with the airport layout”* (Reviewer in Yelp, 2017) The doors are not clearly marked and finding the correct boarding gate turns into a difficult task. The fact that airport services put the boarding gate information in the screens only 1 hour before the take off, thus, passengers have to wander the gate.

The signage is not helping so much with the way finding of the boarding gates. *“And what’s up with the signs? The down arrow to me means “downstairs” but it really means “haha good luck”. I’m an intelligent human being and I can read, but WTF Madrid? Even with my broken Spanish, I feel like I was in some alternative universe that tried everything it could to confuse me.”* (Reviewer in Yelp, 2016)

Signage is so important in airports that have even rules. Allegedly, Frutiger or Helvetica are the main fonts to use in airports signage, moreover, it is said that 1 inch of height of the letter can be seen from 40 feet, and each inch will increase 40 feet of catching distance.

This situation added to the continuous delays create a confusion and a disorientation similar to the Gruen effect’ (Healy, 2014). Delays can affect and increment the disorientation as one passenger comments *“And if not delayed for siesta overkill by the staff, it’ll be delayed for something major that they will announce to you in Spanish, and Spanish only, leaving all passengers on the plane heading to a foreign location confused beyond hell.”* (Reviewer in Yelp, 2017) The language barrier in the MAD airport is a problem due to the character of the building, it is not permissible to hire staff that cannot speak English fluently, therefore, the passenger gets even annoyed because of the inability to help.

On the whole, the passengers described the atmosphere as: *“you just want to go on board instead of sitting next to a stranger in a boring environment where absolutely nothing happens and you are forced to sit on uncomfortable chairs and go online or read”* (Respondent 16, appendix) Here, once again the chairs are one of the most important material affordances and the waiting time is another factor to take into account owing to the fact that in the boarding gates there are not as many possibilities as there are in resting areas (Image 28). Therefore, technology and specifically smartphones (Kalakou et al, 2015) are the main resources to kill time.

Regarding design, in the MAD airport, there are no many differences in boarding gate areas, hence, a respondent would prefer more pleasant materials such as floor carpet or music technology that *“boost my mood and be relaxed in a way”* (Respondent 25, appendix)

The disorganization of boarding gates due to the several lanes is almost improvised. Some airlines differentiate the lanes depending on the fast track (more expensive) or the touristic fare. This creates even more anxious to the people who have to wait for not only their queue but the fast track. A respondent



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discusses about that saying *“On the other hand, the differentiation of queues by class is not very profitable, the beneficiary earns little, the majority looks with suspicion”* (Respondent 35, 2017) This focuses on how the airport is structured, and how the differentiation between classes create an atmosphere of inequalities.



Image 28. Boarding gate in T4.  
Source: Photography in Yelp.

This has been, the situation in the airport from land-side to air-side. However, I did not talk about the arrival areas of the airport, therefore, I will explain briefly how these atmospheres have been analyzed.

### Arrival areas

The arrival area includes a big part of the airport, it usually is located in the lower floors due to technical issues mentioned before. This physical spaces, as opposed to the areas that have been analyzed before, the procedure here is the passenger passed from the air-side to the land-side (Fuller, 2009).

*“The arrival is always different than the departure”* (Respondent 34, appendix) This statement puts in the table the opposite atmosphere that arrival areas have regarding departure spaces. The arrival storyboard can be divided into three different parts, the non-return, the baggage claim, and the exit. The non-return phase is happening when the passenger arrives at the airport destination, get



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outside of the plane and he goes to find the baggage claim or the exit. Here the most important perturbation in the atmosphere (Ash, 2013) is the glass corridor with interlocking doors (Image 29) for a non-return access control. It detects the presence, the direction of movement and left items and it is signed before the entrance that passing this door, there is no way to return to air-side. This is very vital when the passenger is doing a scale. I will describe how anxious can transform the atmosphere with a personal example.

It was August of 2016, I was traveling from Madrid to Aalborg doing a scale in Copenhagen. I have traveled with Ryanair airline (low-cost airlines) and it was my first time doing a scale. In the boarding gate in Madrid, the staff asks me to put my hand luggage in the airplane hold due to space constrictions and because my ticket was the cheapest, therefore, I have not any privileges. The staff labeled my luggage with the Copenhagen destination. I did not realize until I arrived in CPH that I had to go to the baggage claim and pick my luggage up. I had 1 hour to do the scale and for me, at the beginning, it was enough but it was not true.

I was forced to cross the interlocking doors in order to get my baggage, and then after waiting in the carousel, complaining to the staff because of the time delayed, and again waiting. I spent 30 minutes to get my bag. Then I had 30 minutes to go out of the arrival area, and go to the departures, I had to do the security lane and run to the boarding gate. It was insanely anxious and nervous, the worst airport experience in my life. Finally, I accomplished to get to the plane because I talked with the staff of the security queues and they let me pass through the fast tracks



Image 29. Interlocking doors  
Source: Photography taken by the author of the thesis.



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and I didn't have to wait for 45 minutes in the queue. Thanks to the kind staff that CPH airport has. (Personal narrative)

Following the non-return corridor, the baggage claim is next (Image 30). Here, in the terminal 4, it is the space with most height on the airport, due to is ubicated between volume 1 and 2 and the glass runways that connect each other. Tens of carousels are arranged in the space with multiple air systems (white volumes).

*"Baggage claim took a while on both my arrivals here, also probably because the airport is so big"* (Reviewer in Yelp, 2017) is one of the examples of comments that reviewers have posted on the internet. The time here, although is not usually a big amount of waiting time, it is felt as an interminable period. This maybe happens due to the big change of the big rush that arrivals have and the tiredness of the flight in confront with the immobilities (Cidell, 2013) that the arrivals and baggage areas have.

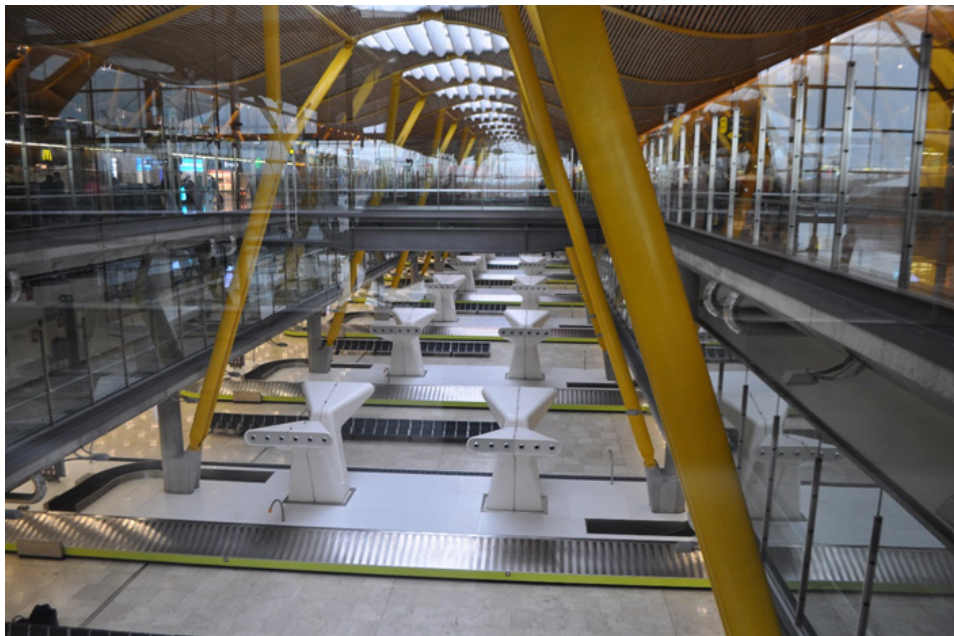


Image 30. Baggage Claim Carousels.

Source: Photography taken by the author of the thesis.

The exit phase constitutes the last step of the passenger (Image 31), they grab their baggage and go outside to the arrivals doors, where the atmosphere related to the emotion gets the highest point. Here, families, friends, couples reunion again, business people meet their coworkers or tourists arrive at a strange country with the eagerness of know everything about it.

Now, the passenger just needs to go outside. However, due to the situation of the airports and in this case, the MAD airport. People usually take the public transport, the metro. Therefore, as one reviewer states: *"The only frustrating part is that if you aren't at Terminal 4 when you arrive, you're going to have to walk for quite a while in order to get to the busses/metro."* (Reviewer in yelp, 2017) People commented that is 20 minutes and more than 2k steps to reach the metro



Image 31. Exit Phase

Source: Photography taken by the author of the thesis.

entrance and see it as an inefficient procedure, especially in red-eye flights (night flights).

The long corridors connecting terminals and public transport with the airport are provided with mechanical pathways in order to help people mobilities. Although is not saving any time because it is almost de same speed as walking, it helps to make a stop in the trajectory without the necessity of being immobile.

This has been the analysis of the different parts of the MAD airport, now we move to the concluding chapter which is structured in three parts, the bestiary of situations, the conclusions, and the further research.

## Conclusion

This chapter is divided into three sections. The bestiary of situations which includes six illustrations and drawings of six different situations in airport concluding with the main factor, analysis data and theoretical framework concepts that generate different atmosphere. It is an attempting to draw the different atmospheres. The six situations are Check-in, Security, Commercial, Resting, Boarding gate and Arrival situations.

Following the bestiary, the concluding mark will be shown commenting the highlights of the thesis and the paramount links between theoretical framework and the analysis done in the case study, the MAD airport.

Finally, a future research framework will be discussed with a reflection on potential fields of study regarding airport and affective architectures.

**5.**

**THE**

**NAKED**

**AIRPORT**

**AND**

**THE**

**BESTIARY**





## The Naked Airport and the Bestiary.

This chapter includes the graphical data analysis regarding the case study. It can be grouped into two different types of drawing. The naked airport and the bestiary of situations.

The naked airport section follows the diagrammatic way of thinking of Guy Debord and the psychogeographers creating maps as a connections of meaningful locations. Therefore, the drawings will be generated in two different maps, terminal 1, 2 and 3 due to its proximity and the T4. The layout is exploded and regenerated creating meaningful locations with relation in a map. What is to say, the Madrid Airport is transform as a The Naked Airport. The next section will be the bestiary.

*“Bestiary: a book written in the Middle Ages containing descriptions of real and imaginary animals, intended to teach morals and to entertain”* (Cambridge, 2018)

I have decided to call this series of drawings a bestiary because of two reasons. The content and the goal of the drawings. First, the content of the bestiary was to provide the most realistic approach to imaginary beasts and animals. Moving to the thesis topic, atmospheres are not tangible either visible. Moreover, they are not universal, so each person will feel it in a different way. Therefore, what I want to do it as an architect and mobilities designer is to draw these situations to provide the closest image to the reality of what it is to be inside of an atmosphere, what and how are the triggers and how influence and negotiate different bodies, objects and contexts. Second, due to their purpose. I want to show the different concluding points in the situations analyzed before in a quick way. The drawing has different levels of readability in order to obtain information and knowledge from them.

Finally, the drawings have three different levels. The environment or context agent which is represented in a spherical or circle way in order to create a visualization of the atmosphere which is ‘atmos’ + ‘sphere’ (Anderson 2009). The second level is the objects which are the technology, material affordances, factors of design and so on. Finally, the last level is the subjects which are the people who experience those atmospheres. The three aspects of the drawing and their negotiation between them are what create a unique atmosphere.

These drawings want to represent a universality atmosphere regarding those different aspects. It is worth to know that this is a limitation because as I have stated before, the atmospheres are unique so we cannot define the security atmosphere to be applied in every case. However, it is an approach to atmospheres in airports.

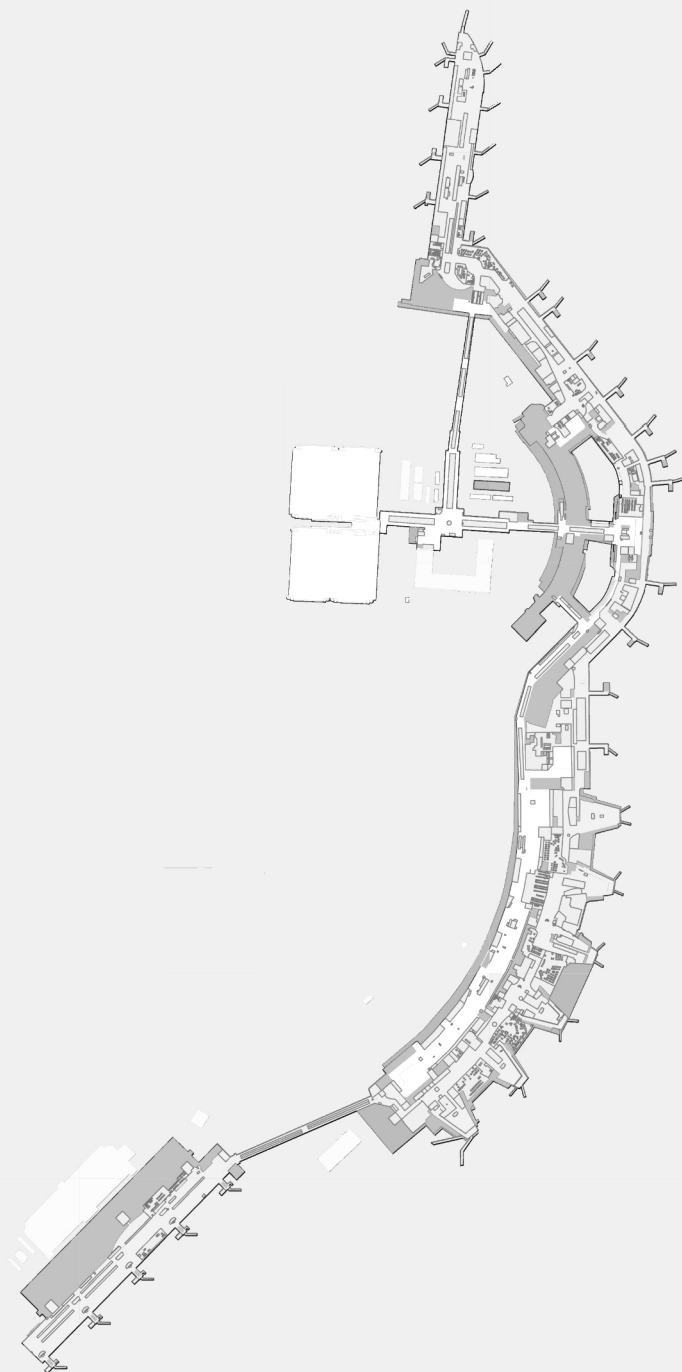


THE NAKED AIRPORT AND THE BESTIARY

# THE NAKED AIRPORT T1 , T2, T3.

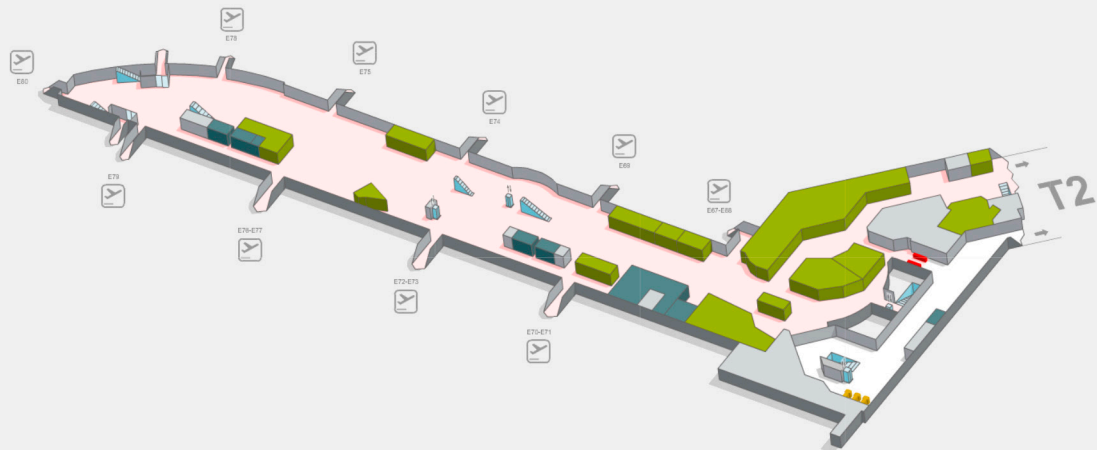
# TERMINAL 1,2,3

# MAD AIRPORT

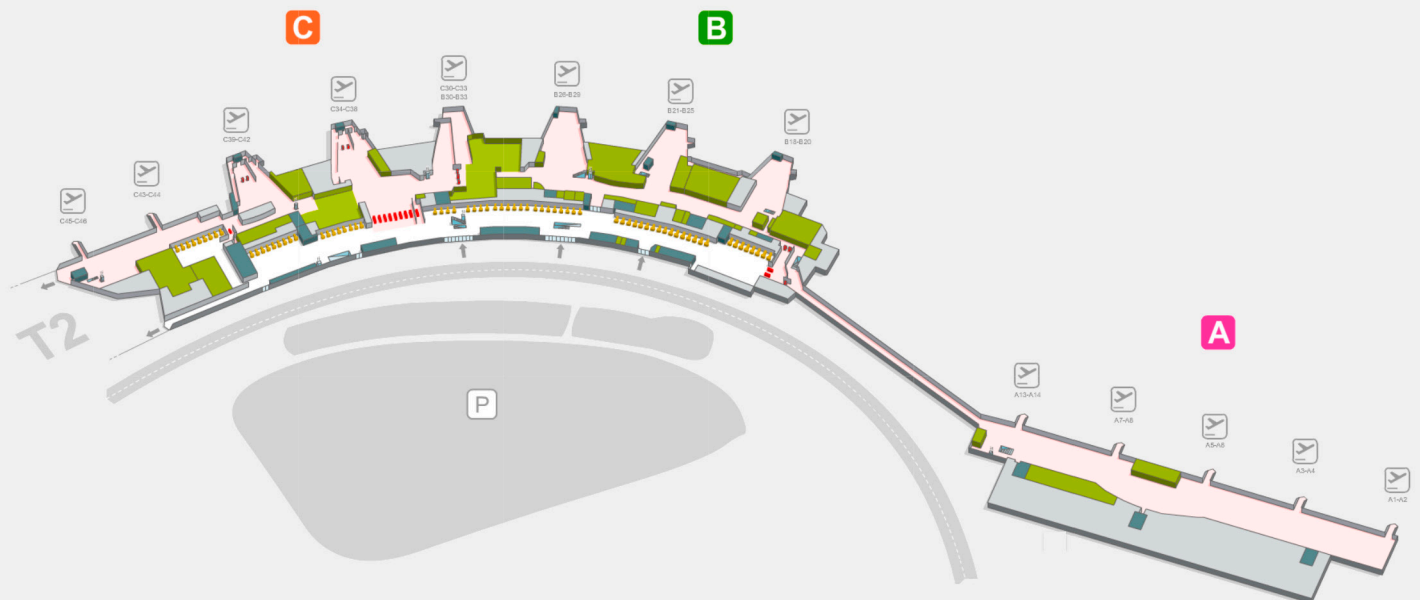
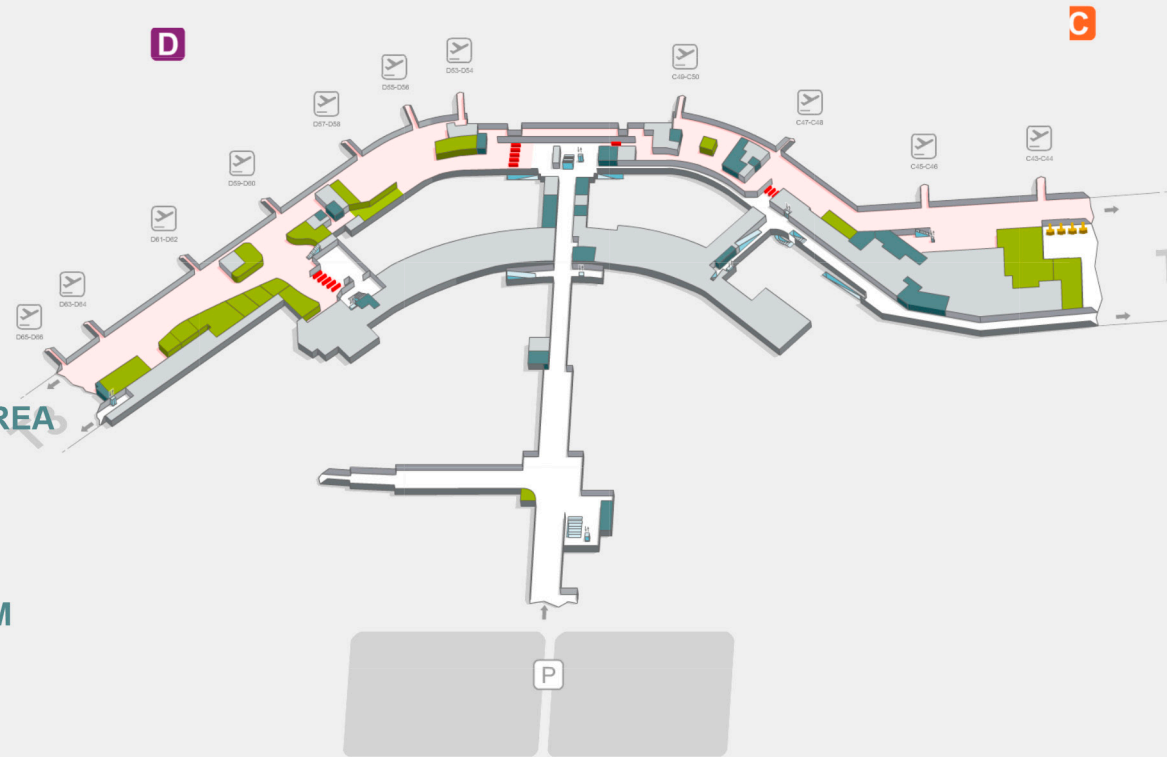


# TERMINAL 1,2,3

# MAD AIRPORT

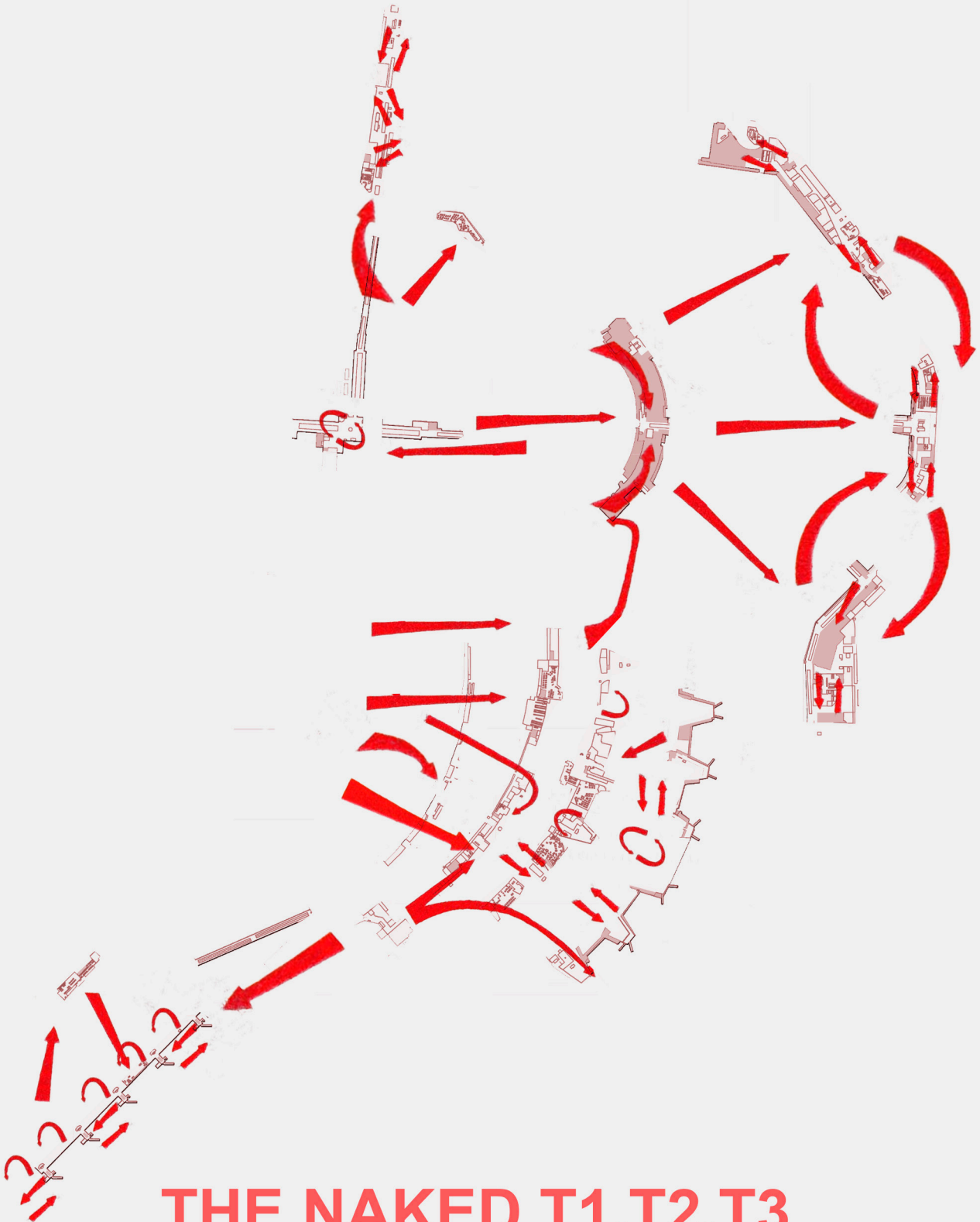
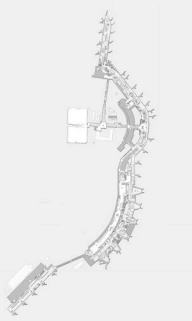


- LAND-SIDE
- AIR-SIDE
- COMMERCIAL AREA
- CHECK-IN
- BAGGAGE CLAIM
- SECURITY



# TERMINAL 1,2,3

# MAD AIRPORT



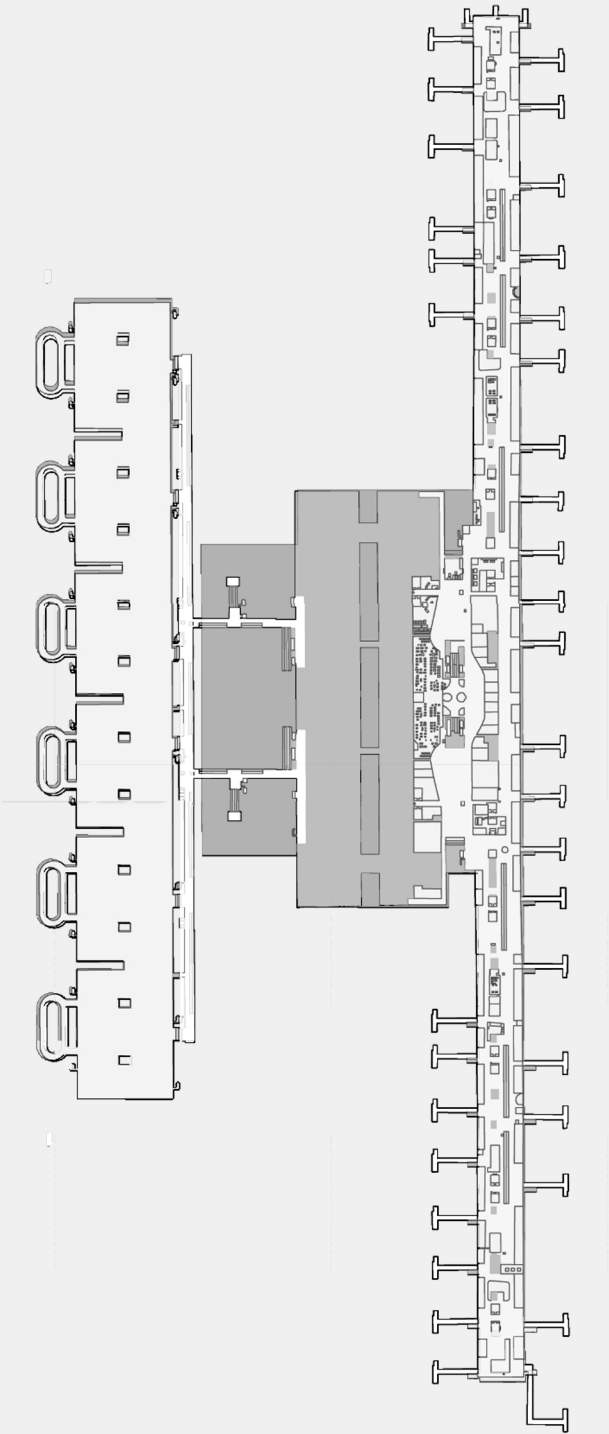
## THE NAKED T1,T2,T3



# THE NAKED AIRPORT T4.

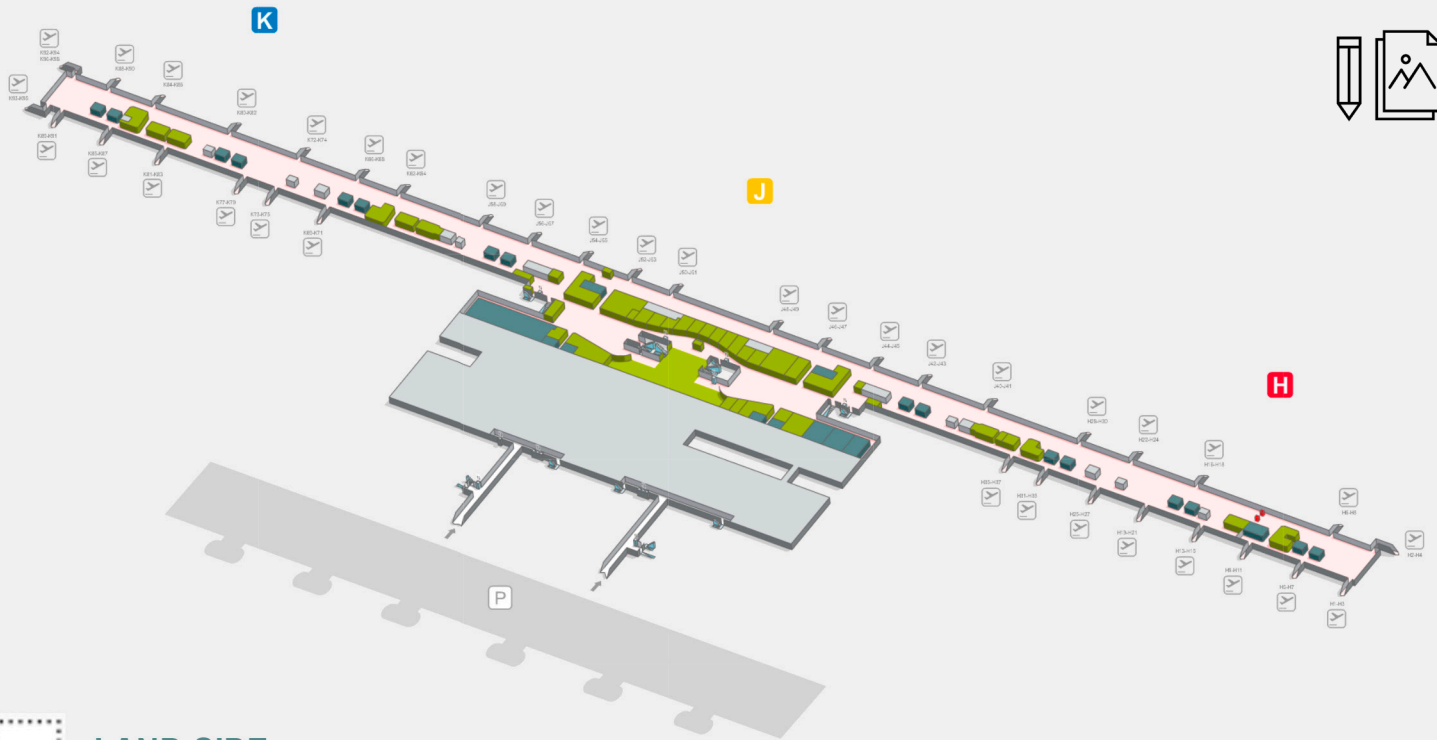
# TERMINAL 4

# MAD AIRPORT



# TERMINAL 4

# MAD AIRPORT



LAND-SIDE



AIR-SIDE



COMMERCIAL AREA



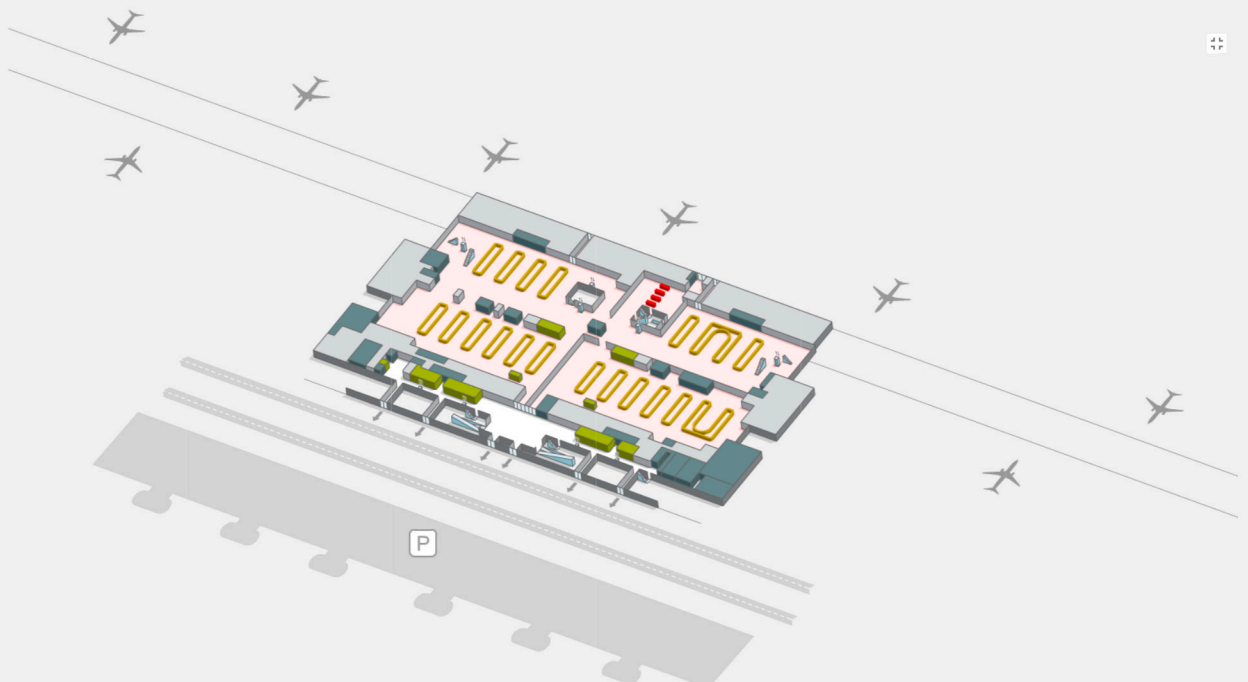
CHECK-IN



BAGGAGE CLAIM

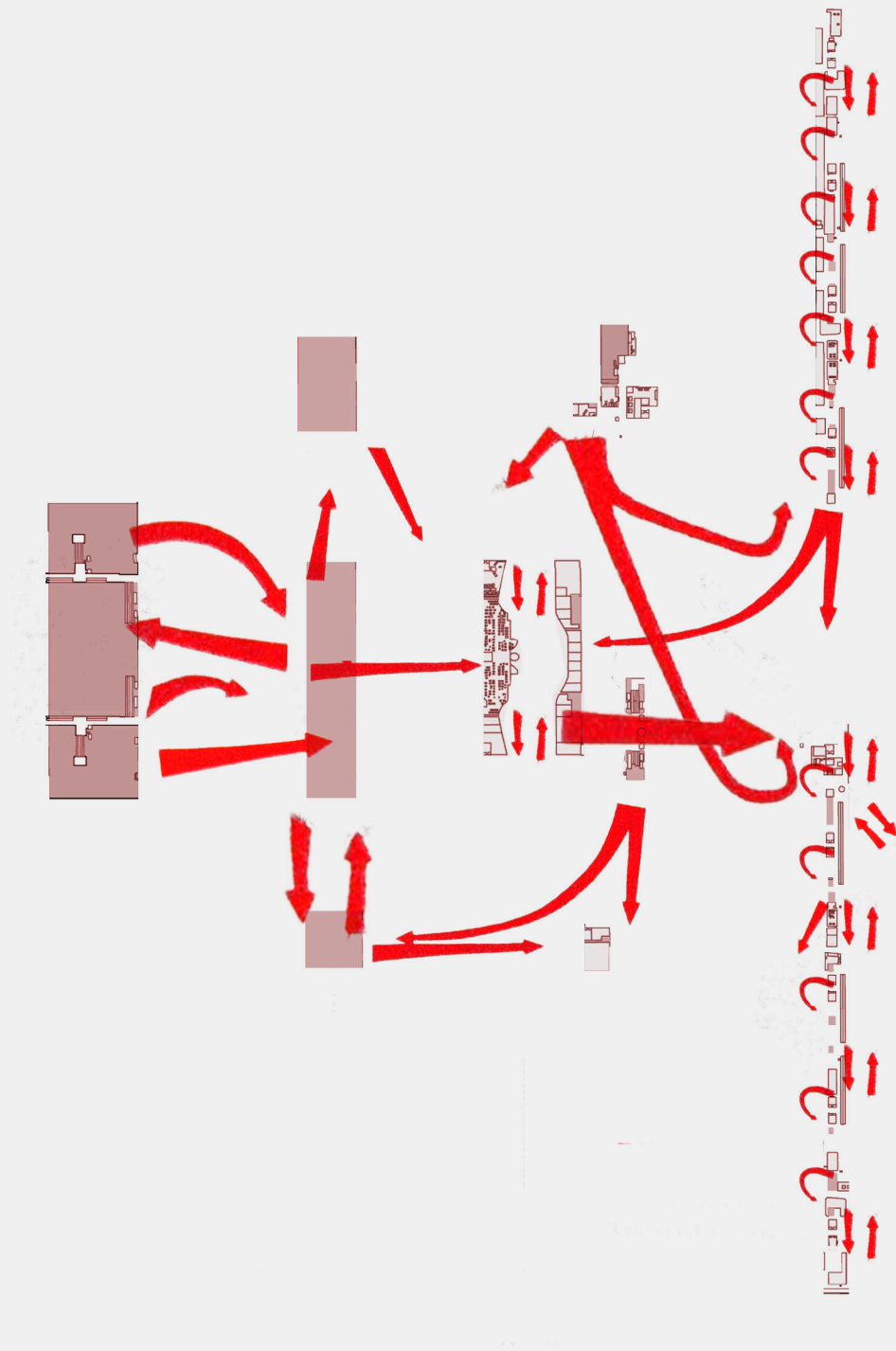
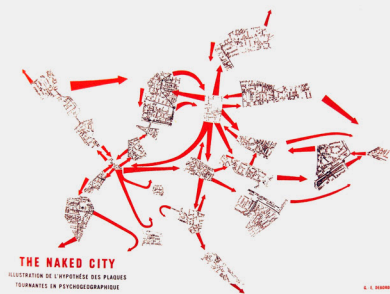
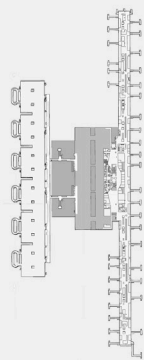


SECURITY



# TERMINAL 4

# MAD AIRPORT



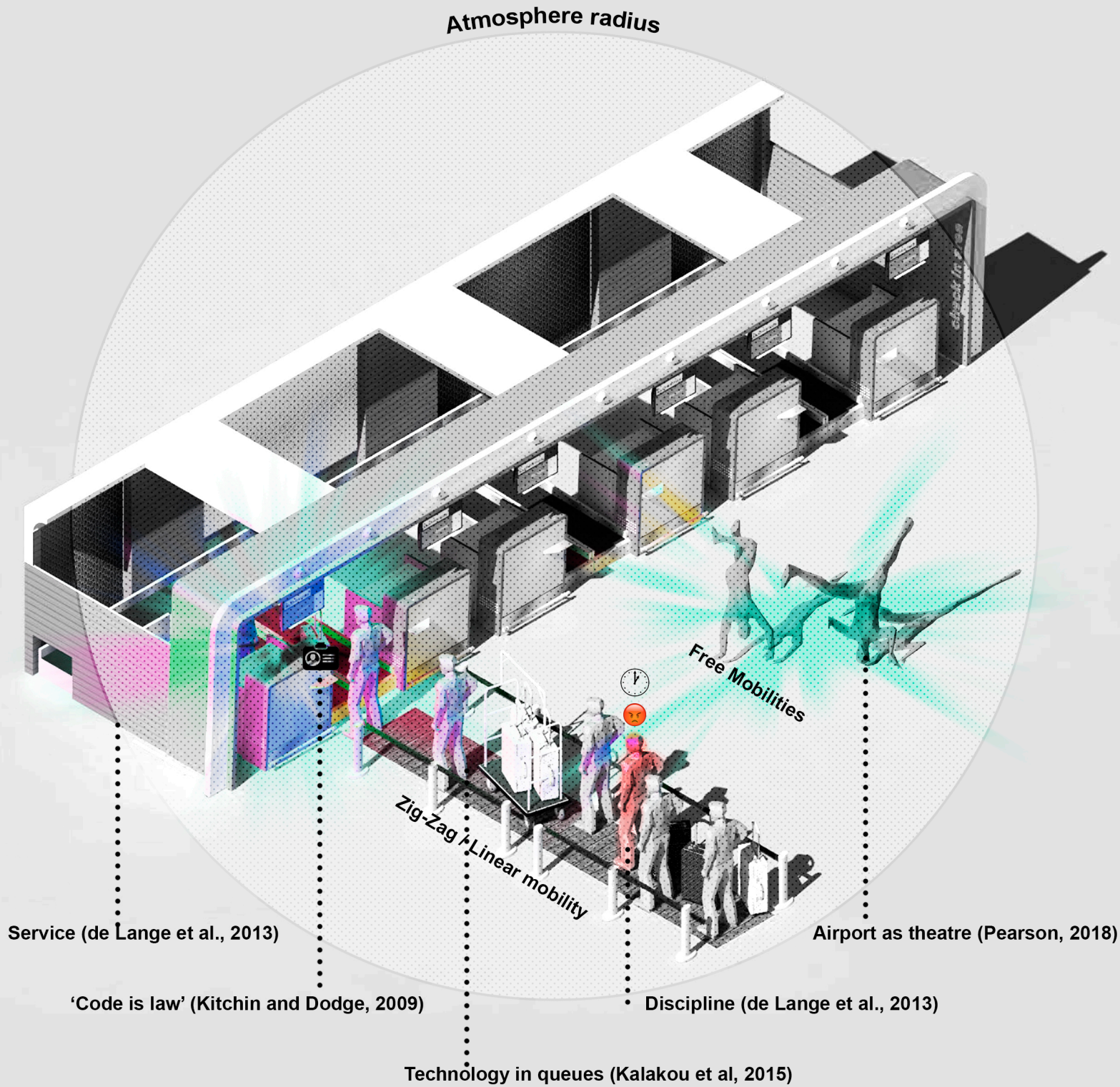
# THE NAKED T4



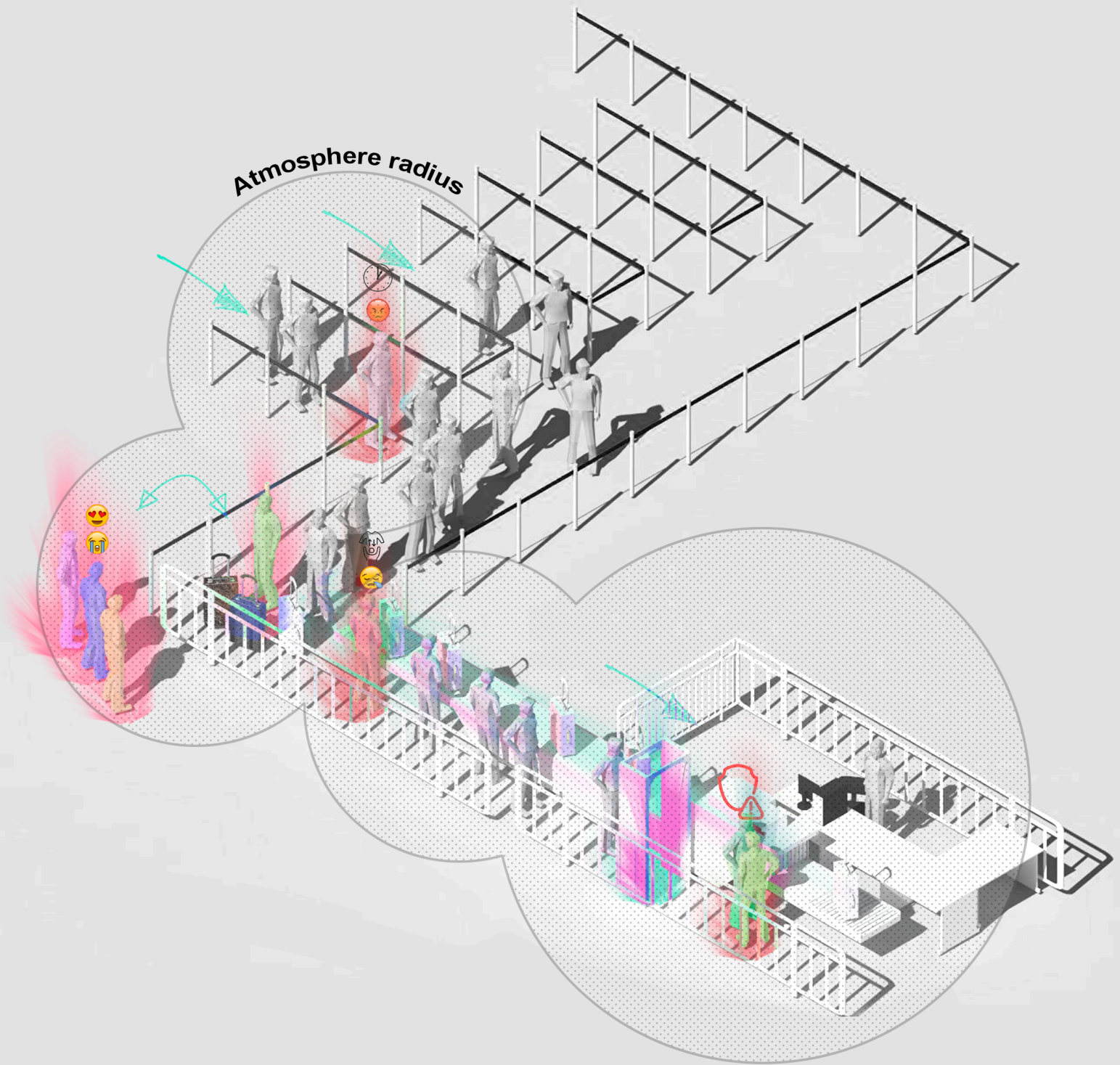
# THE BESTIARY.



# CHECK-IN SYNECDOCHE

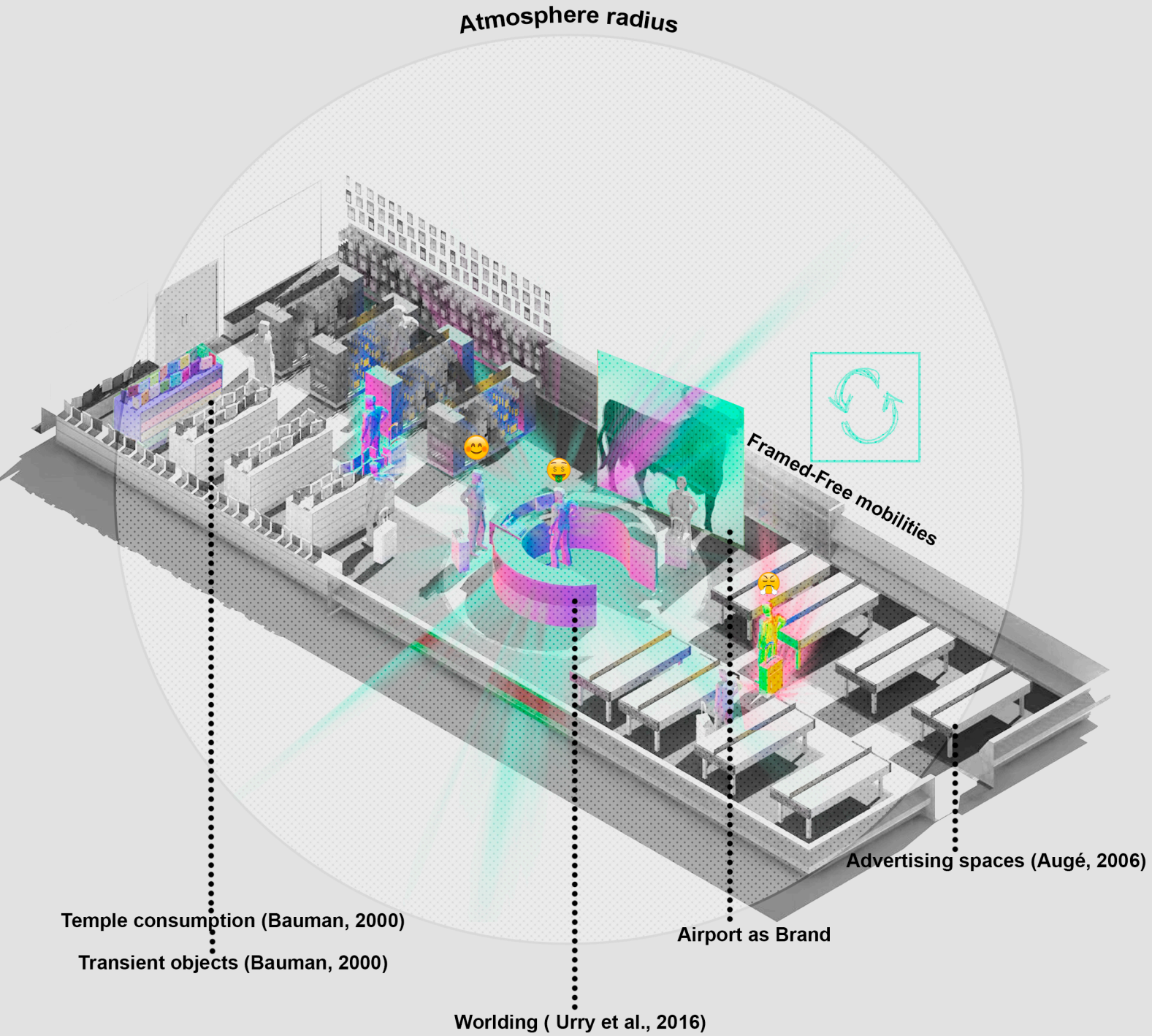


# SECURITY SYNECDOCHE

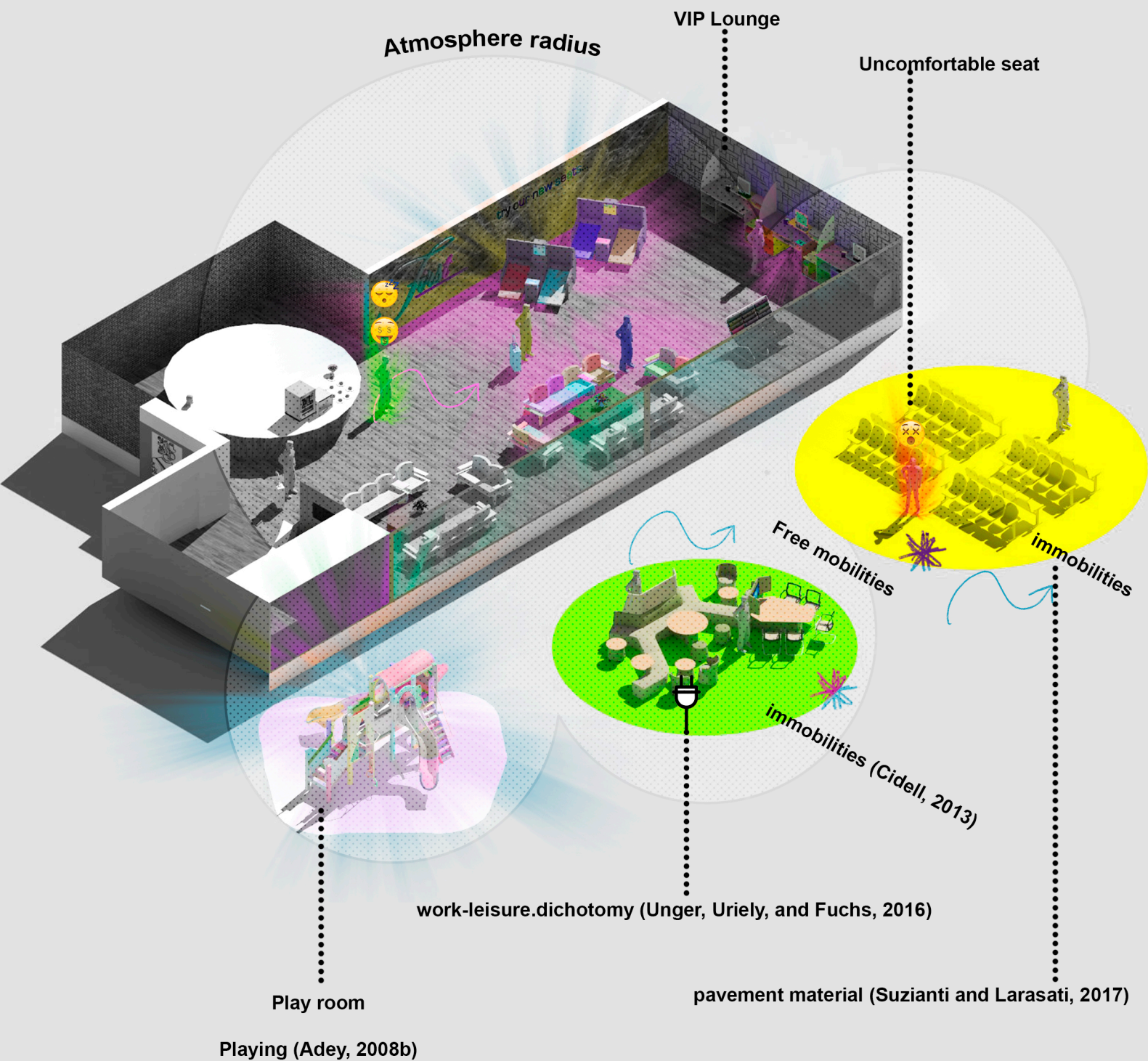


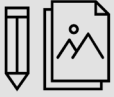


# COMMERCIAL SYNECDOCHE

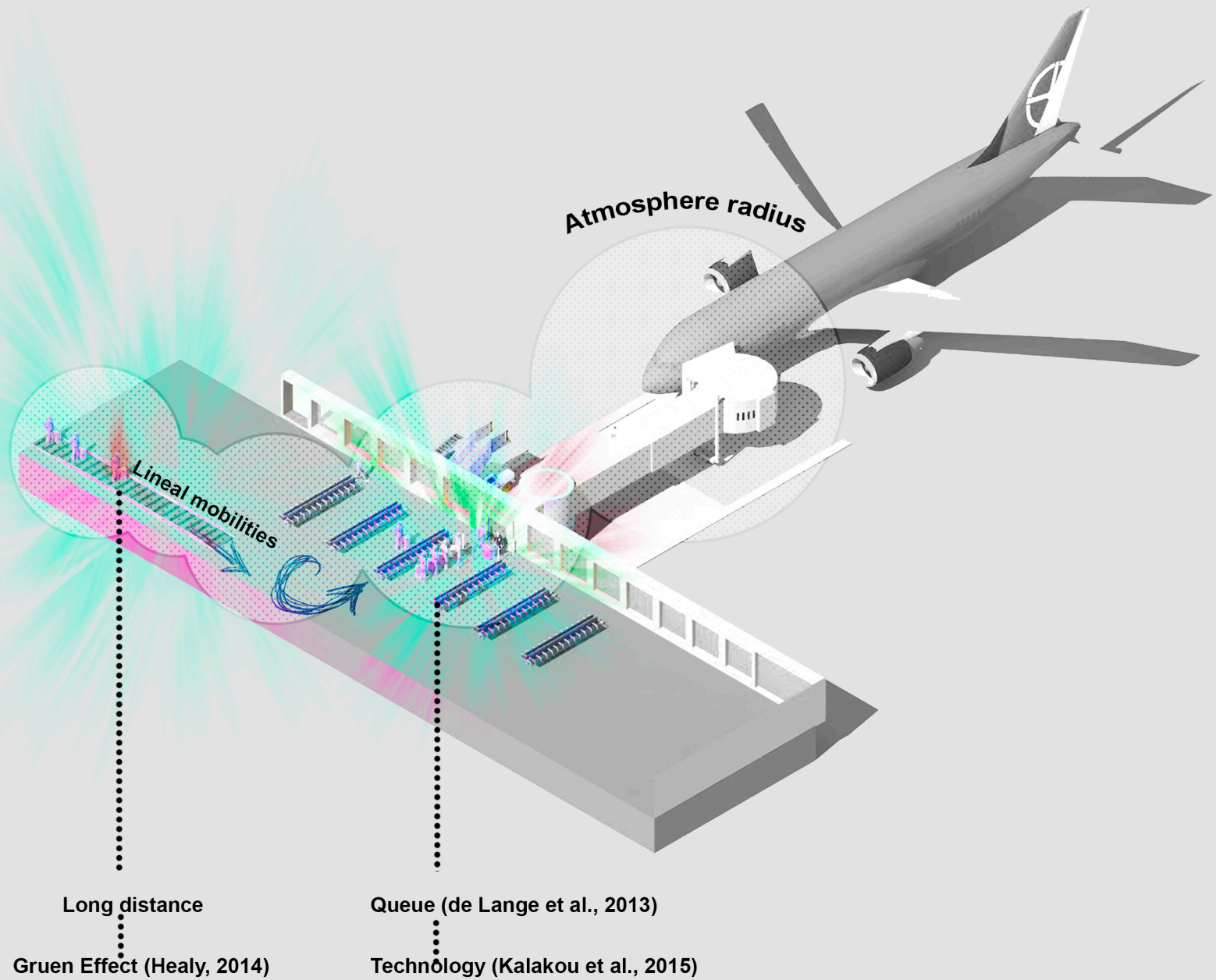


# RESTING SYNECDOCHE

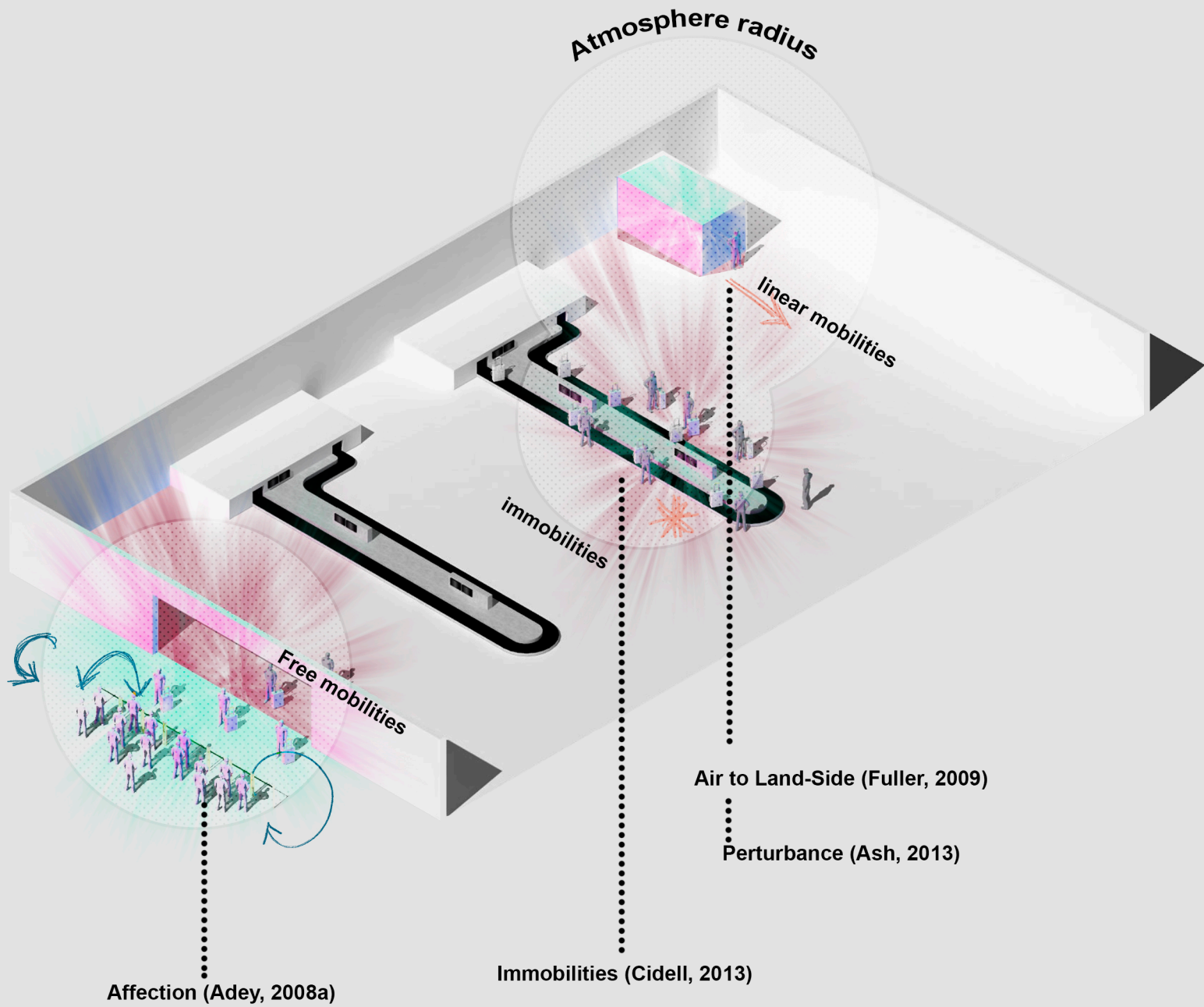




# RESTING SYNECDOCHE



# ARRIVAL SYNECDOCHE





**6.**

**CONCLUSION**

**AND**

**FUTURE**

**RESEARCH**



## Conclusion And Future Research

### Conclusion

The thesis has explored how airports spaces act together with embodied performances, activities and affective links. The relationship between theory of affects (Anderson, 2006), place and non-place (Augé, 2016) and psychogeographical situations (McDonough, 2002).

Furthermore, it has been described the different situations and atmospheres that passengers have to pass within the airport, from the anxiety in the security lane to the relaxed and funny playroom spaces for kids. It has also talked about differentiation of typologies in passenger behavior.

Therefore, seven concluding points have to be highlighted as the final chapter of this thesis.

1. Airport as a juxtaposition. Airport has been defined as many things, as a non-place (Augé, 2006), as a meaningful location (Creswell, 2004), as a Junkspace (Koolhaas, 2002), empty or blank spaces (Bauman, 2000), Third place (Pearson, 2018), Thick and Thin places (Healy, 2014), as a space with narratives (Augé, 2006). However, through this thesis, I have been able to notice that airports are not a unique concept but everything. Airports are a juxtaposition of non-places and thick places. They have narratives and have empty spaces. They are considered as junkspace and the representation of the modernity by the passengers. Therefore, airports have to be thought in a polylateral fashion due to its spatial complexity. Airports are transformative spaces, what is to say, depending on the factors that triggers and shape atmospheres, the spaces of the airport can be meaningful places or empty spaces. The airport as a matryoshka of places and non-places.
2. Atmospheres have been studied by several scholars (Adey, 2008a; Urry et al. 2016; Edensor, 2015; Bille et al. 2015; i.a.). They are shaped by three different agents. Environmental agents which constitute the contexts, the period of time, the duration of the activity, and all the intangible things that people feel but don't see. The second active agent is the objects or aesthetic object (Anderson, 2009). Here, the technology, physical spaces, architectural designs, materialities, textures, colors, and each physical thing that can be felt by the senses is included. The last factor would be the subjects, which are the mind and body of the viewer, and goer. The people (or animal and plant) that experience the atmosphere. The activities, behavior and the negotiation between subjects and subject and object are paramount here. Therefore, what actually creates an atmosphere is the amalgam of the before mentioned agents, how they perform and relates one



## CONCLUSION AND FUTURE RESEARCH

with each other generating perturbances, disorientation, preferences, activities, affect, and situations in a psychogeographical way of thinking.

3. Airports layouts are psychogeographical maps. In the psychogeography, (McDonough, 2002; Stracey, 2014; Costant, 2002) the situationist projects are drawn as a juxtaposition of situations and behaviors being the master example the naked city by Guy Debord. Situationists represent their projects with 'synecdoches' described as the atmospheres, 'asyndetum' as the relationship between atmospheres and the empty places which fill all the space between the atmospheres. Therefore, the airport can be seen as a situationist project with the same keys of the drawings. In this thesis I have studied the MAD airport, then, in order to identify this airport as a situationist project of connection of atmospheres, a psychogeography map of the airport has been drawn in the previous chapter. The Naked Airport.
4. After the analysis, the disorientation feeling is increasingly present in airports spaces, from the indiscriminate adverts that commercial areas have, to the bad design in spatial communication between different spaces. In the case of MAD airport, the bad signage and the long corridors between terminals generates a disorientation or a 'gruen effect' (Healy, 2014) that generates to the passenger a sensation of lost.
5. Security is one of the most important things for passengers. Due to the close relationship between airports and terrorism, passengers are afraid of what is going to happen. However, there is a dichotomy on passenger behavior which divides people into two groups. First, the people who think that security is too picky in the airports, therefore, passengers would perform negatively against security staff. The other group would be the opposite when people think that there has not had enough security in their controls. E.g. Staff don't look at the passports. Therefore, the passenger will have a good and quick behavior in the control but they will be shocked after the control if it not what they have expected.
6. Similar to the concept of the airport as a juxtaposition of different concepts. Passengers have not one profile but several. Passengers can be flaneurs, tourists, business-oriented, compulsive buyers or they can be in the unaffected by the atmospheres, turning them into walking PAX codes.
7. Regarding methodologies, this thesis use netnography as one of the main supports of data and analysis. I reckon this is a good point and a strength of the thesis because it represents modernity as well as the airport concept. We live in an era where social media and internet are shaping our socialization and our way to understand. The medium where the message is traveling is transforming our way of thinking. Therefore, using twitter analysis and internet investigation in forums and



## CONCLUSION AND FUTURE RESEARCH

web pages is a representation of the modernity which links coherently with the airport character.

8. A few conclusions regarding the case study, that is the MAD airport will be: The majority of the passengers mentioned that whereas the T4 of the MAD airport is architectonically a piece of art, the others terminals are less attracted to the eyes. The T4 has obtained compliments due to its colorful structure, to their sincerity in architectural terms, to their high illumination and enormous windows that are used as a balcony in which the passenger's spot and catch what is happening in the runways. The check-in areas and security controls are predominantly characterized by the negotiation between passengers and technology and staff. Moreover, the zig-zag queues can enhance or get worse the atmosphere, depending on the time waiting. Looking at the air side, Commercial is seen as an imposed structures due to the eagerness of the airport to obtain money from the passengers. However, the commercial areas are also seen as a way to scape of the anxiety of the airport. The resting spaces are seen as everything but comfortable, passengers state that the only spaces to relax and rest are the VIP lounges where you have to pay to enter. Nevertheless, they see as a positive the playrooms for kids and the different possibilities that airport offers in the resting areas. Finally, the boarding gates are seen as a chaotic space where lanes are not organized. Furthermore, the worst thing about gates in the MAD airport is the ubication of them, passengers need to spend at least 15 minutes (in the case the read and understand everything right) to reach their gate.

These have been some conclusions that have been paramount in the thesis. The main objective of this project has been to talk about the relationship between passengers affective behaviors and airport situations which is a gap that several scholars have highlighted. Now I will discuss some ways that this project can open and suggest in future researchers.

### Future Research

Regarding future research, we can divide this recommendation into four different points.

1. This thesis has focused in the areas within the airport building leaving outside of scope the areas that are outdoors. I reckon that airport is also what is influencing in its surroundings, the airport catchment areas. Therefore, an analysis of outdoor areas using an affective and pragmatic perspective will provide new inputs and information that will be interesting to take into account. In the case of the MAD airport, it will be also critical to study the Barajas district where the airport is ubicated. Owing to the fact that MAD airport is so historical starting from the 30's until the present,



## CONCLUSION AND FUTURE RESEARCH

it will be interesting to analyze how the district has grown and has been influenced by the airport.

2. As I have mentioned before, the thesis did not analyze the different modes of transport that reach the airport, the travel situations do not start when the passenger enters the airport but when they planned it and when they take another mode of transport to get there. In the MAD airport, trains and metro reach to the T4, therefore, an analysis of what is happening inside these modes of transport is recommended. Furthermore, an analysis of what is happening in the actual 'travel', inside the plane is a good point to take into account in future researchers.
3. An affective approach is an interesting approach to mobilities due to the relation between the subject and their environment. It highlights that mobilities are more than movement. Thus, other examples of mobilities can be described and analyzed under the gaze of affective behaviors.
4. It will important to include the new forms and procedures of the airport, e.g. the exclusively self-service options and how this is going to influence in spaces and behaviors. Moreover, the introduction of new technologies in security terms such as the biometric analysis of people called SmartSecurity will bring a total change in the security airport areas (Kalakou, Psaraki-Kalouptsidi, and Moura, 2015). Technologies such as smartphones are right now changing the way that airports are experienced. Therefore future paper should include and focus on different areas to obtain more detail in their results.

## ACKNOWLEDGEMENT

### **Acknowledgment**

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**APPENDIX**

**ABSTRACT**

### **Appendix Abstract**

The appendix PDF includes all the empirical data obtained through this thesis. The structure is the following:

- Survey structure and answers
- Netnography posts and results
- "R" software analysis

The CD will include also the visual data:

- Visual Ethnography (Photo and Video)
- Layouts of airport



