Going to the Museum: A Quantitative Insight into Rotterdam Art Museum Visitors

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Abstract

This thesis revolves art museums' visitors, their characteristics and relation with the specific museums they visit, as well as differences with non-visitors. The theoretical framework presented intends to give an overview on the development of museums approach to their visitors in terms of openness and inclusiveness. Indeed, museums have a reputation of elitism that is believed to have kept lower classes and marginalized groups away from them during history. However, in the last decades, an attempt has been made to attract larger audiences and increase inclusiveness. Marketing strategies have been implemented and museums have largely changed their approach, focusing on the visitor experience. However, relatively few is known about visitors and their characteristics. I also suggest the use of behavioral strategies like nudging and explain their potential usefulness for cultural policies and museums specifically.

Therefore, this thesis attempts to give an insight on visitors and non-visitors of art museums in Rotterdam, namely Museum Boijmans Van Beuningen, Kunsthal Rotterdam and Witte de Witte Center for Contemporary Art. Through quantitative analysis of a dataset on cultural participation provided by the Municipality of Rotterdam, profiles of visitors and non-visitors of the three museums and of a general "museum variable" are created through the analysis of their socio-demographic characteristics, personality traits and other leisure activities they carry out. Results reveals that Museum Boijmans Van Beuningen's and general museums' visitors reflect the expectation of being generally older, richer, white and more highly educated, while Kunsthal and WdW visitors are younger, and WdW visitors are also more ethnically diverse. It is showed that this WdW peculiarity might derive from its location and from lower entrance fees, while the characteristics of Kunsthal visitors might also derive from lower fees compared to Museum Boijmans Van Beuningen. Moreover, differences in visitor profiles might derive from the two museums images and "personalities" that are presented here through personal observations. The visitors' and non-visitors' profiles based on personality traits reveal that visitors present characteristics that might be explained through their higher level of cultural capital (they perceive themselves as more intelligent and more balanced, for instance). Because profiles of non-visitors correspond to that of less highly educated individuals who perceive themselves as less intelligent than visitors, in addition to being generally less highly educated, the use of nudging techniques are suggested to museum boards and policy makers that might be willing to enlarge their audience. These strategies are indeed suggested in cases where people might face challenging choices. Museum boards and policy makers that are willing to enlarge art museums' audiences might therefore benefit from the results of this thesis.

Keywords: Art museums, museum visitors and non-visitors, quantitative analysis, cultural capital, inclusiveness, Rotterdam

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1.Introduction

My thesis addresses the topic of cultural participation. Specifically, I will investigate museums' strategies and services and their relation to the characteristics of their visitors. Moreover, I will offer profiles of visitors and non-visitors of three museums in Rotterdam, namely Museum Boijmans Van Beuningen, Kunsthal Rotterdam and Witte de With Center for Contemporary Art. Subsequently, I will offer recommendations on possible strategies to increase museum attendance and inclusiveness. Therefore, my RQs is:

What are the characteristics of visitors and non-visitors of art museums in Rotterdam? How do museums' strategies and services relate to their visitors' characteristics?

In the theory section, I will address the history of the evolution of museums and its relationship with the audience, with a particular focus on museums' approaches in this sense and how they have changed throughout recent history. Moreover, my thesis has a particular focus on the Netherlands, both because of the availability of data and because the Dutch art museums offer an interesting case study. Indeed, Dutch museums can take pride in an extremely efficient museums system, especially regarding large museums, which attract millions of visitors every year (Centraal Bureau voor de Statistiek, 2015). Moreover, some of the major museums in the Netherlands, such as the Van Gogh Museum and the Rijksmuseum, have been recently found to have an extremely positive reputation all over the world (Van Riel & Heijndijk, n.d.). This thesis aims at understanding who is going to these museums and how these individuals are characterized, in order to provide museum and policy makers with a better understanding of the situation and to know whether this could still benefit from improvements, especially in terms of social inclusion. Indeed, Dutch museums are popular among tourists, and are attended by a large number of visitors in general, but relatively little is known about the identity and motives of these visitors, as well as about the differences between visitors of distinct art museums. By analysing a large dataset on cultural participation provided by the municipality of Rotterdam, which contains survey data collected in 2015, I will be able to offer an insight into the socio-demographic background of the visitors and non-visitors as well as on other characteristics of their personality and leisure activities, comparing the profiles of three art museums in Rotterdam. Finally, I will use my findings to reflect on the effects of museums' services on visitors' attendance, their compatibility with behavioural strategies such as nudging and choice architecture and what could be done to use them effectively in the case of museums.

Indeed, my research topic is inspired by the work of Richard Thaler and other researchers, who have initiated the discipline of behavioural economics. Behavioural strategies such as nudges

are being utilized by governments more and more extensively in many public domains such as healthcare and retirement plans, and studies are being conducted in order to improve their application.

Nevertheless, the area of cultural policies has not yet benefited from these types of policies. In his book, Nudge (2008), written together with the legal scholar Cass Sunstein, Thaler presents a list of characteristics that make a public issue eligible to be addressed with the aid of nudges and choice architecture. In my thesis, I will argue that cultural policy is a domain that may greatly benefit from these techniques and that museums are an interesting starting point for new applications and studies. Museums have been, since the times of their creation, a place of social exclusion, as they were meant for elites and contained objects that common people were hardly considered to be able to appreciate. Even when their mission changed into a more educational and "civilizing" purpose, the part of population that was excluded in terms of access and representation was still large. In recent years, however, a shift has been occurring and an attempt to democratize culture and widen access has been taking part. This happened, partly, since art and culture in general - and therefore, museums - are widely considered as contributing to - and enhancing - life's quality and enjoyability. Therefore, the scope of this thesis is to offer valuable information on the current visitors of art museums and offer suggestions on how the situation might be changed by museum boards and policy makers who might be willing to attract a larger and more inclusive type of audience. As previously said, the analysis of Dutch museums and their visitors might provide interesting insights, given their alleged success and their popularity in the recent years.

2.1. Theoretical Framework

2.1.1 Overview on museums' history and development

During the last decades, the approach to museum management has changed all around the world and with this, museums' identities have changed as well. What are believed to be the ancestors of modern museums, were established back in the 16th century, and consisted of extravagant chambers where objects from all around the world that were collected by explorers and travellers were clumped and displayed. They were sometimes called Wunderkammer, chambers of wonders, but also *gabinetto*, galleria, Kunstkammer or Kunstschrank. The word *museum*, which derives from the old Greek word *museion* and means "seat of the Muses" denoted a place of education and philosophical discussion. It was firstly revived in the 15th century to describe Lorenzo de' Medici's collection of curiosities, therefore applied to the Renaissance princes' art repositories and then spread across Europe (Olmi, Impey & Macgregor, 1985).

In the old versions of museums, one could find art objects, antiquities, jewelleries, mechanical and innovative tools, maps, and mysterious remains of mythological animals such as the unicorn – in a fascinating mixture of science and a sense of magic and superstition. In this sense, Wunderkammer and the like reunited the interest in wonders with the need of systematic knowledge.

At the beginning, only few privileged groups — such as scholars, travellers or those who were willing to pay to access them - were allowed to see the collections which often pertained to royals or the other wealthy individuals, such as merchants or even clerics. According to Carol Paul, who wrote *The First Modern Museums of Art* (2012), private collections in Rome, such as the collection of the Borghese family, had a tradition of being "semi-public" museums, which were open to European aristocrats and an unmissable stop-over for travellers on their Grand Tour. Paul argues they were not only places of display for beautiful objects, but also for the visitors themselves, being primarily a place to network for the European elite, where they could share knowledge and flaunt their prestige.

In time, the desire to safeguard private collections which were tightly tied to the fate of an individual or family, together with the desire of spreading knowledge and reason as encouraged by the ideology of the Enlightenment, many collections were donated to the public or made accessible to common citizens. They were believed to be bearers of a universal heritage which had to be protected and diffused so as to educate the masses and make their lives more pleasant. (Lewis, 2011; Saumarez Smith, 1989). For instance, the process of creation of the Louvre in Paris started in 1750 with the exhibition of works of art at the Luxembourg Palace by Louis XV and grew through the revolution. Pushed by the desire to create a national museum where people could contemplate the royal collection, the Central Museum for the Arts was created and was made accessible to the public in 1801, constantly replenished by Napoleons' European campaigns loots.

Duncan (1995) describes museums as an international phenomenon connected to the cross-national bourgeois culture and highlights that museums' history is tightly connected to the appearance of a notion of the public in the development of European states. She argues that the birth of museums occurred in a time when the notion of the public was developing and being defined through the forms of the bourgeois state, both in Europe and America. Moreover, the museum format developed and was finally exported to other colonial countries such as Indonesia, India, Australia and South America. Therefore, museums of the biggest Western capitals and around the world share similar organizational structures in the way they exposed objects and support similar ideological needs.

2.1.2. The sacralization of Art

On the other hand, Levine (1988) focuses on the dichotomy of lowbrow and highbrow culture in the 19th century USA, and especially Chicago. He argues that in the 17th and 18th century, as a consequence of the desire to create public entities that could communicate culture and a national identity to the masses, Western museums were equally visited by the entire spectrum of the socioeconomic classes, i.e. from the lower popular class to the noble elite. It was not common to strictly distinguish between forms of high or low culture, as different classes attended the same cultural spaces and benefited from artistic performances such as theatrical pieces, opera and visual art. As Shakespeare's pieces, which were originally meant as a form of popular culture, were later appropriated by the elite class and ascribed to a higher, scholarly and refined type of consumption, the same happened with art museums. In the 19th century United States, the idea developed that art was something noble and pure which could not be fully appreciated by uneducated people. Access was restricted with dress-codes and higher prices and a process of sacralization of the art was enacted through exhibition modalities and explicit narrative. According to Levine (1988), it was the institutionalization of the elite's concept of high art that led to the hierarchization of culture as opposing lowbrow and highbrow art and keeping lower classes away from the free consumption of the latter. Even when access was free or not explicitly forbidden to the masses, a sense of sacrality was conveyed through both the public narrative around art and the way it was exhibited in museums and galleries, suggesting the objects displayed were to be observed with respectful contemplation (the same was true for the performing arts), and little information was given about the story or technical aspects behind its creation. At the beginning of the 19th century, as stated by Hudson (1975), "museums were temples and their directors priests (...), in an age when the appeal of religion had faded, art had to take its place" (p.52).

On the other hand, Hudson continues, museum exhibitions, even when public, were mostly the result of the directors' personal taste in matters of design of the exhibition and content displayed. There was no interest in understanding visitors' opinions on their experience of the museum as it was considered an obvious privilege to access and admire the collections. The first publication about museums' customers' views is dated to 1897; however, visitors' survey became a common practice only after 1950. It was indeed in the post-war period, during the 1950s and the

1960s, that a critical change happened in the world of museums management. The winds of reconstruction and the desire to bring back national treasures and reinforce internal cohesion brought a new wave of interest for museums. At the same time, culture and the arts were becoming more and more mass products and an enlarged middle class was taking an interest in them. Until that moment the museum staff was mostly formed by a group of professionals in research, conservation techniques and mainly revolved around the study and protection of the objects and in serving the educational institutions – such as universities and research centres - with the knowledge they could provide. In the second half of the 20th century, new roles were included in the museums' staff, such as exhibition designers, educators who developed strategies for students and the general public, information managers and marketing experts. Consequently, a larger share of the audience, including tourists, were attracted to the newly renovated museums. The situation also led most European governments to acknowledge the contribution of museums to the national economy (Lewis, 2011; Hudson, 1975; Latham and Simmons, 2014).

2.2 Museums' approaches and strategies

2.2.1. New Museology

It was, however, not until the 1970s that the *new museology* came into the game. According to Ross (2004), a set of political and economic pressures led museum professionals to change their perspective on their own world. A wave of self-reflection led to the creation of journals and the beginning of critical studies on museums, as scholars started to question museums' hidden subtexts, such as the ideology they represented, the intrinsic elitism, as well as their role in society, therefore mining old assumptions and older narratives of "empire, class, race and science" (Ross, 2004, p.85). With regard to history and local museums, a new focus was put on ethnic and cultural minorities, aiming at an ethically justified representation and a change of narrative. This also reinforced the shift from a "peer focus" to that of a more visitors-oriented strategy, inspiring an effort for a more inclusive and pluralistic practice of museums.

On the other hand, the new museology partially contributed to the opening of the museum practice to market forces, as they started seeing their visitors increasingly as customers rather than citizens. The need of broadening the audience and increasing participation brought the application of a new set of strategies, which contributed to the weakening of cultural barriers against elitism, especially in the sense of loosening the distinction between high and low culture (Ross, 2004).

Nevertheless, it is argued that the reflections which were stimulated by the new museology brought a number of expectations that were not always put into effective practice (Ross, 2004; McCall and Gray, 2014). Ross argues that there are forces in tension within the museums' world, such that some parties are opposing the "dismantling of established cultural boundaries" (p.85), because they are threats to professional and social identities, and to the value of cultural capital. Indeed, Ross believes that museums are resistant to these forces of change.

On the other hand, a substantial change could be observed in managerial strategies of museums, especially since the 1980s and 1990s, as a consequence of significant modifications of national policies and funding mechanisms, as I will explain in the next section.

2.2.2. A visitor-centred model and the growth of Dutch museums

The case of the Netherlands is extremely relevant in this sense. As said, public policies and funding matters played a significant role in the change. In general, the second half of the 20th century brought a set of changes in museum management strategies. Although museums are generally seen as providers of public services, their legal status and regulations depend on each nation's cultural and financial policies and have indeed significantly changed in the past decades. Of course, changes in the broader situation such as the international and national economic situation and the reshaping of cultural policies strongly affect museums' configurations (Tobelem, 2007; Benhamou, 1996). In Westernized countries, North America and Europe first but also Japan for instance, a substantial shift started to begin in the 1980s and 1990s. As already mentioned, the desire of shedding new light on the material symbols of national identities – in the hope of healing recent wounds and strengthening national cohesion – together with the economic recovery and the physical reconstruction - led to an increase in the popularity of museums. The number of visitors grew, and newly gained recognition forced governments and museum boards to accept the need for change. According to Mensch, who bases his study on data from the Centraal Bureau voor de Statistiek (Mensch, 1989), museum visitor numbers increased steadily after the second World War until the 1980s. In addition to the trend previously explained, this was also due to a set of cultural policies enacted in the 1970s to increase cultural participation and attendance – which proved to have a significant positive effect on visitors with different levels of education. However, the growth stopped in 1980, only to start again two years later, in 1983, when only more highly educated individuals were affected by the positive upswing. According to Mensch, part of this new rise derived from the use of blockbuster exhibitions, which were purposely conceived so as to maximize the turnout (therefore increasing financial returns from tickets sales), were characterized by an extensive media coverage and exploited especially by art museums that were benefiting from the rise of interest in art within the broader society. The continuous planning of blockbusters by part of Dutch museums was also derived from a lack of funding from the government, and therefore a need for increasing revenues from entrance tickets and to attract sponsors.

2.2.3. The shift to privatization in the Netherlands

At the same time, an urge was felt by the government and museum boards to change the mechanisms of museums funding and management structure. Starting in the late 1980s, Dutch museums started a process of privatization that involved all the major museums in the Netherlands. In the 1994-1995 period, seventeen national museums, including Van Gogh Museum

and Rijksmuseum in Amsterdam – officially passed from being state-owned to being privately owned and managed (Engelsman, 2006). According to Engelsman (2006), the decision derived from a need to simplify bureaucratic processes and clarifying responsibilities in the decision-making structures. Indeed, as museums were publicly owned, directors needed the state approval for every decision from technical to artistic matters, while on the other hand the minister was the sole authority and thus considered responsible for any negative outcome. In this way, the whole decision process was slow and ineffective; the call for modernization was widely shared to the point that the entire process went through different political mandates without being affected and was completed by the first years of the 1990s. Therefore, national museums – although still depending in great part on public funding, were able to take decisions freely and to move on from a managerial point of view. The shift of responsibilities also led to a more urgent need to make the museum machine efficient and to be able to prove their merit when applying for both public funding and private sponsorship.

At the same time, monetary profit became a more acceptable purpose which accompanied the museums' missions, and commercialization was no longer regarded with a completely negative connotation. Indeed, although public funding did not differ substantially after the privatization shift, in the last years it has been reduced, causing problems especially for small museums (CBS, 2015; Engelsman, 2006). On the other hand, in terms of public policies, cultural amenities started to be considered as critical for the urban economy, therefore leading to investments in terms of cultural clusters such as museum parks or other cultural infrastructures (Zukin , 1995; Van Aalst & Boogaarts, 2002). Another critical transformation which occurred in recent years is the outburst of private ventures, where rich collectors or entrepreneurs are starting their own museums, such as the Moco in Amsterdam or the museum No Hero in Delden, but also internationally with museums such as the Broad in Los Angeles (Biedermann, 2018).

Moreover, the 1990s' shift to privation was considered successful as the Dutch museums are nowadays extremely popular, and they attract large numbers of visitors. A recent research by Erasmus University on the reputation of the most famous art museums in the world has revealed that Van Gogh museum in Amsterdam – which was also the most visited museum in the Netherlands in 2017 - was ranked first among European respondents and second in the world.

In general, museums are found to have a better reputation among consumers than other companies; according to Van Riel, the admiration of visitors/consumers for museums has a lot to do with the purpose-driven nature of these institutions (Van Riel & Heijndijk, n.d.). Indeed, this aspect is connected to the particular nature of museums' marketing when compared to that of other types of businesses, as I will explain in the next chapter.

2.2.4. Museums and marketing

As previously mentioned, recent changes in museum management, the need for revenues and the shift in the theoretical approach to museum studies, led to a more visitor-centred approach and to a broader acceptance of the commercialization of the museums.

Starting from the 1980s, educational and research departments started to be complemented by marketing divisions, as museums boards were interested in introducing new business-like concepts and theories. The employment of marketing strategies by museums brings up the focus on the very specific nature of these entities. Indeed, although marketing was originated in order to construct the best strategy to increase sales, it evolved to be a discipline focused on the demand side of trades, inquiring into the needs of consumers and their experiences. In this sense, inquiries into customers' needs and expectations should lead to the developing of a long-lasting and trustworthy relationship between the company and the buyers (Tobelem, 1998).

However, as stated by the Smithsonian Institution Office of policy and analysis (2001), marketing strategies as employed by museums are unique as they have both a mission to educate and serve the public as well as that of increasing revenues by attracting audience. Museums' marketing is both "market oriented" and "mission relevant" (Smithsonian Institution, p.2). As non-profit organizations that provide a public service, museums' actions in this sense might reveal to be much more complicated than those of a purely commercial company.

The Smithsonian Institution report continues by noting that since 1988 museum directors have been implementing targeted advertising campaigns which have revealed to be efficient, so as to strengthen the idea that museums should rely on sophisticated communication strategies in order to reinforce their relationship with the public. Indeed, according to the Smithsonian Institution, museum marketing aims at understanding the visitors' needs and improving their experience, as well as to find the most appropriate way to meet these needs with the museums' missions and resources. The visitors' experience offered by museums should therefore be "attractive, accessible and satisfying" (Smithsonian Institution, 2001, p.2; Tobelem, 2007; Gilmore and Rentschler, 2002; Rentschler, 2010).

2.2.5. Museums as tools for social inclusion

In order to increase attendance, and parallel to marketing strategies, museums have been using an outreach approach aimed at the inclusion of specific groups of individuals, such as youngsters, minorities and individuals with low incomes. These groups are believed to be more vulnerable, as well as less eager to spend their free time visiting museums or doing cultural activities of a certain type. However, cultural activities are considered by scholars and policy makers as enhancers of quality of life, therefore strategies to implement their fruition by vulnerable groups have been studied and applied (Sandell, 2003). Among those, the offering of tickets at a reduced price and the

creation of specific guided tours, for example for students, or even the inclusion of exhibitions specifically targeting some groups.

The matter of social exclusion through institutionalized forms of art has been acknowledged by governments, such as the United Kingdom in the 1990s and 2000s. The British Department for Culture, Media and Sport (DCMS, 2000) declared museums, galleries and archives to be bearer of "social responsibility"; they were therefore appointed the role of broadening participation to the arts and culture sector, which was considered from that moment onwards as critical to the well-being of every citizen (Sandell, 2003).

Therefore, audience development strategies were implemented, which aimed at broadening the segment of the population that was already attending arts and culture events, as well as attracting potential audiences. On the other hand, social inclusion initiatives attempted to involve marginalized groups within the community and increase their rate of cultural participation. For instance, audience development projects were sponsored by the New Audiences Fund from 1990 to 2003, which funded 1157 programs of different natures. One type of activity involved the planning of classical concerts in informal contexts, such as public squares or street festivals, in order to attract audiences that would not usually attend opera or classical music in theatres and other formal environments; others included bringing theatrical or music performances to unusual locations such as prisons and hospitals (Kawashima, 2006). These projects were concerned with an educational purpose that consisted in increasing knowledge and familiarity with the arts, in both categories of people who already had some interest and education and in those who had never been in touch with any form of high art. With regards to marginalized groups, an attempt was made by art organizations to increase representation, which was seen as a way to stimulate debates and awareness of social issues. Increasing representation was also utilized as a way of attracting underrepresented groups and strengthen their connection with artists and the art world (Sandell, 1998). Examples might be special exhibitions on the theme of refugees or HIV-positive people (Sandell, 1998). Moreover, projects have been implemented in Nottingham, where the Gallery of Justice have worked in collaboration with public agencies to involve young offenders into the work of the museum, by making them reflect on their behaviour and attempt to prevent them from committing other crimes. The Living Museum of the West, in Australia, was created with the aim of telling the stories of working class people, as well as providing them with professional training to develop their skills (Sandell, 1998). These types of initiatives such as those described above were deemed important especially as part of policies which aimed at fighting social exclusion.

According to Sandell (2003), social exclusion is a complex phenomenon that can be deconstructed as deriving from four main aspects, namely economic, political, social and cultural. Particularly, he stresses that cultural organizations are of critical importance in the public battle against exclusion. Indeed, his work highlights the relevance of the cultural dimension within social exclusion, calling for the attention of museum boards to an issue that might seem distant to their main mission. In order to create a truly inclusive museum, Sandell suggests that both practical and

mental barriers need to be removed. In the first category he includes physical, geographic and economic barriers, while the second entails psychological and intellectual ones, which are often aided by the "ambience of the building, signage and the language used in display" (Kawashima, 2006, p.58). Therefore, audience development strategies and the creation of inclusive museums as intended by Sandell – which are both compatible with social outreach strategies - can be considered as parts of the same dimension, as purposes and actions taken often overlaps.

For instance, examples such as those mentioned above are described by Sigurjonsson (2010) in the case of orchestral music. Induced by economic needs, symphonic orchestras have created successful projects in order to broaden their audience and attract a larger segment of the population. The Sacramento Symphony was on the edge of declaring bankruptcy, when a number of events were planned to raise the audience interest and permit the orchestra to continue its work. One of these events was the "World-View Music festival" that aimed at celebrating the music traditions of the ethnic groups that inhabited the area; on the other hand, the "Jeans and Beers" offered performances where artists were wearing casual clothes, drinks and snack were offered to the crowd, the prices were kept low and no dress code was required (Kotler and Scheff; 1997; Sigurjonsson, 2010).

To explain the success of this kind of projects, we can turn to the concepts of comfort and risk aversion. According to Maitland (2000), audience development is meant to improve the experience of the visitors by framing the artistic or cultural exhibition into a more comfortable and risk-free situation, one that permit the audience to not distance themselves from their everyday set of meaning and behaviours. In other words, individuals who do not believe to possess the proper knowledge on how to behave in certain occasions – such as an orchestral performance in a theatre – will avoid this type of events but might be more easily drawn into a more casually displayed version of the same cultural performance.

In this sense, risk-aversion, intended as a psychological process, has been traditionally taken advantage of in marketing strategies aiming at engaging the audience with popular and catchy products. Within the mass culture industry, it is common – and has been strongly criticized – to exploit familiar and repetitive elements that guarantee the easy satisfaction of the consumer, who is not required to make any kind of intellectual or emotional effort to fully enjoy the experience. As said, this technique has been strongly criticized, for instance by Adorno (1991[1938]) and Foucalt (Foucalt and Boulez, 1988), who were worried about the implications of this approach for the quality of the art experience and the effect on the consumers' cultural habits.

More recently, audience development's strategies have been pointed out as a potential danger of an instrumental use of art as they might focus on the organizational and institutional aspect of cultural organization while overlooking the quality of the performance itself. Indeed, Maitland argues that audience development needs to grow into a long-term strategy that aims at the development of "artistic, education and marketing functions of an organizations" (as cited in Sigurjosson, 2010, p. 269), without overlooking any of these aspects. The purpose of audience

development strategies should be that of building a fulfilling relationship with the audience, also including the educational aspect – fundamental for the experience of aesthetic appreciation – while maintaining a special focus on the individual (Sigurjosson, 2010).

2.3. Behavioural Science and Nudging

As we have seen, attempts to attract visitors to museum exhibitions encompass different strategies and can be differentiated based on the type of audience they target, as in the case of marketing and audience development strategies. A third way that might be incorporated in the museums' strategies is that of behavioural techniques, which have been considered by social marketing and are at the core of *nudge* theory. The peculiarity of social marketing, when compared to mainstream marketing, is that of aiming at the benefit of the individual and society in general, rather than aiming at financial profit. In doing so, social marketing borrows techniques from classic marketing and has been driven by "models of individual-level behaviour change" (Collins et al., 2010). As Collins and colleagues argue, however, these theories tend to be based on a classical view of economics according to which individuals act on their self-interest and are therefore defined as homo-economicus.

Contrary to this view, in recent years, the growing of behavioural economics has led to a critical change in the development of economic models which interpret individuals' behaviour. As behavioural economics became an established discipline and acquired authority, the application of its principles started to be studied within the area of public policy.

During the 1980s, economist Richard Thaler and colleagues, inspired by the works of psychologists Daniel Kahneman and Amos Tversky, started what would result in a long – victorious - battle in order to introduce relevant changes in the dominant economic theory. As said, inspired by the work of Kahneman and Tversky on prospect theory – which presents a model to interpret the way people make decisions – Thaler started to investigate the role of cognitive biases in the ways people make decisions in the economic domain. His and other economists' work led to the creation of a new discipline, behavioural economics, which attempts to construct realistic models to predict people's actions and, therefore, suggests ways to correct their erroneous – non-rational – behaviour (Thaler, 2015; Tversky & Kahneman, 1992).

In *Misbehaving* (2015), Thaler narrates the process by which he managed, with others, to develop behavioural economic theories and explains why, in some cases, classic economic models fail to make correct predictions. In exploring his interest in psychology, Thaler realized that people do not behave, as classic economics assume, as homo economicus – or Econs, perfectly rational human being capable of making correct predictions, but rather as Humans, who often "misbehave", following their emotions and being misled by their cognitive biases. The development and use of behavioural economic models led researchers to a better understanding of the markets, permitting

the creation of realistic and reliable models which are effectively and extensively used by companies nowadays (Thaler, 2015).

2.3.1. Behavioural Economics and Public Policy

As mentioned, the implications of behavioural economics were also studied and applied within the domain of public policy. At the time Thaler was starting to take an interest in the application of behavioural strategies in economic matters, American citizens' subscription rates in retirement plans were dramatically low, causing an alarming situation of poverty among elderly and unemployed people. The national plan for retirement called Save More Tomorrow was implemented to help people save money for their future. The plan was mainly based on changing the procedure from an opt-in to an opt-out method, therefore making the enrolment automatic – leaving the option for those who did enter the saving program to, indeed, opt-out. Thanks to this simple expedient, enrolment rates significantly increased. The second main innovation was asking people if they would accept to contribute a low percentage of their pay, while accepting that the percentage will increase at their next salary raises (Thaler & Benartzi, 2004; Thaler & Sunstein, 2008).

In his book *Nudge* (2008), written together with legal scholar Cass Sunstein, Thaler thoroughly explains how the use of similar strategies can be efficient in dealing with public policy issues. The authors argue for a "libertarian paternalism" approach which is meant to help people in making choices in their best interest when, due to the particular nature of these choices, they fail to do so (Thaler & Sunstein 2003, 2008). The areas in which nudges can be applied are presented in the book as money (pensions, investments, social security), health (drugs prescription plans, organ donations, energy saving behaviours), and freedom (school choices, medical lottery tickets, marriages). What all these public issues have in common, according to Thaler and Sunstein (2008), is the way their complexity might be overwhelming for some people, who indeed do not dispose of the proper knowledge to face them and would possibly fail them or give up before even starting to tackle the problem.

According to Thaler and Sustein (2008), there are five elements into which those difficult tasks can be deconstructed, in order to make them recognizable to policy makers: 1. benefits now – costs later (self-control issues), 2. degree of difficulty, 3. frequency (the less often we do something, the less likely we are to have the proper skills to deal with it), 4. feedback (not being able to know if we made the right decision or not, like in long-term processes), 5. knowing what you like (also related to rare events/decisions). Nudges are also considered effective where motivation and effort are a considerable issue, as in desired behaviours that are considered hard to accomplish, like carrying a healthy lifestyle by exercising often or quitting toxic habits.

As libertarian paternalism is based on protecting people's freedom, what it tries to do is to gently nudge people into making the right choice - which is the choice experts think would be the

best for them or, sometimes, that individuals themselves claim to be wanting-leaving them the chance of acting differently in the case they show a strong preference for a different option. Since this method is meant to help people deal with issues they would not normally know how to tackle or that they would rather avoid, the process of directing them toward a specific behaviour is thought to be ethically appropriate. Moreover, as Thaler and Sunstein argue, often there is no such thing as a "neutral option", as people are irremediably affected by the way something is structured and, in the case they are no expert in something, they would always go with the easiest way to do something, or the standard option. For example, it would be easier for someone to pick the brand of cereals which are at eye-sight level on the supermarket shelf. Placement of healthy food in schools' cafeteria or shops has been proven to lead people to eat healthier, as well as placing shelves so as to lead to the vegetables area or indicating it with green arrows contribute to the same result. However, these techniques guarantee that motivated individuals could take the conscious decision to avoid the nudge and buy other products. These types of strategies are also defined as choice architecture, as they take advantage of simple cognitive processes or biases in order to lead people to take the desired decision. A similar example is that employed by banks after the introduction of ATMs, as they realized that setting the machine on spitting the debit card before handing the money would reduce the number of cards forgotten at the ATM (Thaler & Sunstein, 2008).

2.3.2. Challenging Choices and Cultural Capital

Choice architecture and nudging seem to present, therefore, an interesting set of techniques that can be used in many public policy areas, such as economic and health issues management, energy saving and educational programs. They could, however, be applied to all the domains where people face challenging choices with similar characteristics to those presented above. In the educational area, for examples, simple tricks like texting kids' parents they day before a test – to remind them the kid might need some help with a quick recap – or requiring high-school seniors to enrol in the local public university before getting their diplomas, led to positive outcomes in improving kids' test results and in increasing university enrolment rates in the schools involved in the experiments. Those are among the few cases in which nudging was specifically utilized in culture-related issue (Thaler & Sunstein, 2008; Pretlow & Wathington, 2014; Castleman, Page, 2015).

I argue here that activities such as going to the museum and enjoying art or culture in specific settings are, therefore, potential issues for some people that might benefit from such behavioural strategies. As claimed by Bourdieu (1984) in *Distinction*, his study on aesthetic taste among the French population in the 1960s, education level and socio-economic class are very relevant factors in determining people's taste and therefore the cultural environment people would attend.

By studying correlations between respondents' cultural taste and their socio-economic background, Bourdieu was able to construct a solid theoretical framework which is referred to as *Distinction theory*. The core principle of the theory is that cultural taste is determined by

individuals' cultural capital, which is strictly connected to their socio-economic background. Indeed, people learn to appreciate different activities and develop their aesthetic taste based on the social environment in which they are raised. Through institutions such as the educational system, but also through the teaching and behaviour of people in their social circle, parents and family members in the first place, individuals learn what is most appropriate to appreciate and how to distinguish people based on their taste (e.g. clothing, attitude...). Therefore, during their socialization process, they acquire the appropriate symbolic capital that determines their habitus, the internalized set of behaviours and attitudes which is also linked to one of the three ways cultural capital can be expressed, namely embodied cultural capital.

The other two forms of cultural capital are objectified and institutionalized. The former refers to owning objects such as paintings, records, etc., and the latter consists in the official recognitions of capital such as level of education. As already mentioned, Bourdieu found a correlation between socio-demographic characteristics and taste appreciation, exploring the relation between economic, social and cultural capital. Indeed, Bourdieu was particularly concerned with the role of institutions in the reproduction of social structure, which tended to reinforce the symbolic power of the dominant class and benefit those who had been socialized properly at home – i.e. according to the dominant elitist culture. These findings were crucial in introducing the idea that cultural consumption is an area of individuals' lives where the reproduction of social class takes place (Bourdieu & Holt, 1998).

Socio-demographic characteristics such as income, age and education are found to be relevant in visitors studies as well, which confirm that museums visitors are generally richer, more highly educated and older (Kirchberg, 1996; DiMaggio & Useem, 1978), as I will more extensively present in the next section. Therefore, people with lower cultural and symbolic capital might benefit from the use of behavioural techniques in order to be *nudged* toward the consumption of cultural products within a public environment – such as museums – as well as to maintain a long-lasting and fruitful relationship with these institutions. Indeed, given the complex nature of taste development – which is tied to a web of meanings that is believed to be acquired since an early stage of individuals' lives, and difficult to develop later in life, especially without proper education or mentoring – I believe that nudges might be helpful in smoothing the process of introducing individuals to the complex word of art appreciation.

Both sociological and psychological studies on art appreciation affirm that a previous education on the matter would significantly enhance people's ability to enjoy the aesthetic experience (Marković, 2012). While Thaler specifically addressed cases in which high quality skills or expertise are required in order to complete a task, this might also be generalized to cases in which these tasks are never addressed, cultivated or are explicitly avoided. Simple nudges, together with elaborated marketing and advertising techniques, might be used to make it easier for people to enjoy an environment in which they do not – or they think they would not - feel comfortable (Moore, 1998; Kay et al., 2009). On the other hand, it might contribute to attracting other

segments of the potential audience which might be problematic in this sense, such as people who would like to go more often to the museums, but for some reasons do not (laziness, erroneous thinking about what the museum offers, or entrance fees, etc.), or young people, for instance.

In order to better understand which strategies would be more efficient in attracting broader audiences, however, it is necessary to deepen our knowledge of the visitors and non-visitors' characteristics and on the reasons for attendance and non-attendance. I will explore this topic in the next section.

2.4. Cultural capital and museums visitors

2.4.1. Methodological issues

One way we can study and therefore measure the inclusiveness of museums is by analysing the characteristics of their visitors and, as already mentioned, the road was opened with the massive empirical study conducted in the 1960s by Pierre Bourdieu, who analysed data from surveys about taste conducted in France. Bourdieu was able to develop his theory through the analysis of questionnaire responses which revealed a correlation between socio-economic class and cultural taste. Based on his findings, he concluded that people who pertain to a higher socio-economic class possess more cultural capital, which means they have a wider and deeper knowledge of various types of culture and tend to appreciate — or at least they did in the 1960s France - forms of so-called high art. On the other hand, lower class people tended to appreciate more popular forms of art and culture, or mass culture.

Since Bourdieu's work, other studies have adopted this quantitative-based approach and, especially in recent years and with the advent of new technologies and the democratization of culture, the situation seems to have changed. Scholars have started to question the idea of cultural capital as a stable and well-defined entity which grows proportionally to individuals' socioeconomic class. Indeed, although cultural distinction is likely to still be strongly present in our society, it is developing into different forms and requires new methodologies to be studied and better understood.

A significant innovation in the theorization of cultural capital came in 1992 with the work of Peterson and Simkus, who introduced the idea of cultural omnivorousness. The researchers noticed that higher-class individuals, rather than distinguishing themselves by appreciating only forms of culture considered more refined and prestigious, were interested in diverse types of cultural and artistic expressions, including popular or folk culture, being therefore classified as cultural *omnivores* and opposed to *univores*, who could instead only appreciate a single type or genre of cultural products. Subsequently, the concept of cultural capital has been further analysed and developed; for instance, recent studies have stressed the importance of modalities of cultural consumption rather than the choice of particular cultural products (Prieur & Savage, 2011).

As argued by Lizardo and Skiles (2012), the new focus is not invalidating Bourdieu's original distinction theory. However, it reinforced the idea that it is necessary to avoid a universal definition of cultural capital, as it has proven to be a fluid concept which acquired different meanings based on the symbolic systems of the worlds in which it has developed (Friedman, Savage, Hanquinet & Miles, 2015). For this reason, assessing and individual's cultural capital also presents methodological issues and the operationalization of the concept must be tailored to different situations (Lamont and Lareau, 1988; Friedman et al., 2015). For instance, it was observed to be differently expressed based on age groups and nationalities, as well as diverse professional areas. Generational changes are critical in the study of the evolution of the concept of cultural capital, as they reveal how younger people are influenced by a different cultural, social and historical context in which they were socialized and educated (Friedman et al., 2015).

On the other hand, cultural capital is relevant for museum visitor studies as it can be used to theorize visitors' characteristics and understand their relation with attendance. Indeed, cultural capital in its different forms is still believed to fulfil a critical role in the construction of personal taste and therefore cultural participation. Determining how individuals' cultural capital relates to cultural participation aids in understanding if — and how - culture is still a relevant element of class reproduction. For the reasons mentioned above, however, it is particularly complex to operationalize cultural capital in a universal way. Traditionally, different indicators have been used to measure it, such as knowledge and appreciation of high culture — as well as participation in related events -, educational achievements, the mastery of symbolic practices or the ability to carry them in "culturally acceptable ways". (DiMaggio & Useem 1978) . In particular, many have followed Bourdieu in focusing on high culture as the element that constitutes legitimate culture - with the exception of studies that include cultural omnivorousness.

As already mentioned, cultural capital can be divided into three main aspects (embodied, objectified and institutionalized) which must also be measured differently. For instance, a way to measure embodied cultural capital is that of inquiring after individuals' participation in different types of cultural activities, such as festivals, concerts, theatre performances and museum exhibitions. As said, level of education is traditionally used as an indicator of institutionalized cultural capital. Moreover, since education and social class (which includes income, parents' level of education and profession) are considered to play a relevant role in the creation of someone's cultural capital, we can affirm that embodied cultural capital is at least partially influenced by its institutional counterpart (DiMaggio & Useem, 1978; DiMaggio & Mukhtar, 2004). Traditionally, school programs have emphasized high culture rather than mass or popular culture, offering knowledge in terms of history and interpretations tools, as well as spreading a focus on the aesthetic experience. At the same time, it has been suggested that higher class families provide kids with better education, both in terms of economic support – for instance paying expensive fees or extra courses – and of symbolic capital that kids learn within the household and bring with them in

the educational environment, therefore being advantaged in comparison with lower class kids (Bourdieu & Passeron, 1977; DiMaggio, 1978; Kraaykamp & Van Eijck, 2010).

On the other hand, Yaish and colleagues (2010) report that economic and cultural capital affect distinct aspects on the relationship with art, noting that economic capital has a stronger effect on cultural participation, while cultural capital is more relevant for taste. Indeed, although there is still a correlation between the two forms of capital, their relationship has become more complex to understand, especially in economically developed countries where the average level of education has also risen and the educational gap between lower and higher economic classes has been reduced (Barro & Lee, 2013). However, the two aspects are often considered indistinctly as cultural participation is used to measure taste. Therefore, studies have been carried on visitors and non-visitors profiles, in the attempt to isolate socio-economic elements that characterize these two groups.

2.4.2. Visitors and non-visitors profiles

Following existing literature, I will now discuss differences between visitors and non-visitors. Being a crucial indicator of cultural capital, level of education demonstrated to be a fundamental background characteristic predicting museum attendance (DiMaggio & Useem, 1978). Income, gender and household composition are also important elements to consider, both as indicators of social class and because of their correlation with cultural capital. Other factors to be considered are ethnicity, region and age, which can also affect the "class-culture" linkage (DiMaggio & Useem, 1978; DiMaggio & Mukhtar, 2004). However, education is typically found to be more relevant than income or general class-related characteristics. (DiMaggio & Useem, 1978; Kirchberg, 1996)

Museums visitors are usually older, better educated and with a higher income than non-visitors (Kirchberg, 1996; Kay, Wong & Polonsky, 2009; DiMaggio & Useem, 1978). However, this is especially true for art museum visitors, as opposed to science and natural history museums. Kirchberg (1996) placed the three categories on a continuum, where art museum visitors and non-visitors are on the opposite poles, while visitors of other types of museums are in the middle. Kirchberg argues that there is no substantial social contrast between general museums visitors and non-visitors, meaning that the gap is wider between art museums visitors and non-visitors, rather than general visitors and non-visitors who are more similar to each other. According to DiMaggio (1996), art museum visitors are characterized by an open and tolerant mind, an attitude that he describes as cosmopolitan and modern, and by a solid respect for science and artistic authority as well as a preference for secularity and political and social non-conformity.

However, a lack of knowledge characterizes scholars' understanding of the reasons for not visiting (Prentice et al., 1997), although a few studies have been conducted in this sense. Kay, Wong and Polonsky (2009) complemented the analysis of socio-demographic characteristics with indepth interviews. They therefore constructed a model that entails a set of eight reasons (physical access, personal access, cost, time and timing, product, personal interest, understanding and

socialization, and information), which are then grouped into three wider categories: external/situational factors, product specific factors and personal factors. The three categories are presented as complex and interrelated, especially in the sense that external and product-specific factors have an impact on personal ones. Moreover, the three categories entail both real (physical distance, cost) and perceived barriers (the belief of prohibitive costs, for instance). Kay and colleagues also underline the importance for non-visitors of lack of information, both before and during the events or exhibitions. Interviewees consistently elaborated on the actions that museums might undertake in order to improve this aspect, such as giving detailed information about an event before its occurrence. According to Kay and colleagues, "information motivate[s] one to consume" (p.847).

Assessing visitors' and non-visitors' motivations and constructing precise profiles would help museums in building efficient strategies for strengthening their relationship with existing visitors and attracting new ones. However, motivations are varied and complex, as suggested by Kay et al., concerning different areas of one's personality as well as external reasons. By understanding who the visitors and non-visitors are and what their reasons are for (non-) attendance, museums have the chance to question the success of their strategies and possibly develop new approaches. Given the relevance and the successful reputation of Dutch museums, I will analyse data related to these two categories of individuals in Rotterdam, inquiring into their socio-demographic and personal characteristics and how these are related to their preference for museums.

3. Methods

3.1. Secondary data analysis

In order to assess the composition of art museums' visitors and non-visitors groups in Rotterdam, I have analysed secondary data on cultural participation collected by the Rotterdam municipality in 2015, focusing on three museums in Rotterdam, namely Museum Boijmans Van Beuningen, Witte de With Center for Contemporary Art and Kunsthal.

The use of secondary data presents many advantages as well as some disadvantages. Bryman (2015) defines it as the analysis of data by researchers who were not involved in its collection and that were likely to be collected for a different purpose of that of the secondary research. It might involve the use of both quantitative and qualitative data, however the former is more widely used and usually considered more reliable. Of course, the main advantage of using data collected by others is that of diminishing financial and temporal costs, which makes it perfectly suitable to a master project that only relies on a limited amount of time (and finances as well).

One of the main advantages of using secondary data is the fact that relying on official and authoritative entities can guarantee the quality of the data collected. Organizations that supply large datasets have usually well-established means for reaching respondents, providing samples that are more likely than others to be representative of the population one wishes to represent. In this case, data are provided by the Department of Research and Business Intelligence (OBI) of the municipality of Rotterdam, which follows national guidelines in order to collect reliable data that can be compared with that of other cities in the Netherlands. Moreover, large datasets can be interesting to many researchers since they present the possibility to divide the population in subgroups that have characteristics in which the researcher is interested. Using secondary data is also criticized as it raises some issues, for example the complexity of the data and the presence of many respondents and variables that require a familiarity with the information collected that only those who contributed to its creation might have. Indeed, working with a dataset that someone else has produced, usually requires some time to familiarize with it and form a clear idea of how the information is structured and how it can be used. However, the time spent in familiarizing with the dataset is usually not comparable to that necessary to structure and conduct surveys in order to create one's own dataset.

A relevant issue of secondary data analysis is that of the possible absence of key variables when conducting multivariate analysis. However, the dataset at my disposal revolves around cultural participation, which made it likely to provide most of the variables necessary to reach a satisfactory understanding of the topic of my research.

3.2. The survey

As already mentioned, the dataset I have analysed was provided by the Onderzoek en Business Intelligence (OBI), the Department of Research and Business intelligence of the municipality of Rotterdam. Particularly, it is a survey on leisure time - the VTO, Vrijetijdsonderzoek – of Rotterdam inhabitants, which was held in 2015 and includes different activities such as sports participation, visits to the city, use of green spaces, volunteering and cultural participation, as well as on individuals' satisfaction and perception of the city's attractiveness. The survey was submitted to a random sample of Rotterdam inhabitants, via post or online, and following national guidelines for the type and formulation of questions asked. Moreover, respondents provided information on their attendance of a number of museums in Rotterdam during the year previous to the survey, as well as on whether they consider going to the museum as a leisure activity. Specifically, I used in the analysis variables describing sociodemographic characteristics, such as age, income, ethnicity, gender, level of education. Other potential characteristics have been included in the analysis such as personal traits, such as shy, honest, thoughtful, etc. (a complete list of the variables is provided in the appendix) and participation in leisure activities, such as shopping for fun, playing videogames or attending sports, which have not given relevant results and therefore have not been included in the final analysis. Other variables that have been included in the analysis are those which have been utilised to explain a difference among the museums' visitors, namely those related to the museums' location (also to be found in the appendix). It is important to underline that, since the survey was only submitted to inhabitants of Rotterdam, tourists who attend museums in Rotterdam will not be considered in the analysis.

For this research, I have considered three art museums in Rotterdam, namely Museum Boijmans Van Beuningen and Kunsthal Rotterdam, which are located in the Museumpark in the west part of the city centre, and Witte de With Center for Contemporary Art, which is located in the cultural and nightlife area of Witte de Withstraat. Among 2795 randomly selected respondents, in the 12 months preceding the interviews, 550 people affirmed to have visited Boijmans, 565 Kunsthal and 323 Witte de With. The great number of respondents permitted to conduct a statistical analysis of these visitors with sufficient power. Further details on the characteristics of the respondents will be given in the analysis chapter.

3.3. Rotterdam museums

I will give a brief description on the three museums based on information that is found online and obtained via personal observations. Moreover, a list of services offered by the museums will help in comparing them and understanding what kind of approach they are using. Since it was not possible to have detailed first-hand information, my description is based on information that is accessible online and that still provides me with helpful general descriptions of the museums and their approaches. Therefore, the information given refers to the current year (2018) and is used to give a general description of the museums but might not faithfully reflect the situation in the years before the survey, in terms of spaces rearrangement for instance. However, I attempted to provide some information on which exhibitions and activities were happening in 2014 as well, using once again

online resources. In giving general information found online, I will maintain the focus on the characteristics that are highlighted in the museums' websites as to respect the image the museums have chosen to convey of themselves.

4. Analysis

Let me repeat my research question: What are the characteristics of visitors and non-visitors of art museums in Rotterdam? How do museums' strategies and services relate to their visitors' characteristics? I shall first offer a presentation of the three museums based on personal observations and information gathered online, together with a brief analysis of the services offered by the museums. I will then proceed with the construction of visitors and non-visitors profiles, in order to offer both general information on art museum visitors' profiles and to be able to investigate the connections of the museums with their group of visitors. I expect, however, the visitors to have a similar profile and to distinguish themselves more strongly from non-visitors (for hypothesis see the quantitative analysis chapter 4.2.1.). However, a brief description of the museums is relevant in order to describe the images that the museums convey of themselves to the visitors, and offer a glimpse of the "visitor experience" to the reader. Therefore, the following sections are not to be considered as thorough description of the museums personality or image, but rather as a quick sketch that will guide the reader through the distinction of the three museums and will provide a foundation for the linkage of museums' and visitors' profiles.

4.1.1. Museum Boijmans Van Beuningen

Museum Boijmans Van Beuningen is one of the most important museums in Rotterdam. It boasts a wide collection of "no fewer than 50,000 objects" (Boijmans.nl, n.d.) which were donated by private collectors during 170 years. The permanent collection consists of Western works from the Middle Ages to the present day, including Dutch old masters like Bosch and Rembrandt, and international established artists like Kandinsky, Magritte and Dalí.

Boijmans' website is colourful and dynamic and filled with any kind of information on the museum exhibitions and history. On the homepage, a moving presentation shows the major works of the museum with both images and text, stressing popular names (Van Gogh, Mondriaan), and the incredible number of works (with a series of "and, and, and..."). The website also provides extensive information on different educational activities, divided per schooling level from primary education to HBO and MBO.

Museum Boijmans Van Beuningen is located in the Rotterdam Museumpark and consist of three buildings which have different aesthetics and functions. A strong focus is put on the role architecture plays in the fruition of art. The Van der Steur building (1935) is a massive building which stands out with its distinctive tower and consists of a series of large and smaller galleries, conveying an intimate atmosphere and refined by traditional materials such as bricks, copper and

natural stones. The exhibitions building (1972) is characterized by rougher material, with three wide spaces that offer a great flexibility to be differently arranged for each new exhibition. It was extended in 2003 and the new galleries involved the use of concrete and glass, as well as bricks. Museum Boijmans Van Beuningen also has a pavilion, which offers a bright environment and hosts the bar and restaurant with a view on the garden. The museum is also planning to open a depot, which will permit to exhibit the entirety of its collection within a seven stories sustainable building that is meant to fuse with the environment by its reflecting glass facades.

The museum is currently displaying its permanent collection with an exhibition called "the collection as a time machine", which is characterized by the lack of chronological order in the disposition of artworks, leading the visitor through a surprising journey from different ages and aesthetic movements and intending to encourage "slow looking". Yayoi Kusama's mirror room is also a permanent exhibition, placed not far from one of the entrances. By accessing the museum from the ground floor entrance, one finds herself in a spacious room with the ticket desk, a books/gadget shop, a creatively set wardrobe where coats can be hung and lifted to the ceiling by pulling a rope - and decide to which section of the museum to head first. From the entrance, one can cross the wide hall – walking under the coats – and access the library, a couple of areas dedicated to different exhibitions, and the Mirror Room already mentioned, where it is common to see people taking selfies and pictures – that one can also observe from the TV monitor outside of the room. Instead, following on the right of the ticket desk and the shop, it is possible to access the main exhibition from two different entrances, proceeding on the ground floor or going upstairs. It is also possible to access the building from a different entrance that leads directly to the exhibition area. As said, the current curation of the permanent collection offers a peculiar non-chronological order of works, were the visitor might find herself in a section characterized by a whole new set of aesthetics. Different buildings and areas offer a dynamic experience where the dialogue with the works is shaped differently based on the spaces and the curation, going from small and intimate rooms with different wall colours, to big areas where one can freely walk around and create her own path.

In 2013-14 the permanent collection was rearranged into the "The Collection Enriched" created by Peter Hecht of the Rembrandt Association Fellowship and Professor of History of Art at Utrecht University. Works by Tintoretto and Goya were among the twenty that were added to the collection, lent by other Dutch museums, and around thirty were taken from the museum's collection. The installation included more than 350 paintings.

4.1.2. Kunsthal Rotterdam

Kunsthal Rotterdam is also located in the Museumpark and is a popular attraction in Rotterdam. The Kunsthal website is also dynamic, but stresses quite different elements than Museum Boijmans Van Beuningen. The homepage offers an interactive schedule of all the past, current and future exhibitions and a smaller part at the bottom which shows the current events. The information given highlights Kunsthal's "individual" personality, presents the team and their functions, and claims

that Kunsthal "is not a museum" (Kunshtal.nl, n.d.). Kunsthal, which has no permanent collection, wants to "surprise and amaze" with a variety of exhibitions and activities which follow one another and wants to include a diversified and broad audience. Moreover, it offers a range of art, from modern to contemporary works, including "forgotten cultures, photography, fashion and design". Kunsthal officially opened in 1992 and was located in the innovative building designed by the famous architect Rem Koolhaas together with Fuminori Hoshino, from the Rotterdam firm OMA. The building offers an attractive architectural site, with its original use of materials, shape and position of entrance and ramps. From the garden in the Museumpark, one can access the museum and enter directly into the café, which is separate from the rest of the spaces. On the left side of the hall are located in sequence the tickets desk and the shop. Once passed this first room, and the wardrobe in the next area, one finally starts her path through the seven exhibition spaces, which are preceded by a vast and colourful auditorium with 300 seats - which can also be rented for events.

As said, once entered the museum one can go through seven different exhibitions places that are shaped differently based on each show, and freely decide in which order to visit the halls. At the same time, works can be provided with more or less informative labels depending on the type of exhibition. During the recent show of Paul Delvaux' works, large temporary walls were set to lead the way through the exhibition. At the entrance, a big timeline was displayed on the walls, and educational brochures on the artist, his life and the interpretation of his oeuvre were provided. At the same time, less information was given when visiting the exhibition Circus Europa by Michael Kvium. In this occasion, the visiting area was dominated by the colours and shapes of the works (they were both paintings and sculptures), and the visitor was introduced to the "circus" by a video which was part of the exhibition itself.

In 2013-14, Kunsthal was closed for renovation for seven months and reopened on 1st February 2014. The building was made more sustainable and easy to access and the former shop was transformed into an educational area called KunsthalLAB.

4.1.3. Witte de With Center for Contemporary Art

Witte de With is a small space compared to Kunsthal and Boijmans, and as the name indicates, it is identified more as a centre for art than a museum. The museum mission is focused on artists and on the current themes and issues within the art world. Indeed, it maintains a strong relationship with artists and the audience can often engage in conversation, attend conferences and enter into direct contact with the art-makers. As the name also indicates, its focus is on the contemporary scene, although it "regards how art has been created and experienced in the past, and it imagines the futures art can come to shape" (wdw.nl, n.d.). Moreover, it commissions and distributes books, publications and catalogues, in an attempt to stimulate dialogue and reflection on both aesthetic and current societal issues. The museum has always had a small display of books on sale, that has

recently been expanded to a larger book shop in one of the rooms at the ground floor that is also visible from the street through the spacious windows of the building.

Witte de With's website presents itself as simple and based on a scale of grey tones, with the exception of a central box that shows current exhibitions and events. The homepage provides extensive information on current and future events and exhibitions. On the other hand, the rest of the website is rich in information on WdW goals and its activities. Like the website, the exhibition spaces are sober and devoid of colour, recalling the contemporary art format of the white cube. Indeed, the four floors of the former monumental school consist of spacious white-wall rooms, which occasionally alternate with office spaces with transparent walls –the inside of which is visible from the flight of stairs. The centre also includes Tent, an exhibition space on the ground floor of the building, which praises its connection to the city of Rotterdam and its artists. The rooms often include only one or a few works, therefore leaving visible a great part of the white walls that completely surround the visitor. At other times, however, the works completely cover the walls bringing a radical change to the atmosphere of the space. At the moment, Witte de With Centre is hosting Rotterdam Cultural Histories, in collaboration with Tent, that display a number of local newspapers dating back to the revolutionary period of the 1968; a new work by Teresa Margolles is exposed on floor two, a conceptual work revolving around emigration between Venezuela and Colombia, and displaying t-shirts of men hired by the artist to carry stones across the rivers that divides the two countries. The second floor also hosts a solo exhibition of Irene Kopelman, an Argentinian artist based in Amsterdam, who travelled across different and remote countries such as the volcanic islands of Hawaii and the mountains of Borneo and consequently tried to represent and render them through paintings, drawings and sculptures. On the last floor, a thematic exhibition that reunites the works of Susana Mejía, Pamela Rosenkranz, and Anicka Yi, artists who have worked in the Amazon forest and interacted with locals and teams of professionals such as anthropologists and biologists. The three artists' exhibitions play with the ambient, changing colours with led lights and coloured windows, mixing technology and natural elements and bringing the visitor to a whole new experience from that of the previous floors.

In addition to educational programs with schools and events revolving around exhibitions (like openings), Witte de With Center also offers workshops and special meeting with artists, which might help in attracting other aspiring artists and art-enthusiasts willing to enter in direct contact with the professionals. In 2014, Witte de With Center hosted numerous events and exhibitions, including conferences on hybrid ecologies and digitalisations, the *Rotterdam Cultural Histories* exhibitions and *Dai Hanzhi: 5000 Artists*, revolving around the work of a Dutch artist who has worked and became popular in China in the 1990s. It also included *The Part In The Story Where A Part Becomes A Part Of Something Else*, a group exhibition created with the collaboration of Spring Workshop in Hong Kong which tackled the topics of "repetition, resemblance and difference, synchronicities and slippages" (Wdw.nl, n.d.).

4.1.4. The museums' strategies

While only one of the museums, namely Witte de With via its PR, Marketing & Communication Associate, confirmed that they are not using behavioural strategies, I was not able to prove that the other museums are using this kind of techniques. Moreover, I could not find evidence in literature or reports of the use of nudges by museums; neither I could, through my personal observations, notice the use of explicit nudges. Therefore, I have no reason to believe museums are using these strategies although I cannot provide hard evidence for this statement. However, the line between marketing and behavioural strategies is sometimes blurry and it is safe to say that at least some of the strategies used by the museums might have resemblance with the behavioural approach. In the discussion chapter, I will write more extensively on specific nudges that might be used to improve the efficacy of museums' strategies. From the information at my disposal, I could compile a list of services and activities offered by the museums that possibly have an influence in attracting visitors. The list is presented in the table below.

	Boijmans van Beuningen	Kunsthal	Witte de With
presence in cultural	Museumpark	Museumpark	Witte de
clusters			Withstraat
diversification of	Restaurant/cafè, library	Restaurant/cafè,	Conference room,
services		auditorium	same building as
			Tent
Use of museums'	Admission with CJP card	CJP 7 €	
card	€15,00	Museum card,	CJP Pass €4.50
	CJP Pass: €12.50	Rotterdam pass: free	Museum card: Free
	Holland Pass Free	BankGiro Lottery	Rotterdam pass
	Museumkaart Free	VIP CARD: free	Free
	Rotterdam pass	Museumpark ticket	ICOM: free
	ICOM free	€ 27.50	Club Witte de With
		Kunsthal Friends /	members: free
		Circle / Business	
		Circle: free	
		ICOM pass,	
		Vereniging	
		Rembrandt pass: free	
General discounts:	Adults: €17,50	Adults:€ 14	€ 6,00: Witte de
	students: €8,75	o – 17: free	With, adults

	Admission children up to 18	students up to 26	€ 9,00: Combi-
	years €0,00	years of age: €7	ticket Witte de
	Boijmans audio guide:	Groups of 15 people	With and TENT
	€3,00	€ 12	€ 3,00: < 18 /
			students / CJP /
			seniors
			€ 4,50: Combined
			ticket Witte de
			With and TENT (<
			18 / students / CJP
			/ seniors)
			Free: < 12
presence on social	Website	Website	Website
media, websites	Facebook	Facebook	Facebook
	Twitter	Instagram	Instagram
	Instagram	Twitter	Twitter
		Youtube channel	Youtube
			Linkedin
			Soundcloud
Traditional	Yes	Yes	yes
advertisement			
partnership with	Yes	Yes	Yes
schools And group			
tickets			
conferences and	Yes	Yes	Yes
workshops			
Guided tours	Yes	Yes	Yes

Table 1. Museums services

We have seen from the previous presentation that the museums created different images of themselves that are conveyed to the public. However, as shown in the table, they offer similar services with minor differences. They have slightly different entrance fees — WdW is the cheapest, while Museum Boijmans van Beuningen is the most expensive, although all three offer discounts and free access with special cards. Moreover, some use more social media platforms (once again

WdW) and they are located in two different cultural clusters - Museumpark and Witte de Withstraat.

4.2. Quantitative Analysis

4.2.1. Hypotheses

Previous research affirmed that major differences are found between visitors of art museums and other museums (natural history, science), as well as between art museums visitors and non-visitors (Kirchberg, 1996).

Therefore, I expect the museum visitors to have a similar profile while differentiating themselves from non-visitors. As previously mentioned, art museum visitors are generally older, richer and have attained a higher level of education than non-visitors, and are also characterized by a different mind-set and political attitude (DiMaggio and Useem, 1978; Kirchberg, 1996).

Therefore, I hypothesise that visitors in the sample I will analyse will score higher on these categories than non-visitors. I will also include gender and ethnicity in my analysis. Regarding personal and political attitudes, I do not dispose of similar information on museum visitors. However, the dataset offers a number of variables regarding respondents' behaviour and personality characteristics, which I will use in order to build a profile of the groups. As far as personality is concerned, I can only hypothesize that traits found within visitors and non-visitors groups will reflect differences in level of cultural capital. My hypothesis will therefore be:

- 1. The three museums' visitors groups have similar socio-demographic and personality profiles.
- 2.a. Visitors' and non-visitors' profiles differ in socio-demographic characteristics and personality traits:
- 2.b. The visitors group will be generally older, richer and have attained a higher level of education.
- 2.c. Personality traits of visitors will be compatible with those of individuals with higher cultural capital (more intellectual and balanced, for instance), while non-visitors' will be showing features more typical of individuals with less cultural capital.

4.2.2. Socio-demographic profile

As already mentioned, the sample included 2795 individuals. At the question "which of the following museum, exposition spaces or galleries did you attend in the last 12 months?" 550 (19,7 % of the sample) have marked Museum Boijmans Van Beuningen (MBVB), 565 (20.2%) Kunsthal and 323 (11,6%) Witte de With. 353 people (12,6 %) have included visiting museums in "the three most important leisure activities [they] undertake in Rotterdam" (I will call this the *museum* variable or *museumbezoek* in Dutch). The profiles of visitors and non-visitors are similar for the three

museums and the museums variable, although with minor differences. However, I was not able to test for significance of the differences between the four groups of visitors. The reason is shown in the crosstabs below and lies in the overlapping of groups of people who attend the different museums, making it impossible to clearly delineate them for statistical comparison.

Indeed, from the tables below, we can see that 65.1% ([358/550]*100%) of MBVB visitors also visit Kunsthal, while 63.4% of Kunsthal visitors visit MBVB. At the same time, 65.5% of those who selected the museum variable, visit MBVB as well and 59.3% visit Kunsthal. 29.2% of Kunsthal visitors also attend WdW, as well as 28.3% of MBVB and 19.4% of those who selected the museum variable. Therefore, we can see that Museum Boijmans Van Boijmans and Kunsthal largely share their group of visitors, while around half of WdW visitors also visit the other museums, but only a smaller part of other museums' visitor and general museums passionate attend WdW. It follows that considering each museums' group of visitors separately – therefore excluding part of the respondents - could easily lead to biased or insignificant results. Therefore, in some cases it revealed to be more interesting to use simple means comparisons in order to obtain results that are not testable on statistically significant nor representative, but still provide valuable insight into visitors' characteristics.

Kunsthal * Museum Boijmans Van Beuningen				
Kunsthal	MBVB		Total	
	No	Yes		
No	1969	192	2161	
% within Kunsthal	91,1%	8.9%	100%	
Yes	207	358	565	
% within Kunsthal	36,6%	63,4%	100%	
Total	2176	550	2726	

Tabel 2. Crosstab - Kunsthal*MBVB

Witte de With * Museum Boijmans Van Beuningen				
Witte de With	MBVB		Total	
	No	Yes		
No	2009	394	2403	
% within WdW	83,6%	16,4%	100%	
Yes	167	156	323	
% within WdW	51,7%	48,3%	100%	
Total	2176	550	2726	

Table 3. Crosstab - WdW*MBVB

Kunsthal * Witte de With				
Kunsthal	Witte de With		Total	
	No	Yes		
No	2003	158	2161	
% within Kunsthal	92,7%	7,3%	100%	
Yes	400	165	565	
% within Kunsthal	70,8%	29,2%	100%	
Total	2403	323	2726	

Table 4. Crosstab – Kunsthal*WdW

For instance, I provide mean scores of socio-demographic characteristics of visitors and non-visitors groups of each museums. The first figure shows means for education, where higher scores correspond with higher level of education, measured on a scale from 1 to 10 according to the Dutch educational system division (a complete description is provided in the appendix). It is immediately clear from the figures below that visitors groups (depicted in green) are on average more educated, and that Museum Boijmans Van Beuningen and Witte de With visitors are the most educated among other visitors.

	Museum	Kunsthal	MBVB	MWdW
	variable			
No	5,54	5,89	5,88	6,02
Yes	7,05	7,55	7,61	7,77
Sig.	,000	,000	,000	,000

Table 2. Means – Level of Education

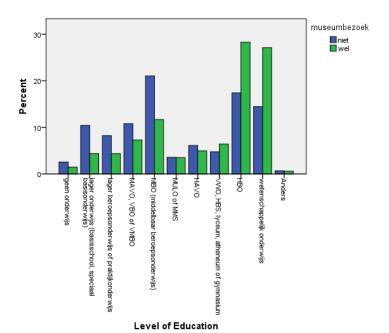


Figure 1. Level of Education – Museum Variable

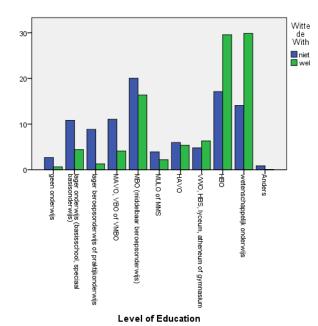


Figure 2. Level of Education - Witte de With

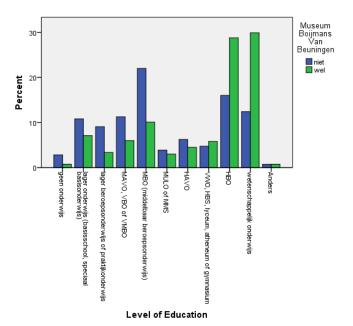


Figure 3. Level of Education, Museum Boijmans Van Beuningen

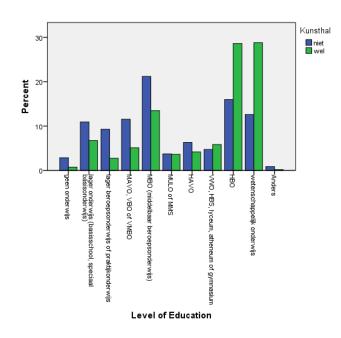


Figure 4. Level of Education, Kunsthal

Specifically, 28% of Kunsthal visitors have a university degree, compared to only 12% of the non-visitors. In general, a higher percentage of visitors attended vocational colleges and universities, while non-visitors' profiles are dominated by the first five categories (no education, primary school, lower vocational schooling, lower secondary schooling, intermediate vocational schooling).

This is true for the three museums, although WdW presents a slightly higher percentage of individuals who have attained an MBO (intermediate vocational schooling, 16%) compared to the

other museums (13% Kunsthal and 10% Boijmans), and the difference with WdW non-visitors is smaller; 11% of those who consider museums a leisure activity have completed an MBO (compared to 21% of those who have not included museums). With regard to the variable "ethnicity", which consists of the two categories "western" and "not-western" (Surinam, Antilles/Aruba, Cape Verde, Turkey, Morocco, and others), the visitors of Boijmans and

Kunsthal and the museum variable present higher percentage of westerners.

For instance, 80% of MBVB visitors are western, against the 19% of non-western visitors; on the other hand, WdW presents almost identical percentage of western and non-western visitors and non-visitors, as shown in the graph.

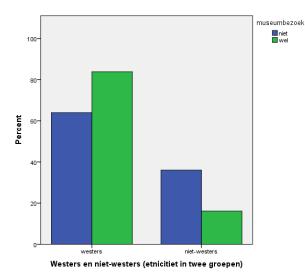


Figure 5. Ethnicity – Museum variable

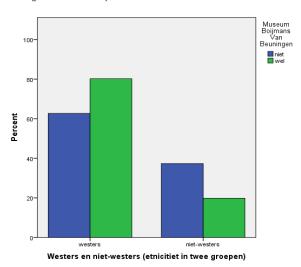


Figure 7. Ethnicity – Museum Boijmans Van Beuningen

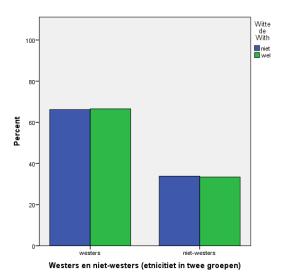


Figure 6. Ethnicity - Witte de With

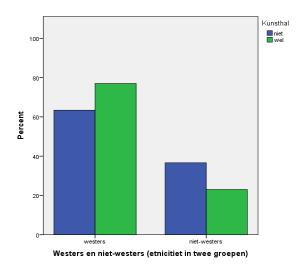


Figure 8. Ethnicity - Kunsthal

Income				
	Museum	Kunsthal	MBVB	WdW
	variable			
No	2,31	2,26	2,25	2,32
Yes	2,64	2,64	2,71	2,53
Sig	0,000	0,000	0,000	0,002

Table 3. Means - Income

Above, means comparisons show that museum visitors are also on average slightly richer than non-visitors, with MBVB showing the highest mean incomes and WdW the lowest.

For instance, for the museum variable, 57% of visitors have an income which is twice or more than twice the modal income, while for non-visitors this is only 43%; WdW visitors are slightly less rich than the visitors of the other museums (the only group that score higher in visitors than non-visitors is that of those who gain more than twice the modal income, 26% of the visitors and 18% of the non-visitors).

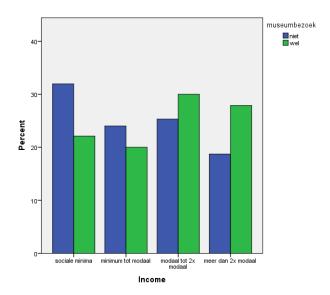


Figure 9. Income – Museum variable

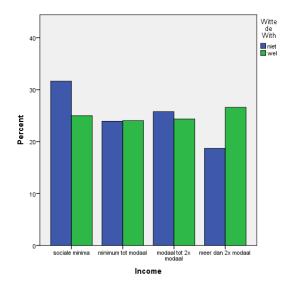
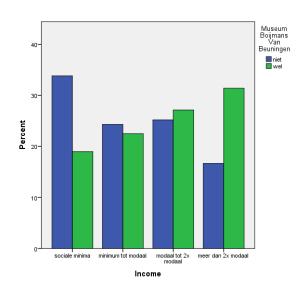


Figure 10. Income - Witte de With



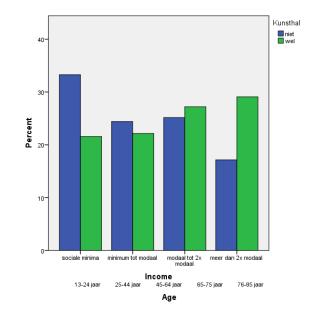


Figure 11. Income – Boijmans

Figure 12. Income – Kunsthal

As far as age is concerned, we see that the average visitor is older than the non-visitor for the museum variable and MBVB, but visitors are younger for WdW and do not differ from nonvisitors in terms of age for Kunsthal.

Age				
	Museum	Kunsthal	MBVB	WdW
	variable			
No	2,53	2,63	2,60	2,69
Yes	3,03	2,60	2,72	2,14
Sig.	0,000	0,495	0,028	0,000

Table 4. Means – Age

For WdW and Kunsthal, the group that attend more is that of people aged 25-44 (35% Kunsthal), but the percentage gap is stronger for Witte, where 46% of visitors are aged between 25 and 44 against 22% who are 44-64 years; moreover, Kunsthal percentages of visitors and non-visitors aged 45-64 are almost identical (30,2% non-visitors and 30,4% visitors). Boijmans' and the museums variable show older visitors (e.g. 36% aged 45-64 museum variable and 32% Boijmans).

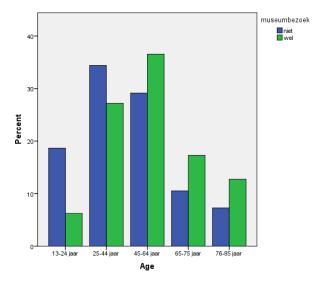


Figure 13. Age – Museum Variable

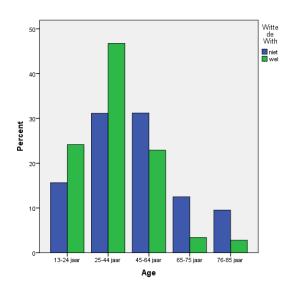


Figure 14. Age – Witte de With

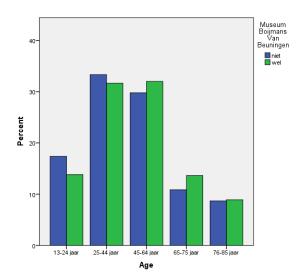


Figure 15. Age – Museum Boijmans Van Beuningen

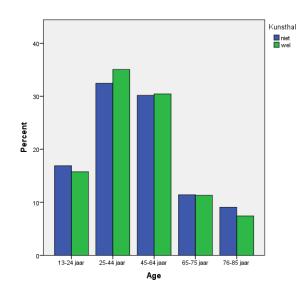


Figure 16. Age - Kunsthal

There is no substantial difference in gender composition of the visitors (41% men and 58% women for the museums variable, the three museums present similar percentages) and non-visitors groups (43% men and 56% women).

4.2.3. Regression on socio-demographic characteristics

Binary logistic regression gives a stronger insight into which characteristics affect attendance and preference for museums. Indeed, visitors and non-visitors profiles based on descriptive frequencies do not reveal causal relationships. By including different variables into a single regression analysis, it was possible to determine which characteristics affect museum attendance. Therefore, the following analysis adds to the previous descriptive one, by revealing which socio-demographic characteristics are significantly affecting the attendance on each museum, and thus leading to results that can aid in predicting which types of individual will more likely attend the museums.

Logistic Regression	Museum Variable			
	В	Sig,	Exp (B,)	
Household Income	-,025	,097	,975	
Age	,497	,000	1,643	
Gender (female)	,189	,137	1,208	
Level of Education	,230	,000	1,259	
Ethnicity (non-Western)	-,737	,000	,479	
Constant	-4,154	,000	,016	
Nagelkerke R Square	.133			

Table 5. Logistic Regression - Museum Variable

Logistic Regression	Kunsthal			
	В	Sig.	Exp (B.)	
Household Income	,034	,511	1,034	
Age	,056	,258	1,057	
Gender (female)	-,007	,946	,993	
Level of Education	,215	,000	1,240	
Ethnicity (non-Western)	-,467	,000	,627	
Constant	-4.154	,000	,091	
Nagelkerke R Square	.133			

Table 6. Logistic Regression - Kunsthal

Logistic Regression	Witte de Wi	th	
	В	Sig.	Exp (B.)
Household Income	,007	,914	1,007
Age	-,493	,000	,611
Gender (female)	-,025	,845	,975
Level of Education	,211	,000	1,234
Ethnicity (non-Western)	,027	,847	1,028
Constant	-2,261	,000	,104
Nagelkerke R Square	.115		

Nagelkerke R Square

Table 7. Logistic Regression – Witte de With

Logistic Regression	Museum	Boijmans Van	Beuningen
	В	Sig.	Exp (B.)
Household Income	,096	,070	1,101
Age	,191	,000	1,211
Gender (female)	,008	,941	1,008
Level of Education	,229	,000	1,257
Ethnicity (non-Western)	-,569	,000	,566
Constant	-2,974	,000	,051
Nagelkerke R Square	.131		

Table 8. Logistic Regression – Museum Boijmans Van Beuningen

As indicated in the tables, older people are significantly more likely to go to or appreciate museums in general, and specifically age has a weak positive effect on Museum Boijmans Van Beuningen' attendance, while the effect is moderate on the museum variable. However, in the case of Witte de With, younger age makes attendance more likely, while the effect of age is not significant for Kunsthal, indicating that individuals of all ages are equally likely to visit the museum. This difference might derive from the different nature and type of exhibitions of the museums, which present itself as dynamic at the point of only offering temporary exhibitions, often showcasing internationally renowned artists.

Both gender and income do not show significant results. On the other hand, education and ethnicity showed significant and moderate results, positive for education and negative for ethnicity. Education has a moderate positive effect on the three museums attendance and on the preference for museums as a leisure activity. Ethnicity has a strong (museums variable) or moderate (Kunsthal and Boijmans) negative effect, while it has no significant effect on WdW attendance, which means that individuals of western ethnicity are more likely to attend and prefer museums, but equally likely as non-westerners to attend WdW.

These data show that being white and highly educated are still strong predictors of museum attendance, with age also being an important predictor, although not for all museums. In a country where 22% of the population is of non-western descent (CBS, 2016) – and in a city that is among the most multi-ethnic of the Netherlands -, this data is indicative of the lack of inclusiveness within the art museums sector. It is important to note that Rotterdam is below the average of the national education level and household income, with non-western ethnicities being more represented in the lower sectors in both categories (City of Rotterdam Regional Steering Committee, 2009). Indeed, lower levels of education might contribute to the underrepresentation of non-western inhabitants among art museums visitors and reflect the broader situation of non-western individuals in the city.

Thus, while education has a significant impact on the likelihood of visiting all the museums, in one case ethnicity is not a significant predictor of participation, namely Witte de With. This might be due to the location of the Center, compared to the other two museums. Witte de Withstraat is a particularly multi-cultural and multi-ethnic street, which offers many other types of leisure activities other than the Center, both cultural and generally recreational, such as bars, restaurants and shops. It is also very close to the city centre. On the other hand, both Kunsthal and Boijmans are located in the Museumpark. I will go deeper into this potential source of differentiation in audience composition in the next chapter.

Moreover, it must be noted that ticket prices for Boijmans are generally higher, while entrance fees for Kunsthal are lower than Boijmans but higher than Witte. Although income does not have a significant influence on attendance, frequency tables show that higher percentage of WdW visitors have a lower income, compared to the other two museums. Moreover, younger people might be attracted by lower prices, and especially students. I will also test this option later.

At the same time, as previously mentioned, the non-western population is generally less wealthy, especially in Rotterdam, and might prefer to attend an art centre that offers lower prices.

Finally, the non-significant effect of ethnicity on attendance to Witte de With might also derive from the specificity of the museum – which often exposes highly conceptual works and mainly focus on contemporary emergent or less established artists, as explained in the personal observations section. As we have seen, WdW events also revolve around strengthening the relation with artists themselves and with attracting aspiring artists or professionals of the sector. Indeed, WdW visitors form a small group that is also likely to be selective in terms of unobserved variables such as passion and knowledge of contemporary art. Therefore, WdW visitors are likely to be part of a small niche which does not completely correspond to the standard art museum visitors profile – the one described in the literature and also found, for instance, in the museum variable - where non-westerners are less represented. Therefore, a strong dedication to the sector might contribute in neutralizing the importance of the ethnic background of the visitors.

42.3. Primary profiles

I have shown in the previous chapters that the museum variable and Museum Boijmans Van Beuningen visitors present the socio-demographic type that was expected as claimed in my hypothesis: they are older, more highly educated, richer and more often white.

Moreover, although income is not a significant predictor of attendance, ethnicity and level of education significantly affect the likelihood of individuals to attend Boijmans, Kunsthal or to have a preference for museums in general. However, although age positively affect preference for museums and Boijmans, it affects negatively Witte de With attendance and it is not significant for Kunsthal. Ethnicity is, however, not significant for Witte. It is visible also from the distribution graphs for education and ethnicity that WdW presents a younger and more diverse audience, while Kunsthal presents similar percentage of younger and older visitors.

Indeed, Kunsthal Rotterdam and Witte de With offer a slightly different profile when compared to the museum variable and to MBVB. I attempted to explain the peculiarity of the two latter museums by using my personal observations, by underlining the specificity of the two museums: Kunsthal offers dynamic and attractive exhibitions in terms of a continuous change of offer and the popularity of the artists, including fashion designers – which might explain why both younger and older people attend it; Witte de With attracts a specific type of audience that is extremely passionate about contemporary art, thereby possibly reducing the importance of the ethnic aspect for attendance. The lower entrance fees might also contribute to the preference of younger people for the two museums (WdW being the cheapest one and Kunsthal the second cheapest); while WdW's location might explain both the greater presence of young and non-western individuals. In the next section, I will analyse further this possibility by introducing new variables to my analysis. Moreover, I will attempt to dig deeper into the differences among visitor groups by adding features such as leisure activities, location and personality traits. In this way, I will be able to offer an even more detailed profile of the three groups of visitors.

4.2.4. Additional Hypothesis

In order to create an even more detailed profile of visitors and non-visitors, I compared the average values of the groups' answers on a series of characteristics. As already explained, means comparisons among visitor groups do not offer significant values because of the overlapping between groups; however, they provide an interesting picture of the mentioned groups that I believe is still relevant to the creation of detailed visitor profiles.

Firstly, based on the findings previously presented that show a difference in the demographic composition of WdW visitor group, compared to the other two museums, I used some variables in the dataset to test a new hypothesis. Given the table presented in section 4.1.4. which shows the services offered by the museums, I hypothesize that location might be a relevant element of differentiation between the museums – as the other services and characteristics do not show remarkable differences. Another interesting element of distinction might be the entrance fee, as WdW presents slightly lower fees; indeed, WdW has more visitors with a slightly lower income compared with the other museums. Given the combination with a younger audience, I also decided to test the presence of students in the visitors' groups.

I tested the first hypothesis, which I called the "cultural cluster hypothesis" – i.e. that some of the differences in the three museums visitors might be related to their position in the city - by comparing the mean of variables related to the location of Witte de With Centre.

The table and graph shown below report the means of different variables for each museums' visitors group. The results show that Witte de With visitors score higher on average on attending the art festival in Witte de Withstraat, going to Museumpark, going out in general and at night and going to Worm. Moreover, they more often select "sitting on a terrace" as one of their favourite activities. This suggests that, although WdW visitors are avid consumers of high culture who attend museums and often visit the Museumpark, they also spend more time on activities that are available in Witte de Withstraat – like going to Worm, an underground venue that offers concerts and cultural activities, or simply sitting on a terrace and going out, activities largely available in the street which is rich in bars and restaurants. Therefore, differences in visitors' characteristics such as ethnicity and age, as reported above, might be connected with the museum location – as well as with prices as previously mentioned.

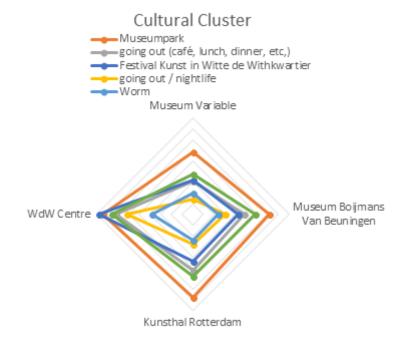


Figure 17. Graph – Cultural Cluster

		Museum		
	Museum Variable	Boijmans Van Beuningen	Kunsthal Rotterdam	Witte de With Center
Festival Kunst in Witte de Withkwartier	0,16	0,21	0,22	0,44
Museumpark	2,93	3,58	3,9	4,22
Going out (café, lunch, dinner, etc.)	1,56	2,4	2,61	3,58
Going out / nightlife	0,07	0,15	0,14	0,31
Worm	0,10	0,12	0,12	0,19
Sitting on a terrace	0,19	0,29	0,29	0,38

Table 13. Means - Cultural Cluster

		Museum		
	Museum Variable	Boijmans Van Beuningen	Kunsthal Rotterdam	Witte de With Center
Student house	2	14	13	26
% within each visitors group	0,6%	2,6%	2,4%	8,1%
Scholarship/Study grant	9	21	22	29
% within each visitors group	2,8%	4,2%	4,2%	9,5%

Table 9. Means - Students

In this sense, I tested the second hypothesis – that more students will visit WdW compared to the other museums. Indeed, it is interesting to note that a higher percentage of WdW visitors are students, in comparison with the other museums. Although there is no direct variable indicating whether a respondent is a student or not, I tested frequencies for the variables "household", which contains the category "I live in a student house" and "statement on economic situation", specifically the category "I receive a scholarship/study grant". Witte de With visitors indeed revealed higher percentages in both categories, as shown in the table above.

Therefore, after testing these additional hypothesis, I can affirm that people who go to WdW also attend more activities in the cultural street where Witte is located, and that they are more often students, when compared with the other museums. Therefore, differences in WdW visitors with the other museums' visitors might be partially explained by its location and by the greater presence of students (who, as I already mentioned, are attracted by lower entrance fees).

4.2.5. Personality traits

To continue with the creation of visitors and non-visitors profiles, I used variables indicating personality traits. Indeed, after a thorough analysis of the dataset, variables related to the respondents' personalities revealed interesting differences between visitors and non-visitors profiles, as well as between visitors groups. Therefore, these variables – which correspond to different personality traits that the respondents declared to feel as descriptive of their own personalities – were selected and included in the graphs and tables here presented (see Appendix for a complete list of the variables). Visitors' and non-visitors' personality profiles might assist museum boards in developing properly targeted strategies to address both visitors – to increase their attendance rate – and non-visitors - in order to attract them to the museum. Indeed, understanding in what respects these two groups differ might provide interesting insights into their motives to attend and reveal which type of people the museums result attractive. As previously mentioned, visitors and non-visitors profiles might be of great interests for both museum boards who are willing to better understand their audience and possibly enact strategies to attract new visitors or create a stronger relationship with the current ones, and for policy makers who are willing to include museums in social inclusion policies. Psychological profiles might be used within rebranding processes or in or order to build targeted advertisement campaigns.

For instance, respondents who strongly like museums - such as those who included going to museums as one the first three activities they like to do in Rotterdam – described themselves as more critical, more interested in others, serious, balanced and intelligent. On the other hand, non-visitors marked themselves as more cheerful, spontaneous, *gezellig*, and helpful/obliging. As critical and intelligent are unsurprising ways of museums visitors to describe themselves, the identification of non-visitors as more helpful/obliging stands out as an interesting element of their character; this might be used to create targeted events or exhibitions which involve, for instance,

charity purposes which requires an active participation from part of the public. Moreover, visitors' personality characteristic might indeed reflect the characterization of someone interested in highbrow culture and somehow more refined and elitist (critical, more interested in others, serious, balanced and intelligent); while adjectives such as cheerful, spontaneous, *gezellig*, and obliging might be typical of to a humbler type of personality, characterized by less cultural capital.

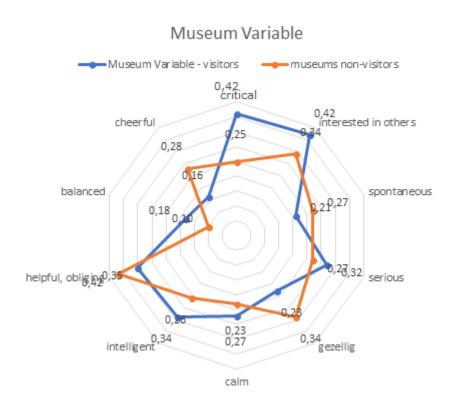


Figure 18. Graph – Museum variable, visitors and non-visitors profiles

Museum Boijmans Van Beuningen

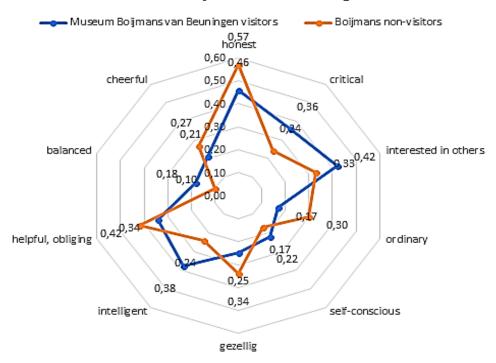


Figure 19. Graph – Museum Boijmans Van Beuningen, visitors and non-visitors profiles

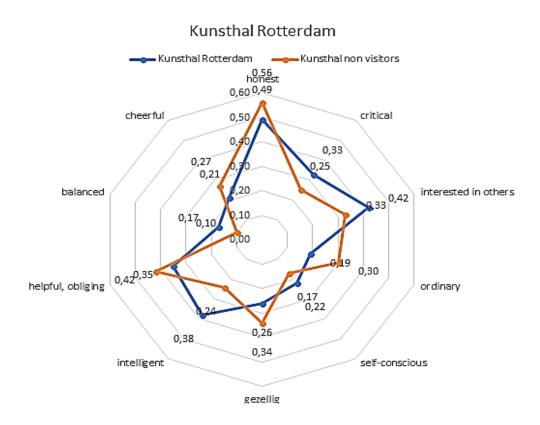


Figure 20. Graph - Kunsthal, visitors and non-visitors profiles

Witte de With Center for Contemporart Art

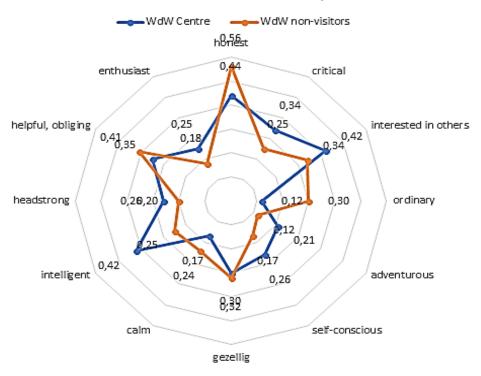


Figure 21. Witte de With, visitors and non-visitors profiles

Similar profiles have been indicated by Kunsthal and Museum Boijmans Van Beuningen visitors. However, some differences are found once again in Witte de With visitors profile.

Indeed, WdW visitors think they are more adventurous, self-conscious and enthusiast, as well as more intelligent (compared with other museums' visitors); moreover, they are less calm and as *gezellig* as the non-visitors. Therefore, this analysis confirms the idea that Witte de With visitors present a slightly different profile with respect to individuals who only attend other museums. This could both relate to the particular personality of the art centre, which involves fresh artists from the contemporary art scene and offers stimulating topics, and to the younger age of the audience.

As it is observable in the graph and table below, and as predicted by the initial hypothesis, visitors' profiles of the three museums do not seem to differ consistently among each other. However, there are minor differences, as for instance Witte de With visitors marked themselves as more self-conscious, *gezellig*, intelligent, less balanced and less ordinary. Museum Boijmans Van Beuningen and Kunsthal visitors present almost identical scores, while the museum variable scores higher on honest and calm, while it presents lower values on cheerful and enthusiast.

The difference between WdW on the one side and Kunsthal and Boijmans on the other, in terms of personality of the visitors, might be linked to both the location of the museums, as previously indicated, and the image conveyed by the museum and its mission. Although there is no direct way to prove this assumption within this thesis, personal observations and general

information on the museum found online confirm the idea of a venue attended by individuals who have a more specific passion on contemporary art, who might sometimes be professionals or close to the art sector – and therefore their identifications as more intelligent, adventurous, and less balanced might acquire meaning in this sense.

There are, therefore, personality differences between visitors and non-visitors, and between visitors of specific museums. Differences between the first two groups might be related to differences in cultural capital level, as visitors describe themselves as more intelligent and balanced persons, compatible with more highly educated people with refined or proper manners; while non-visitors appear to be more spontaneous and cheerful, as well as humbler (helpful and obliging), which fits well with the characterization of lower cultural capital. Connection between personality and socio-economic status have been explored by researchers within the area of health behaviour and health inequalities. Rancor and colleagues (1996) noted that analyses of personality traits that affect health behaviour should consider together with social class, as some traits - such as hostility or lower self-esteem - are found more often in the lower classes. Moreover, Adler and colleagues (2003), noted that the relation between socio-economic status and health could be better explained when using psychosocial processes as mediators. Although the mechanisms of this relation are still debated, the connection between psychological processes and social class have been assessed by these studies (Adler et al, 2003).

On the other hand, Witte de With visitors distinguish themselves as more intelligent than the other visitor groups, as well as less ordinary, which confirms the idea of a different type of audience which might also be linked to the specific offer of contents of the Center, together with the lower age of the visitors.

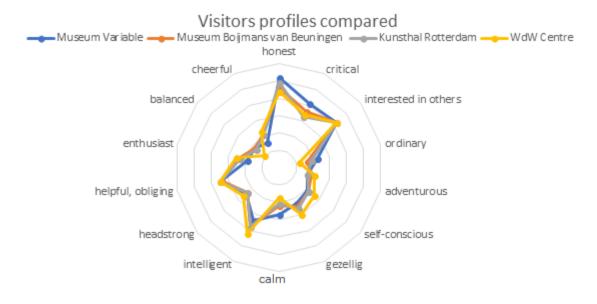


Figure 22. Graph - Visitors profiles compared

	Museum Variable	MBVB	Kunsthal Rotterdam	Witte de With Center
honest	0,52	0,46	0,49	0,44
critical	0,41	0,36	0,33	0,34
interested in others	0,42	0,42	0,42	0,42
ordinary	0,23	0,17	0,19	0,12
adventurous	0,17	0,19	0,17	0,21
self-conscious	0,21	0,22	0,22	0,26
gezellig	0,23	0,25	0,26	0,30
calm	0,27	0,22	0,21	0,17
intelligent	0,34	0,38	0,38	0,42
headstrong	0,24	0,23	0,23	0,26
helpful, obliging	0,35	0,34	0,35	0,35
enthusiast	0,19	0,24	0,23	0,25
balanced	0,18	0,18	0,17	0,11
cheerful	0,16	0,21	0,21	0,23

Table 10. Means - Visitors profiles compared

5. Discussion

In this thesis, I attempted to provide a general insight into art museum visitors and non-visitors, as well as understanding the link between museums' strategies and their group of visitors. As I have shown, art museum visitors are still generally more highly educated, older and richer than non-visitors, although income does not significantly affect attendance of the selected museums. The persistence of education level as a relevant factor that affects museum attendance suggests that nudges might be effective in order to facilitate the attraction of a larger audience. Moreover, personality traits reinforce the idea that non-visitors present lower levels of cultural capital – such as perceiving themselves as less intelligent, more cheerful and obliging. As explained above, nudging strategies might be particularly useful in increasing attendance of those who manifest an interest in participating in cultural activities but face difficulty in realizing their intention. On the other hand, specific techniques that I will present in the recommendation section below might prove efficient in attracting new audience as well.

As the three museums studied – Witte de With Center for Contemporary Art, Museum Boijmans Van Beuningen and Kunsthal Rotterdam – have been found to offer similar services and characteristics, although with different brand "personalities", visitor groups were expected to generally coincide. However, although visitor groups present similar characteristics and partially meet the expectations of an older, whiter and more highly educated audience, Kunsthal and especially Witte de With Center presented some remarkable differences.

A more diverse and younger audience is found to attend Witte de With Center for Contemporary art, although this audience still shows high levels of education and income; while age is not a relevant predictor of visiting Kunsthal, which indeed shows similar percentages of visitors of different age. I derived from my personal observations that these aspects might be relatable to the specific type of exhibitions and image of the two museums. Moreover, lower entrance fees might also explain the preference of younger audiences for Kunsthal and WdW, and with the latter being the cheapest of the three, this might be connected to the more ethnically diverse audience – as non-westerners typically present a lower income, especially in Rotterdam.

Finally, I presented empirical data that suggest that WdW visitors' atypical profile might derive from the location of the Center, which is characterised by a more ethnically diverse environment and is surrounded by bars and restaurants together with a lively night life. Indeed, I provided data that confirm a more frequent engagement with activities that can be easily related to Witte de Withstraat, a popular cultural cluster and night life location in Rotterdam. Other possible explanations for Witte de With's more diverse audience is the fact that a more specifically oriented passion for high arts might contribute to neutralizing the effect of ethnicity within a group of professionals or art-enthusiasts. Lower fees can attract younger audiences and specifically students, who might also be attracted by stimulating exhibitions engaging with lively debates like migration and globalization, therefore also attractive to young educated minorities.

As far as personality traits are concerned, the three museum visitor groups have similar profiles, although with minor differences that pose Witte de With in opposition to both Boijmans and Kunsthal. As we have seen, differences in WdW might be ascribed to both the ages of the visitors – who are generally younger – and to the specific type of museum that is WdW, characterized by the offer of contemporary artist who mostly exhibit conceptually stimulating topics and artworks.

The differences and similarities presented might deserve more attention from those who aim to understand deeply the museum visitors' profile, both scholars and museums boards. The information might indeed be beneficial to the museums' mission of attracting more people and offering a better service to current attendants, as well as to policy makers and governments who wish to render arts and culture a part of social inclusion policies. Moreover, they are of interest for scholars who intend to understand the social and psychological processes of appreciating and consuming art in public. The present thesis can only offer a grasp on socio-demographic and personal characteristics without hazarding to understand the deeper reasons of the composition of these profiles. More detailed studies, including qualitative studies, are needed in other to better understand motivations and relations between these profiles and their preference or non-preference for museums.

In the next and final section, I will attempt to give recommendations on possible behavioural techniques that can be used by museums in order to attract visitors or enlarge their audience. The data presented in this research led to the confirmation that a higher level of education enhance someone's chances to attend and appreciate museums, and the finding of personality traits among museums that are compatible with higher levels of cultural capital. Therefore, attending museums might be assimilated to a challenging behaviour that can be stimulated through the use of nudges, as suggested by Thaler and Sunstein (2008) and by numerous studies on the matter of behavioural change, especially applied to public policy. This will be the topic of the final chapter.

6. Recommendations

The outcomes of this research show that, despite the efforts of museum boards to attract new audiences, there are still limits in terms of ethnic diversity and education level. We also have seen that the museums present different "personalities" and try to convey different images of themselves, although they offer a similar range of services and activities with minor variations from each other. Museums efforts have been successful in attracting a larger audience that is, however, still composed mostly of the same people that have traditionally attended museums (older, white and highly educated individuals).

In particular, for Rotterdam museums, ethnicity and level of education significantly affect an individual's likelihood of attending museums or thinking of museums as an interesting leisure activity. Suggestions on using nudges also start from the assumption that some people consider attending museums as a beneficial activity, but they also happen to be prevented from doing so by the lack of time, money, or by the fear they will not enjoy the activity (Kay et al., 2009). Nudges are also used in situations when people are facing complicated choices. The persistency of a higher level of education among museum visitors might suggest that, if a museum board or policy makers are interested in increasing attendance among people with a lower level of education or among marginalized groups, the use of nudges could yield positive results. Indeed, given the findings on lower levels of cultural capital, the self-perception of non-visitors as less intelligent as shown in this research and descriptions of the museum experience as a source of worries and obstacles, I believe it is possible to assimilate museum attendance to the kind of situations that can benefit from the use of nudges.

Moreover, the use of nudges originates from the assumption that most individuals tend to be misled by cognitive biases that affect every human, although at different levels, and can successfully be applied to a number of different situations. However, it must be noted that the finding of personal differences between visitors and non-visitors might also be of great benefit for marketeers or brand designers who desire to create a profile for the institutions suitable to that of (potential) visitors. In this sense, Witte de With Center for Contemporary Art offers an interesting case for further analysis, especially when compared to Kunsthal and Museum Boijmans Van Beuningen.

6.1. On possible nudges

I am hereby proposing a number of types of nudge that might be used by museums that are willing to increase their visitor numbers and the attendance of current visitors. Behavioural techniques such as nudges have demonstrated to be effective in increasing individuals' rates in taking part in certain activities, such as enrolling in university or attending literacy and numeracy programs for adults (Prestlow & Whatington, 2014; Chande et al., 2015). A group of researchers (Lattarulo,

Mariani & Mazzolini, 2016) have studied the effect of incentives, one of the solutions also presented by Thaler, in increasing teenagers' attendance of a museum in Florence. Their study found that a non-financial incentive in the form of extra credits was effective in increasing the attendance rate, in comparison with other groups which were only offered flyers and a presentation given by an expert. However, this increase did not prove to induce a long-lasting change in attendance with respect to the presentation. On the other hand, other studies affirm that a long-lasting behavioural change needs to be supported by likewise enduring effort. In this sense, some behavioural techniques might help in attracting new visitors, while the museum's curatorial staff would need to work on building a sustainable relationship with them in other ways. Therefore, although Lattarulo and colleagues' study is the only example of nudges explicitly used in the case of museum attendance, in the next section I will attempt to offer other examples of nudges that have been used in different areas but could prove beneficial for museums' attendance as well.

6.1.1. Text Messages and Opt-out

The use of text messages has proven to be effective in increasing participation in time. Chande and colleagues (2015) have studied the effect of messages on individuals who attend Leicester and Manchester colleges in order to make up for their lack of basic knowledge necessary for working and living in contemporary society. The target population is therefore composed of adults who might already have family and work and decide to return to school to increase the quality of their life. The researchers have identified as potential reasons for the drop outs to be "lack of social support networks, lack of positive feedback and encouragement, and planning problems" (p.7). Therefore, the texts addressed these three aspects by encouraging individuals to plan their school time one week in advance, by sending links to the class' Facebook page and motivational messages. The experiment obtained a 7.3% increase in attendance, which lasted for the rest of the year. A similar approach might be used by museums, where potential visitors might be asked in other situations – at school, for instance, or during other cultural activities for adults – to subscribe to a text message service that would remind them of special exhibitions, give suggestions on how to find time for a visit and information on prices and discounts. Qualitative studies on the reasons for nonattending, such as that of Kay and colleagues (2009), might suggest the themes to be included in the text messages as presented in the case of Chande and colleagues (2015).

These individuals might subscribe voluntarily or be included in the program as part of their subscription to other activities. For instance, the fact that Witte de With shows similar numbers for western and non-western visitors, suggests the possibility of linking the centre to the other museums, offering visitors the chance to subscribe to text message service – by simply asking WdW visitors if they wish to subscribe, or by including it in WdW's already existing services. The connection of these services with Witte de With, schools, and other types of activities attended by both visitors and non-visitors, would offer the chance to increase participation by using the opt-out strategy. As noted by Thaler and Sunstein in the case of retirement plans, changing the status of an

option – e.g. subscribing to a retirement plan when starting a new job – from opt-in to opt-out, which means that to opt out would require an active effort from the individual – significantly increase the rate of subscription (Thaler and Sunstein, 2008). In the case of museums, the text message options might be included in museums cards or other services offered by museums (e.g. newsletters). On the other hand, non-visitors that are considered to be potential and desired attenders by the museums, such as young people or minorities, might be included in the service through other institutions, such as schools, or other activities, such as sport facilities or cinemas (further analysis are required in order to find proper locations for this purpose).

6.1.2. Feedback and Social Influence

If an institution is willing to increase marginalized groups' attendance, an efficient way of doing so might be providing them with information on the positive effects of a consistent cultural participation – such as better quality of life and acquisition of symbolic power, especially given its role in social exclusion (Sandell, 1996). Thaler talks about disclosure policy as a way to increase correct (for instance healthy) behaviour, such as what happened with mandatory messages on the risks of smoking cigarettes. In this sense, visually attractive and easily understandable schemes might be posted to them or provided in combination with other types of documents, such as brochures on how to pay taxes or bills. Giving feedback to people on their behaviour is an important and efficient incentive. Thaler and Sunstein underline the issue with ecological behaviour – i.e. respecting the environment and acting responsibly in this sense - which does not present clear and immediate feedback of its positive outcomes – neither is it easy to understand the negative effects of anti-ecological behaviour. At the same time, realizing the benefits of undertaking cultural activities such as going to the museum, might not be immediately grasped by a nonhabitual visitor. Moreover, lack of information has been indicated by non-visitors as a significant reason for non-attendance (Kay et al., 2009). In addition to information on the exhibitions, data on the benefits of attending these events might be provided – such as, for instance, statistics on higher quality of life of people who attend museums. Moreover, the principle of social influence might be used in conjunction with this strategy. Giving information on other people's behaviour, especially the desirable one, would also lead more individuals to follow the example. The HER (Home Electricity Report) experiment, held in 2008, consisted in delivering a report that showed the household absolute level of consumption, a comparison with neighbours living in similar-sized homes and with the same household the previous year. The report also included green stars for the month when the family consumed less, and messages of "great", "good" and "room for improvement". Allcott (2011), Ayers, Raseman, and Shih (2009), and Schultz et al. (2007) found that this strategy led to a decrease in consumption by 1% to 2%, while a similar campaign showed a decrease of the 7% (Reiss & White 2008). Reports with information on museum attendance or general cultural participation – as well as visitors' life satisfaction or self-perception (like the personality traits profile shown in this research) compared to that of non-visitors - might lead to

positive results in a similar way. For instance, subjects might realize that more people than they expected enjoy going to the museum or to an art exhibition, or that visitors have a more interesting personality profile, generating a desire to imitate them. Indeed, availability heuristic and misperception of reality - like the idea that few people would actually go or enjoy going to the museum - are indicated as relevant factors that influence individuals' behavior (Thaler & Sunstein, 2008). The effects of social influence might also be helpful through the use of well-known people as sponsors, an expedient largely used in commercial advertisement and that offers the chance to target specific segments of the (potential) audience by the choice of celebrities (Thaler and Sunstein, 2008). With the aid of these strategies, attendance might increase especially among those who blame their absence in museums on lack of information and fear of feeling inadequate, by providing them with more extensive information and by taking advantage of the effects of social influence.

6.1.3. Priming and Commitments

Another behavioural principle is that of priming, which consist in the fact that asking someone about their intentions to engage in specific actions would enhance the likelihood of maintaining their intentions. According to Thaler and Sunstein (2008), the efficacy of this nudge is incremented by asking individuals for a specific planning – when and where they intend to do something. In particular, written and public declarations of the intention of doing something substantially increase the likelihood of that action being carried out (Cialdini, 2007). Both strategies rely on the need of individuals to be consistent with themselves to maintain their self-image (Thaler and Sunstein, 2008; Cialdini, 2007). Websites like Stickk.com use this principle by letting their users sign a contract, which establishes that they will follow an exercising program for a chosen amount of time (Bhattacharya, Garber & Goldhaber-Fiebert, 2015). In this case, the "punishment" for not respecting the contract is financial, but non-financial commitments are also effective thanks to the power of peer-pressure. In this sense, a public commitment to accomplish something would enormously increase the rate of success. Cialdini also argues that "commitments are most effective in changing a person's self-image and future behaviour when they are active, public, and effortful" (p.70). Companies have used these strategies in promising discounts and rewards in exchange of public positive feedback on their websites – which is also a form of public commitment. Museums might use the same strategy and choose as a reward something appealing to specific target groups. Given than most museums are active online and on social media, a similar strategy might be easily implemented. This approach might be used for both people who have expressed the intention to attend museums more often, but also to other groups using different rewards and designs. Moreover, the request of information about future intention – which might be reinforced by requesting specific plans – could be provided to individuals right after their visit or made available on the museums' websites and social media pages.

6.1.4. Conclusions

I have shown in the previous sections how some types of nudges can be used to attract new visitors to museums and to increase attendance of current visitors. The opt-out strategy combined with a text message service and connected to other activities, such as schools, sports or cinema for instance, can be used to attract new visitors, as well as to increase attendance rates of current visitors. Feedback on positive effects of cultural participation, together with information on other people's behaviour and characteristics would stimulate the effect of social influence and possibly activate a process of imitation. Finally, public commitment to future plans to go to the museum, or a simple request of future intentions asked at the end of one's visit, would increase the desire of an individual to maintain a coherent self-image and respect their plans.

As already mentioned, the statements of some non-visitors who find obstacles in their desire to attend museums, and the feeling of inadequacy of others, make of museum attendance an interesting candidate to the use of nudging theory. The lower levels of education and cultural capital, which is also reflected in their self-image, reinforce the idea that non-visitors might be stopped by the fear of a complicated situation, both for practical and symbolic or social reasons. The nudges presented here suggests that behavioural strategies might be useful for those aspiring visitors, or for those who never considered museums as an interesting activity because of preconceived opinions, as well as for museum boards or policy makers that are willing to attract a larger share of audience.

As said, all these nudges can be targeted at less educated people and non-white groups. However, especially for non-westerners, these initiatives might still need to be complemented by traditional audience development techniques that permit to grow stronger and lasting relationships with vulnerable groups and lay the foundation for a deeper understanding and appreciation of the arts.

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Appendix

Variables

Socio-demographic characteristics

- what is your highest schooling level attained?	1=no education, 2=primary school, 3=lower vocational schooling, 4=lower secondary schooling, 5=intermediate vocational schooling, 6=intermediate secondary schooling, 7=higher secondary schooling, 8=pre-university schooling, 9=vocational colleges, 10=university, 11='other'
- household income	1=social minimum, 2=minimum to modal, 3=modal to twice modal, 4=more than twice modal
- age in five classes	1=13-24 yrs, 2=25-44 yrs, 3=45-64yrs, 4=65-75 yrs, 5=76-85 yrs
- ethnicity in 2 categories	1=Western, 2-non-Western
- gender	1=male, 2=female

Personality Traits

	•	Honest, critical, interested in others, ordinary,
below a perso	are most apt to describe you as	adventurous, self-conscious, gezellig, calm,
a perso		intelligent, headstrong, helpful/obliging,
		enthusiast, balanced, cheerful.

Cultural Cluster variables:

-	which of the following festivals did you attend in the last 12 months?	Festival Kunst in Witte de Withkwartier
-	How many hours on average per week do you spend on:	going out (café, lunch, dinner, etc,)
-	Which are the 3 most important leisure activities you undertake in Rotterdam?	going out / nightlife sitting on terrace
-	Which of the following concert and theatre venues did you attend in the last 12 months?	Worm
-	How often in last 12 months visit the city parks below?	Museumpark
-	what is the composition of your household?	1=living alone; 2=two adults, no kids, 3=couple with kid(s), 4=single parent with kid(s), 5=other, 6=student house, 2 or more adults
-	which statements best describes your situation?	1=I have no personal income, 2=I have a paid job or I am self-employed, 3=I am a (pre)pensioner, 4=I receive a disables allowance, 5=I receive welfare or unemployment benefits, 6=I receive a scholarship / study grant, 7= 'other'