

Smell Ya Later!

*A Brief History of Olfactory Cinema*

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Moving Image and Sound: Basic Issues and Training

December 4, 2020

If you were to ask someone if they have ever had the opportunity to experience scented cinema, one would probably get a few different answers. Some people may have had the chance to experience Smell-O-Vision for themselves, while others will have no idea of its existence. Some may remember using a scratch-and-sniff card in theaters. Die-hard Disney fans will likely tell you about some of their favorite rides that feature fragrances. A large majority of these people may have never experienced scented film for themselves but can vaguely recall the smell of burnt popcorn from when the fire alarm went off during a show. Our sense of smell is a curious one that can transport us to specific points in time. Scent is an immensely powerful tool of nostalgia, yet it remains underutilized by the filmmaking community. Why is this? The answer lies within the complex history of scented film, which started years before the infamous Smell-O-Vision made its debut in 1959. A complicated past also makes for a problematic future. Not much remains of the first ‘Smellies’, whether that be of the machines or the actual fragrances used. Scented cinema is unique because its legacy exists without the gimmick that defines it, leaving moving image archivists with a unique challenge: how to preserve a film for which a crucial part of the experience is gone forever.

Theatre owners were the first to begin experimenting with scented cinema, as it proved to be a great advertising tool that could generate buzz for specific pictures. The first recorded instance occurred in 1906, when theater tycoon Samuel Rothafel diffused a rose scent with an electric fan during a screening of that year’s *Rose Bowl*.<sup>1</sup> In a similar stunt, Fenway Theatre in Boston poured lilac perfume into their ventilation system during the opening credits of the film *Lilac Time* and some time later, a screening of MGM’s film *The Hollywood Revue of 1929*

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<sup>1</sup> Paterson, Mark W. D. "Digital Scratch and Virtual Sniff - Simulating Scents." In *The Smell Culture Reader*, edited by Drobnick, Jim, 358-367. Oxford ; New York: Berg, 2006, 359

featured an orange scent during a major musical number<sup>2</sup>. These experiments never proved to be popular with patrons, as the large amounts of perfume used meant dealing with the lingering smell throughout the entire screening<sup>3</sup>. Despite the lack of audience support, scented film stuck around in the minds of theatre owners and filmmakers alike.

By the 1950s, television became more widely available in America, and more and more people were staying home with their TV sets as opposed to going out to the movies. Many filmmakers began incorporating a variety of gimmicks into their films during the 1950s as a lure for audiences. In 1959, audiences who viewed director William Castle's *The Tingler* were seated in a chair outfitted with a Percepto technology vibrating seat, which would jolt them during suspenseful scenes in the film.<sup>4</sup> It was a cheap scare to some but functioned perfectly within the exploitation film experience grade, and audiences loved it. Castle became well-regarded in the industry for his ability to churn out a constant stream of movies while staying under budget and on a strict schedule. His gimmicks were fearless: in *House on Haunted Hill* (1959), Castle had a skeleton fly over the audience during the film's climax<sup>5</sup>. Castle's films may have been B-films, but they have remained beloved by many for years and have gone on to acquire a cult following.

Smellies - motion pictures with synchronized scent - were also born out of this period of gimmick craze in the 1950s; the reception they received, however, is very different from Castle's. AromaRama, the first scented gimmick, was used in conjunction with the release of *Beyond the Great Wall* in 1959. The American distribution rights for the film were bought by

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<sup>2</sup> Gilbert, Avery N. *What the Nose Knows: The Science of Scent in Everyday Life*. New York: Crown Publishers, 2008, 149.

<sup>3</sup> Paterson, 359

<sup>4</sup> Gilbert, 166.

<sup>5</sup> Kisner, Scott. *Inventing the Movies: Hollywood's Epic Battle between Innovation and the Status Quo*, from Thomas Edison to Steve Jobs Scott Kirsner, 2008, 44.

producer Walter Reade, who was eager to use it for his first AromaRama release.<sup>6</sup> An American version of the original Italian, the film's added fragrances are merely meant to enhance the certain aspects of the film and are not necessarily tied to the film's plot. The AromaRama process was similar to earlier attempts by theatre owners. Scents were dispersed into the theatre via the air conditioning, while an electronic air purification system helped to prevent any odor buildup.<sup>7</sup> Special cues in the film's soundtrack would signal for the next scent to be released, making the operator's job fairly straightforward. However, installing AromaRama into a theater was pricey, costing up to \$7,000 (adjusted with inflation, the equivalent of \$61,000 today).<sup>8</sup> The air purification system was not successful, and odor buildup was only made worse with the multitude of fragrances now being used. Audience members during the first few screenings left with headaches, so Reade invested in a reversal pump in hopes the film might rebound at the box office. When the film continued to flounder, the producers cut the smell gimmick from the experience altogether.

AromaRama had failed to impress audiences, but the creator of the next smell gimmick Smell-O-Vision hoped his technological advancements could win over naysayers and win big at the box office. Unlike AromaRama, Smell-O-Vision's process existed separately from the air conditioning and looked to create an automated smell track. Creator Hans Laube spent 25 years developing the process, which he first debuted at the 1939 New York World's Fair.<sup>9</sup> His invention generated great buzz at the fair and especially impressed producer Mike Todd and his son, Mike Todd Jr. Several years after the fair, Laube and Todd Jr. would become partners and

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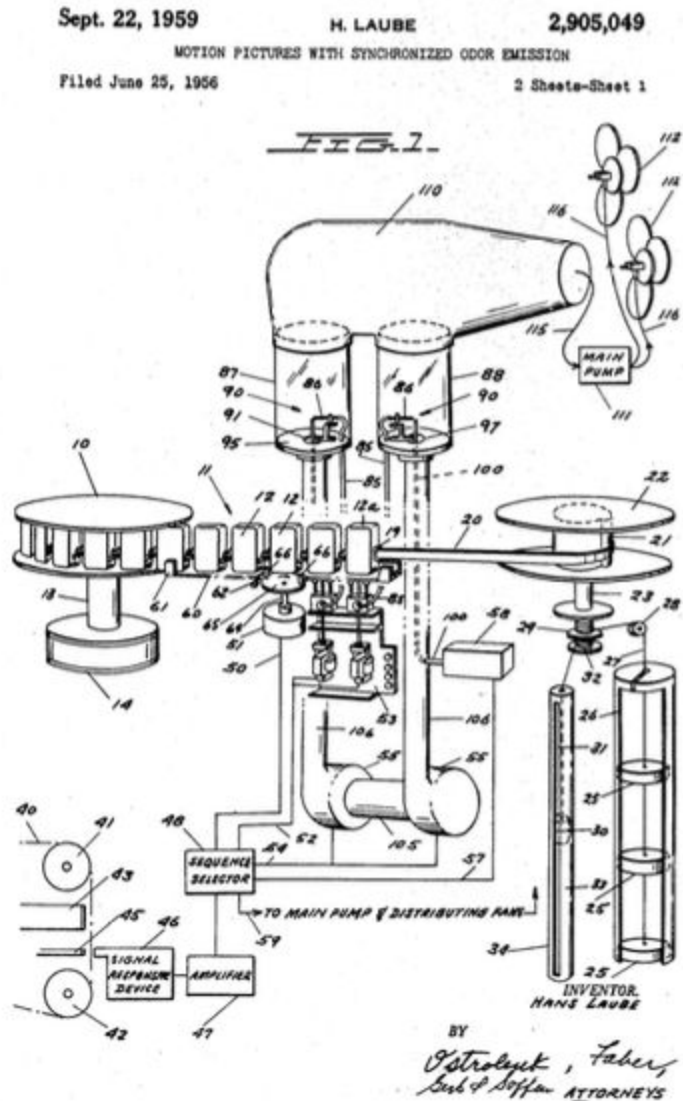
<sup>6</sup> Gilbert, 158.

<sup>7</sup> Gilbert, 159.

<sup>8</sup> Gilbert, 159

<sup>9</sup> Gilbert, 153

continue to work on Laube's design. In 1959, the United States officially issued a Smell-O-Vision patent to Laube.<sup>10</sup> The process revolved around a 'scent brain,' which consisted of several perfume containers that were attached, in order, to a belt.



<sup>10</sup> Laube, Hans. Motion Pictures with Synchronized Odor Emission 1959.

<sup>11</sup> Smell-O-Vision as seen in the 1959 patent.

This belt was connected to a motorized take-up reel, which would pull containers into the appropriate position for every scent cue. Markers on the 35mm film reel then signaled the ‘brain’ to release the next fragrance as it was threaded through the projector. On cue needles would pierce the surface of the container and release the scent into a tube, promptly resealing the perfume containers to prevent unnecessary leakage. Fans inside the tubes would then pipe the fragrance out vents installed underneath the audience’s seats.

Scent-O-Vision’s first-and-only feature is *Scent of Mystery*, a lighthearted comedy set in Spain. Laube and Todd Jr. both understood the limits that came with the Smell-O-Vision process and took great care to ensure the scents and movie were as complementary as possible<sup>12</sup>. Neither wanted the process or film to be taken too seriously, so a comedy was chosen as the process’s vehicle. To highlight Scent-O-Vision’s effects, fragrances were included during crucial plot points throughout the film, such as a tobacco scent whenever the villain is seen smoking on screen. The film also featured other luxurious fragrances, such as flowers, perfume, coffee, and brandy. Jack Cardiff was chosen to direct the film, which had a budget of 2 million dollars<sup>13</sup>. Cardiff is one of the film’s harshest critics and considered it to be his greatest directorial failure.

*Scent of Mystery* received a minimal release in the United States, playing in major metropolitan cities like New York City, Chicago, and Los Angeles. The limited release was likely due to the large \$15,000 installation fee<sup>14</sup>. While most theatre-goers enjoyed *Scent of Mystery*, they were less than impressed by the Smell-O-Vision experience. Many said the

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<sup>12</sup> Gross, Daniel. *The Third Sense - A Hollywood Impresario Tries to make His Mark on the Movie Business*. Science History Institute, 2017.

<sup>13</sup> Cardiff, Jack. *Scent of Mystery* AFI Catalog, 1960.

<sup>14</sup> Kisner, 46.

perfumes smelled too synthetic, while others were unable to make out any scents at all.<sup>15</sup> To make matters worse, the machine made a loud hissing sound with each scent, causing audience members to be distracted. Critics reflected these frustrations in their write-ups. Bosley Crawling opened his review of the film for the New York Times with this stinker: “If there is anything of value to be learned from Michael Todd Jr’s *Scent of Mystery*, it is that motion pictures and synthetic smells do not mix.”<sup>16</sup> In the case of AromaRama, exhibitors were able to cut the scent gimmick from future screenings while the film was still circulating and make a small recovery. That was not possible for *Scent of Mystery*, whose plot depends heavily on the Smell-O-Vision gimmick. In the end, the film made \$300,000 at the box office before quietly wafting into obscurity.

Filmmakers would not touch fragrance for another twenty years, but that changed in 1980 with the release of *Polyester*. John Waters’s melodrama employs a scratch-and-sniff card gimmick called Odorama.<sup>17</sup> Audience members received an Odorama card before the film started and were instructed to ‘scratch-and-sniff’ each number as they appeared on the screen. The scents used in *Polyester* differ wildly from those used in previous scented films and include foul odors such as ‘natural gas’, ‘dirty tennis shoes’, ‘flatulence’, and ‘new car smell’.

Waters was making use of an established technology: scratch-and-sniff first debuted in 1965 and gained popularity during the late 70s.<sup>18</sup> Each card was made of lightweight cardstock and held ten scents, each contained within one circle. Fragrances were created by blending scented oil with a water-based polymer at high speeds. A chemical catalyst was then added

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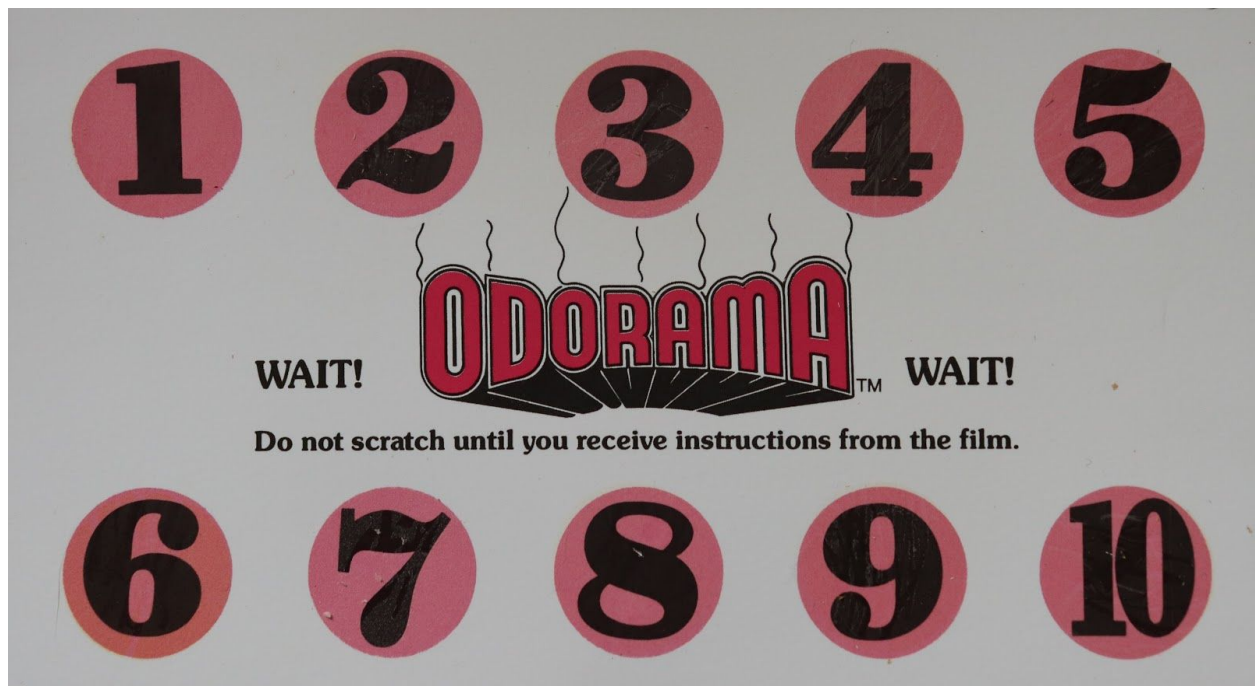
<sup>15</sup> Gilbert, 163, 164.

<sup>16</sup> Crowther, Bosley. "How does it Smell?: 'Scent of Mystery' Intrudes another Question of Quality in Films." New York Times (1923-Current File), Feb 28, 1960.

<sup>17</sup> Waters, John. *Polyester* AFI Catalog, 1980.

<sup>18</sup> Soniak, Matt. "How does Scratch and Sniff Work?" Feb 9, 2009.

which created a shell surrounding the scented oil. The shell was treated with more water and an adhesive, creating a thick slurry that could then be printed onto the Odorama cards. When audience members scratched the fragrance treatment, the microcapsules broke apart and released the scent.



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Overall, scratch-and-sniff proved to be a successful follow-up to Smell-O-Vision. Scratch-and-sniff cards addressed previous criticisms. Where Smell-O-Vision machines were loud and distracting, Odorama cards were small and compact and still managed to produce strong fragrance. Waters' choice of fragrances also paid off, with many people citing the Odorama cards as the best part of the film<sup>20</sup>. Despite these positive responses, scratch-and-sniff gimmicks have failed to gain any further traction in filmmaking. There have only been two other

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<sup>19</sup> An Odorama card released with Criterion's version of Polyester. Photo taken by the author.

<sup>20</sup> Gilbert, 166



films that have used scent, and both movies - *Rugrats Go Wild* (2003) and *Spy Kids All The Time In The World* (2011) - cater to a child audience.<sup>21</sup> Perhaps this shift in the intended audience is responsible for the decline in the appeal for this technology and is ultimately what signaled a new audience for these technologies.

Scratch-and-sniff may be dead in the water, but, thanks to the Walt Disney Company, scented cinema certainly is not. Walt Disney is often credited with being the first filmmaker to explore the idea of using scents and hoped to do so in his film *Fantasia*, but this desire ultimately never came to fruition<sup>22</sup>. Disney has since begun to incorporate fragrances into their theme park attractions, which has turned out to be a wildly successful decision and a favorite among die-hard Disney fans. Some of the most popular scents include the water in the ‘Pirates of the Caribbean’ ride and orange blossom used during ‘Soarin’ Over California’. In August of 2019, Disney Enterprise, Inc. published a patent for a new “Scent Blending” process that will probably be used in a future theme park ride.<sup>23</sup> This system can selectively control the airflow of the scent distributors, thus allowing for scents to fade in and out of a synchronized sequence.

Preserving scented film presents several crucial problems. The largest and perhaps most obvious issue is that there seems to be nothing remaining of the original Smell-O-Vision machines used during the 1960 release of *Scent of Mystery*. Avery Gilbert notes in his book *What the Nose Knows* that one of the last remaining Smell-O-Vision machines resided in the basement of the Cinestage Theater in Chicago prior to the theater’s destruction.<sup>24</sup> He comments that it is unlikely the machine survived. Luckily, plenty of ephemera and papers related to *Scent*

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<sup>21</sup> Paterson, 361.

<sup>22</sup> Gibson, 151

<sup>23</sup> Reichow, Mark, Samantha Catanzaro, David Lester, and Steven Johnson. Scent Blending 2019.

<sup>24</sup> Gilbert, 167.

*of Mystery* and *Polyester* have been saved by archives throughout the United States. Examples include an original Odorama card held at the Wisconsin Center for Film and Theater Research and the Celeste Bartos International Film Study Center, *Scent of Mystery* production files at the Margaret Herrick Library, and production files of *Polyester* at the Reid Cinema Archives. However, these institutions collect these items as ephemera related to the films, and no steps have been taken to perform treatment on the materials or to attempt to preserve the smells<sup>25</sup>.

The existence of documentation also brings up the question of reviving a scented film, either in an original or a reformatted version. *Scent of Mystery* was revived along with a modern low-tech version of the Smell-O-Vision process in 2016 at the Widescreen Weekend Festival in Bradford UK and the Danish Film Institute in Copenhagen.<sup>26</sup> The event was a collaboration between writer Tammy Burnstock, the film's distributor Redwind Productions and the founder of the Institute of Art and Olfaction, Saskia Wilson-Brown. All 14 fragrances were custom made for the two screenings, including a new signature scent, 'Scent of Spain', that was also sold as a souvenir perfume.<sup>27</sup> During the screening, audience members were tasked with dispersing the smells via spray bottles and paper fans when prompted by cues on screen. While the event was well-received and even sold out one night, it was a relatively expensive endeavor for only two screenings. Both screenings were run entirely by volunteers from across the globe, who turned to IndieGogo in hopes others were willing to contribute to their cause. Forty-four people backed

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<sup>25</sup> Huelsbeck, Mary. *Scented Film (Odorama)*, edited by Miller, Lindsay 2020.  
Maxwell, Genevieve. Re: Library Email Reference Form Submission, edited by Miller, Lindsay 2020.  
Miller, Joan. *John Waters Collection*, edited by Miller, Lindsay 2020.  
Swinnterton, Ashley. Re: Film Study Center Request Form [#188] , edited by Miller, Lindsay 2020.

<sup>26</sup>Burnstock, Tammy. "Scent of Mystery Lives again!" in70mm.com.  
[https://www.in70mm.com/news/2016/smell\\_o\\_vision/index.htm](https://www.in70mm.com/news/2016/smell_o_vision/index.htm).

<sup>27</sup> Gross, Daniel.

the project, and they were able to raise \$3,072 of their \$9,918 flexible goal.<sup>28</sup> This demonstrates that the biggest challenge restorers will have to face if they plan to pursue olfactory-based events is funding. Crowdfunding sites like IndieGogo are popular among the filmmaking community, but they are never without their risks. This is especially true in this day in age where more and more artists rely on these types of platforms to fund their ambitious projects. A campaign's success can frequently depend on how much buzz it could generate on social media, leaving smaller projects with a huge disadvantage.

In 2019, the Criterion Collection announced a rerelease of *Polyester* on DVD and BluRay. Each copy includes an Odorama card with scents similar to those used in the 1980 Odorama card.<sup>29</sup> John Waters was also heavily involved in the scent selection process, making this as close to the original experience as one can get.<sup>30</sup> Copies of the film can be bought through their website for around \$30, making it a relatively inexpensive and easy access option. However, those who rely on public libraries to see their films will most likely not be able to experience the Odorama gimmick. Notably, the New York Public Library does not include the Odorama card in copies provided to patrons, opting to, instead, keep it separately cataloged.<sup>31</sup> While this is understandable action for the library to take, it also inadvertently undermines the accessibility of Criterion's new Odorama card, with the full scented experience only being available to those who can afford it.

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<sup>28</sup>Burnstock, Tammy. "Be Part of Smell-O-Vision History!"  
<https://www.indiegogo.com/projects/be-part-of-smell-o-vision-history#/>.

<sup>29</sup> A Whiff of Polyester: Inside the Odorama Process. Criterion.Com. The Criterion Collection, 2019.

<sup>30</sup> I had the opportunity to see this version of the film and found the fragrances to be quite atrocious. Pizza and natural gas are particularly impressive.

<sup>31</sup> Rose, Billy. [Ask NYPL] from Email Ask NYPL Form 599159 , edited by Miller, Lindsay 2020.

There is no immediate solution to these preservation issues. However, having these issues identified and documented is perhaps the most important step in solving the problems. Should scented cinema make a comeback in the next few years, it is critical for moving image archivists to work with artists on their preservation plan. This would mean sitting down and talking with the creator about the official scent process or even acquiring these technologies following the film's release. Working with these artists from the get-go guaranteed the survival of their works. Further, it is necessary for institutions to continue to collect any examples of scented film, whether that be the prints and negatives or ephemera related to the scent. The lack of artifacts relating to films like *Scent of Mystery* is directly correlated with its failure at the box office. Archivists must set these previous biases aside when deciding what types of work belong in their institution. This is a sentiment that remains true regardless of an item's scented status. A film's ultimate survival should not depend solely on the money made or awards won, but rather on its creativity and ingenuity.

## Annotated Bibliography

A Whiff of Polyester: Inside the Odorama Process. Criterion.Com. The Criterion Collection, 2019.

The Criterion Collection shares how they recreated Odorama cards, a scratch and sniff gimmick featured in Polyester (1980) for their new edition. The original factory involved has since moved on from scent making, so Criterion hired Print-A-Scent to create new cards. John Waters was also involved in the scent selection process, so this is probably the closest you will get to the original fragrances used.

Burnstock, Tammy. "Scent of Mystery Lives again!" in70mm.com.

[https://www.in70mm.com/news/2016/smell\\_o\\_vision/index.htm](https://www.in70mm.com/news/2016/smell_o_vision/index.htm).

Tammy Burnstock recaps a scented rerelease of Scent of Mystery, which occurred at the Widescreen Weekend Festival and Danish Film Institute in Copenhagen in 2016. The forces behind the screening are Redwood Productions, the film's distributor; Burnstock; and Saskia Wilson-Brown, founder of the Institute of Art and Olfaction. Wilson-Brown created custom scents for the screening, which were distributed via spray bottles and fans scattered throughout the audience. Everyone worked as a volunteer on the project. Burnstock describes the final product as "rough around the edges" but it was well-received by both audiences.

Burnstock, Tammy. "Be Part of Smell-O-Vision History!" .

<https://www.indiegogo.com/projects/be-part-of-smell-o-vision-history#/>.

This is the official IndieGogo campaign for the scented rerelease of Scent of Mystery. They achieved 30% of their \$9,918 flexible goal. Worth noting that of the 44 backers, only four contributed more than \$100. Something I was not able to confirm is if donating to this got a ticket to the screening. Film fundraisers often include clauses in some of the donation rewards like “Includes digital download of the movie” or “Must be able to pay for your transportation to the movie set for tour”.

Cardiff, Jack. Scent of Mystery AFI Catalog, 1960.

American Film Institute catalog entry for Scent of Mystery, which lists the credits for the film as well as a history of its production. Copies of this film seem to be scarce, which is curious considering it was re-released less than 10 years ago.

Crowther, Bosley. "How does it Smell?: 'Scent of Mystery' Intrudes another Question of Quality in Films." New York Times (1923-Current File), Feb 28, 1960.

<http://proxy.library.nyu.edu/login?url=https://www-proquest-com.proxy.library.nyu.edu/docview/114934581?accountid=12768>.

Bosley Crowther’s review of Scent of Mystery for the New York Times. He is not a fan of the movie and thinks the Smell-O-Vision gimmick is the least impressive thing about the whole experience. I adore this quote: “Anyhow, the odor squirters are mildly and randomly used, and patrons sit there sniffing and snuffling like a lot of bird dogs trying hard to catch the scent.” He’s very blunt and straightforward about the whole experience.

Gilbert, Avery N. What the Nose Knows: The Science of Scent in Everyday Life. New York: Crown Publishers, 2008.

Avery Gilbert offers a comprehensive history of the origins of scented cinema, including an interview with John Waters on his process of creating his Odorama gimmick. This book was

an immense help in understanding how the different processes worked and why they ultimately failed.

Gross, Daniel. *The Third Sense - A Hollywood Impresario Tries to make His Mark on the Movie Business*. Science History Institute, 2017.

Daniel Gross interviews Tammy Burnstock and Saskia Wilson-Brown about their recent scented screening of *Scent of Mystery*. Wilson-Brown describes how she created all the custom fragrances for the screening. Also included in the introduction is a nice little write up of the history of the film.

Huelsbeck, Mary. *Scented Film (Odorama)*, edited by Miller, Lindsay 2020.

I emailed a variety of institutions to see if anyone had any examples of scented cinema in their archive. I was directed to the Wisconsin Center for Film and Theater Research after talking with someone at the Library of Congress. Mary confirmed that WCFTR has an original Odorama card, which is stored in a folder with other ephemera. She also told me it has undergone no preservation efforts.

Kisner, Scott. *Inventing the Movies: Hollywood's Epic Battle between Innovation and the Status Quo*, from Thomas Edison to Steve Jobs Scott Kirsner, 2008.

Scott Kisner details the beginnings of gimmicks in film in the chapter 'How Television Led to Smell-O-Vision'. This provided me with great insight on how filmmakers adapted to the rise of television and includes anecdotes on William Castle, 3D film and the rivalry between AromaRama and Smell-O-Vision.

Laube Hans. *Motion Pictures with Synchronized Odor Emission* 1959.

Hans Laube patented the Smell-O-Vision process in 1959 after working on it for 25 years. Scents are attached to a motorized belt, which releases smells based on cues printed on

the accompanying 35mm film reel. Those scents are then piped to vents located beneath the audience's seats. I found this to be quite technical (as expected) and needed to read it a few times to fully grasp how everything worked.

Lizzani, Carlo. Behind the Great Wall AFI Catalog, 1960.

American Film Institute catalog entry for Behind the Great Wall, which lists the credits for the film as well as a history of its production. This film is the American version of an Italian documentary entitled *La muraglia cinese*. I was unable to find a copy of the film online and much of the information about it is shrouded in mystery.

Maxwell, Genevieve. Re: Library Email Reference Form Submission, edited by Miller, Lindsay 2020.

Genevieve at the Academy's Margaret Herrick Library was very helpful in my quest to locate any examples of scented film. The Academy has production files from *Scent of Mystery* and Odorama card, but unfortunately none of them have been digitized so I was not able to further access them.

Miller, Joan. John Waters Collection, edited by Miller, Lindsay 2020.

Wesleyan University in Vermont has a large collection of items that once belonged to John Waters. Joan Miller confirmed that there are items related to *Polyester* and Odorama, however, I was unable to access these due to COVID-19.

Paterson, Mark W. D. "Digital Scratch and Virtual Sniff - Simulating Scents." In The Smell Culture Reader, edited by Drobnick, Jim, 358-367. Oxford ; New York: Berg, 2006.

Mark Paterson discusses the ways scents have been used as a media, particularly in films and online. This piece also provided valuable insight into the history of the topic and even explored how it has been used in the digital realm.



Reichow, Mark, Samantha Catanzaro, David Lester, and Steven Johnson. Scent Blending 2019.

A patent registered by Disney Enterprises Inc. in 2019 for a new “Scent Blending” technology. The system synchronizes moving images and scent dispersal to a seated audience. This system is unique because by controlling the intensity of both scents being used (high to low and low to high), Disney can create a seamless transition between scenes. This will likely be used in new theme park attractions. I speculated during my research that perhaps Disney will try to monopolize this technology somehow, but this is not something that I can really back up.

Rose, Billy. [Ask NYPL] from Email Ask NYPL Form 599159 , edited by Miller, Lindsay 2020.

It was important for me to see how a library handled the Odorama card that was released with Criterion’s version of Polyester, so I decided to reach out to the New York Public Library. According to Billy Rose, the Odorama cards are not lent out with copies of the film and they are instead cataloged and stored separately. The circulation desk also let me know that the library does this with all of their collection, which definitely makes sense in hindsight.

Soniak, Matt. "How does Scratch and Sniff Work?" Feb 9, 2009.

I referred to this piece by Matt Soniak when writing about the scratch-and-sniff process. I was definitely having a hard time wrapping my brain around all the specifics, especially coming off the technical Smell-O-Vision patent, so I appreciated him breaking it down the process step-by-step.

Swinnterton, Asheley. Re: Film Study Center Request Form [#188] , edited by Miller, Lindsay 2020.

The Celeste Bartos International Film Study Center has some ephemera related to Polyester, Beyond the Great Wall, and Scent of Mystery. Ashley noted that these were collected

separately as ephemera related to the film and have otherwise not undergone any sort of preservation treatment.

Waters, John. Polyester AFI Catalog, 1980.

American Film Institute catalog entry for Polyester, which lists the credits for the film as well as a history of its production. This film is definitely tamer compared to Waters' earlier works but I still enjoyed it a lot.