



Abstracts, "Multimodality: Illusion, Performance, Experience"

Abstracts in the chronological order of presentation.

Session: Multimodality in Theater & Spectacle

The Multimodal Freakshow: The Case of the Two-Headed Nightingale

Remi Chiu, Loyola University Maryland, Dana Gorzelany-Mostak, Georgia College

Millie and Christine McKoy (known professionally as the singular Millie-Christine, 1851-1912) were successful African-American conjoined twins who sang and performed in American and European freakshows as the "Two-Headed Nightingale." This ornithological persona suggested that her attraction was established as much in the realm of the aural (that is, the nightingale as a symbol of superior musicality) as it was in the visual (the twoheaded-ness of her body). Indeed, Millie-Christine's show and its promotion relied heavily on the cross-modal incongruity between the presentation of her physical body and the sounds it generated. This paper investigates such incongruity at two inter-connected levels. Relying on freakshow ephemera and press reviews of her shows, it first attempts to reconstruct the sonic aspects of Millie-Christine's act and to identify the effects that aimed to confuse audience perception and enhance her freakishness. Second, it contrasts her repertoire of parlor songs and her genteel singing persona against contemporary audience expectations of black, female, and disabled bodies on display to reveal another layer of sonic mismatch constituted in an "oral/aural miscegenation." In both these carefully calculated aspects of her show, Millie-Christine misaligned her body and her voice to occupy a freakish and uncanny space between the familiar and the unfamiliar. More broadly, this study remediates the neglect of sound in recent ethnographies of freakshows and reveals some ways by which multimodal experiences—and cross-modal confusion - can enhance the appeal of their performers.

The Multimodal Experience of the Minimalist Scene: The Case of Stand-Up (and Its Success)

Jean-Marc Larrue, Université de Montréal

It is fascinating to note that, while the theatre scene is generally tending to become more technologically advanced, helped by the ever-increasing accessibility and effectiveness of digital sound and image reproduction technologies, the most successful stage practice in North America in recent years – and this is particularly true in Québec – is the comic stand-up, which is low-tech. Very often, its device is a rudimentary stage and a microphone. Despite this minimalism, which applies even to the most elaborate stand-up shows (those presented in the most prestigious festivals), the experience of stand-up spectators is surprisingly intense; it mobilizes them like few traditional shows manage to do. In recent years, there has been a tendency to link multimodality to the development and mastery of technologies used on stage. I want to demonstrate that stand-up opens up other avenues for the analysis of multimodal spectacular practices. Based mainly on stand-up, but also on other types of shows that use monologue and direct address to the audience – such as the magic show with which stand-up shares many characteristics – I would like to come back to some of the key concepts of intermedial theory, starting with those of human and non-human agentivity, performativity and transparency/opacity.

Cruelty within Fake News: The Houdini Case

Filip Dukanic, Université de Montréal

The aim of this paper is to form a conceptual framework for analyzing and understanding how magical spectacle attains aesthetic force in multimodal communication. In order to achieve so, I will first sketch the contours of a model to be used for analyzing coherence and mediation process of magic. I thus argue that this model, called *entropy*, provides a better understanding of multiple sensory modalities (auditory, visual) that systematically occur in magic spectacle. Moreover, following Lars Elleström's and Chiel Kattenbelt's stance on media transformation, I will demonstrate how *entropy* delineates certain residual communicational aspects, creating a unique phenomenon in which communication operates a peculiar reversal.

More specifically, by analyzing Houdini's magical tricks and different documents (letters, photographs, programs) that I've gathered at McCord Museum working on his archives, I will determine that his magic transforms not only the source medium and media environment, but also the sensorial and mental entities within the spatiotemporal capacities. These transformations are self-referential and self-reflexive, hence the communicational reversal. I therefore argue that *entropy* evokes a non-communicational reciprocity – a specific aesthetic transmission that represents the impossibility of communication.

Secondly, from a broader perspective, I will discuss how this multimodal communicational model pushes further the boundaries of intermedial discourse. Magical spectacle and its specific reversive mediality leads to paradigm shift creating new modes of representation as well as new dramaturgical strategies that emphasize on matter and not on construction of human subject. I will demonstrate how certain Houdini's performances position the term "theatre" in its material manifestation. Magical mediality acknowledge the severity of matter as a leading vector in the construction of a new theatre discourse that Estelle Barrett and Barbara Bolt call "New Materialism in the Arts." Thus, this paper inquiries into materially engaged methods in order to examine more broadly how magical performance structure the new cultural turn in the technologically driven phenomena.

The Visitor Experience of Theater Exhibit: Can We Mediate What Is No More? Eve-Catherine Champoux, Université de Montréal

A theater performance is, by definition, ephemeral and intangible. A short moment shared between a casting and its audience. From the spectators perspective, once the curtain's down, only memories remain. But from the creators point of view, many artefacts are left in their closets, drawers, shelves or basement. From costume to annotate text, sketch to poster, stage model to photograph, hand script to video recording; they're all witnesses of a past theatrical event. They aren't simple props and papers anymore. They then carry theater history into their single materiality. As theater is getting more and more collected, preserved and so, exhibited, we have to question our way to mediate them. How to expose what is no more? Which kind of theatrical artefacts may be presented in order to create a meaningful experience for visitors? How will they get a sense of its history? How will they get the feeling of what happen once and disappeared? These are the main questions that lead my doctoral research project. Based on

them, I propose you to specifically look at the Scenkonstmuseet of Stockholm as a very interesting case study. Its great use of interactive and immersive technological devices into its exhibit offers visitors not only to see, but to hear, to touch and even to wear the theatrical history. How this multimodal perception contributes to the visitor experience? Is this plurality of involved senses the key to pregnant memories of the exhibit? But then, is there a risk to fall out into merely playful experience and loose the theatrical heritage knowledge and transmission purpose? My communication will address these questions as well as finds many, many answers.

Panel: The Bijou Collection: A Multimedial Constellation for Multimodal Experiences (B-Magic Consortium)

The Belgian Documentation and research center on religion, culture and society (KADOC, KU Leuven) holds over 20.000 projection slides, used by Catholic congregations in the late 19th and first half of the 20th century. Among these slides is a rare and precious find: the Bijou collection, produced by the French publishers Tolra and Simonet (Tol-Sim) in 1895-1903 (Luikerwaal museum website, 2019). Tol-Sim released various slide series (from comic to moral-educational ones, like the Bijou slides), catering to different audiences. The part of the Bijou collection acquired by Belgian Catholic schools for the purposes of catechism classes and preserved in the KADOC archives consists of eight complete sets of projection slides and accompanying materials. Not only slides — bright hand-painted cellophane cutouts, trapped in-between glass plates — but also hand-written notebooks that equip the images with edifying narratives tales that relate moralistic messages to history, religion, and fiction, are preserved. Moreover, certain sets come with official booklets, wherein each page features a blackand-white picture of a slide, accompanied by an explanatory text. This material evidence makes it clear that both the slide producers and the teachers, which used slides during catechism classes, understood and operated such projections from within a specific multimedial ecology (slides, notebooks, booklets, etc.), in order to address their pupil-audience in a multimodal way, with a number of possible "affordances" or transactions between the text, the performance, and the

audience (cf. Leander et al., 2017) in mind. Our panel will explore the intersections of multimediality, multimodality, and experience-production strategies at work in the Bijou collection. From this vantage point, we will interrogate the Tol-Sim editorial process and choices (Fevry/Werry), the ways in which the Bijou projections approached sentiment and emotions (Nasta/Moens), and question of image rhetoric in the context of inter-iconicity and Catholic memory politics of the era (Marion/Majsova).

The Editorial Strategy of the Bijou Collection. When Media Diversification Reinforces an Edifying Ambition

Sébastien Fevry (Université catholique de Louvain) and Adeline Werry (Université catholique de Louvain)

This presentation will focus on the editorial strategy (Letourneux, 2017) of the popular Bijou collection, with particular emphasis on the multimedial aspect of the collection (glass plates, publisher's booklets, illustrated publications...) and the reappropriations produced by the catechists in the context of lantern projections (Saint-Martin, 2003). In this perspective, we would like to better understand the interrelationships between the different media and the specific contribution of each of them in order to meet the edifying purposes of the collection. This analysis of the co-presence of different mediaforms will be supplemented by a genetic approach aiming to retrace the fabrication process of this multimedia ensemble. Our hypothesis will be that the illustrations for glass plates play a crucial role from the beginning of the editorial process.

The Bijou collection: Multimodal Structures of Sentiment

Dominique Nasta (Université libre de Bruxelles) and Bart G. Moens (Université libre de Bruxelles) xelles)

The Bijou collection offers a rich ground to explore the multimodal character of emotional expression in lantern performances. Its melodramatic stories and images (e.g. the slide set 'A terrible night') are charged with Christian values, and its aesthetics of heightened emotionality often lead to the "melodramatic moment of astonishment and ethical recognition" (Brooks, 1976). In this presentation, we focus on positive and negative emotion categories, which provoke sentiments and empathic identification through the senses. We take on a perspective

from recent developments in cognitive psychology, more specifically the 'theory of constructed emotion', according to which emotions are closely related to somatic, cognitive and socio-cultural components (Feldman Barrett, 2016). Our aim is to analyse how different modes of emotional expression are intertwined during lantern performances, so as to form a coherent genre and ultimately lead to a structured multimodal experience.

The Edifying Structures of the Bijou Imaginary: An Investigation into Images, Rhetoric, and Memory Politics

Philippe Marion (Université catholique de Louvain) and Natalija Majsova (Université catholique de Louvain/University of Ljubljana)

This presentation will analyze the imaginary of the Bijou collection from the interrelated perspectives of image rhetoric and memory politics. We will investigate the rhetorical devices at work in both individual images and their sequences, pointing out the underlying structures of the edifying world of the Bijou projections, and the imaginary that this world evokes. In doing so, we will demonstrate how and to what effect different Bijou stories that apparently belong to various registries, such as national, social and biblical history, aim to deliver a coherent set of consistent messages. Moreover, we will contextualize the rhetorical power of the Bijou projection imaginary in relation to mnemonic strategies employed by the Catholic church at the beginning of the 20th century, accounting for the history of Catholic memory politics and different approaches to "education through the senses" (Saint Martin, 2003; 2009), but also for other graphic and pictorial traditions involved in visual culture and the "inter-iconicity" of an era.

Session: Machines, Embodiment, and Multimodal Experience

Optical Rhapsodies: Music in the Abstract Films of Mary Ellen Bute and Oskar Fischinger

Henry Balme, Yale University

Can abstract moving images enhance our experience of a famous piece of classical music? This is just one of several questions raised by a number of short films that were created to accompany pieces of classical and popular music at the advent of soundtrack technology. Artistfilmmakers composed colorful imagery that moved in lock-step with the rhythm of the music thereby creating an entirely new art form, sometimes called "visual music," in which music inspired the films, not vice versa. Among the most well-known filmmakers who brought this genre to fruition during the 1930s and '40s are Mary Ellen Bute and Oskar Fischinger. This paper compares two works by them—Fischinger's An Optical Poem (1938) and Bute's Color Rhapsodie (1948)—to argue that these films are early examples of intermedia and can be productively studied through a musicological lens. A comparison of these films is apt since they have at least three things in common: first, they employ Liszt's Hungarian Rhapsody No. 2 as a soundtrack, a canonical work of Western art music that has entered popular culture due to its frequent use in animated cartoons; second, they are based on thousands of animation sketches, which assign movements of shapes to musical events and can therefore be placed in a long tradition of choreography; and finally, they use similar iconographies that center on the movements of circles, making the films amenable to interpretations relating to the motion of planets. Thus far, scholarship on Bute and Fischinger has paid little attention to the soundtracks of the films. By reading these films through a musicological lens whilst also emphasizing their statuses as intermedia, this paper proposes a methodology that draws equal attention to both visual and aural components and breaks new ground for further research in other academic disciplines.

Oozing Automata, Pneumatic Puppets and Robot Devils: Multimodal Mechanics and Magic in Medieval Animation

Hans Henrik Lohfert Jørgensen, Aarhus University

The medieval sensorium integrated a rich array of sensorial, extra-sensorial and infrasensorial impulses into a perceptual continuum transgressing the boundaries defined by the classical Aristotelian compartmentalization and bureaucratization of "the five senses" (cf. Jørgensen et al.: The Saturated Sensorium: Principles of Perception and Mediation in the Middle Ages, Aarhus University Press, 2015). This integrated sensorium - or intersensorium - allowed for multimodal acts of embodied performance, wondrous spectacle and mobile imagery, addressing all the senses with theatrical animations, at once both visual and audial, oral and aural, olfactory and aromatic, optic and haptic, pneumatic and hydraulic, visceral and somatic, mechanical and magical. Robot devils and automaton saints would exude bodily substances towards their viewer. Christ puppets would bleed and perspire through their artificial wounds and palpably tactile skin, imitating miraculous figures that actually bled and issued real effluvia. Marian statues would secrete holy oil or sorrowful tears through internal conduits, emulating iconic Madonnas lactating as mothers in the flesh. Air or water driven androids would sound their horns and play their music, producing audible animatronic sound. Flying angels or string-pulled demons would flap their wings, while moving dragons and animated Hell mouths would blow fire or howl in agony. Falling within the historical categories of "miracula" and "mirabilia", miracles and marvels, such wonders of mechanics and magic played out multiple modes of animation, characteristic of the living or lifelike image as an active sensory agent. The paper will exemplify these multisensory exudations, incarnations and interactions as enactments of the nearly organic life of medieval imagery, resulting in "real magic", so to speak, beyond mere illusion.

A Demanding Child: Perception and Interaction in Medieval Devotion

Laura Katrine Skinnebach, Aarhus University

Like many other medieval nuns, the Dominican mystic Margaretha Ebner (1291-1351) from the convent of Maria-Medingen in Bavaria, owned a doll depicting the Christ Child. She also had a richly decorated cradle for the doll. According to her Revelations, the doll was an important art of Margaretha's devotional life. She would play with it and embrace it, kiss it and swaddle it.

And the doll would respond. In the arms of Margaretha it 'became a real bodily child', and this living Christ Child would demand to be suckled and nursed. Sometimes it would wake her up at night in order to embrace her and kiss her. They would often exchange words of affection, and the Christ Child expressed his need for love and care. The relationship between the Christ and Margaretha was one of mutual dependence and desire, mediated by the doll. Margaretha Ebner's Christ doll illustrate the multisensory and intersensory character of medieval devotional performance. It also illustrates that perception of religious objects was a matter of embodied interaction that transgress our modern distinction between living humans and dead matter. Images and objects were experienced as entities that possessed personhood and lifelike abilities. Images of Christ, Mary and saints could sense and perceive. Inspired by the work of Alfred Gell and Bruno Latour, the present paper regards medieval religious images and objects as agents that influenced and were influenced by the social networks into which they entered. The paper will set out to investigate and discuss multisensory perception in a medieval devotional context as a mutual exchange of touch, gazes, odors, tastes and sounds between human and other-than-human agents. It asks: To what degree were medieval images regarded as sensing and perceiving entities?

Session: Empirical Approaches to Multimodality

Multisensory Processing in Brain and Behaviour: One Size Fits All?

Cecilie Møller, Aarhus University & The Royal Academy of Music

The world is multimodal and everyday perception relies on the complementary roles of simultaneously active sensory systems. Two major approaches have guided the recent wave of scientific studies on multisensory processing in brain and behavior. The phenomenological approach, typically advocated by psychologists and philosophers, investigates the often surprising impact of multisensory information on even sensory-specific perceptual experiences, such as hearing a friend speak. The neurophysiological approach emerged from the pioneering studies on cross modal influences on the orienting response by Barry Stein, Alex Meredith, and their colleagues in the 1980s and 1990s. The spiking rate of multisensory neurons embedded in neural networks are under scrutiny, an endeavor that has been instrumental in revealing some of the basic mechanisms underlying multisensory processing at neural and behavioral

levels in non-human animals. Both of these approaches provide a base of knowledge for the work presented in this talk. The focus is on the sensory-specific experience of auditory pitch and the question put forth is whether visually induced gains in pitch discrimination depend in systematic ways on participants' auditory sensitivity and expertise, according to the same principles of multisensory processing that govern the level of single neurons in the midbrain superior colliculus. Specifically, we used the crossmodal correspondence between auditory pitch and visually perceived vertical position to shed light on the benefits of multisensory compared to unisensory processing, and on the inter-connections and inter-dependence of behavior (measured in a pitch discrimination task), neurophysiology (as measured with magnetoencephalography), and neuroanatomy (using magnetic resonance and diffusion tensor imaging). We addressed group-averaged effects as well as the variability that characterizes responses across individuals with varying levels of auditory sensitivity and expertise, i.e., participants with and without extensive musical training.

Color and Tone Color: Audio-Visual Crossmodal Correspondences with Musical Instrument Timbre

Lindsey Reymore, The Ohio State University

Crossmodal correspondences—widely-shared expectations for mapping experiences across sense domains—manifest in our everyday language. For example, musical timbres may be "bright," "dark," or "warm." Empirical literature in psychology is consistent with the theory that many of these metaphors play out in perception as well as language. The current studies investigate musical timbre as a color-evocative dimension of sound. Specifically, our aim is to disentangle crossmodal correspondences between timbres and colors by using perceptual ratings to predict participants' choices when they are asked to match timbres to colors. The words used by participants to rate timbres were derived from previous research on the perceptual dimensions of timbre as well as empirical literature in crossmodality. In each of three studies, participants used headphones and an iPad to listen to stimuli and match the timbres of various musical instruments with colors. Results from the first experiment (n=106) support the hypothesis that lighter colors are associated with timbres that are rated as higher, smaller, brighter, and happier, while darker colors are associated with timbres that are rated as lower, bigger, darker, and sadder. Data collection is near completion for studies 2 and 3, with results forthcoming.

Study 2 features an expanded experimental interface that allows us to simultaneously test hypotheses about lightness, hue, and saturation. Study 3 aims to untangle the influences of instrument timbre and pitch height by comparing responses to stimuli across the ranges of different keyboard instruments.

Our findings bring insight to the cognitive science of metaphor and audiovisual perception. Increased understanding of latent timbre-color correspondences is relevant for composition and analysis of music visualization, a multimedia genre in which music is intentionally paired or cocreated with color, shape, and movement. Additionally, our correlational results from unipolar scales lead us to recommend the avoidance of bipolar scales in timbre rating tasks.

Panel: Religious Magic Lantern Performances as Multimodal Spectacles (B-Magic Consortium)

During the nineteenth century, the magic lantern became a trans-border mass technology used for entertainment, scientific, educational, and ideological purposes, both in the private and public spheres. Because live lantern performances addressed spectators in a multimodal way — combining words, pictures, music, gestures, and intonation — the lantern could 'speak to everybody'. With the rise of both mass-consumption and mass democracy, such multimodal lantern performances became an integral strategy to educate, inform and entertain a mass audience. Around 1900, the French and Belgian Catholic clergy started to use the optical lantern to transmit catechistic messages to the parishioners and convince non-believers to regain or find faith.

This panel will explore the activities of the Catholic Church from three different angles. The first section will research how Catholic organisations and societies mobilised magic lantern performances for multiple goals and purposes, and ask how these shows appealed to its, mainly, religious public. What were the subjects of these performances? How did they tie into overarching Catholic concerns, anxieties, hopes and aspirations? And by which multimodal means were these shows precisely transmitted to an audience living in the French speaking capital and in the Flemish harbour town? The second section will analyse how the Catholic church used the multimodality of the religious lantern show in the past, from French activities before the First

World War to the work of Belgian congregations in the 1920s. What were (traditional) multi-modal strategies in catholic rituals before 1900? What changed with the introduction of slide projections? The third section will focus on multimodal scenes of creation that took audiences back through millennia, combining elaborate scenography, live performance and all the devices available in the contemporary technology of light and projection. Scenes of creation became a distinctive genre sparked by scientific evidence of planetary time extending unimaginably further back than Christian chronology. This section will demonstrate how, in a new scientific age, different performative contexts framed and negotiated God's primal creative act, addressing different audiences and producing varied modes of experience and understanding.

Magic Lantern Performances in Their Multimodal Context: Spatiality, Senses and Catholic Culture and Society Life in Antwerp and Brussels (c. 1860 – c. 1920)

Margo Buelens-Terryn (University of Antwerp), lason Jongepier (University of Antwerp), and Ilja Van Damme (University of Antwerp)

Typical for Belgium was the increasing 'pillarisation', or fragmentation of social life and public culture on the basis of religious and ideological fault lines. By using Geographic Information Systems (GIS), this section will look at the Catholic appropriation of this first visual mass medium in Belgium in its historical-spatial context. First, the lantern-related infrastructure will be mapped in order to analyse the socio-geographical distribution of the performances in two modernising Belgian cities: Antwerp and Brussels. In this way, Catholic dominated spaces of exhibition and their specific neighbourhoods will be located to gain more information on Catholic actors resorting to the sort of 'multisensory literacy' that the magic lantern technology had to offer. It will use underexplored source data, which can be found in advertisements and articles in newspapers, specialized magazines and other press work, in combination with information from almanacs, census data and other related documents from Belgium Catholic institutions and societies.

Teaching Faith with the Lantern – Multimodal Performances by the Clergy (c. 1900 – c.1920s)

Frank Kessler (Utrecht University) and Sabine Lenk (University of Antwerp/ Université libre de Bruxelles)

The Catholic Church has a long "performative" tradition, even if the Church itself may not have seen it as such. When the French and Belgian clergy started to experiment with the optical lantern around 1900, they could understand this new communication tool as a continuation of their centuries-long efforts to propagate faith. This section will analyse the use of the optical lantern as part of the strategies employed by the Catholic clergy to teach catechism, to visually enhance the understanding of the Bible, but also to fight what they saw as the dangers of modern life, from alcoholism to moral and political threats posed by liberal and socialist ideas, or by the efforts to impose a secularist school system. It will examine the multimodal performance practices on the basis of contemporary source materials, in particular the recommendations and instructions that were disseminated by the Catholic Church in bulletins and pamphlets.

Genesis and Geology: Religious Syncretism in Performances of "Creation" Kurt Vanhoutte, University of Antwerp

Since the mid-nineteenth century, shows picturing the world from the formation of the solar system to the arrival of the first human drew a lot of attention. They performed a tight balancing act between sensation, religion and instruction. Cases range from popular entertainment by traveling showmen such as Henri Robin ('Histoire de la création du monde', first 1863) or great amusement park attractions ('Creation', St. Louis World's Fair, 1904 and Coney Island, 1905) over science popularisation through slide technology (Louis Figuier or Camille Flammarion, 1874 onwards) to influential religious spectacle that for the first time integrated recorded speech, synchronising sound, moving film and magic lantern slides in an eight-hour long event ('The Photo-Drama of Creation' by Charles Russel, 1914).

Session: Magic, Science, & Exhibition in the Nineteenth Century

Rationalizing the Confused Senses: Illusion, Science, and Romantic Music

Feng-Shu Lee, National Chiao Tung University

In 19th-century Europe, the creation and conception of illusion intertwined with science and technology. Optical illusion such as afterimage became the basis of new gadgets in popular culture. Innovations in public entertainment, developed using the latest advances in technology, signified the Romantics' sophisticated understanding of the senses. Presented thus, the emphasis on illusion in 19th-century literature and arts conveys the Romantics' reading of reason. Recent scholarship on illusion and 19th-century European culture focuses primarily on optical illusion in literature, philosophy, fine arts, and photography. In this paper, I offer a fresh way to understand the novel perspectives from which Romantic scientists, authors, and composers explored the senses, as well as the relationship between the senses. My discussion of illusion in this context highlights the scientific basis of the Romantic imagination. I use the seemingly paradoxical relationship between illusion and rationality as a starting point to explore the presentation of confused senses in Romantic literature and music. My case study is E. T. A. Hoffmann's novella *The Sandman*, in which optical illusion led to, and was enhanced by, auditory illusion, in conjunction with contemporary developments in optical science and glass-making industry. Turning up to published manuals describing the Pepper's Ghost, a famous form of theatrical illusion developed in mid-century England, I show how entertainment industry turned scientists' illusion-based devices into commodities that both educated and amused the general public. I conclude with a close reading of R. Strauss and his librettist Hofmannsthal's opera Die Frau ohne Schatten, to demonstrate how illusion serves as a metaphor for the intimidating Other. I will focus on Act III, in which Strauss used offstage sound.

L. K. MAJU: A Dutch Multimedia Entrepreneur in the Nineteenth Century

Dulce da Rocha Gonçalves, Utrecht University

« Maandag 27 September komt MAJU. »

For the readers of the newspaper De Dordrechtsche Courant from September 24, 1880, the concise advertisement transcribed above was deemed sufficient: Maju would be coming to Dordrecht. But what exactly did that mean? In the case of Maju the possibilities would have been still a few: Would he be performing a scientific popular lecture with his Hydro-Oxygen Microscope and projecting the "invisible wonders of the world"? Would he be bringing the patented instruments from the Royal Polytechnic and performing De Geest van Maju, the Netherlands' own version of Pepper's Ghost? Or, even still, would he be projecting dissolving views in the city's park, and challenging the open-air weather conditions of the nights of September? For the Dutch entrepreneur Levie Kinsbergen Maju, who reportedly died at 61 years of age in 1886, magic, science, entertainment, education, advertisement and even telecommunications were not diverging fields. On the contrary: they were at the core of his professional practice. Unlike some popularizers of science from the nineteenth century, such as his contemporary (and colleague for a period of time) John Henry Pepper, Maju did not dwell in the memory of the Dutch as a man connected to science (or even entertainment) - in fact he was all but forgotten until now. For a short period of time, however, his name still lingered in the popular collective use as an expression used in case of "unexplained" phenomena such as creaking floors and self closing doors: then people would cast the blame of such occurrence to the *geest van* Maju! This article explores the range of his multimedia experiences but also the contrasting nature of the places where he performed such as touring the regional fairs in the Netherlands or as a recurring act of the program of the Royal Polytechnic in London. My research will be focused on primary sources such as newspaper advertisements and reports, and will be informed by David Livingstone's reflections on geography of science and Bernard Lightman's formulation of *sites* and *experiences* in the nineteenth century's marketplace of popular culture. As such, I will explore the sites and the experiences that L. K. Maju delivered, as well as their spatial and temporal distribution between 1850 and the year of his death, in Amsterdam, in 1886.

Luminous Fountains and Their Tension in Perception

Evelien Jonckheere, Antwerp University

Jonathan Crary explores in *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (1999) the paradoxical nature of modern attention: its late nineteenth century rise of attentive norms and practices on the one hand and sustained attentiveness as a constitutive element of a creative and free subjectivity on the other. This paper explores how the popularity of late nineteenth century luminous fountains reflects this paradoxical nature of modern attention.

During the second half of the nineteenth century luminous fountains developed from scientific experiment and special effect on stage towards omnipresent and independent multi sensorial spectacle. Luminous fountains served as 'counter-forms of attention' when presenting multisensorial fairylike dreamworlds during breaks in foyers at theatres and music halls or as closing event at festivities or exhibitions. Pattering and refreshing water, combined with dynamic color transformation, stimulated distractive 'rêverie'.

Expositions such as Paris 1889 and Brussels 1897 created luminous fountains with massive proportions. The *mise-en-scène* of these massive luminous fountains represented dreamworlds, as well as national progress thanks to scientific and economic shifts. However hidden in underground spaces, high-skilled technicians displayed a disciplinary organization and concentrated attentiveness when operating hydraulic systems, a mechanism of visual optics with colored glass and innovative electric and telegraphic applications.

By bridging concepts of progress and spectacle on the one hand and the visible and invisible on the other, this paper aims to unveil both the enchanting and disenchanting discours in the multi sensorial spectacles of luminous fountains and their corresponding tension in modern perception.