

RUTH MYERS

Technologies of early film and interdisciplinary performances

Abstract

This paper explores technologies of early film and interdisciplinary performances by focusing on filmic body performance encountered via the Kinetoscope, a peephole viewing device developed in the late nineteenth century. Scrutinised via the lens and peephole, these performances are explored as disciplining bodies revealing the efforts of a physiological gaze to 'analyse, regulate and reconfigure'¹ and re-performed within a popular amusement context. They are situated within the notion of cinema of attractions, an exhibitionist and direct address of the viewer, and a 'now you see it, now you don't'² temporality. Employing peep technologies hide and reveal mechanism; the Kinetoscope addresses the individual viewer requiring their immediate attention. This 'present tense', however, is one fraught with disruption and dislocation; a complex exchange situated between bodies/screen bodies, viewers/films and viewers/shared social spaces. I put forward this positioning, and link within contemporary video art projects, as a performative encounter where we can reflexively engage in our own performances of self and other.

Introduction

Perhaps in no other time have we had such an intense and pervasive relationship with the small screen. Riding on the airport buses and trams in Melbourne did much to convince me of that. People travelled in bubbles, visible but isolated, and I felt strangely uncontained amongst their intense individuated attention to their held screens. While current day mobile technology is not the topic of this paper, aspects of this contemporary phenomenon, in considering how we encounter individually addressed technologically mediated body performances, incidentally are.

This paper takes as its setting the very early films produced for the Kinetoscope, an individual peephole viewing device developed in the late nineteenth century. While only prevalent for a couple of years, this new technology of "moving views" provides some of the earliest encounters with the filmic moving body. These very short films of body performances such as dancing, contortions, acrobatics, sneezing and kissing are not about stories but, rather, focus on the momentary acts of display. This presentation for the lens I situate as performative; as a shared exchange between viewer and viewed, and draw links in this to contemporary video body performance. Firstly I explore these encounters by briefly describing and situating the Kinetoscope in its social setting. I then focus

¹ Cartwright, 1995, p. xiii.

² Gunning, 1996, p. 82.

on the technological attention given to the scrutiny of the moving body, as normative work where knowledge and power operate directly on the body. I discuss them as interdisciplinary performances; as 'an intertext between popular and professional representations of the body'³ and one that situates the physiological gaze as amusement in popular culture. I draw on Tom Gunning's cinema of attractions as well as focusing on peep technology to analyse the shared, in-between space and immediate temporality of the Kinetoscope film viewing encounter. I propose this to be one fraught with tension and complex modes of exchange: between public and private, an intensified visibility and isolation, a situating and dislocating, and, conditioned by disruption. I explore encounters with acts of display in filmic body performance in early kinetoscope films and contemporary video art projects as sites of exchange, which demand to be contended with, and in which we implicate ourselves in our performances of self and other.

First some brief background about the kinetoscope. Thomas Edison's 'kinetoscope moving view'⁴ was a wooden cabinet with a peephole on top developed by Edison and his team during the late nineteenth century. Around fifteen and a quarter metres of film was looped on sprockets inside. The film material, cut to roughly thirty five millimetre's format and edged with sprocket holes, became an enduring innovation. An electric sprocket wheel drove the film while an electric lamp flashed light through a narrow slit as each frame of film moved over it.⁵ The camera, called the kinetograph, was housed in Edison's film studio at Orange, New Jersey, and the early experimental films were of studio assistants performing actions directly for it. The first public kinetoscope showing was in May 1891, when the National Federation of Women's Clubs visited the studio and viewed leading assistant William Dickson, bowing and taking his hat off.⁶ Shorts clips of well-known acts and amusements of the day such as dancers, acrobats, staged fights and the like followed. The range of kinetoscope film subjects is 'nearly encyclopaedic'.⁷ An Edison catalogue of films produced between 1892 and 1896 divides them into; dances, descriptive scenes, fights and miscellaneous. Within these headings are titles such as lady fighters, somersault dog, lasso thrower, clown in grotesque tumbling, interrupted lovers and so on.⁸

The first kinetoscope parlour opened on April 14, 1894, in an old shoe store at eleven hundred and fifty five Broadway, New York City. The parlour was laid out with ten kinetoscopes lined up in rows of five, which 'one by one' customers 'bent over and looked at the movie through a slot in the top'.⁹ Parlours quickly opened in many American, English and Australian¹⁰ cities. The kinetoscope coincided with increasing mobility of women in the public sphere,¹¹ and Edison's films of popular male

³ Cartwright, 1995, p. 4

⁴ Musser, 1991, p. 29.

⁵ Robinson, 1997, p. 34.

⁶ Musser, 1991, p. 31.

⁷ Gunning, 1995, p. 125.

⁸ Phillips, 1997, pp. 53-57.

⁹ Spehr, 2009, p. 23.

¹⁰ Phillips, 1997, p. 86

¹¹ Hansen, 1991, pp. 2-3.

amusements became unexpectedly accessible to women through exhibition in these parlours,¹² stimulating calls for censorship, and the Edison team to quickly produce what they called "tamer views".¹³ After a brief period of commercial success, by 1895 sales of the kinoscope had faded. The addition of un-synched sound in Edison's kintophone failed to revise interest and peephole viewing encounters with film were superseded by screenings to audiences during the Nickelodeon era.

To return to a primary observation in my paper, I focus on the kinoscope as a particular moment when performance and the technologies of the lens involves a close up scrutiny of moving bodies as performers present themselves directly to the camera. I explore these filmic body performances as "disciplining bodies", as part of normative work where knowledge and power operate directly on the body. I consider their relationship to early physiologies technological attention to revealing processes of the body in motion, but one redirected through the Kinoscope as attractions for popular consumption. The Dickson/Edison films *Kinetoscopic record of a sneeze* (1894) and *Sandow* (1894) are considered in this interdisciplinary context as positioning the viewer in a performance where they partake in a disciplinary scrutiny of the moving body.

Here I briefly touch on Foucault's policy of the body in relationship to early films scrutiny of the moving body. Involving techniques of overlapping subjection and objectification, Foucault's policy of the body utilises disciplinary institutions as well as human sciences to regulate and modify behaviour. This is done through the accumulation of knowledge about individuals and the setting and assessing of 'norms' to shape individuals to requirements of institutional power.¹⁴ The Kinoscope, along with other nineteenth century optical and recording devices contributed to this normative work of measuring, regulating and controlling moving bodies by revealing unseen processes of bodily movement and providing the ability to replay, re-perform and scrutinise.¹⁵ Technologies of early film were developed to record movement, and are inherently tied up with surveillance and 'physiological analysis' of the moving body.¹⁶ An example of this is the 1894 Dickson/Edison film, *Kinetoscopic record of a sneeze*, (Fig. 1) which records the act of Edison lab assistant Fred Ott sneezing with similar attention to the mechanisms of bodily movement as physiological motion study documentation in science and medical journals of the time.¹⁷

¹² Musser, 2004, p. 23.

¹³ Musser, 1991, pp. 42-44.

¹⁴ Crary, 1990, pp. 15-16.

¹⁵ Cartwright, 1995, p.xii.

¹⁶ Cartwright, 1995, p.xii.

¹⁷ Cartwright, 1995, pp. 13-16.



Fig. 1. William Dickson, *Kinetoscopic record of a sneeze*, 1894, photographic print, Dimensions 17.8 x 12.7 cm, Courtesy of Prints & Photographs Division, Library of Congress, LC- USZ62-536. (W.K.L. Dickson.)

An interest in capturing body movement was already evident in the serial images of photographer Eadweard Muybridge and physiologist Etienne Jules Marey. Muybridge's zoopraxiscope, a device with sequences of transparencies mounted on a revolving glass plate, allowed for short projections of bodily movement.¹⁸ Linda Williams's discussing Muybridge's work identifies four factors that drove this desire to reveal unseen processes of bodily movement; a growing consideration of the body

¹⁸ Williams, 1986, p. 509.

as a mechanism, a doubting accuracy of human eye observation, the development of new measuring and recording machines, and the pleasure derived in viewing lifelike moving bodies.¹⁹ Tom Gunning draws a comparison between the focus on recording 'repetitive tasks of disciplined bodies' such as 'work and exercise' in studies like Muybridge's and the interest in the 'regulated rhythms of highly trained bodies' in the performances of dancers, contortionist, acrobats and the like in the early kinoscope films.²⁰ But while Muybridge and Marey recorded body movement for scientific reasons, Edison, Gunning states, presented this technological scrutiny of body movement as 'fascinating in itself, a completely modern spectacle'.²¹

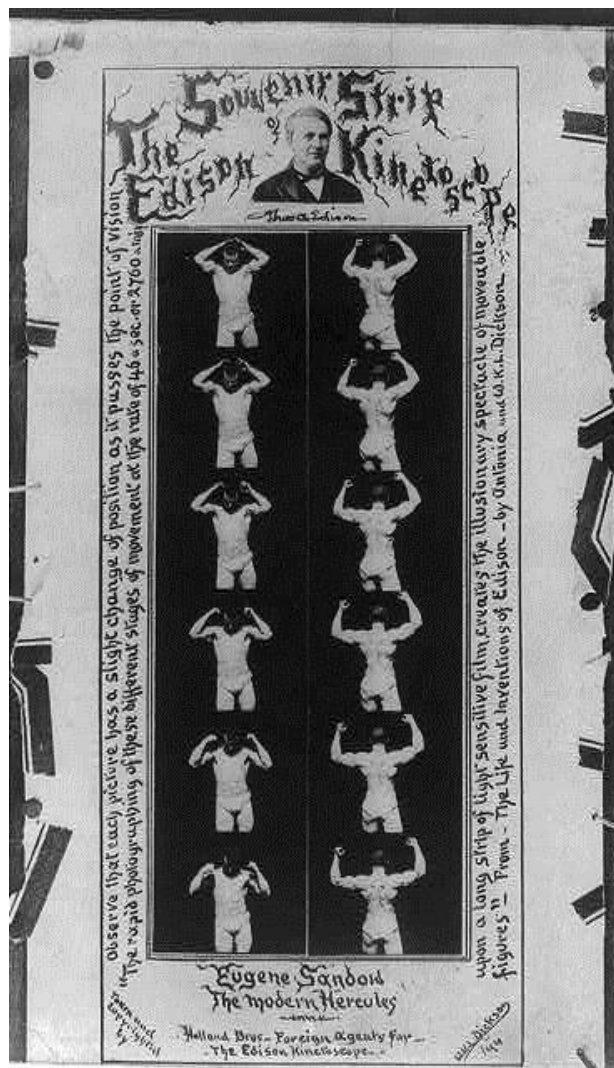


Fig. 2. William Dickson, *The souvenir strip of Edison Kinetoscope Eugene Sandow, the modern Hercules* 1894. Photographic print, 17x8.5 cm, Courtesy of Prints & Photographs Division, Library of Congress, LC-USZ62-2124 (W.K.L. Dickson.)

¹⁹ Williams, 1989 p. 38.

²⁰ Gunning, 2001 p. 90.

²¹ Gunning, 2001, p.79.

Although the kinoscope was exhibited at the Department of Physics at the Brooklyn Institute in 1893 for '400 scientific people' and the films described as experiments in the local newspapers and scientific journals,²² the Dickson/Edison film subjects were drawn from the world of popular entertainment, sporting pursuits and work and leisure. An example of this is the short 1894 Dickson/Edison film *Sandow*, (Fig. 2). Eugene Sandow, "the strongest man in the world" and a popular stage performer was Edison's first famous visitor and important publicity for them both.²³ Sandow is filmed in front of a black space, cropped above the knees, performing a series of held poses up close for the camera, positioning the viewer as front row spectator,²⁴ and in a performance directly for them. This technological intimacy, achieved by the medium-shot 'peep show vicinity' is echoed in the Dickson/Edison *The Kiss* (1896), where the titillating attraction is witnessing Broadway stars kissing, in an 'impossible placement of the viewer'.²⁵ In both these cases, popular acts of the day are positioned within the scrutiny of "scientific looking"²⁶ and where the close up attention of the moving body, brought a thrill to the viewer that has a lot to do with scientific techniques of analytical surveillance.²⁷ Bodies here are in need of 'regulation and control',²⁸ and film, in its ability to capture movement, could 'analyse, regulate and reconfigure'.²⁹ Kinoscope filmic body performances shift across science and amusement sharing a technological and interdisciplinary relationship – they are never just the one endeavour – rather are propelled by a desire to see and name that is bound up with disciplinary practices. Such filmic encounters with the disciplined body staged as popular amusements remind us that 'surveillant looking and physiological analysis ... are broadly practiced techniques of everyday public culture'³⁰ in which we contribute.

These early films are examples of the cinema of attractions, a term introduced by Tom Gunning and André Gaudreault referencing a mode of exhibitionist address prevalent in film prior to around 1906 and 1907 when a narrative focus took over.³¹ The notion of Attractions is drawn from Sergei Eisenstein, and references thrill seeking and curiosity-arousing devices of the fairground³² and an exhibitionist relationship to the viewer. Kinoscope encounters directly address the individual viewer through performers devices such as a nod, or gaze and in an emphasis on momentary display, as in the short performances of dance, contortions, acrobatics and other physical demonstrations like *Sandow's* (Fig 2) show of strength. Rather than absorption in stories or self-enclosed fictional worlds, the viewer here remains aware of the act of looking.³³ This heightened viewer awareness of looking, and the performers awareness of being looked at, Miriam Hansen situates within a theatrical

²² Musser, 1991, pp.35-38.

²³ Spehr, 2009, p. 35.

²⁴ Spehr, 2009, pp. 33-34.

²⁵ Hansen, 1991, p. 35.

²⁶ Cartwright, 1995, p. 46.

²⁷ Cartwright, 1995, p. xii.

²⁸ Cartwright, 1995, p.xi.

²⁹ Cartwright, 1995, p. xiii.

³⁰ Cartwright, 1995, p.5.

³¹ Gunning, 2006, p. 32.

³² Gunning, 1996, pp. 73

³³ Gunning, 1995, p.121.

voyeurism of 'reciprocity', and 'active complicity...of seeing and being seen',³⁴ a shared address. Governed by a temporality described by Gunning as 'here it is" Look at it',³⁵ they are moments, or flickers, where the viewer, 'plays a ...game of presence/absence, one strongly lacking predictability or a sense of mastery'.³⁶ These kinoscope performances of bodily display are an 'intense form of present tense'³⁷ an immediate confrontation for the viewer to contend with.

The Kinoscope employs peep technology which addresses the individual viewer and situates the viewing encounter in a mode of dislocation and disruption, one where 'cinematic and physical bodies are rendered open to display enacting a vexed and often self-conscious web of exhibitionism, surveillance, and social exchange'.³⁸ In 2012, before engaging in any historical research, I unintentionally made a contemporary version of a kinoscope (Fig.3). Faced with the dilemma of wanting an individual address with which to question and draw out reflexive response from the viewer, I buried two portable players in a wooden cabinet and made peepholes into it. What I didn't expect, as I stood to the side on opening night was the encounter this viewing cabinet facilitated. One by one people leant over and looked, went away, came back for another look, or steadfastly didn't look at all. Looking entailed bending their body over, breath caught on the rubber surface, and their bodies were revealed as their eye addressed the video loops of ambiguous bodies colliding inside. One viewer described this experience as gazing at his own navel. I realised this was about the performance of *their* looking, that is, an opportunity to identify privately in an exchange with the film body. The peephole apparatus focuses attention, emphasises the encounter, and supports the performance within the show. Reinforcing the lens, the peephole replicates it, re-performs it. It also demands an embodied encounter: you must move, bend over, your body exposed situates and implicates you. A similar performance of the viewer's body with technologically mediated body display is found within the larger installation titled '*On seeing through obstacles, across space and round corners*',³⁹ by Torben Tilly and Robin Watkins (2008), where there is a very small monitor mounted on the wall. The tiny screen demands you move in incredibly close, where you view a looped brief segment of a drummer in a rock performance. Standing hunched, viewing the drummer's exertion, his sweating torso equally scrunched, it seems, fitted into the confines of the monitor. Within the thrill of closeness you replicate the technological scrutiny. Amy Herzog's essay on the American pornographic peep show arcades in the 1960s and 1970s is useful in considering performances such as *Sandow* and *On seeing through obstacles* as having multiple exchanges 'between on-screen performers and cameras, between spectators and texts, and ... between spectators and arcade'.⁴⁰

³⁴ Hansen, 1991, p. 35.

³⁵ Gunning, 1996, p. 76

³⁶ Gunning, 1996, pp.82

³⁷ Gunning, 1996, p. 76.

³⁸ Herzog, 2008, p.30

³⁹ Tilly and Watkins, 2008

⁴⁰ Herzog, 2008, p.31.



Fig. 3 Ruth Myers, *being made*, 2012. Two Nine Inch Portable DVD players, video and audio loops, wooden cabinet, estimate 110 x 45 x 45 cm, Invercargill, Riverton Arts Centre, Collection of artist.

The Kinetoscope sits within a tradition of “peep practice” which emphasises an intensified visuality through the peep show mechanism of ‘hiding & revealing.’⁴¹ Highlighting relationships between the social and private, site and function, Erkki Huhtamo overviews peep technologies various forms as ranging from nomadic, such as the popular handheld stereoscope and travelling fairground peep shows, to situated and shared large scale peeping devices such as the Kaiser Panorama in the early 1880s . These were followed by the individual but socially situated late nineteenth century phonograph parlours (aural peeping devices) and the Kinetoscope parlours, which functioned as an extension to street life.⁴²

⁴¹ Huhtamo, 2012, p. 35

⁴² Huhtamo, 2012

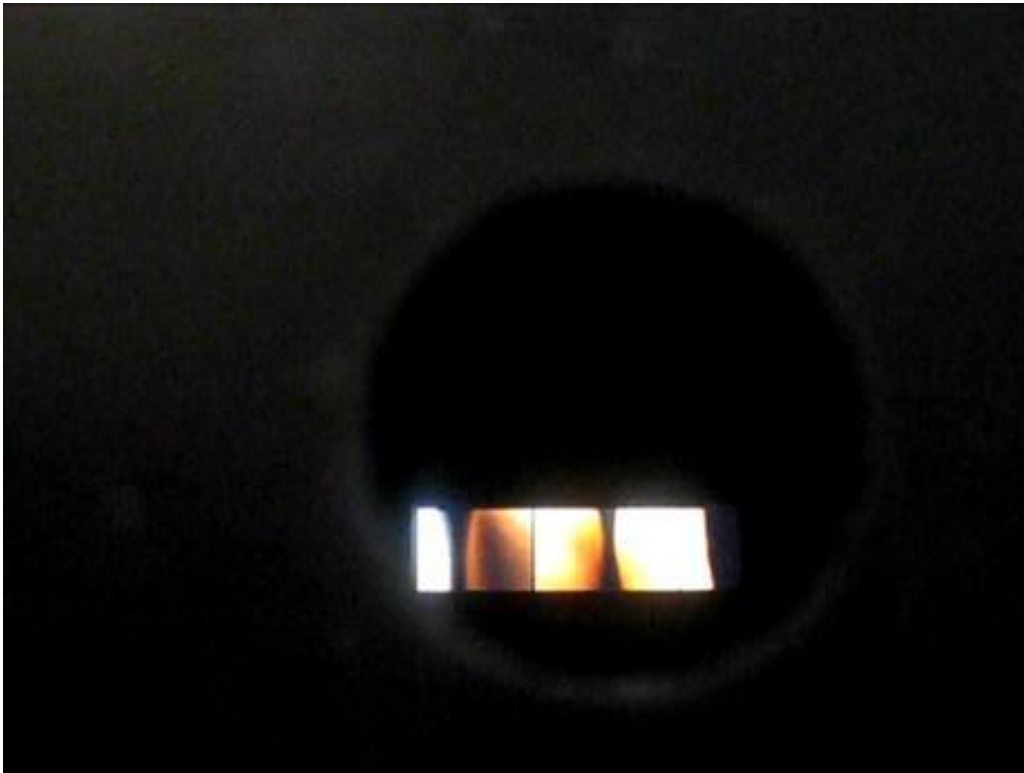


Fig. 4 Ruth Myers, *being made*, 2012. Two Nine Inch Portable DVD players, video and audio loops, wooden cabinet, estimate 110 x 45 x 45 cm, Invercargill, Riverton Arts Centre, Collection of artist.

Peep technology in social spaces such as arcades and parlours has a particular relationship with the viewer in that it explicitly acknowledges and situates the body of the viewer publicly.⁴³ Alongside locating the viewer's body, peeping requires the viewer to disengage optically from their surroundings⁴⁴ so as to focus on the provided attraction seeking their attention. This viewing experience though is never completely immersive, both Herzog, in discussing porn peep show arcades & Huhtamo, peep show fairground encounters, point to disruption and interruptions from other peepers and site visitors, bringing tactile & noise intrusions, as well as the built-in stoppages from the devices themselves.⁴⁵ ⁴⁶ Equally the filmic body display in these early kinoscope films is one of dislocation. Gunning discusses the removal of these filmed performers from a 'surrounding spatial world' such as background details like a stage or curtain, and describes them as floating within a black void, as

⁴³ Herzog, 2008, p.34.

⁴⁴ Herzog, 2008, p.34.

⁴⁵ Herzog, 2008, pp. 34-35.

⁴⁶ Huhtamo, 2012, pp. 35-36.

tiny 'enclosed and bounded' images generating a 'claustrophobic space' which 'still cause(s) a sense of unease in spectators today'.⁴⁷ This dislocation and isolation is discussed in Jonathan Crary's analysis of William Hogarth's painting of a carnival *Southwark Fair* (1730s) in which he identifies two seated figures viewing a shared peep show. Crary reads these figures' separation from their surroundings as indicative of both Walter Benjamin's 'new isolated consumer in a mass produced commodity' and 'Mikhail Bakhtin's "private chamber" for an enclosed and privatised subject'. These modes Crary says have become 'powerful model(s)...of dominant forms of visual culture'⁴⁸ and which I would suggest our current propensity to develop intense and personal relationships with our mobile communication devices plays out. This compromised engagement, of disruption, dislocation and public-private enfold of the Kinetoscope situates the viewer in an in-between space which I propose locates these film body encounters as very much about our own performances of self and other.

I have situated the kinetoscope encounter as a shared performance, and an exchange between filmic body and lens, filmic body and individual viewer, and viewer and site. These performances implicate the viewer, through their direct address and positioning of the viewer's body. They are exhibitionist presentations that require to be contended with, an encounter conditioned by modes of disruption and immediacy. Viewers participate in scrutinising the performance of the moving body, in a physiological gaze resituated as amusement and pleasure. The supposed reveal and positioning of this gaze enacted through technology dislocates to some degree both the viewer and the viewed. Both removed from their wider setting, the small floating personally directed filmic body performances and the viewer's attention, through the peephole, these encounters are focused as performances of our own looking. What is interesting is within the explicit sense of production, of being this or that, by doing or displaying this or that, within these early filmic body performances, these encounters, by failing to be stably located, position us in an opportunity to reflexively encounter our own performances of looking and performing self and other.

⁴⁷ Gunning, 2001, pp. 75-77.

⁴⁸ Crary, 2002, pp. 8-9.



Fig. 5 Ruth Myers, *being made*, 2013. Projection, video and audio loops, Cardboard Boxes, Table, Dimensions variable, Auckland, Gallery Three, St Pauls Gallery, Auckland University of Technology, Collection of Artist.

Finally I look briefly at contemporary practice to extend this focus on technological scrutiny and display of the moving body as a set of conditions that position the viewer within an opportunity to reflexively engage in their processes of looking, and performances of self and other as something which they continually do, as an active site of production. To do this I briefly consider the body reflexive performances in two 1970s video art works, as well as my own work (Figs. 5&6) as an exchange with the film body encounters as performative, as 'made'. Jeffrey Weeks writes that 'bodies are objects of social practice...they are acted upon, and inscribed with meaning.' With reference to Australian sociologist Raewyn Connell, he describes this process as 'body-reflexive practice... in which individual bodies are both subject and object.' This reflexivity, Weeks continues is 'a critical aspect of everyday practice' which involves a potential confrontation with self and social institutions and systems.⁴⁹ Lynda Benglis' *Now* (1973) employing Benglis multiplied self-responding profiles, and Hannah Wilke's *Gestures* (1974) in which Wilke manipulates her face into suggestive gestures explore aspects of gender identifications as shared performance. Presenting displays of the artists bodily performances of the lens, both artists engage in simultaneous subject-object activity in order to enact a technologically enabled reflexive loop. This loop is enforced with what Anne Wagner terms a 'coercive posture towards the viewer'.⁵⁰ In this way, Benglis, through a vocalised layering of ambiguously directed instructions such as 'now', 'start recording' 'no', 'do you wish to direct me' and Wilke, through her 'face/screen' (as) 'one and the same' ⁵¹ aggressively mark our presence. Display here too is tempered by dislocation and disruption, and "claustrophobic space" such as the static between Benglis' profiles and the black void surrounding Wilke's close ups of hands manipulating facial gestures. There is a play within these performative overlapping gestures, to an almost incoherency, all the time inviting a scrutinising close up gaze at the performed displays. The ambiguous relationship this sets up with the viewer, is emphasised with extended duration in Wilkes thirty five minutes plus performance. These conditions of ambiguity, dislocation, duration and display are explored in my own work. My current PhD project, *being made*, explores the use of one after the

⁴⁹ Weeks, 2011, p. 6.

⁵⁰ Wagner, 2000, p. 79.

⁵¹ Jones, 2006, p. 149.

other short peephole projections of bodily gestures. Up close, the lens instantiates an ambiguous bodily 'opening'. This lens performance aims for both a sense of scrutiny and ambiguity. Here bodily opening is not a physical entry or exit but a mechanism where looking and performing body conflate as sites of subject and object overlap. These made openings toy with decency, heightened by the address of the peep hole to explore relationships of regulatory and surveillance practices between self and others.



Fig. 5 Ruth Myers, *being made*, 2013. Projection, video and audio loops, Cardboard Boxes, Table, Dimensions variable, Auckland, Gallery Three, St Pauls Gallery, Auckland University of Technology, Collection of Artist.

Conclusion

The filmic body performances evident in early Kinetoscope films situates the viewer in a shared address, where a bodily positioning and reveal (mediated through technology) of both viewer and viewed points to a contingency of viewing. These encounters reflexively engage with our own performances of self and other as always being a moment "of pure present tense". I have explored these body performances as part of "normative work" where the scrutiny of the moving body is situated within the context of the physiological gaze which, while performed here through technologically mediated performance, exists in our everyday. The particular temporality and individual address of the early kinetoscope film encounter has been considered within both the cinema of attractions, and peep practice, as an in-between space; one where tensions between public/private, intensified visibility and isolation, a situating and dislocation, and disruption, position these performances as shared and to be contended with. Finally, this performative positioning has been linked to video art body projects and put forward as an opportunity where we can reflexively encounter our own performances of self and other.

Biographical statement

Ruth Myers is a doctoral candidate in the School of Art & Design at the Auckland University of Technology. She is a lecturer at the Southern Institute of Technology in Invercargill, New Zealand. Her research focuses on performance and media arts with a strong interest in historical film practices and feminist theories of gender and sexual identity. Her PhD project questions intersections of identification and performativity via video and sculpture reflexive body performance.

Bibliography

Crary, 2002: Jonathan Crary, 'Géricault, the Panorama, and Sites of Reality in the Early Nineteenth Century', *Grey Room Inc.*, Autumn, No.9, 2002, pp. 5-25.

Crary, 1990: Jonathan Crary, *Techniques of the Observer, on Vision and Modernity in the Nineteenth Century*, Massachusetts: MIT Press, 1996 seventh printing.

Gunning, 1995: 'An Aesthetic of Astonishment: Early Film and the (In)Credulous Spectator', in Linda Williams (ed.) *Viewing Positions, Ways of Seeing Film*, New Brunswick: Rutgers University Press, 1997 second printing, pp. 114-133.

Gunning, 1996: Tom Gunning, "Now You See It, Now You Don't", in Richard Abel (ed.) *Silent Film*, London: Athlone Press, 1996, pp. 71-84.

Gunning, 2001: Tom Gunning, 'New Thresholds of Vision, Instantaneous Photography and the Early Cinema of Lumière' in Terry Smith (ed.) *Impossible Presence, Surface and Screen in the Photogenic Era*, Chicago: University of Chicago Press, 2001, pp. 71- 99.

Gunning, 2006: 'Attractions: How They Came into the World', in Wanda Strauven (ed.) *The Cinema of Attractions Reloaded*, Amsterdam: Amsterdam University Press, 2006, pp. 31-39.

Hansen, 1991: Miriam Hansen, *Babel and Babylon, Spectatorship in American Silent Film*, Massachusetts: Harvard University Press, 1991.

Herzog, 2008: Amy Herzog, 'In the Flesh: Space and Embodiment in the Pornographic Peep Show Arcade', *The Velvet Light Trap*, Fall, No. 62, 2008, pp. 29-43.

Huhtamo, 2012: 'Toward a History of Peep Practice', in André Gaudreault, Nicolas Dulac and Hidalgo Santiago (eds.) *A Companion to Early Cinema*, Malden :Wiley-Blackwell, 2012, pp. 32-51.

Jones, 2006: Amelia Jones, *Self/Image: Technology, Representation and the Contemporary Subject*. New York: Routledge. 2006.

Musser, 2004: Charles Musser, 'At the Beginning, Motion Picture Production, Representation and Ideology at The Edison and Lumière Companies', in Lee

Grieverson and Peter Kramer (eds) *The Silent Cinema Reader*, London: Routledge, 2004, pp. 15-30.

Musser, 1991: Charles Musser, *Before the Nickelodeon: Edwin S. Porter and the Edison Manufacturing Company*, California: University of California Press, 1991.

Phillips, 1997: Ray Phillips, *Edison's Kinetoscope and Its Films, a History to 1896*, Wiltshire: Flicks Books, 1997.

Robinson, 1997: David Robinson, *From Peepshow to Palace The Birth of American Film*, New York: Columbia University Press, 1997.

Spehr, 2009: Paul Spehr, '1890-1895, Movies and the Kinetoscope', in Andre Gaudreault (ed.), *American Cinema 1890-1909, Themes and Variations*, New Brunswick: Rutgers University Press, 2009, pp.22-44.

Tilly and Watkins, 2008: 'On seeing through obstacles, across space and round corners' in *Sound Full, Sound in Contemporary Australian and New Zealand Art*, 2013, Dunedin: Dunedin Public Art Gallery, pp.41-43.

Wagner, 2000: Anne Wagner, 'Performance, Video, and the Rhetoric of Presence', *October*, Winter, No.91, 2000.

Weeks, 2011: Jeffrey Weeks, *The language of sexuality*. Oxon: Routledge. 2011.

Williams, 1989: Linda Williams, *Hard Core, Power, Pleasure, and the "Frenzy of the Visible"*, California: University of California Press, 1999, expanded paperback version.

Williams, 1986: Linda Williams, 'Film Body: an Implantation of Perversions', in Philip Rosen (ed.) *Narrative, Apparatus, Ideology, a Film Theory Reader*, New York: Columbia University Press, 1986, pp. 507-534.