The sense of presence:

How does the use of media technology challenge the notion of live in performance art?

C1: introduction

The question that led me to write this thesis has been to understand how the use of digital computing and the popularity of mobile smart phones are affecting live performance.

Last summer I was performing in an outdoor immersive theatre show of the film 'Back to the Future' in London, UK. It was part of a 'live' cinema event by Secret Cinema, who recreate the film to create a theatrical setting for the original movie to be screened within. On entering the event all audience members are asked to hand in their mobile phones for the duration of the show. On speaking with the Director, Fabien Riggall (xx) he insisted that it was less in the interests of censorship but more an attempt to acquire the full attention of their audiences. By handing in your phone, it makes a separation between the live, physical event and the screen of your smartphone. The gesture of handing in a mobile phone to encourage audiences to participate in the present and be un-distracted by communicating with friends and family outlines the distinctive properties of performance that the live arts (in this case theatre) is threatened by. This no phone policy has become a popular trend as musicians are requesting their audiences to give their undivided attention at music concerts. Last year, on her 35th anniversary tour, Kate Bush asked audience members to not use iphones and tablets so they could all *"share the experience together"* (xx). These pleas by musicians all seem to indicate the importance of presence and attention when viewing their performance. Beyonce, for example, yelled directly at fan in the front row *"You got to seize the moment. Put that damn camera down!"* (xx) And Roger Daltrey, the lead singer of The Who recently was quoted saying, *"I feel sorry for them, I really feel sorry for them. Looking at life through a screen and not being in the moment totally – if you're doing that, you're 50% there, right? It's weird. I find it weird."*(xx)

The focus on being in the moment and not allowing the phone to subtract from that feeling signifies a sense of a presence that performance demands from its audiences. The importance of presence is a core aspect of what makes performance live and distinguishable from other media. If musicians are reminding audiences of the importance of being present and attentive, what does this say about the state of technology and the condition of live performance? I will be exploring how technology has affected the conditions of performance by looking at specific works of performance art that use technology to challenge these pre-requisites of experiencing live events.

It could be argued that particular outcomes of the Internet and digital communication have affected how we experience live events in such a way that performance is in a crisis. Up until the past 10 years the distinction of live could be easily made between the original performance and the photograph or the video recording. However, in 2015, media and events are produced simultaneously and circulate online, on social media and on your smart phones. Media devices and technology that were once us to record performance are now used in conjunction with and play an increasingly responsive and active role during a performance. The temporal urgency of Web 2.0. and the portable present-ness of the smartphone, technology has become incorporated into the present moment like never before. To put it simply, the technology has become increasingly live so how does performance respond to that? I will create an overview of a situation that cannot be adequately resolved by simply handing in your phone to enjoy the show.

I will begin by summarising the positions made by Peggy Phelan and Phillip Auslander, both their analysis on performance and its relation to media and recording technology. The discussion between these two writers is a rich starting point towards looking at how performance has been affected by technology and has led us to the condition we are in now. The two writers open up perspectives on a discourse regarding performance and technology and I will reference their understandings of 'live' and their values of performance when looking at contemporary works. I have conducted a series of interviews with artists using technology in performance that in some way challenge the arguments made by both Phelan and Auslander.
By referencing the ideas of performance made by Phelan and Auslander it will become visible how technologies increasingly active role within the live moment of performance art is leading to bigger social questions in regards to the relationship between man and machine. The role of computers in the western world and the automisation of work done by machines has consistently displaced how the human subject relates the world. In January 2015 scientist Stephen Hawking and hundreds of others signed an open letter asserting the steady advancement of artificial intelligence and the importance of social responsibility that Artificial intelligence 'must do what we want them to do'. (xx) The relation between human and machine is potentially undergoing its biggest transformation to date, as the idea of artificial intelligence contesting humans is moving from science fiction entertainment to political agenda. By looking at works of performance art that use computers as non-human actors the distinction, capabilities and potential uses for artificial intelligence can be seen through the spotlight of performance. Within the ontology of performance you can identify specific values about what it means to be human and the importance of being (a)live, to act, to make decisions and to perform them. These values, of being physically present and temporally responsive and live, are how humans frame an understanding of the world that makes them distinct from their technological counter part. Performance art and its immediate interplay between human and machine can serve as a gateway into a wider discussion between mankind and machine.

C2: Two texts

I will briefly introduce the two texts that will provide the main positions regarding the importance of live and the dispute between performance and technology, before going through the key points made in both texts.
Phillip Auslander's 'Liveness: Performance In A Mediatized Culture' (1999) has been an important text as it makes a dramatic claim that all performance is another reproducible medium and a product of mass media. Peggy Phelan is one of the founders of performance studies International and wrote 'Unmarked: The Politics Of Performance' (1993). Phelan describes the performative act as something outside of technical reproducibility and based on a notion of absence. I chose these two writers because I find Auslander's analysis on the relationship between performance and media too general and I believe in the experiential quality of performance described by Phelan. The two writers have publically critiqued each other's views on performance, in open letters and interviews. Although they differ on how technology affects the values of performance they also have a common understanding of what why live is becoming increasingly important.

<u>Phillip Auslander</u>

'Liveness: Performance In a Mediatized Culture' (1999) takes a broad look at performance, from rock concerts, basketball games and legal trials, to demonstrate how media technology has co-opted performance to the point that they are both *'mutually interdependent'* (XX). Auslander aims to situate performance within a media epistemology, that performance is a product of the mass media and wants to dispel vague notions of there is being something phenomological that cannot be explained. In order to assist his argument that performance has become another reproducible media Auslander has to include all technology under the umbrella term 'mediatization', and that all performance that uses electricity to some extent is more or less mediatized.

'Live performance now often incorporates mediatization to the degree that the live event itself is a produce of media technologies (2005:40)

The issue is that if you take Auslander's definition of mediatization seriously than any performance that involves a microphone, an amplifier, a light bulb or any electronic device becomes a product of mediatization. Auslander admits that he uses the term *'somewhat loosely' [x]* and it is borrowed from Jean Baudrillard and who uses the term to define *'a cultural object (that) is a product of the mass media or of media technology' (Auslander 2005:4).*
The postmodern origin of the term mediatization affiliates all technology to be devices of mass media that proliferate saturated, simulated, electronic reproduction. This is my primary disagreement with Auslander's analysis, in that in his generalization of all technology as products of mass media he fails to give any agency to different technologies and how it can be used to produce live, generative and unexpected performances. I am not content with

simply categorizing all media as tools of reproduction and I will update this analysis with technology that should be understood as tools of production.

This situation represents the historical triumph of mechanical (and electronic) reproduction (what I am calling mediatiaztion) and Benjamin implies: aura, authenticity, and cult value have been definitively routed, even in live performance, the site that once seemed the last refuge of the auratic' (2005: 70)

Auslander uses the notion of authenticity proposed by Walter Benjamin to propose that all modes of performance are now mediated to a point where the original and the reproduction cannot be separated. To move away from the *'common assumption is that the live event is 'real' and the mediatized events are secondary' (2005:3)*. To no longer think of there being a secondary, artificial reproduction and an authentic real that is *'tied to physical presence'* (Benjamin :xx) This is helpful in taking the role of technology within performance more seriously however Auslander fails to describe what the technology is, what it is doing and how it can change during the performance of a live event. His view of technology as 'electronic reproduction' is simply too broad a claim. Auslander's neglect of what the technology is and what it is doing leaves a vast landscape of technological based performance art that do not fall under products of mediatization. Computers can become actors, scripts can respond to different inputs, interactive generative technology that does not just reproduce. I agree that we should no longer think of technology as a secondary reproduction and through examining the role of technology in performance a much more accurate analysis can be made rather than dismissing *'performance being another reproducible text'*(xx)

Auslander uses the term liveness to measure the quality or value of live experience, often in relation to how mediated a persons performance is. The word liveness refers to the quality of a live experience of something happening at the same time.

Liveness: *The quality or condition (of an event, performance, etc.) of being heard, watched, or broadcast at the time of occurrence. (xx)*

Considering a performance or a technology as live and measuring the quality of this experience can help unpick what works and doesn't work when technology is used within performance. Liveness is a way of highlighting Auslander's position that recorded technologies bought live into being and that before records, radio, films and television everything was just live, there was no need to declare it as anything else. This is the prevailing trajectory Auslander takes to frame live as product of recording technologies and media and that recording technology has bought live into existence.

<u>Peggy Phelan</u>

Peggy Phelan is one of the founders of performance studies International and wrote 'Unmarked: The Politics Of Performance' in 1993. Phelan says she is looking for a *'theory of value'* (xx) that is created through the performative act that is rendered (in)visible by its very disappearance of being. 'Unmarked' describes performance as an act of absence and disappearance and its unique ontology that *'performance's only life is in the present'* (1993:146).

"Performance's being, like the ontology of subjectivity proposed here, becomes itself through disappearance " (1993:159)

Phelan describes performance as the passing of time and the disappearance of bodily acts into memory. This, she says, makes performance unique and distinct from other media. What is important to note about Phelan's position is that she is referring to media as documentation and how it alters the representation of a performance. The reason for including her views in this text is because I would argue that certain technologies (that I will discuss later) are now adhering to and creating the ephemeral, disappearing act that Phelan describes. I want to specifically look at chapter 7, where Phelan summarizes her view on the relationship between performance and technical reproduction. I want to pay particular attention to the way Phelan describes the temporal vulnerability of performance and that it *'plunges into visibility-in a manically charged present-and disappears into memory'* (1993:161). This temporal vulnerability of the present moment is what makes the sensation of live so exciting. In the next chapter I will look at how the temporal liveness can be experienced through broadcasting and the rise of Internet video streaming used within art institutions.

'Performance art implicates the real through the presence of living bodies' (1993:148)

Phelan asserts a traditional notion that performance requires the presence of living bodies. Phelan's position on performance is based on bodies, physical presence and their acts disappearing into time. This is something I explore in my practice when making performance works with technology, the importance of physical presence of a human subject that can make a performance an uncontrollable live event. I will take this view and apply it to non-human actors and the way machines can imitate presence in performance. I am forming my argument between these two writers because I believe in what Phelan says about performance and I find Auslander's analysis too general and all

encompassing. His broad use of the term mediatization leaves no room for art that produces the ephemeral experience described by Phelan though both the physical presence of the body and the performance of the technology. I find through my own practice and the works of other artists that the ephemeral nature of performance and an uncontrollable tension of liveness can be achieved though interplay between human actor, technology and audience.

Comparison

Its first helpful to look at a common themes between the two writers. Phelan does not explicitly use the word 'liveness' but she talks about disappearance being fundamental to the ontology of performance and that as soon as it is written or recorded it becomes something else. Liveness can be thought of as the absence of writing; it is something that is encoding and decoding simultaneously and continually being lost in the agency of time. Both writers define live in relation to what it is not, Auslander situates live in relation to media recordings and Phelan describes live acts through its disappearance. Actions and gestures are understood as live because of the absence of their recording, this is what makes live performance valued as it comes to existence through its disappearance. If Auslander defines live in relation to recording media and Phelan defines live in relation to mortality and an understanding of death, both analogies rely on an other or an alternative to validate live performance. This notion of 'other' is relevant when thinking about time, mortality and presence in performance. When performing alongside a machine or non-human actor they have no sense of this other, the present moment is a repeated state that has no sense of past or future. I will explore this idea further when looking at performing with non-human actors and how computers do not interpret these important aspects of liveness in their performance. Although they both employ an 'other' to present their view of live performance, the use of media, representation and technology divides their views. This is made obvious in their debate around whether performance art is outside of the economics of reproduction. To put it in their own words, Phelan writes *'Performance's independence from mass reproduction, technologically, economically, and linguistically, is its greatest strength'* (1993:162) while Auslander directly responds to Phelan in his book saying that it is naïve to think that any *'cultural discourse can stand outside the ideologies of capital and reproduction' (1999:45)*. I want to question whether performance art is still outside of the circulation of reproduction, and to look at the broadcast of performance over the Internet. The temporal liveness of video streaming is a good example of how the live nature of performance can be adapted by technological advances and the demands of the market.

A secondary aspect that has evolved through looking at writings regarding liveness, performance and technology is the role of the human and weather the question of what makes something live opens up wider questions on mankind and technology. In chapter [x] I look at performances with chatbots, automated robots designed to imitate human language, and how their ability to imitate living humans further challenges what constitutes a live

performance. Returning to the descriptions made by both Phelan and Auslander, it seems that certain types of technology challenge Auslander's perspective and make the performance described by Phelan even more integral. The need for human physical presence, the need for an uncontrollable state that opens the *'possibility of both the actor and spectator to change during the events unfolding'* (xx).

Although this research predominantly references the two texts that were published in the 90s, I incorporate revisions made by the authors and articles that have been published since, interestingly although Phelan has somewhat avoided the subject of technology in performance Auslander has not only revised a chapter on liveness in 2005 but frequently published reviews of performance works that subvert his claim made in 'Liveness…'

Time in performance and media.

This chapter will look at how the two main features that makes performance a unique ontology; a temporal immediacy and a physical presence have been disturbed and challenged by some technological advances.

Time in web 2.0.

The first is the change in temporality and speed in which the Internet now operates that can be signified by a shift in the early 2000's to web.2.0. Web 2.0 was a tactical rebranding of the World Wide Web to make it more about interactivity and collaboration about participating and socialising though interacting with a webpage. To achieve this fluidity of communication the Internet became asynchronous and websites went from direct static pages to dynamic sites that take form from a multitude of server requests. The experience of the Internet therefore changed as WebPages refreshed and consistently updated with the latest content. Web pages were built to be responsive so that each interaction by the user triggered something but it's not just the technical alterations but also the wider focus on the web being a social environment and requiring human participation. Social media platforms like Facebook and Twitter structure their content based on time, every post or comment is time stamped and displayed in the order of most recent. Facebook for example adds 'Just Now' or 'Just a few seconds ago' (xx) in the ongoing arrest for user attention. The streams of posts, comments, and updates are organised in order of immediacy. The instantaneous temporalities of the Internet and its social platforms have been used as a medium to broadcast and experience works of performance art. In 2012 Tate Modern launched 'Tate Live' 'a series of performances commissioned and conceived exclusively for the online space and are broadcast live across the web ' (xx) and Marina Abramovic's online research platform for 'immaterial and long durational works (xx). The quality of the work varies however they are the latest examples of how large institutions are creating performance programs that converge with the internet & popular digital media platforms (YouTube etc). When an artist chooses to broadcast a live performance via the Internet they prioritise a temporal liveness over a physical shared presence between

themselves and the audience. In light of the views of Auslander and Phelan it seems that the use of the Internet to live stream a performance turns the event into an immediate video representation. Although the video stream may have the temporal liveness quality the experience of the audience is similar to watching television. In this regard I would argue that video streaming damages the enchantment of experiencing live performance, and in Auslander's terms turns performance into another reproducible medium. How can the Internet be used to heighten the sensation of experiencing live performance, rather than reduce its live ephermarlity into a pixelated window? I would argue that for the majority of live performances that are webcast or video streamed the tension of the unexpected situated within the live moment is lost. However the same social media platforms that broadcast a live event can also be used in other ways to produce a performance, rather than represent it. A good example is '6pm your local time', an event happening on the 22nd July 2015 is a distributed exhibition taking place in many art institutions, galleries and artist studios at the same time, and documented under the same hashtag'(xx) Here the appointed time is the binding agreement for a series of simultaneous actions and performances that are broadcast over social media platform(s). Another example is the leap second festival 'The leap second festival is an open, free, distributed, international, non-profit festival for art, technology and precarity coordinated on the Internet. (xx) This festival takes it starting point as the second that is missed every 2 years with Universal time standards.

Both of these events curate performance work, actions and gestures that are bound by their synchronicity to make a networked performance that embraces the distance and lack of shared physical presence. There are examples of how the mobility of networked culture and its always-on connectivity not only enable dislocated performance happenings but the effects of these systems on our sense of time are becoming subjects in themselves for artists to explore. Some artists are utilizing the liveness of social media platforms to curate networked performance rather than imitate older mediums like television with webcasting and video streaming.

Ephermality in digital communication
Phelan vs. snapchat.

Another recent medium I want to address in relation to the thoughts of Peggy Phelan is the communication platform 'Snapchat'. Snapchat is a video / image messaging mobile application that only permits the recipient to view the media once, once played it is deleted. Mobile communication services such as Snapchat and Frankly, both let users send images and video that can only be viewed once before it is deleted. These are recent trends and are not in a minority with (x) amount of users and in September 2014 Snapchat was valued at 10billion U.S dollars. The media (in the case image and video) is deleted after viewing and disappears similar to the performative act described by Phelan. The media is being programmed to imitate the valuable sense of loss and ephermality that is integral to performance. I am not attempting to call messages on Snapchat as works of live art - it is a communication service that is incorporating the idea of disappearance to a reproducible media object.

It demonstrates how much the properties of performance that Phelan described as unique to its ontology are being appropriated in media and communication. The examples so far have of been of art being performed in 'real-time' with internet streaming, events co-ordinated by social media or performativity in digital communication. These technologies only become live through their temporal immediacy and still do not seem to threaten or challenge the physical presence of performance. I now want to present how a computer can imitate a human in physical presence.

Bots

This last technology that I want to look at is not a recent development but its ubiquity has led to it being used in performance works. Chat bots are a particularly type of robot designed to imitate human characteristics with text based or voice synthesis and interact in a similar way to human beings. Chatbots are not a new phenomena, Joseph Weizenbaum created 'Eliza' in 1966, a type of therapist Bot that repeats user questions back to them thus giving the impression of talking to a very inquisitive listener. Chatbots have become increasingly popular and from 2011 came installed on the iphone. Chatbots (like Siri) are effectively able to perform with humans in real-time and therefore present a technology that is able to perform as live as a human being. This caught Phillip Auslander's attention and In 2002 he attempted to revise his original claim with an article in Performance Art Journal titled 'Live from Cyberspace: Or, I Was Sitting at My Computer This Guy Appeared He Thought I Was a Bot'. In this article he attempts to reframe the discussion around live to register Chatterbots that according to Auslander, '*undermine(s) the idea that live performance is a specifically human activity; it subverts the centrality of the live, organic presence of human beings to the experience of live performance; and it casts into doubt the existential significance attributed to live performance.*' (Auslander 21:2002)

This is where Auslander begins paying a bit more attention to the technology and looks at how Chatbots are programmed to operate, because of their ability to respond in real-time, they become more than a tool of reproduction. He even begins to echo Phelan by expressing the necessity of the 'organic presence of human beings' to be able to distinguish between man and machine. He is right to highlight how the development of technology has changed from that a tool of reproduction to production where it therefore becomes possible for Bots to be understood as a live performance.
"Although chatbots are programmed and draw their conversational material from data bases, their individual performances are responsive to the actions of other performers, autonomous, unpredictable, and improvisational. That is, they perform in the moment" (Auslander 21: 2002)
This article is important because it demonstrates just how much one type of technology can reframe what constitutes live between a human and a machine. It highlights how our understanding of what constitutes a live performance is changed by the implication of certain technologies and how Phelan's notion on physical presence becomes even more relevant.

Section 3: My Verdict

In this chapter I will present performance and theatre works that employ the technology that I talked about in chapter 2 to create ephemeral, improvised and non-human based performance art. Through interviews with artists and examples of work of myself and others I will frame my practice amongst other technological live performance art.

Non-human actors

Algorithmic Theatre.

Annie Dorsen is a theatre maker and in (sic) published a short text introducing her work in the context of 'Algorithmic Theatre'. In this text, Dorsen describes how algorithmic theatre and performing with computers challenges what our understanding of theatre is and what it could be. She situates theatre's cultural role as mirror to society and then continues to explain how including algorithmic computation in theatre challenges what she calls the 'initial axioms' of theatre that are; embodiment, ephermerality and language. I became interested in her work after seeing a performance of 'Hello Hi There' at Impakt Festival in October 2014. In this performance two computers are on stage with two simultaneous screen displays projected behind the computers. The two computers use a custom made chat Bot and a synthetic voice to converse with each other and discuss extract taken from a television debate between Noam Chomsky and Michel Foucault. The two chatbots endlessly talk to each other back and forth in an unstable balance between sense and nonsense. The piece is about language production and weather language is a specific human skill that requires a specific human creative quality. To say that the technology is producing something new every show is true, it is improvising and no two shows are the same, it is creating a liveness that is unexpected and unplanned to an extent. However it can be argued that because the language the bots are using and the sentences they are forming are all taken from databases and samples of recorded linguistic data, it is simply an act of reproducing these words in front of an audience that qualifies this action as performative. This argument is made more extensively by performance theorist Herbet Blau who responds to Phillip Auslander's article on chatbots in Performance Art Journal. In 'The human Nature Of The Bot' Blau claims that chatbots are not a live performer as they are reproducing human language and the rather than reframe the discussion of liveness they highlight how the premise of liveness is based on human centred subjectivity. *'What we have through the digital technology is the invisible appearance of liveness, but not what-at the sticking point of performance, rarely to be sure-is its inarguable manifestation.' (Blau 24: 2002)*

Blau highlights unexpected elements attributed to the physical performer like a coughing fit or a unscripted laughter that make the liveness of performance a human related activity. I am not convinced that these hesitations or

improvised moments are a solely human attribute and I talked to Annie Dorsen about how she attempted to program or automate the frail nature of the human on stage into her chatbots. Dorsen talked to me about using tactics to sculpt the bots performance from somewhere between the 'real' human like and the automated absurd. She programmed random pauses to imitate thought and hesitation and even added 'creative speech randomization' which adds rhythm to the voice synthesis. These tactics to humanize the Bot's performance can be seen as attempts to make the computer more live, less stable, more unexpected and less scripted. However Dorsen is not simply trying to play the imitation game, she puts both laptops centre stage and makes the condition of the performance very clear to her audience. This is why her work is of interest because she creates the tension of the unexpected live performer on stage, but without a human actor. Dorsen is interested in the proposition that 'Hello Hi There' makes to the audience and when I asked her what how the absence of body affects the tension of live she reversed the phrase to ask what does the human take away from a performance? By putting two computers on stage and programming them to perform you are directly propositioning to the audience to imagine, to challenge their ability to creatively perceive the action without the assistance of a living breathing human. *'by being forced out of human logic by dealing with an alien logic (computational logic, algorithmic logic) its activating the human imagination and its capacity for invention, the creativity of the listener, its activating it in some very exciting ways.' (xx)*

Having no physical bodies on stage challenges the audience in Dorsen's work to imagine, to test our ability to imagine something as if it were something else. She concludes are discussion with a nod to the mathematician Alan Turing saying that *"we don't really know what thinking is, so we cant reproduce it"* but *"looking at the computational versions of these things can teach us something about what creativity is".(xx)* I think this perspective is useful when looking at the value of live in performance, we don't really know what the essence of liveness is, however by experiencing it staged by computers we can begin to understand more about why it is important to us.

Karen and Blast Theory

I spoke to Ju Rowe-Farr one artist from the collective Blast Theory who make games, theatre and performance often using technology in their shows. Their latest work 'Karen' is a described 'life coach' that interacts with audiences via an application on their mobile phone. After completing an initial questionnaire that profiles you Karen then contacts you in an informal friendly way, asking questions and being inquisitive about your life. This relationship continues as the data profiled on you begin to shape the relationship you have with Karen. As 'she' gets to know you and reflects on the data that you have submitted, the sense of surveillance is masked behind a caring friend who calls you at inconvenient times. After talking to Rowe-Farr about Karen I found an interesting aspect that happened during the development of Karen. The actress is performing the responses from the Bot, which have all been programmed in before hand, so it's a case of bringing the chatbot to life. So

once the Bot had been developed and the questionnaire made, Karen was filmed responding to all the different answers and possible scenarios so that the system could be bought to life. Although this was unintentional it highlights this imitation game between physical live performers and digitally live performers that make the question of live or not live really interesting.
We began discussing Karen and then looked at other Blast Theory works where the technology had created a sense of live with the audience or player that really worked. In regards to technology being live or not live Farr thinks there is an *'obsession with it happening now, live in real time. Partly it matters, partly it doesn't matter.'(xx)* Although it is not Rowe-Farr's main consideration when making a work there are demands that a live event can make of its performers, audience and technology. These temporal or physical conditions of live can make a strain that occasionally brings out a magic or a completely spontaneous moment but it's through a combination of elements where this magic will sometimes happen. When talking there seemed to be a prevailing attitude that using technology in performance was more economical and could simply sustain longer than a human being ever could. The technology can loop and execute without degradation of transformation, this is useful for creating reliable stable systems but what about when we want the technology to slip up, to make an accidental error, to improvise and perform?

Trying to get software to improvise in response to my actions and in turn to create a performance in partnership with the computer is an aspect of my performance work. In Foley Narrative (2013) I use speech to text software to interpret the sound of objects to emit words onto a projection. The script of the computational software is responding to my actions and producing text that forms a generative narrative for performance in front of an audience. The process from household item, to software, to translation, to performance is happening live and performed in front of an audience. The software, in this case speech to text, has a certain restriction, it has been scripted to perform in a certain way, and software has a behaviour pattern and a character that I want to unlock in a performance. Through rehearsing and practicing a vocabulary was built upon so that the sound of a matchstick might say 'is' whilst the bang of a shoe would say 'you'. But always leaving lots open to for the software to improvise, some performances were better than others; there was always the tension of failure. When looking at what digital technologies are good for using in live performance, one could say all of them; what's more important is the type of performance. For example take Blast Theory, whose works involve a game play element between their audiences and the technology; these interactions are based on a set of rules that then allow for the audience to engage in certain ways. In my performances I attempt to make the technology perform through improvisation and to sustain some narrative tension.
This method of (miss)interpretation that I have been developing as a way to get computer software to improvise in a performance is an example of technology becoming a tool of production. Auslander makes a similar comment after experiencing an installation called 'Listening Post' by Ben Rubin and Mark Hansen. In what seems another revision of Auslander's initial argument he begins to count certain technologies as performers if 'The

distinction is that between a technology of reproduction and technology of production' (xx). These are technologies that make 'decisions' that respond and should be seen as a different category to 'playback' media. However although this follows my line of thought his clarification on the difference between human and non-human performer will also need revising soon. He claims that *"the fundamental difference between human performers and machine performers is that whereas the former have the potential to exercise both technical and interpretative skills the latter have only technical skills at their disposal"* (xx) This is changing with increasing programs that are designed to interpret the world to certain degrees and respond with the interpretation made. Interpretation of speech in speech to text software and image analysis software all perform technically and make an interpretation that should be considered as a performance. As software built around imitating human senses become increasingly available the roles for computers to play in performance art will become increasingly insightful and exciting. But this will only happen if the computer, the software and the hardware, are given more agency to demonstrate their performative qualities rather than used as ways to highlight the performance of the human. Too often are the digital aspects of a performance hidden behind the curtain or glanced over as the audience squint to see the 'real' thing. I encourage people to stop thinking of the human as the real actor and the technology as the artificial prop that is secondary to the performance.