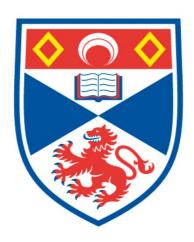
THE SILENCE OF THE LAMPS: VISIBILITY, AGENCY AND ARTISTIC OBJECTS IN THE PLAY PRODUCTION PROCESS

Louise Stephens

A Thesis Submitted for the Degree of PhD at the University of St Andrews



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The Silence of the Lamps: Visibility, Agency and Artistic Objects in the Play Production Process

Louise Stephens



This thesis is submitted in partial fulfilment for the degree of PhD at the

University of St Andrews

13th October 2015

Abstract

This thesis is a case study which looks at the creation of two theatre productions. Using the literature of Actor-Network Theory as a methodological provocation, it analyses the processes by which networks of actors created these theatre pieces with particular attention to where agency was observed. Through data gathered through observing material interactions, the thesis develops the concept of the (play)text: an object that is an expression of the ideas of the text, but is not the text itself – rather, a bricolage of 'translations' of a piece of written and rehearsed work bound together by time and combined action. Conceiving of the eventual product – the (play)text in performance – as parallel to the ANT concept of an agencement, a network of different people and objects working together to maintain a stable construction, but one which perpetually refines and redefines each of its component parts – this thesis proposes that the (play)text is an example of a dynamic and fractional artistic object, stabilised only briefly in the moments of its performance. Examining the theatre production process in this way contributes to ANT literature by providing specific examples of an artistic object created materially and agentively; it also highlights the limitations of the ways in which theatre has been used as a metaphor within Organisation Studies. Finally, it contributes to work on process in showing an object which is, though it appears constantly improvisational and changing in its form, stabilised by material interactions.

Declarations

Candidate's declarations

I, Louise Stephens, hereby certify that this thesis, which is approximately 78,335 words in length, has been written by me, and that it is the record of work carried out by me or principally by myself in collaboration with others as acknowledged, and that it has not been submitted in any previous application for a higher degree.

I was admitted as a research student in September 2009 and as a candidate for the degree of PhD (Management) in September 2009; the higher study for which this is a record was carried out in the University of St Andrews between 2009 and 2014.

Date 13TH October 2015

Signature of candidate

Supervisor's declarations

I hereby certify that the candidate has fulfilled the conditions of the Resolution and Regulations appropriate for the degree of PhD (Management) in the University of St Andrews and that the candidate is qualified to submit this thesis in application for that degree.

Date 13th October 2015

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Dedication

This thesis is dedicated to the memories of David Maclennan and Robert Stephens, whose inspirational examples charge the following.

Chapter One: Introduction

My initial interest in exploring the theatre production process in an Organisation Studies context came from some observations I made whilst working for theatre companies in the subsidised professional theatre sector. In the course of my work, I became interested in the language other theatre practitioners used when discussing plays; in particular, I made two observations. The first was about the use of the word 'play'. My colleagues could glide seamlessly between using the word to mean a pile of bound pages, an idea for a story and a set of characters, and a performance by a group of actors in front of an audience; they used it to mean one of these concepts on its own, or more than one of these concepts simultaneously. The multiplicity of things that the word 'play' could refer to at once did not seem to trouble or confuse on very many occasions. The second was an observation I made about the words that the theatre practitioners used when they referred to plays (an observation that, I noted, held across different theatre cultures, different roles, different statuses and different working methods): they often referred to the play as if it was agentive. Directors might say, "it feels like it needs something here"; they might say, "it's crying out for a pause in that moment". "It feels like it wants an interval here," I would hear in programming meetings. "I don't know what sort of play it wants to be yet," a playwright might say. "The play is determined to take us there, isn't it?" a colleague might say as we discussed a plot point. "It's asking for a lot of loud noise at this point," I would hear a sound designer say. Practitioners talked of the play's wants, its needs, its demands and its desires. And this was not only the artists who came in late in the process: as much of my work brought me in contact with the writers who first created the text for these plays, I was aware that this agency was, for them too, something they attributed as external to themselves. My colleagues spoke this way in the knowledge that the play was not a conscious being, but they were clear in their implications: for them, the play in its multiple incarnations could be considered to have some sort of agency.

When I started to look at literature within Organisation Studies, I became frustrated that analyses within the Organisation Studies literature that I encountered felt limited in a number of ways. My first observations were directly linked to theatre. Looking particularly for work on artistic creation and specifically for work about theatre production, what

studies there were of theatre-making tended to 'black box' the journey from text to performance and missed much of the nuance I had identified in my professional practise, particularly regards the material world. Theatre production processes are full of objects: not only visible objects, but also objects that are invisible in the final production; not only objects related to the mechanics of staging, like the hosts of pulleys and weights that swing open a trapdoor, but also the stage props that help create the worlds in which the performers rehearse, objects which were always-present in rehearsal but which become absent in performance. I did not feel that the importance of the material was explored. Time also felt somewhat absent, and the combined qualities that for me make the end product of a theatre production feel so unusual in comparison to many artistic products — the ephemeral nature of the final product; its relationship to the material; its relationship to space and to bodies in space — did not seem to have been probed. In fact, detailed observations of the process of creating a piece of theatre seemed somewhat absent.

Theatre had been examined as an area of study by Organisation Studies accounts. I read reports in which theatre shows were used as models by which to analyse organisations through analogy (Boje 1995). I read how organisational theatre worked within organisations as a problem-solving tool, helping organisations communicate with their employees (Meisiek and Barry 2007). I read an entire volume of the journal Organisation Studies (2004: 25 (5)), compiled after a 2002 conference entitled Organizations as Theatre and Organizational Theatre, with interest. The version of theatre I read of in these pages, though often thoughtfully applied to organisational settings and intellectually engaging, did not immediately strike me as resonating with my understanding of theatre's workings, practical and theoretical (the nature of my experience, I detail later). In this first stage of research, I was struck by how often the role of the actor was discussed and made central; I was very used to performers being an important part of the process of realising a play on the stage, but I was also aware that there were many other roles too. I read these accounts with interest – particularly when they highlighted the problems in directly comparing acting in a theatrical setting with the roles that people play in everyday life:

"However, it has to be acknowledged that theatrical acting is clearly not synonymous with social acting. In particular, the stakes in social life are much higher, and the audience is likely to be both less committed to playing its part

in sustaining a successful performance and highly committed to its own performances."

(Schreyögg and Hopfl 2004: 692)

These accounts provoked me to think not only about the centrality performing and performers were given, but also made me question some of the terms used and ask why they were troubling to me. What was 'social acting' and how was it different from acting on a stage? The difference between acting as a performer and metaphorically acting a role in everyday life was surely to do with the space in which this acting occurred – the material space of a theatre building contextualises an 'act' and helps the audience understand what they see. The material which surrounds the performance is therefore important – not only in the abstract, but in the particular. In my own daily reading of scripts sent to my company for consideration, I read plays with one question in my mind: why is this play the right play for my theatre company to produce in one of our auditoria? Those auditoria, when I pictured them, were embedded in a very specific material setting; they were composed of specific bricks; they had some immovable physical qualities. Productions and performances we rehearsed in this building were designed, were built for these spaces, intended to be surrounded by these particular walls. Part of my role in reading scripts was to determine whether they were right for the company, but with colleagues I would not refer to 'the company' but 'the building', as if the bricks themselves desired some plays and rejected others. Coming from a setting where the material was so active and so thought of in every programming decision, descriptions so separate from the material seemed alien.

The studies I read which engaged with theatre often did take seriously the material during performance, in particular the bodies of the audience and the space of auditoria in the moment of production. But the role of the material in the process of reaching performance seemed as underexplored as the process itself. In fact, more generally, I observed that whilst there were explorations of how objects were used in organisational settings, there were few accounts which embraced the possible multiplicity of an object, and not very many, on my initial probings, which embraced the idea of objects as potentially agentive.

Thus to an extent my engagement with Actor-Network Theory (ANT) literature was provoked by reading ANT accounts which conceptually conceived of material objects in a way that suggested they could be multiple and agentive, as my instincts and observations of theatre materiality also suggested. The accounts I read from an ANT perspective also detailed process in a manner that paid close attention to material interactions and thus resonated with the processes I had observed in theatre companies' buildings and in rehearsal rooms more than other accounts that I had encountered within Organisation Studies. In my reading of this material, I then encountered a concept which resonated still further.

Law (1999) develops the idea that the performed qualities of each actor in a network is dependent on their relationship to the network as a whole, but also that each relationship between each actor is also relational and that this quality is part of what gives the network as a whole its shape. I considered this in relation to my own experiences, where I had observed the ways in which performers relied on one another to make a performance – how their relationships to not only the text, say, but also to their fellow performers created the performance of the play. More exciting than this alone for me was the fact that the physical space too, I'd observed, prescribed so much of their actions; most exciting of all was the possibility that objects too were, in ANT studies, acknowledged as having their own relationships and contributions to building the performance. When I considered the important role I had seen an individual piece of machinery play – exposed only when it stuck mid-performance, for example – I felt that there might be useful insight to be drawn from a study of theatre that employed an ANT-inspired methodology to draw a fuller picture of the mechanisms of theatre not only as a study in its own right but also to refine the understanding of roles, the material and theatricality in understanding organisational behaviour.

As a result, this thesis is a case study which looks at the creation of two theatre productions in Scotland. The focus and field of study for this thesis was suggested to me by an instinct based on my professional experience. Professionally, I am a dramaturg and have worked in professional subsidised theatre for nearly a decade. There are so many definitions of dramaturgy that I shall give a succinct one based on my own professional practise within

text-based theatre¹. Dramaturgy is, at its basis, the shaping of the contents of a piece of live performance. Its relationship to a piece of performance is anchored around the text. The text may be words on a page or it may be another incarnation of the ideas which the text tries to capture – for example, performers moving in a space whilst speaking words. Dramaturgy is practised by all the creative team making a play – the director, performers, designers, composers. However, whilst the rest of a creative team are also fulfilling another purpose – performing the text, directing the performers, designing the set – dramaturgs fulfil only the dramaturgical role in the rehearsal room. The advantage to this is that dramaturgs can concentrate on observing and commenting on the structure and content of the performance, but as the role in Britain is not well established, this can mean the role is not always accurately or positively perceived within the industry. The result is that both as a requirement of the role and as a consequence of the sometimes-tenuous position of the dramaturg within the rehearsal room structure, as a dramaturg it is not unusual to be often in a state of silent observation, verbally reflecting on the shape of the play and its discrete elements only at carefully chosen moments. The content of these observations is a combination of notes about the direction that the piece is moving in – its macro-level overarching objectives, its politics, the events of the play which are portrayed – and small, carefully-chosen observations on details that may have been overlooked by other members of the team through the demands of their own roles or their closeness to the material. As a result, I have spent a lot of time reflecting from a somewhat detached position on discrete elements of the theatre production process and how they work in combination with one another; I am used to very carefully inserting certain thoughts or underlining pertinent points into a situation where a group of people are making a project together and of seeing the consequences that this small insertion can have; I am used to observing all of the actions of the people making the work and how they are working together to do this in order that I can analyse the entire effect and offer reflections upon it.

Dramaturgs, like academics, have a broadly collective objective but also individual ontologies and I will briefly outline into my own understanding of the objectives of the role here on order to contextualise the following work. My work is contextualised by my

¹ This is not the only way to make theatre but I shall not detail others in order to avoid a lengthy and ultimately not entirely relevant excursion into the many ways to make theatre.

understanding of what live performance is and hallmarks of how the process from imagined idea to piece of performance operates. Live performance is played out in real time and is subtly different in every iteration. The audience are generally in the same physical space as the performers. My own dramaturgical method is born out a particular positioning towards the writer: I conceive of my role as a dramaturg to consist of four parts².

The work of the dramaturg can occur in or outside of the rehearsal room where productions are formed. The first part of the role is external to this space and consists of reading and assessing scripts, responding to them in writing or verbally to either the playwright or internally to colleagues. This role requires me to think about both imaginary and real space at the same time: I need to have the ability to picture the story that the writer has chosen to tell in an abstract sense and envisage how it would work in an actual physical space. By this, I mean that I am required to imagine the consequences of the spatial dynamics embedded in a script: for example, if the set contains seven long scenes in a drawing room and one three-minute scene in the middle of these in a space-ship, this has consequences both for the pacing of the story of the play (the imagined story world – 'imaginary space') and the practicalities of achieving it in theatre space ('real space'), because there are physical consequences and restrictions as to how quickly and easily an entire set can be set up then changed back again. As a result, the objects that the playwright imagines – the set of a space-ship, in this case – are ones whose consequences I need to consider.

The second part of the role is to consider the potential match between the play and the potential producing company. In reading a play for a particular theatre, I would have to imagine how the play would work in a *particular* physical space: generally the spaces that are (for example) part of the theatre company's building, or ones which they do not own but in which they often produce work. The dramaturg also needs to consider the *artistic* space that that theatre company inhabits. The size of the theatre spaces a company possesses influences the scale of work that a company is creating; its objectives and aims as a company no less influence the work it will select for production. Most theatre companies state what their artistic objectives are on their website; I use touring company Headlong here as an example. These statements might give an indication of their working practises —

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² Dramaturgy is a term that is variously employed in a large variety of contexts – I define here a term of theatrical relevance.

"commissioning new plays from theatre's most exciting writers to sit alongside radical reinvigorations of the classic repertoire" – alongside descriptions of the qualities the company believes their work encapsulates – "exhilarating, risk-taking and provocative"; "explosive" (Headlong: About Us). This means that in a play's themes, its objectives, its subject matter, its tone, its politics, or in the events or topics that it represents, a play needs to fit the artistic niche that the theatre company inhabits as well as its concrete physical spaces.

The third part of this role is to help the writer to get words on the page which create a blueprint for the performance. My objective is to help the playwright to get the words on the page that communicate as closely as possible the play that the playwright has imagined in their head. It is also to question the consequences of the decisions they have made and check whether these consequences are intentional: for example, did the playwright mean to portray the only female character as passive and weak; what message might the audience take away from the play as a result?

The above work all occurs outside of the rehearsal room. The fourth part of the dramaturg's role in my articulation of it occurs within the rehearsal room, where a dramaturg's function is to help the entire creative team to build a play which, ideally, achieves that which the playwright had imagined. In a perfect world, the play which is built is a collective imagining based on the playwright's vision; for some playwrights, the perfect result might be the perfect articulation of precisely what they'd imagined. However, as a collaborative medium, it is fair to say that the perfect production of their play for most playwrights would be one which presented to them surprises too: ways of articulating their initial vision or imagined story that they imagined which they could not have arrived at alone. As a result, for a dramaturg, If the overall objective of the production shifts, ideally it would be towards building a play which responds to and relates to the writer's objectives in a way that the playwright feel serves their story well; if not, the dramaturg might be required to point out or question this shift. This professional ontology gives me, as I see it, a certain proclivity to focus on specific objectives: to questioning the effect of minor decisions on the overall path of a performance; to checking to ensuring imaginary and real stories maintain a commonality. As a result of these types of considerations – considerations of the real and not-yet-real – in my working life I am much concerned with the point at which

many types of the imaginary and the real intersect. The imaginary worlds I have imagined or seen may look nothing or everything like ours; I may be required to imagine a world where boys are accustomed to eating butterflies or where newspapers can talk. But to achieve them in the theatre space I must imagine them intersecting with a real space made of physical objects that respond to our laws of physics, no matter how much in the space of a play the characters defy gravity. The physical and imaginary spaces of theatre also contain and communicate specific types of meaning – the space is engaged in a constant dialogue between the metaphorical and the actual, as I later explore through the case study data. Perhaps as a result, I am used to thinking about the visible and the invisible at the same time and in relation to one another; about how imagined and actual objects could, or do, interact.

When I came to consider the topic for this thesis, I imagined that it might in some way draw on the observations I had made as I progressed through the material of my professional life. Initially I did not think it would draw so directly on the experience I had had both within and without rehearsal rooms in making performances. All the time which I spent daily thinking about how the imagined and the real intersected, and about the different ways in which invisibility and visibility affected what an audience experienced in a theatre space, and about how metaphorical and 'real' space intersect, seemed missing from the literature I read within Organisation Studies. I read about how people were like performers (in, for example, Goffman 1959) or how organisations could be compared to theatres. But for me one of the clearest qualities of being a performer or of being an organisation in which performances were made was that you were constantly engaged in the act of thinking about space in two different ways at once – as a physical area inhabited by physical objects, and as a world of imagination which could be inhabited by anything that could be imagined. These spaces were not separate, either, but overlapping and played out simultaneously: the bodies of the performers embodied both worlds at once, traversing them. This was not a complexity I saw reflected in the literature I read.

Furthermore, this act of thinking and achieving was not solitary but collective; it took place not only alone but in conversation with numerous others. When I read about theatre in Organisation Studies literature, I felt like it had somehow been flattened out. There was a lack of accounts, to me, based on detailed analysis of the process of making theatre – that

is, the creation of the artistic performance object. This had two consequences. The first was that in my observation, it weakened the ability to use theatre as a metaphor – if organisations can behave *like* theatre performances but nobody has analysed what a theatre performance is *like*, are there conclusions or parallels yet unmade which could be usefully deployed? The second is that the field of theatre itself seemed to me a rich seam for exploration: a collection of people and objects in space together create an object that exists only temporarily.

Early in the research process, I was reading through different literatures and came across some papers that spoke of materiality from whence I encountered Actor-Network Theory (ANT) for the first time. What I recognised in these studies was an approach which, I reflected, might be applied to the analysis of the process of making a play more accurately and in more detail. Upon reading more deeply, I encountered the idea that agency is generated in interaction between objects and people in Muniesa, Millo and Callon (2007) and that the performed qualities of each actor is dependent on their relationship to the network as a whole, but also that each relationship between actors is also relational, and that this quality is part of what gives the network as a whole its shape in Law (1999). In the same way that Latour proposed we find 'the missing masses' of the social by looking at how humans and objects interact (Latour 1992), I began to hypothesise that it was through interaction with objects that theatre-makers created performance: the crystallised artistic object is the product of the artistic process, a flash of light in the which the material relationships between actual, metaphorical and imagined space are for a moment visible.

A further sympathy between ANT and theatre-making was proposed when I saw reflected in ANT studies an acknowledgement of the creation of objects through networks. In the process of making a play work for the duration of a performance, a type of harmony is presented: people, spaces, objects combining in a pre-arranged configuration to create an object (even though it is one that only temporarily exists). This network works together despite the deeply hierarchical nature of both theatre companies and rehearsal rooms, where there are intricate politics about what jobs belong to whom, who can speak on certain topics on what time and what is permissible or not within that space. The impetus for this is not one person's agenda, but a direction created by all at the one time. Furthermore I saw reflected in those studies the acknowledgement of the role of space and

of objects that I had not hitherto encountered within Organisation Studies literature. The building of a piece of performance is everyone's responsibility and I had long observed that it is not only humans who actively participate in this process. I thought of all the work that went into creating such a temporary phenomenon which involved the invisible work of so many partners in the process: the sound design, perhaps barely consciously perceived by the audience; the position of the lamps on the stage that transmitted the light which signalled a change of location, unnoticed by an off-stage performer; the blocked-off seat which could not be sold for one performance due to its poor view of the stage due to the set design, irrelevant to the stage managers; the marketing text that the audience carried in to the auditorium in their heads that may never have been read by the composer. ANT allowed a space for analysing what was being created mutually by all the people and the spaces and the objects together; to consider the process as one of co-creation and to consider the specific circumstances of this site of study on the object which was created. As I considered it further, I began to believe it had to potential to provide a framework to present an account of the theatre production process which more fully explored the links between those agents who created the production whilst acknowledging and interrogating the nature of the produced object itself.

Furthermore, I did not read any accounts in other branches of Organisation Studies that I recognised as presenting the type of account that could philosophically accord with that which I had observed in the rehearsal rooms and theatre offices in which I had worked, or at least one which had the capacity to expand beyond what I saw to be structural analyses of the topic that did not take into account the form of the work being created. For example, Starkey, Barnatt and Tempest speak eloquently of latent networks in the television production process, and I read with interest their account early in my research. What I increasingly became uncomfortable with, however, was the degree to which the nature of any creative product being produced – its form – was skipped over in these accounts. Should theatre be assumed to equate to the process of creating television merely because they are both artistic products? So much of the time I had spent discussing plays in my employment had been devoted to the discussing of form and its effect of artistic products that it seemed to me to be frustrating that no full engagement with this perpetual puzzle to theatre-makers was forthcoming within the Organisation Studies literature. Was the

purpose of these networks of creation not relevant to the form that they took? Did this really present a new area of research, or flatten out the subject so that it could be viewed on comparative terms with another with which the authors were more familiar? This is even before we consider that television production and theatre production are two entirely different processes, despite having similarities.

Another reason that I read ANT papers with interest was because when I thought back over the rehearsal processes that I had taken part in, I remembered how often the agency of both the imaginary version of the play and the real text were mentioned. I thought of all the times a director had talked about how the play *demanded* an interval, or *needed* a stronger ending, or *begged* for a cut. These did not (always) feel like ways of the people concerned masking their own agency: from my observations, they were tempering their own needs and wishes in a negotiation with another agentive actor.

When I investigated ANT literature, I realised too that there have not been many studies of the process of artistic creation which have used an ANT framework. The work of Yaneva (2003a, 2003b) on the creation of visual artworks and Gomart and Hennion (1999) are exceptions to this. A keyword search of academic journals and close reading of key ANT texts shows that there have been no publications of work which applies ANT to the process of producing professional subsidised theatre in the UK. As I outline later, there have been explorations of theatre in organisational settings, but as an object explored in its *in situ* place of creation, the field has perhaps been neglected. Yet there are a number of characteristics of the industry which make the application of this theory seem beneficial in furthering knowledge about the process as a contribution to Organisation Studies.

The aim of this study is to explore the qualities of agency within the network of agents involved in creating a piece of live performance through examining two case studies. Applying a methodology developed from Actor-Network Theory, the intention is to examine whether, and how, a play is produced and in the process, whether the play itself exerts agency upon the other members of the network which enables the production. Before doing so, I will set out some features of the field of study for context.

The theatre industry

'The theatre industry' is a broad term which somewhat obscures the diversity of aims and outcomes which influence the processes and outcomes of producing different types of theatre. One characteristic of the industry is that ways of working, working processes and methodologies and the nature of relationships and networks vary greatly according to both geography and the type of theatre produced. For this reason, I shall briefly outline some of the characteristics of different types of theatre in the U.K.

The type of theatre being produced greatly influences the way in which a play is produced. Roughly speaking, in the U.K. the sector is divided into two sectors: commercial theatre and subsidised theatre. Commercial theatres produce work that is intended to attract large audiences, often through long runs at large theatres and through national or regional tours to large venues that can seat hundreds or even thousands. The plays produced have, or are estimated to have, mass and populist appeal, as evidenced by the size of venues chosen to present the work. The production companies making this work specialise in commercial work and are often large multinationals – Stage Entertainment, who produce or co-produce huge successes such as 'Dirty Dancing', 'High School Musical' and 'Billy Elliot: The Musical' employ over four thousand people in the U.S.A, Europe and Russia (Stage Entertainment 2012). Their method of production is to attract private investment, buy the license to plays, and recoup the costs of financing the play through ticket sales. Plays are estimated to have a large potential audience: a play such as 'Cats' is a market-tested product with a long and demonstrable track history of returning large profits; the stage production of 'Billy Elliot: The Musical' was developed using the plot and script from the hugely commercially successful film of that name³. Actors may be replaced throughout a long run; several productions may run in different countries or cities simultaneously. The producing companies have large advertising budgets and often fund television and radio advertisements, advertising hoardings, fliers and large magazine or newspaper advertisements. The main aim of commercial theatre is to make a profit and the way that the industry operates allows for considerable returns as a result of investment, partially due

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³ The presumption that a successful film will become a successful play is, naturally, not always correct; the assumption that the familiarity an audience has with a product will increase its marketability is open to exploration.

to high ticket prices. A stalls ticket to see 'Billy Elliot: The Musical' at the Victoria Theatre during its (currently seven-year) run there in May 2012 would cost up to ninety-five pounds, not including booking fees.

Subsidised theatre does not operate based on the same principals. To state that the main aim of subsidised theatre is not to generate profit is perhaps misleading – all theatres do of course wish to generate box office income⁴. The difference between the two sectors is perhaps more usefully explored through the question 'why?' A commercial theatre company will redistribute profits to its (private) investors as well as using profits to acquire the rights to produce a new adaptation or new original play; a subsidised theatre company will only use profits to maintain the work of the theatre company itself. The profits of a subsidised theatre are not distributed to shareholders because there are none; the theatre company is (in most cases) a registered charity, and any income a subsidised theatre might generate will be spent pursuant to the company's aims. Profits may be put towards running costs; they may fund a new production, project or commission, or go into the company's reserves to fund future work (or provide a safety cushion against future difficult times). Profits might also be reinvested in any assets that the company might own, such as equipment, vehicles or buildings. Subsidised theatres tend to be much smaller in capacity and productions tend to occur in buildings with much smaller capacities – the Tron Theatre, a subsidised theatre in Glasgow and the frequent venue for productions both by the Tron Theatre Company and other subsidised touring companies – holds a maximum of 230 in its main auditorium, in contrast to the 1,785 capacity of the nearby (commercial) King's Theatre. It can be deduced that subsidised plays are not predicted to be as widely appealing or popular from the size of the venues – the largest 'house' (auditorium) of a subsidised theatre in the U.K. is the 1,206 capacity Chichester Festival Theatre (closely followed by the 1,160 seat Olivier Theatre at the Royal National Theatre in London), whilst the largest commercial venue is Edinburgh's Playhouse, with a capacity of 3,059⁵. Furthermore, the

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⁴ A somewhat confusing term sometimes used for this area is 'not-for-profit' which I avoid here due to the, incorrect, altruistic overtone.

⁵ I have discounted the New Globe theatre, which is a recreation of a Shakespearean theatre in London. It has a capacity of 1600 – however, only 900 of these are seated, and as standing is extremely atypical of the modern building-based theatre-going experience, I suggest it is an unhelpful outlier that should be discounted from this overview. In further support of this decision, the building was created at least in

size of the main house in Chichester is atypically large – a survey of the most popular (and artistically respected) subsidised theatre companies in the most populus city in the U.K, London, shows that the next largest to the Olivier is the Jerwood Theatre Downstairs at the Royal Court, whose main house seats a much more modest 380. Whilst potentially employing a moderate number of employees during a production, permanent staff numbers in these theatres are small – in the U.K., anything from one or two to around eighty. Yet ticket prices are much more modest – the most expensive ticket for the 2012 production of 'Love Love' at the aforementioned Royal Court was twenty-eight pounds, with a ticket in the Olivier for 'Collaborators' on its concurrent run only four pounds more.

The reason that tickets for a show in a subsidised venue can be one-third of the price of a commercial theatre show is because of government subsidy. These shows are subsidised by funding from the government, either directly or through funding via an arts council. There are four arts councils in Britain, each of which distribute money to projects via long-term or project funding, or a mixture of the two. Some organisations are directly funded by the government: in Scotland, for example, the National Theatre of Scotland is directly funded by the Scottish Government, whilst all other subsidised companies are part-funded permanently or on a project-by-project basis by Creative Scotland, an arts council⁶ who in turn receive their funds from the Scottish government. City councils often part-fund theatre companies within their boundaries, and theatre companies pursue private sponsorship and partnerships with other theatre companies (leading to 'co-productions') to cover the rest of their running, commissioning⁷ or production costs. This enables subsidised companies to sell tickets at prices that are vastly underpriced in relation to the cost of producing that show. The reason that private funders, governments and arts councils are prepared to give

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part as a tourist attraction and receives a large proportion of its income from revenue generated by school groups who often tour the building without seeing a theatre production there.

⁶ Creative Scotland as an organization have, at the time of writing, moved away from this term, preferring the use of 'investment body', but their core purpose – distributing money from the government and lottery sources to projects within the arts – has remained the same.

⁷ A commission is the money a company pays writers a fee upfront to write out their script, which may or may not then go forward to production; I shall not delve further into the intricacies of this process here.

these companies money with no return expected is because the work that they are making is considered to be art⁸.

A sufficient exploration of the nature of art incorporating a full exploration of the delineations of the boundaries that define where art stops and commerce begins, if such boundaries were proved to exist, would be a doctoral thesis in itself. Even the above outline of the two sectors lacks finesse – a number of very successful West End (that is, commercial) shows of recent times have originated in the subsidised theatre sector and, as outlined by the London Society of Theatre's 1998 Wyndham Report and by subsequent surveys of the landscape such as Shellard (2004), commercial and subsidised theatres can and do work successfully together. This is amply evidenced by the fact that commercial productions of the plays 'War Horse' and 'Jerusalem' were at the time of writing playing to large audiences in London's West End, despite the plays' original productions originating at the subsidised Royal National Theatre and the Royal Court respectively. Such productions can and do generate income from even further afield when they are established as concurrentlyproduced tours on Broadway, in Australia or Asia. Even within an individual theatre, commercial-subsidised interactions can occur: during the past ten years the Theatre Royal in Bath experimented with producing populus and commercial work in its nine-hundred seat main house which generated the revenue which meant the one-hundred and twenty-six seat studio theatre could produce more experimental work. West End transfers of plays from the subsidised sector can often be co-produced with commercial producers; they share the financial risks of a run in larger venues, as well as taking their share of the profits alongside the subsidised companies.

It has been mentioned that geography also plays a part in the ways in which production processes differ, especially within the subsidised sector. This is partially due to the widely varying ways in which subsided theatres can be funded. Practises in the U.S.A. are very different to those the U.K. – theatres in the U.S. rely upon private subscriptions and philanthropy with arts funding via the government accounting for a much smaller

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⁸ The ancilliary benefits to the economy of many people attending theatre shows (and the attendant generation of income for restaurants, transport and so on) do of course mean that the funding is at least in part an investment in other businesses too.

percentage of a theatre's income. But within a much smaller geographical area, the UK industry exhibits quite different characteristics too: working practises and the percentage of income a company might expect to receive from any one source are quite different in Wales to Northern Ireland, for example, or in Yorkshire compared to London. Local councils may contribute generous or negligible funding; informal or formal arrangements between companies can influence macro- and micro-level decision-making processes, whether this is sharing proposed Press Night dates to ensure clashes are minimised and reviewers are not torn between venues, or sharing details on programming to ensure two companies are not pursuing identical artistic remits in the same geographical area. Individual companies might have generous benefactors or may own many assets; they might be heavily in debt due to a previous administration, or have plentiful reserves from a successful transfer to the West End. The company may have an unionised workforce who are well paid or be staffed entirely by volunteers.

One aspect that remains constant, despite the changes in production context, is the fact that a play requires a text of some nature⁹. One of the objectives of this study is to examine the production of a play in a way that attempts to set aside traditional assumptions about who and what the text is, and thus what (if any) agency it has; in order to do this, it must be accepted that the context of a play and the processes which result in its production make it difficult, if not impossible, to draw general 'rules' from any one study, even if that were desirable. The above outline is provided in the hope that by providing a contextualisation of the industry, the nature and characteristics of the plays that I shall explore are already at least acknowledged to be deeply impacted by the circumstances of their creation.

Approaching ANT

The focus of many ANT case studies have been projects whose products are taken for granted; objects which have never been seriously studied; items produced by mechanisms that seem to be simple or self-evident. Callon, in one of the articles which came to be discussed as a foundation of Actor-Network Theory, portrayed the networks brought

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⁹ Practitioners who develop their work through devising – through improvisation and group work – might disagree about the necessity of a written text, but as I shall explore later, my use of the word 'text' takes in a number of concepts which expand the term to take in a number of written, verbal and physical forms of record.

together the processes by which scallops were grown and harvested in St. Brieuc Bay in France (Callon 1986). Law and Callon (1992) together studied an abortive aircraft design, the TSR2; Latour, alone, a door closer (Latour 1988, 1992). Susan Leigh Star investigated onion allergies (Star 1991); Akrich, the electrification of a village in West Africa (Akrich 1992). Mol examines the shifting, overlapping enactments of a vascular disease (Mol 2002). Although it initially began within the field of science and technology, ANT as a methodology has increasingly been applied in studies outside of this area. Hetherington has investigated the arrangement of visual art in galleries (Hetherington 1997, 1999); Herrero has used the vocabulary of ANT to examine calculations in the art market (Herrero 2010). As Woolgar, Coopmans and Neyland (2009) point out, different branches of Organisation Studies scholars have applied ANT methodologies to their realm of interest, studying for example the financial market itself (Knorr Cetina and Bruegger 2000) or aspects of it: organisational concepts of time (Czarniawska 2004); safety (Gherardi and Nicolini 2000); option prices (MacKenzie 2003; MacKenzie and Millo 2003); stock tickers (Preda 2006), and hedge funds (Hardie and MacKenzie 2006). Others have engaged critically with ANT's potential application within Organisation and Management Studies (OMS) (e.g. Mutch 2002; Steen, Coopmans, Whyte 2006; McLean and Hassard 2004; Alcadipani and Hassard 2010).

How artistic objects come to exist has, in some ways, been somewhat unexplored too: the act of creating a piece of performance in a physical space from notation and words on a page has not been explored fully as the act of an organisation assembled for this sole purpose. The act of making a piece of performance has at times been the object of Organisation Studies research, but studies have not fully engaged with the consequences of material processes on the qualities that the artistic object comes to possess.

The research questions that I began the study with were those provoked by those ways of speaking about plays that I had been drawn to in my professional life: the ones which seemed to recognise agency as a potential quality of the play. When a piece of text became a theatre production, became a 'play', who and what were the agents in this process, and what were the natures of the processes each of these agents engaged in? How did these processes interrelate and reach a point of accord and a state of stability – in other words, how was order achieved? How, if at all, did the material surroundings influence this

process, and what was the relationship of this process as a whole, or any one process, to change? Who or what had agency in this process? Did the play, or the text, have agency?

I was also interested in the multiplicity of forms that the play took. 'Play' is a nebulous term, variously used to describe a number of physical and conceptual objects – so a play is sometimes a pile of papers bound on a table, sometimes a live performance, sometimes a concept upon which a group of are trying to agree. 'Text', whilst apparently much more straightforward, is still a slippery term. It's a stack of bound papers on a table, too, but when performers and objects are on stage, they too are 'read' as if they are texts. 'Going back to the text' is about more than looking at pieces of paper as it also implies reading and understanding something beyond those words – concepts, intentions, and motivations that dwell within the text, sometimes seemingly between the words; that which is elusive and imaginary. For theatre practitioners, the terms 'play' and 'text' can be used so interchangeably as to seem haphazard: the interchange seems to be due to an implicit agreement, explored at the conclusion of this chapter, between all members of the play's network that the play and the text have a complex relationship, and that the relationship between them and other actors¹⁰ in the network is equally multifarious. Another objective, then, as well as to examine the process of a play coming to be a production was to examine the precise nature of what a play actually was: what it was composed of; how its composition related to the text.

The focus of the next chapter is the different ways in which theatre has been engaged with by OMS, and why; I explore why a methodology inspired by ANT seems to provide the best way of understanding the production process through considering its relationship to the material and to agency. Chapter Three covers the ways in which I applied this methodology to the site and the consequences, advantages and disadvantages of the methodology and methods employed. Chapters Four and Five concern the data gathered from the two case studies, and Chapter Six covers my findings and the conclusions from this work. In this chapter, I develop the concept of the object that I discovered through this research process, the (play)text: more than a text or a performance or a set of physical properties, this object

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 $^{^{10}}$ Throughout, I have referred to any human or object implicated in the production of the play as an 'actor' – not those who perform, who are referred to solely as 'performer'.

is the ultimate articulation all actors involved in the process are trying to achieve. It is an assemblage, an object composed of multiple objects, stabilised only in the moment of performance; it is the outcome of the processes of theatre. In this final chapter, I consider what the development of this concept adds to ANT literature and to the understanding of Organisation and Management Studies, to studies of organisational change and process, and as well, to my own practise.

Chapter Two: Literature Review

The aim of this review is to outline the chief literature informing this study. The literature concerning space and process studies of change in Organisation and Management Studies is considered before considering the literature cognate to Actor-Network Theory (hereafter ANT). After a brief outline of the philosophical and epistemological positioning(s) of this theory and the rebuttals of ANT critics, I will survey the vocabulary of ANT and related areas, and consider the areas for potential exploration left open for study.

One of the questions which arose for me in my initial reading of Organisation Studies literature relevant to this study was whether the production of a piece of theatre made those involved in creating that production an organisation. The briefness of the period of time that this organisation existed seemed a concern if I was to consider organisations as static entities. So too did the radical change that the organisation seemed to undertake in its short life, from a set of disparate actors with what seemed like wildly different personal objectives and skillsets, to a unit working together with precision and exactitude. So too did their product: a product which ceased to exist so soon after its creation and could never be recaptured, but only re-approximated.

This question was one of the paths which led me to engage with process organisation studies. The conceptualisation of organisation which emerged through these studies was of organisations as entities which were actively and continually constructed in some manner.

In their introduction to a Special Research Forum on Process Studies of Change in Organisation and Management, Langley et al (2013) propose a useful outline of several characteristics of process research.

Process research is particularly concerned with the effect of time on social practises and thus organisations, an area which they see as previously underexplored in the field (Langley et al. 2013: 4).

"Process research, thus, focuses empirically on evolving phenomena, and it draws on theorizing that explicitly incorporates temporal progressions of activities as

Langley et al. point out the multiple ontologies of Process research scholars, seeing the division as chiefly between research which considers there is "a world made of things in which processes represent change in things (grounded in a substantive metaphysics) and the other a world of processes, in which things are reifications of processes (Tsoukas & Chia, 2002)" (Langley et al. 2013: 4).

The definition that Langley et al. offer is thus bifurcated in its focus, capable of containing an unproblematically unresolved, if directly incompatible, tension.

"Process conceptualizations offer ways to understand emergence and change as well as stability, and they incorporate understandings of causality as constituted through chains of events rather than through abstract correlations."

(Langley et al. 2013: 10)

Tsoukas and Chia (2002) suggest that looking at organisations as mutually constituted by and of change gives the opportunity to obtain a more detailed view of the processes by which change occurs, look at the mechanics of achieving change, and shift from an ontology which has assumed change is deviant for organisations, and which has therefore made it "reified and treated as exceptional" within organisation studies research (Tsoukas and Chia 2002: 567).

The mechanics of change are described as occurring from two different perspectives; for Feldman (2000), it is the routines of organisations (in the hands of human actors) which "perpetually interact and change in action" as every performance of a routine contains "seeds of change" (Tsoukas and Chia 2002: 567). For Orlikowski, situated change, driven by improvisation, is the building block from which change occurs within organisations — but more than this, organisations are in themselves entities made up of continual change by being composed from "the ongoing and situated actions of organizational members" (Orlikowski 1996: 67).

Tsoukas and Chia (2002) see limitations in both approaches: in their assessment, Orlikowski doesn't say what drives change and Feldman doesn't look at human action. Using the research of both, they propose that the stability of organisations lies in a combination of stability and of adaptation to local conditions. They use the metaphor of an aerial artist to explain how these elements might all work together. The acrobat perpetually adjusting her posture on the high wire looks stable. It is equally true to say all three of the following statements: she is stable, she is adjusting, each muscle adjusts. All of these statements are true depending on perspective, and nor do they mutually exclude one another (Tsoukas and Chia 2002: 572). The metaphor is explored in theorizing that organisations could be the same: "organisation aims at stemming change but, in the process of doing so, it is generated by it...change programmes trigger ongoing change" (Tsoukas and Chia 2002: 578). But, like studying the aerial artist's muscles, "organisation scientists need to give theoretical priority to microscopic change" (Tsoukas and Chia 2002: 580) in order to fully understand how the elements of change and stability interrelate, i.e. how the appearance of stability is generated by change. It is through constant adjustment that tasks in an organisation are carried out (Tsoukas and Chia 2002: 577).

Tsoukas and Chia's approach carries with it methodological implications: drawing from Wittgenstein, Bergson and James, Tsoukas and Chia propose the researcher must "dive into the flux itself" and directly experience that, not points of stillness individually: in the same way as viewing individual slides of a zoetrope does not describe motion (Tsoukas and Chia 2002: 571). They propose that ethnography is a good match for this work, due to:

"...its insistence on capturing the dynamism and the ever-mutating character of organizational life. Organisational phenomena are not treated as entities, as accomplished events, but as enactments – unfolding processes involving actors making choices interactively, in inescapably local conditions, by drawing on broader rules and resources"

(Tsoukas and Chia 2002: 577)

The idea of organisations which are constituted of change is one embraced and further

developed by Orlikowski (1996, 2007). Orlikowski's work demonstrates a sustained interest in the "constitutive entanglement of the social and material" (Orlikowsk 2007: 1435) in organisations through the examination of process change.

Orlikowski (1996) presents three "beliefs" of organizational change that she wishes to refute: that organizational change must be planned; that is it cited within technology itself when a change is provoked by the introduction of a technology; and that change is generally large in size and significant in impact. She suggests that an exploration of more incremental "organizational transformation" is also important (Orlikowski 1996: 65). The data that Orlikowski (1996) theorises from was gathered during the introduction of software for recording the nature of and resolution of customer queries in a remote contact centre. The study tracks the transition for operators and managers between an informally-structured, individual, idiosyncratic paper-based system to a integrated, standardized and structured computer-based system. The study incorporated two phases – the initial implication of the programme and standardized modifications to the way the programme was used two years after implementation.

The consequences of the changes, intended and unintended, are documented: initial digitization lead to integration of work and multi-user access within the case notes for each query. Some of the consequences included substantial changes in the way cases were resolved, often by proactive offers of help from colleagues and sharing of problem solving approaches which had worked for them in the past, leading to more efficient management of work load. Further integration of offices in other locations added to the ability to share knowledge. As the programme's capacity to be a database for stock solutions developed, so did the requests to access it from other areas of the company; informally, then formally, the organisation created recognized methods of making this data available.

In this example, Orlikowski characterizes change as occurring through "metamorphic" (Orlikowski 1996: 89) action on the part of the actors. Her conclusions include that "change may not always be as planned, inevitable, or discontinuous as we imagine" (Orlikowski 1996: 88); that there are unexpected consequences and modifications to the way that technology is employed as a result of situated action of employees. It is the change itself

that constitutes the organisation, and she embraces "a perspective that posits change rather than stability as a way of organizational life" (1996: 65).

Orlikowski (2007) summarises and develops from Orlikowski (1996) the concept of constitutive entanglement, in which organisations are co-constructed by the interaction of human and matter, constantly shifting and changing. In this research she also characterizes the exploration of materiality in organisation studies in general as exploring change not as a process but rather as an event, particularly when focused around organizational objects (like the introduction of a new piece of technology). She proposes that there has been a tendency in organisational studies and within process change literature to make such accounts either techno-centric or human-centric rather than paying attention to the context in which changes are made. Rather than seeing organisations as full of "distinct interacting entities", she suggests there are possibilities for revelation in observing the ways in which organisations and their material contexts are "mutually shaping each other" (Orlikowski 2007: 1438). Orlikowski uses two case studies to demonstrate ways in which this mutual shaping can occur. One is Google, a web search engine; the results one receives from the engine are changed by the act of searching itself as the website aggregates and ranks data according to algorithms which will then take into account ones own search in future rankings. The second is the introduction into a company of Blackberries – mobile telephones linked to office email accounts and which, in Orlikowski's study, changed the working spaces and times of an organisation whose employees were all provided with them for work purposes. Orlikowski concludes that the detail from materially-attuned studies such as these, through which the mutuality of co-constitution is acknowledged and probed, is one way to further examine the nature of the relationship between change, organisations and the material, proposing that "all practices are always and everywhere sociomaterial" (Orlikowski 2007: 1444).

Feldman builds a picture of organisational change in which resources (Feldman 2004) and routines (Feldman and Pentland 2003) are the methods by which change incrementally occurs. Feldman and Pentland (2003) define an organisational routine as "a repetitive, recognisible pattern of interdependent actions carried out by multiple actors" (Feldman and Pentland 2003: 106) and in which "agency is apparent in each participant's choice of actions

and of the reflexive self-monitoring of those actions" (ibid.) as the routine is performed, contrary to accounts which have tended to emphasise the "inertia and inflexibility" (Feldman and Pentland 2003: 94) of routines. Using a concept based on structuration theory, Feldman (2003) builds a picture of organisations in which resources are fed into schema which are then performed by organisational actors, and it is through the performance of these schema that incremental change occurs.

These accounts are all concerned with the ways in which change is perceived in relation to organisations and how processes and human interaction drive change in organisations or stabilise them. Each takes a different view on which scale change occurs at, finding commonality in the consideration of the microprocesses of organisations and their routines as a way to observe change. There are differences in how the studies see the material and human agents of change interacting, and the degree to which material surroundings are considered. Notable in its absence in Feldman's account of organisational change in a halls of residence, for example, is an account of the material in the form of the human body, even when bulimia becomes part of the source data from which theory is developed.

Orlikowski's observation that organisation studies accounts can tend towards viewing matter as a series of "distinct interacting entities" was a tendency which had struck me in some of the case studies I came across within organisation studies but outwith process change literature that explored theatre in a variety of settings. One of these is Clark and Mangham (2004) which records the creation of a piece of corporate theatre – that is, a text commissioned by an organisation and staged for their purposes and employees. In Clark and Mangham (2004), the piece of theatre was to prepare, celebrate and educate employees about the event of two large banks merging together. The paper acknowledges the influence of Goffman in introducing the metaphor of theatre in *Presentation of Self in Everyday Life* (1959) where it was taken up by many different fields, including organisation studies. They also point out that "his debt to theatre lies in the use of terms derived from it" rather than for any close observation of the processes of making theatre (Clark and Mangham 2004: 40) – so the roles of actor, of scripts, and of performances became examined in their relationship to social behaviour. Clark and Mangham propose that until a more rigorous development of this theory exists, at present it is "inadequate"; their criticism

is that Goffman's "lack of familiarity with the function of theatre, with rehearsals and director, with stage performances or theatre audiences" are what limit the relevance of his work in this context (Clark and Mangham 2004: 41).

The nature of theatre and its very explicit relationship to physical space perhaps caused me to raise an eyebrow that space is not included in Clark and Mangham's above critique of Goffman, and whilst their own study describes at two points the material relationship between the performance space and the audience or performance space and performers, space is not afforded a great deal of prominence. The symbolic space of theatre is mentioned in reference to the purpose of theatre in ancient Greece, thus answering (though perhaps somewhat broadly and so a little contentiously) the 'function of theatre' which Goffman missed, but the first mention of a specific physical space as opposed to symbolic space is in the description of the exhibition centre in which the performance took place and its resonances of triumph and empire in its echo of "a Roman procession route" (2004: 50). The second mention of specific physical space was in the description of a performer – an employee of the organisation – who was urged by the director to "reposition himself so that he could read the autocue more easily" (2004: 49).

The details of these observations were of great interest as they provided a sense of how the material reality of the setting created a context for the performance, the performers and the audience. Clark and Mangham seem to suggest in their mention of Goffman that more detailed knowledge of theatre might positively modify his theories for organisation studies audiences and this is one aspect where perhaps this observation could have gone further. In a setting where symbolic meanings are clearly so thick and in which the relationship between space, bodies and objects is so crucial to the projection of that meaning for an audience. Individual aspects of *performance* were highlighted as the researchers, drawing to attention the "hollow" reception of a manager who had not chosen to run through his section of dialogue with the other performers, nor in front of the director, causing a "mismatch between words and non-verbal signals" that did not match in its style the rest of the performance (Clark and Mangham 2004: 51), so there were aspects of the body and its capacity to act and interact with matter that is discussed, but this receives relatively little consideration.

Furthermore, there is not always a strong sense of how the elements that Clark and Mangham individually describe connect; perhaps the connection between elements could have been usefully explored. There is comparatively a lot of information about how performers might affect the audience with their performances – posture, speed of movement, tone and pitch of speech – and mention of how the audience responded in a way which was "encouraging" (Clark and Mangham 2004: 52), "rapturous" and "enthusiastic" (Clark and Mangham 2004: 53). However there was no strong sense of how close or far away the audience were to the stage, how many performers there were, whether there was a set (excepting the briefly-mentioned sofa on which the aforementioned performer had to reposition themselves), how the lighting and sound was entangled in the process. Thus the process – the way in which the elements related – is not described, and the production feels separated into units; the reader could wonder, in some cases, whether they interacted with one another at all.

Reflecting on the importance of space to the creation of theatre brought me into contact with another set of literatures within organisation studies – that which deals with space and workspace. Space has been considered in a number of ways as an aspect of organisation. Organisation studies, no less than other disciplines, has long included space in the investigations of the work of organisations. However the qualities this space has, by Dale and Burrell's (2008) account, tended to conceive of space as theoretically and symbolically blank – "research treats space as an empty container that has no relevance to the social interactions that merely take place within it." (Dale and Burrell 2008: 206). They see this concept of space as part of a general trend to ignore the material across disciplines, including in organisational and management studies. Dale and Burrell theorise, inspired by Massey (1995), that this divide is the result of an essentially Cartesian ontology underpinning modern thought as a whole which tends to conceive of mind and body as separate entities operating in isolation (Dale and Burrell 2008: 205); the result is the abstraction of "'social' constructs and ignoring a wider social-material embededness." (Dale and Burrell 2008: 206).

Dale and Burrell analyse a number of different approaches to space across disciplines. They assess labour process theory, finding approaches to the material assessed as symbolic of the power relation between management and workers; for them, disappointingly, "this is akin to a long-standing perspective on matter that sees it as inert and passive" (Dale and Burrell 2008: 207). They find organisational symbolism akin to a Rorschach test where the material is constructed from the perspective of the looker, a blank onto which some one must project independent meaning, "a vehicle for the expression of social, cultural and aesthetic value" (Dale and Burrell 2008: 208). They find promise in material culture – and in particular Miller 's (1987) concept of "the diversity of the relationship between humans and objects" and the insight that objects play a role in building relationships – that they are "constitutive, not simply a reflection, of social relations" (Dale and Burrell 2008: 211). They also include an account of material engagement, a theory from archaeology by which objects act almost as external hard drive on which we store systems of meaning and symbolic understanding; this has limitations when applied to Organisation Studies, they posit, as studies tend to concentrate on specific objects – objects which are in themselves somewhat hypersymbolic (Dale and Burrell 2008: 211-2) – whereas in organisational settings, "it is less specific objects in themselves that are of significance in the combined social and material construction of the built environment" (Dale and Burrell 2008: 212) and so the entangled nexus of materialities rather than one discrete object becomes more prominent.

Of particular relevance to this study is their critique of ANT. They see in ANT accounts "the tendency is to privilege abstractions such as texts, inscriptions and representations" (2008: 209) rather than engaging fully with the materiality of the humans and objects the accounts put at the centre of observations; they point to Dant's (2005) assertion that "there are very few accounts of the perceptual or tactile interaction between humans and objects in the network" (Dant 2005: 81, quoted in Dale and Burrell 2008: 210). Dale and Burrell see some achievement of this materiality in Latour's work, particularly in Latour (1992) where they see Latour's account of the action of a door closer as "the point at which ANT envisages, indeed articulates, a role for the now active material world" (Dale and Burrell 2008: 209).

Their reading suggests that whilst there is much work which does engage with the concept of space, there is perhaps still an absence, methodologically and in terms of detailed examples, in the exploration of organisational space – of the material nature of space and

the constructions around and of it. They suggest that humans must fight to overcome their natural myopia when it comes to processes which challenge our centrality and perspective, comparing the social and material to a river whose banks are both formed by and entangled in the water with an interaction of agencies difficult to perceive from human perspective and timescales (Dale and Burrell 2008: 214-5).

The impact of work which considers the materiality of workspaces is one which seems to be of growing relevance. Although it could seem, in a world which is apparently moving away from a concept of work which occurs in a set space bounded and controlled by organisations, that materiality may become of less importance to organisation studies, the reverse may well be true. Globalisation and reliance on technology has the appearance of independence from the material, but also requires "a greater need for specific meeting places, personal contacts and networks" (Dale and Burrell 2008: 204). Indeed, a recent article in Tech Crunch, circulated widely online, has pointed out that in what has been dubbed the 'sharing economy', it is now the case that:

"Uber, the world's largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate".

(Goodwin, 2015)

The nature of material relationships between organisations and their resources is no longer a straightforward one in which ownership and provision go hand in hand. As Dale and Burrell point out, it is not only in working but in all parts of our lives that we interact with organisations and organizing, and if the relationship between ownership and sale, demand and who supplies that demand is changing, so are our relationships to the material. Furthermore, the mutability of the division of work and non-work spaces means there is greater opportunity to study (as, for example, Orlikowski (2007) does) the material intersection at those joins as a way to examine organisations. For Dale and Burrell, the interaction and mutual construction of the material and the social is the key to opening out the material to more nuanced and theoretically diverse analysis of what is 'social'.

"The first step to negotiate a way of understanding the combined social-material world that is not reductive, that does not isolate the two aspects but recognises the mutual enacting of both, is to try to re-conceptualise a relationship that does not institutionalise the material as fixed and inert structure, whilst leaving the social as active and dynamic."

(Dale and Burrell 2008: 213)

The nature of the relationship that organisations have to the material is a recurrent theme in Dale and Burrell's work, and indeed of Dant (2005) whose work they draw on, who suggests that "sociology needs to attend to the changes in material civilisation...to the way that objects affect individual social lives and the life of our society" (Dant 2005: 146). The nature of interactions between humans and objects is something Dale and Burrell perceive as lacking in many organisation studies accounts, but as touched on above, which they do see as addressed in several areas of the field, including in ANT.

Actor-Network Theory

In ANT accounts, both humans and non-humans are considered as equally valid agents in the creation of a network: both humans and non-humans have the potential to exercise agency and thus be considered 'actors', and the vocabulary applied to both groups is the same in order to enable comparison symmetrically between human and non-human actors. The theorisation that the relationship between actors is maintained by relational factors is what John Law calls "relational materiality" (Law 1999: 4), a theorisation that "entities have no inherent qualities" (Law 1999:3) except those which are produced in dialogue with other entities. The very state of existence is relative: "to be is to be related...nothing ever *is* alone" (Mol 2002: 54). In this way, ANT is fundamentally concerned with the semiotics of materiality. Law (1999) categorises this as one of two theoretical pillars to actor-network theory and its areas of interest, or "thrusts", as Landstrom (2000) terms them (Landstrom 2000: 476); the other is performativity.

Performativity proposes that, if relational materiality is accepted, we must also accept that the nature and behaviour of an object is not fixed, but as performed by its context as it is by its qualities (which cannot, as above, be accepted to be inherent). Performativity is the

theorisation that the durability and (even temporary) stability of a network is the result of the act of performance that each actor makes as part of the whole network – therefore it is through following the actors and recording their behaviour that the operation of the network as a whole can be in some sense observed.

ANT presents a problematisation of other sociological narratives in questioning the methods as well as the concepts presented by a number of viewpoints within the pre-existing epistemological matrix. In particular, the nature of sociology's configuration of 'the social' is questioned, found wanting and reconfigured by ANT accounts: according to Bruno Latour, ANT has "transformed the social from...a surface...into a circulation" (Latour 1999:19), and as a result any ANT-inspired methodology is concerned with closely observing these circulations. "By following circulations," Latour says, "we can get more than by defining entities, essence or provinces" (Latour 1999:20). Thus the underlying metaphor through which social relations are understood is given a different metaphorical model – I will say more on this in due course. ANT also shrinks from definitions, ontologically espousing the maintenance of heterogeneity over any definable fixed viewpoint.

Latour argues that in trying to study that which is social, sociologists have in the past attempted to detach conflicts from the material circumstances of their creation, thus detaching them from that which would have given them meaning¹¹. He maintains that in searching for a 'social' that exists outside of the material world rather than is generated through interactions with it, social scientists risk entirely missing what they might study.

Thus for Latour, there is no 'social' to explore other than that which is produced moment by moment by members of a network, and this 'social' cannot be meaningfully isolated and studied, making sense only in relation to the circumstances of its creation. To consider the consequences of using theatre as an object of study or as a metaphor, then, one would need to consider first the context of its production. 'The social' is a series of complex actions by a

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¹¹ This divide is one which has been mirrored in a number of different academic disciplines. The debate about relational semiotics is somewhat reminiscent of the criticism levelled at New Criticism by movements like Feminist Theory, Post-Colonialism, Post-structuralism, Reception Theory and Marxism. New Criticism considers the words on the page to be the sum total of an aesthetic object, the meaning of which can be assembled without any reference to the context within which it was created; the other theories (and many more besides) argue that meaning in an artistic object is created in conjunction with external factors – whether these are societal, political, based on gender or class divisions and so on depend on the theory. I will return to the particular importance of Reception Theory to this study later in this chapter.

chain of actors, not a black box which can be extracted from its context, broken open, and read for data by the correct machine.

Latour sums up the problem with 'the social' in 'Reassembling the Social' (2005) as one of oversimplification:

"So, when sociologists are accused of treating actors like puppets, it should be taken as a compliment...'Treating people like puppets' is a curse only when this proliferation of mediators is transformed into one agency – the social – whose effect is simply transported without deformation through a chain of intermediaries."

(Latour 2005: 60)

Another consequence of this is that agency, like all qualities, is generated in interactions.

Law proposes that relational materiality and performativity are the basis of an ANT-related methodology, the consequence is that a commitment to heterogeneity should be maintained by the ANT 'community' (aware of the contradiction as he proposed this). Heteorgeneity, Law breaks down into three types: the urge to centre, where that not studied is othered; the urge to analyse in terms of our dominant spatial template, where space is Euclidean and imagined 'things' act in a way that reacts as our space does; strategic ordering, assuming that hierarchies within the material world work in the same way as the social orderings we see.

The first of these is an interest in what might be termed the intersectionality of heterogeneity, or as Law phrases it, the "hierarchies of distribution" (Law 1999: 6) which enable a network to function; which compose its structure.

The second and third areas relate to the spatial relations between actors within a network, and within this, conceptualising network spaces and dynamics between elements. Law proposes the following with reference to network spaces:

"...In a network, elements retain their spatial integrity by virtue of their position in a set of links or relations. Object integrity, then, is not about a volume within a larger Euclidean volume. It is rather about holding patterns of links stable..."

There are more ways to imagine space than to rely on the Euclidean concepts to which Western society would seem most consistently drawn – that is, three-dimensional space where objects inhabit distinct and discrete spaces (Law 1999). For example, Marilyn Strathern's work draws heavily on her experience in Melanesian society, where different spatial relationships are performed between humans and objects (e.g. Strathern 1991; 1992). Mol, drawing on Serres (1980, 1994), also presents a different model:

"More often than not, we take objects to be like solid boxes, relating to each other in a *transitive* way... But if, says Serres, we didn't cling to solidity so much, we might come to think about material, about cloth. About bags instead of boxes... One may contain the other. And vice versa. They are, indeed, mutually inclusive. They relate in an *intransitive* way."

(Mol 2002: 145-6)

Materiality

Orlikowski used ANT to explore what she perceives as an oversight in the appreciation of material culture within organisation studies, positing that organisation studies "has traditionally overlooked the ways in which organizing is bound up with the *material forms* and spaces through which humans act and interact" (2007:1435; emphasis added). She proposes that there is an absence of any consideration of "material artifacts, bodies, arrangements, and infrastructures" (2007: 1436) within the field, and proposes that everyday organizational objects are treated as commonplace and thus inferior objects of study, or as objects of novelty examined only in isolation as case studies.

However, even a physical network like a rail network is constructed socially as well as from iron and rails. An example of this can be seen in the changes that took place in the rail network of Great Britain post-1961. In post-war Britain, the publically-owned rail network in Great Britain was operating at a massive deficit, receiving subsidies from the government that were deemed unsustainable: estimates put the subsidies at the equivalent of over a billion pounds per year today. Following a government-initiated commission, major

reductions known as the Beeching cuts were made to the rail infrastructure (Beeching 1963, 1965). A major criticism of the Beeching reports is that they concentrate on the railway 'network' as an isolated unit rather than part of a unified transport system (Hondelink 1965). Carrying out just such an audit on the road system and its subsidies, Hondelink proposes, would have indicated a far higher level of subsidy for the road system than the railways: in failing to consider the railways as part of a larger set of transport provisions and viewing it in isolation, the reports fail to engage with the macroeconomics of their analysis.

In Hondelink's assessment, the problem with the Beeching reports is precisely that they have treated the railway network as a purely physical construction. The reports consider as distinct units the humans who use railways and the humans who use roads; they also consider as distinct units the railway network and road network, rather than considering that for companies or individuals, the two may operate in conjunction with one another. The assemblage of steel and rolling stock, station masters and conductors, passengers and drivers that form the railway network and the assemblage of tarmac and steel, trucks and wheels, drivers and gears that form the road system are not mutually exclusive. But in these reports, the railway network is not viewed as operating in tandem with the road network, economically or socially: the economic consequences of "the substitution of road services" (1965: 2) are not considered for British transport as a whole, and the human actors who partake in the rail network are presupposed to be making a choice in favour of roads versus rail on the supposed merits of the former, not the bad management or maintenance of the latter. The agency of humans in being part in the ongoing construction of the rail network is not considered.

A further criticism levelled at the time through extensive rallies, protests and marches was that neither were the railways solely transport networks. Spokespeople emphasised that it was communities who were losing their connection links and they were vociferous in voicing their opposition precisely because it was that community which would be damaged by the loss of links to other small communities nearby.

Even the physical terrain itself, which could be assumed to be the simplest of all the resources required for a physical construction, is not a neutral space external to the

network: land and structures upon it are subject to complex ongoing 'social' negotiations. To continue the exploration through railways, one example of these complex relationships is visible in the use of the Logierait Bridge in Perthshire. Originally the Tay Viaduct, Logierait, the structure was built in 1863 to carry trains on the Ballinluig to Aberfeldy railway line, which was withdrawn from service in 1964 as a result of the Beeching reports (Royal Commission on the Ancient and Historical Monuments of Scotland 2014). The bridge was returned to the ownership of the local landowners, the Kinnaird Estate, who allowed the bridge to be used for local access by the communities that had grown up together on either side of the river, effortlessly linked by the bridge. After a nearby bridge of the same era was demolished to make way for a new road bridge, the Logierait Bridge was upgraded from a Category 2 to a Category 1 Listed Structure by the Secretary of State for Scotland. In 1991, the Estate suggested the Logierait Bridge be closed due to concerns over its structural integrity; this was an action that would have severed the communities separated by the river and forced hugely increased transport costs upon residents and businesses (About Logierait Bridge 2014). A community-run charity was established and raised half of the money, matched by the Kinnaird Estate, to have the Logierait Bridge inspected by an engineering firm; over the next ten years, the charity stabilised and improved the structure through Lottery funds and those raised from other heritage charities, and gained the financial and political support of cycling infrastructure group Sustrans. The bridge is now community-owned, having been given to the charity by the Kinnaird Estate, and is part of Cycling Network 7, encouraging cyclists and walkers to use it as well as local residents.

When a series of different people and objects working together to maintain a stable construction which can look solid and easy to define, ANT provides a useful term to incorporate and describe this dynamic web of interactions: it is an *agencement*. Here, the bridge becomes an *agencement*, heavy with history and part of a complex network of people and objects: the Kinnaird Estate; local residents; the Secretary of State for Scotland; tourists; Sustrans; survey maps; the destroyed Category B bridge; the Beeching Reports. The wrought iron of the girders and the cast iron of the decorative towers deteriorate and need maintenance; the residents either side of the river wish to move quickly and cheaply across the river. The land, the girders, and the communities which span the River Tay are intermeshed and interdependent, and they constantly create and recreate what The

Logierait Bridge is; the bridge is not a neutral object, but constantly negotiated and renegotiated over time. Ownership of and relationship to land and structures upon it is dynamic and in constant flux; the qualities of each actor in this network and the role they play are determined in relationship to one another.

When Law and Mol (2011) study the construction of Foot and Mouth disease, they portray it as a disease with its various qualities enacted and performed in three different ways. The clinic, the laboratory and epidemiology identify, characterise and act upon the disease through and with quite different methods and results: clinical diagnosis depends on observation of animals, identifying blisters and lesions; laboratory diagnosis identifies antigens in the blood of infected animals through testing in controlled conditions; epidemiology identifies 'patterns of transmission', working out how infection might have spread based on the theoretical behaviour of the disease and comparing this with known movements of actual animals, wind patterns, and other environmental factors. The objects of these three distinct processes exist simultaneously and create an agencement which is heterogenous in its nature, containing internal tensions and contradictions. Despite using the same term, what these three veterinary traditions are "searching for, measuring or tracing are different" (2011: 2), so "clinic, lab and epidemiology do not know the same 'foot and mouth disease'. Each enacts a different version" (2011: 13). The three methods of detecting Foot and Mouth Disease use different tools and look at different sources as they progress towards diagnosis; Law and Mol emphasise that the different veterinary traditions "enact different worlds [which] implies their differences are relevant to the way the world comes to be shaped" (2011: 14; emphasis added). Whilst their relationship is dynamic and the units from which the disease is composed is heterogeneous, Foot and Mouth is still a recognisable disease which can be diagnosed by using one or more of the above methods, which will at crucial points correspond, agreeing that the disease is present. No matter which method is used in its diagnosis, there should be a concurrence: if there are distinctive lesions on the membranes of effected animals, certain antigens will be present in the blood, whether they are tested for in a laboratory or not. However, veterinarians' understanding of the disease is shaped by the methods through which their search for its presence is framed: a clinician understands that the disease is present by looking at the hooves of an animal; a laboratory technicians through the full moon of a microscope lens. Their

understanding of the disease is shaped by the tools that they use, and the physical space those tools are used to explore; the context which is created is itself influenced by those tools. The world then created – in this case, the world in which the qualities and behaviours of a disease are recognised – is indelibly stamped by the marks of the tools which made it; the tools too are marked by the shape of the world they helped make.

The term *agencement* is here both a useful word, but also one which has been pulled in a number of directions by usage in slightly different arenas. To be explicit, I use it here as defined by Callon:

"The term agencement is a French word that has no exact English counterpart. In French its meaning is very close to "arrangement" (or "assemblage"). It conveys the idea of a combination of heterogeneous elements that have been carefully adjusted [to] one another."¹²

Previous studies have explored *agencements* in a number of settings, chiefly in a sociotechnical (as explored through the collection edited by Bijker and Law, 1992) or what we might term socioscientific setting (Latour 1992, 1994, 1999). Expeditions have also been mounted into (to continue the pattern) the sociofinancial (MacKenzie 2005; Hardie and MacKenzie, 2006). Each study has called into question assumptions about how the structures of each field of study functions, from how citizenship of the Ivory Coast is linked to electricity generators (Akrich 1992) to where the laws of a country intersect with a beeping seatbelt holder (Latour 1992).

What is the point in exploring a field of study in this way? In Latour's words, to try to uncover "the missing masses" (Latour 1992) – or rather, to try to show that the search for the fabric of the social is futile if we do not re-examine the possibility that there are more actors in the creation of social frissons or moments or interactions (*agencement*) than just people interacting with other people. In some ways ANT attempts the opposite feat to many illusionists – to show the sheer quantity of *things* which assemble to create the invisible: the invisible in this case being moments (or more) of social relationships – relationships which can in turn can give birth to more *things*, be they airplanes, penicillin,

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¹² Callon 2010 (unpublished paper)

diagrams, or financial models. An *agencement* is a knot in which things – people, objects – become invisible – become social interactions, schema, worlds – but which ANT hopes to make visible again, if only for the duration of the study.

Where, then, are the socioartistic explorations? Yaneva began to explore the stuff of which artistic *agencement* are constructed in her 2002 article on the installation of an (actual) bus into a museum as a work of art, but stops short of exploring the nature or characteristics of the complex knots or impact of this view of artistic creation; as a result, the portrait does not particularly move on our understanding of the setting nor of its implications for other organisations. The act of artistic creation, especially that of theatre – in which the language of practitioners is peppered with acknowledgements of the agency of objects and ideas, in which no argument is made over assertions of 'energies' coming from a group of actors, and in which endeavour is pursued for a product that fizzles away as soon as it is exposed to an hour and a half of air – seems unnaturally well suited to an ANT exploration.

The Processes of ANT

The term 'translation' is used in other ANT accounts to describe a series of actions — incorporating reaction and adjustment, with the accompanying implication of communication and interaction — which occurs within the setting of study. It is the aim of this section to briefly outline some of the usages of this term with the ANT literature in order to clarify its usage in the context of this study.

Brown and Capdevila (1999) describe it as "the semiotic ordering and organising of significations, interests, and concerns" (Brown and Capdevila 1999: 37). Law (1999) bemoans its loss, "thrown out of the nest" by what he proposes is the cuckoo of homogenisation threatening ANT scholars, based on its earlier, promising use in Callon (1986). In Callon (1986), an early and seminal article entitled *Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay*, Callon uses the word 'translation' – a concept developed from the writings of Michel Serres – in relation to three groups of actors involved in scallop fishing. In this instance, the process of translation connects three multiple interpretations into one unified discourse:

At the beginning these three universes were separate and had no means of communication with one another. At the end a discourse of certainty has unified them, or rather, has brought them into a relationship with one another in an intelligible manner. But this would not have been possible without the different sorts of displacements and transformation...the negotiations, and the adjustments that accompanied them. To designate these two inseparable mechanisms and their result, we use the word translation. The three researchers translated the fishermen, the scallops, and the scientific community. Translation is a process before it is a result.

ibid, p19

So by Callon's definition, translation is a *process* of 'displacements and transformation', of negotiation and adjustment (or, as I will later explore, of prescription and subscription), and also a result ('a translation').

Six years later, Law and Callon (1992) emphasise that "translations are the product of continual negotiation" (1992: 56). In *The Life and Death of an Aircraft: A Network Analysis of Technical change*, the setting is the development (and ultimate failure) of a new design for an aircraft. Within the context of that study, the reiteration of an aircraft's design as a second, separate model can lead to a modified design being a *translation* "rather than a simple development of aircraft number one" (1992: 45). In this case, translation also incorporates a sense of reiteration that is consistent with the relational nature of entities as described by Law (1999). Keeping the same stimulus, a new iteration of it is developed, redesigned. Thus the idea of multiple translations developed from the same stimulus is explored.

The concept of translation is an extremely useful one, but there are certain clarifications that should be made on my interpretation of the term and the consequences for this study. The object of Law and Callon's study is a particular aircraft and the process by which it does (or does not) come into being from an imagined (and idealized) concept which incorporates a number of requirements upon it from different sources. The above quotes reference a process of iteration by which an aircraft design is improved and is thus 'translated' into a new design. However, is it not possible to see the process of translation as an iteration of

one *imagined* object? Is it not possible to theorise that, rather than two translations, the story of the aircraft is of *one* translation – the trajectory of an idealized, imagined aircraft into physical form? The process of trying to achieve the imaginary aircraft – its design, development and manufacture – could be seen as one translation: the process would then be not from actual aircraft to actual aircraft, but from *imagined* aircraft to actual aircraft. If this is used as the model, the aircraft will always be an imperfect translation, partially due to the persistent and irascible inability of the imagination to observe the laws of physics. But it is not only physics which means the aircraft is bound to – partially or completely – fail to be realized as imagined by its designer, but the nature of interaction between actors with different requirements.

Callon's conclusion in *Some elements of a sociology of translation* is that a translation is, or at least can be, a process external to the subject. As much as there are displacements and transformations, negotiations and adjustments, in his account of this setting, there is also an external narrator, an interpreter which is enacts the process of interpretation, to literally 'translate'. But outwith the external eye which assembles the information into an account for its own purposes, it is not a large step from saying that the scallops in the above account have agency to saying that they, too, generate a translation: that the translation, rather than meaning 'account of three researchers' is in fact the account of scallops – one which is later coagulated into the account of the three researchers.

This study applies the principles of the displacement/transformation, negotiation/adjustment, prescription/subscription process to a process of artistic creation, whilst accepting that the source of the translation can be an imagined object interpreted through a physical manifestation – for example, a set of ideas interpreted through a text. In this way, the ANT tenet of translation can be explored in a setting outside of science and technology, whilst investigating whether both the end product – the (play)text in performance – and the translations of which it is comprised – individual 'translations' of the (play)text – have agency in their own right.

This study is not the first to consider this ground. Bruno Latour extensively explores the nature of translation in his work, whether it be of the Brazilian rainforest into a diagram (Latour 1999b), or of heavy weights into an instruction to patrons of a hotel (Latour 1992).

For Latour, translation can also be a process analogous to projection – that is, perceiving with a certain frame: perceiving a door closer as a having an agency akin to that of a human is *translating* its nonhuman actions into our frame of reference, making it speak of its objectives on our terms. Through combining these slightly different meanings into a context that heavily foregrounds the ability of nonhumans as well as humans to have agency, Latour suggests it is possible that translations can be independent of the human observer, and it is this extrapolation that I employ in my understanding of the process of translation. In the words of Callon and Latour, writing together in 1992:

To take the scientists' place in deciding on the distribution of actants' competences instead of following them in their work of constructing these competences is a methodological mistake.

(Callon and Latour 1992: 356)

Actor-Network Theory initially emerged from the work of two key academics working within the field of science and technology studies: Michel Callon and Bruno Latour. A good outline of the initial impetus and position of ANT is provided in the summary which prefaces the article the two wrote together in 1981:

"Callon and Latour consider the macro-order to consist of macro-actors who have successfully 'translated' other actors' wills into a single will for which they speak. This enrolment of other actors allows them to act like a single will which is, however, extremely powerful because of the forces on which it can rely. How do micro-actors grow to such formidable size like that of big multinational corporations? Callon and Latour say that unlike baboons, human actors are able to tell not only on symbolic relations, but also more 'durable' materials, for which they provide examples." (1981: 277)

Expanding upon this in a 1983 article, Latour questions what he sees as an underlying assumption amongst social scientists that the phenomena they explored existed within two frames: that there were two scales of scientific exploration which were separate from one another and could be explored as discrete entities, with sociologists zooming from one scale to another with ease.

Latour exemplifies based on his work on scientist Louis Pasteur (Latour 1988). By outlining how pasteurisation became accepted as a process both within a localised and then wider setting, Latour proposes that scientific facts circulate rather than simply being transposed (like the zooming social scientist) from one context to another. Pasteur is a function of the other actors in the network around him. In this article, he proposes that a process of translation – "or 'transfer', 'displacement' or 'metaphor'" (1988: 13) – occurs. Facts have to engage with the world in all of its scales before they are accepted; as a result, dividing the world into micro- and macrocosms is an error – there is just one world:

"Many analysts of STS [Science and Technology Studies] are proud of not entering at all into the content of science and into the microlevel of scientific negotiations, while, at the other end of the spectrum, some analysts claim that they are interested only in controversies between scientists" (1988: 2).

At this stage, Latour merely proposes a methodology whereby the same level of detailed exploration of individual units as might be used to explore large-scale imbroglios as might be used to look at smaller scale controversies in a localised setting. This methodology naturally encourages the researcher to employ certain tactics, one of which is examining the equipment employed in a way integral to the situation, rather than considering it to be a separate consideration. This attention to the role of objects would become a central tenet of Actor-Network Theory as it developed.

ANT academics describe the processes they observe differently, and thus – to respect the ontology of the discipline, they cannot be assumed to be mutually identical, created as they are out of different materials. But some commonalities can be detected in the descriptions. In the following section, two of the most influential theorisations of the process of translation are outlined. Callon's definition of translation is "a mechanism by which the social and natural worlds progressively take form" (1985:19). Fundamentally it is the process of building and dismantling a network which will generate an object.

A project of a number of ANT (and 'after' – the term informally applied to ANT-inspired methodologies) papers is to complicate and problematise the words associated with the term. The term 'actor-network theory' is dismantled by Latour (1999) as being a misleading

one: Latour includes Mike Lynch's observation that actor-network theory should really be called actant-rhizome ontology, based upon the fact that neither the three words nor the hyphen adequately represent the concepts scholars in this area are trying to explore. To take the most pressing of his observations at this point – the nature of the term 'theory' – Latour describes it thus: "far from being a theory of the social...it has always been...a very crude method to learn from the actors without imposing on them an a priori definition of their world-building capacities" (Latour 1999: 20). ANT is not just a portable set of assumptions and methodologies which can be applied to data in a unidirectional relationship, but a "way of delegitimizing the incredible pretensions of sociologists who, to use Bauman's forceful expression (Bauman 1992), want to act as legislators and to open yet another space for interpretative sociology." (Latour 1999: 20). His description positions ANT as a type of anti-theory – not only a method which forms combats the homogeneity and egocentricity of viewpoint suggested by the word 'theory', but also a movement which resists the urge to install itself as an authority. To call ANT a theory, Law (1999) agrees, is to naturalise and homogenise a number of topological assumptions, which is somewhat counter to the commitment to plurality and heterogeneity of voice suggested by the semiotics of materiality.

Criticisms of ANT

Criticisms of ANT have a tendency to focus on the appropriateness of the apparatuses used to 'give voice' in the first place, the way in which these voices are represented in the text, and the conclusions drawn by ANT scholars as a result. Collins and Yearley (1992) propose that the giving of voices is merely semantic sleight-of-hand on the part of ANT theorists.

Part of the potential for conflict between these views may be exemplified in the description Collins and Yearley give of work that Travis (1981) undertook with mass spectrometers. Collins and Yearley state that his work "found that the inscriptions produced by mass spectrometers in biological laboratories were not universally accepted as representing reality" (1992: 311) and later, describe agency being "granted" (1992: 312) by Latour to pieces of paper. In the former case, it does not seem relevant to seek absolute agreement as to anything, but especially not such a grand project as a representation of reality. The positivist assumption here is that reality is a pre-existing quantity ready to be discovered

when ANT has insisted throughout that networks co-create agency through interaction. Remaining true to this methodology, how could there be an essential reality? Reality, according to Latour, Callon and any other ANT scholar, is co-created or constructed moment-to-moment. The description of agency as "granted" to pieces of paper is similarly at odds with how ANT scholars conceive of agency: not bestowed from one power to another entity, but created relationally through interactions within a network (for example, Law (1999: 5) and Muniesa, Millo and Callon (2007:2)).

As part of their rejection of the theory, Collins and Yearley (1992) re-write a passage from Callon (1986) to suggest that the vocabulary Callon uses is a semantic trick to provide a veneer of symmetry whilst telling a familiar story. There is a certainty in this critique which is beguiling, but which fails to 'take seriously' the power and possibility of language, even whilst exercising it. Re-writing sections of Callon's account in 'traditional' language is a decision which contains within it an inherent violence. The authors propose that there is nothing new in the accounts Callon or Latour present – that "the language changes, but the story remains the same" (Collins and Yearley 1992: 315), which suggests that a story is unaffected by the choice of words of which it is composed. 13 The suggestion is almost that Callon or Lator are Caliban, in his cave, babbling to himself in a language that means nothing until it is interpreted by the smooth language of a dominant discourse – a suggestion that is only mirrored in the presumed attitude towards the 'objects' of study. The authors also discount the features of their own language, imbued as it is on one hand with the lexicon of struggle or conflict, and on the other as a steady progression through Euclidean space. If there was a dominant underlying metaphor, it would not be ridiculous to imagine that the authors conceive of SSK as a castle which must be defended against barbarian hoards: "we can only compete on even terms for our share of the world with all the usual weapons" (Collins and Yearley 1992:324), they say, remarking that "it would be a tragedy to surrender this new way of comprehending the world..." (Collins and Yearley 1992: 321). Furthermore, the barbarian hoards to whom this capitulation would be are characterised as "...scientists, technologists and philosophers" (1992: 321), with the implication that those espousing ANT

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¹³ It does seem a curious claim to me that form and content are separable in the creation of meaning: certainly in the field in which I work, content and form are incredibly reliant on one another, but perhaps this is due to the metaphorical dimension of theatre work and I should not hold Collins and Yearley to the same expectations as dramatists.

methods are aiding and abetting them. The authors may conceive themselves of the guardians of a precious cargo that others cannot appreciate, as having the true measure of how to enjoy and represent the contents of the castle in a way the barbarians never can: even on Collins and Yearley's own terms, it is questionable that the philosophers, the technologists, and the scientists are coming to smash the gables and deface the paintings. However, this presupposes that there are essential gables and paintings to attack – that philosophers and scientists are not building them moment to moment as they go.

The violence of the language employed in Collins and Yearley's account is striking, both in its colonial overtones and in the position of certainty from which the metaphor is constructed. But there is another aspect to this characterisation which is perhaps more fundamentally troubling. The article's argument presupposes that there is a pre-existing world of knowledge which *can* be attained if only we can find the right route – like a mine that can be excavated. When they say "when we talk of access to knowledge of nature we must mean access through the sciences" (1992: 306), they presuppose the pre-existence of knowledge as a Euclidean entity – an entity that takes up space in a three-dimensional if imagined format. They imagine an entity which can be 'shared out', which can be carved up with 'the usual weapons' (ibid). As Callon and Latour (1992) put it in their rebuttal, "they start from a closed definition of the social and then use this repertoire as an explanation of nature" (1992: 349), but they do so on terms which display an absolute certainty and a level of presumption about the nature, behaviour and qualities of that entity.

I have examined Collins and Yearley's counter to Callon and Latour in particular (but ANT in general) in order to highlight one particular point that does not seem to have been addressed in Callon and Latour's response. Metaphors, explicit or implicit, are powerful. They are useful tools because they provide a template on to which our understanding of an idea can latch. We are adept harvesters, creators and consumers of metaphors and they are an essential tool for the transmission of ideas. As Carr and Leivesley (1995) and Cornelissen (2004) both conclude, metaphors are dangerous when they align one concept with another without accepting that there can be a multiplicity of ways in which the signifier and the signified can differ. Perhaps the way of knowing the world presented by SSK *is* a castle, which should be defended against invaders. Perhaps it is a pram full of toys that a child does not want to share. If we want to continue to bombard this way of knowing with

metaphors, maybe it is more like a stream, composed of many separate elements but presenting an illusion of unity. Maybe it is like a sound wave, heard once on the ear before fading forever. But to remove it from this context entirely, why is it an object that exists, even conceptually, in a solid, three-dimensional state? Are there not other ways to imagine that are free from the reflection of the physical spaces which we inhabit? That is not to say that academic writing may never employ metaphor. But the pay off is that there are consequences and entanglements in the use of metaphor or allegory for the way in which knowledge is presented, conceived of, and used by others. Organisation Studies in general and ANT too relies on metaphors to communicate its ontology and findings, and later in this case study, I will reflect on the suitability of one recurrent metaphor used in particular, that of performance.

Chapter Three: Methods

In this chapter I detail some of the methodological implications considered when designing this research project and the implications of the methods selected.

The nature of the field of study presented a number of different potential research designs. Whilst an experimental framework was ruled out as incompatible with the ability to control participants, a number of other methods would have generated different results: to use Yin's divisions, survey, archival analysis, history, or case study (Yin 1994: 6). It would be possible to undertake a historical study of plays which had already been produced, to have undertaken surveys, or to conduct archival analysis to look at theatre production processes and attempt to perceive the nature of and characteristics of the relationships therein, and to construct from there a hypothesis of the agency therein. But reconstructing a historical narrative or exploring archival material without a strong impression that there was a specific and unique set of circumstances around the production of a specific play which would be cause to privilege secondary accounts over ones which could be observed unfolding live seemed like a needlessly complicated and potentially frustrating method to employ. Furthermore, the unusual access which my professional work gave me to theatre productions being created in Scotland meant it seemed like an unusually apt research opportunity which should usefully be exploited. With this in mind, I returned to the literature of ANT to consider the remaining methods.

The methods practised in ANT studies had tended to be detailed case studies built from ethnographic methods and employing thick description in the reporting thereof: observing actions and interactions within networks is central to ANT's objectives, if not principles. No other method seemed as well suited, using this inductive as well as deductive reasoning, as the case study. Part of this is due to the reliance not only on what is said to be done, but what is done; of the voices of silent objects as well as speaking people. Therefore interviews seemed only, possibly, part of a process of thoroughly gathering data, given it is difficult to interview a lighting desk and surveys are only useful for human actors and not beech-floored rehearsal rooms; I return to the influence of ANT on my methodological choices later in this chapter.

Surveys, then, and case studies were the remaining tools from which I could choose. Surveys remained a potential method to employ and one which was considered as the research design developed; however, the data that these would have provided on their own did not seem sufficient to provide adequate coverage of the research questions proposed. To revisit them here, the research questions that I began the study with concerned the nature of the processes by which a piece of text became a theatre production. Who and what were the agents in this process, and what were the natures of the processes each of these agents engaged in? How did these processes interrelate and reach a point of accord and a state of stability – in other words, how was order achieved? How, if at all, did the material surroundings influence this process, and what was the relationship of this process as a whole, or any one process, to change? Who or what had agency in this process? What was a play and how did it relate to the text of the play?

In order to study these processes, it seemed that the most effective method would be the case study method, potentially supplemented by surveys. However, as the research began and developed, it became increasingly unlikely to me that surveys would helpfully let me add to or refine my data, or understand better the questions initially suggested to me by my experience. I was also aware of the temptation to introduce too many methods through anxiety to create a 'fuller' picture, which Silverman points out is a danger of employing mixed methods (Silverman 2000: 50).

At this point I started to question what sort of case study I might develop. Yin divides case studies into four types: single-case holistic; single-case embedded; multiple-case holistic, and multiple-case embedded (Yin 1994: 39). The difference between holistic and embedded is in the number of units studied; a single-case study can contain many sub-areas, for example different work groups, sites or departments working on a shared project. Applying the word 'case' to my own potential sites raised the question immediately of whether my proposed study of two to three cases was, in fact, a single-case study containing several "subcases" (Miles, Huberman and Saldaña 2014: 30) or a multiple-case design, and what the implication of this would be in the process of researching and of theorising from the findings. In order to be mindful of this process from the start and to enable clear definition and processes to be reached, I returned to literature on case studies as a method.

Miles, Huberman and Saldaña detail eleven different examples of cases covering units as small as a role, a space or an event, and as big as a nation (Miles, Huberman and Saldaña 2014: 29); the wide variety of different forms a case could take in itself did not resolve my question of how I should define my case(s). Clarity was sought through the definition of what a case study *is*: Yin and Miles, Huberman and Saldaña display commonality in agreement that a phenomenon is at the centre and the "context" (Yin 1994: 13) or that by which the phenomenon is "bounded" (Miles, Huberman and Saldaña 2014: 28) is not certain (but does exist); both concur that the case study occurs in a real-life context unfolding in contemporary circumstances.

In quickly revisiting ANT literature, I could see that studies were very often single-case and a mixture of embedded and holistic. After consideration, I returned to Yin's exploration of what the purpose of a multiple- versus single-case study might be. Yin compares the multiple-case study to experimentation but takes care to establish that generalisation from the findings is to explore whether there are common features between cases and not to use sampling logic by which "data from a smaller number of persons are assumed to represent the data that might have been collected from the entire pool" (Yin 1994: 47).

At this stage, I had three potential sites to which I had gained tentative access. The possibility to study all or one of them had the additional benefit of raising and thus flagging to my attention the question of 'representiveness' which had been a source of concern from the start. I felt there was sure to be interesting data and I had a strong pull towards a methodology that I felt would help me mine that interest and communicate its worth more widely when placed within the context of other literatures. In encountering Stake's intrinsic case study method as described by Silverman, there was a potential solution – no attempt is made to "generalize beyond the single case or even to build theories" (Silverman 2000: 103). But as Silverman expresses, there is something ontologically troubling about having no outcome, theoretical or otherwise, beyond the idiosyncrasies of one particular case and so "the problem of 'representativeness' is a perennial worry of many qualitative or case-study researchers" (ibid.). Silverman describes four potential ways to mitigate this concern: mixing qualitative and quantitative methods to make the data speak more generally of a population; careful selection of case to place a frame around the part of a population most of interest; careful selection of case to place a frame around the part of a population most

of interest to a specific theoretical framework; or using a single-case study. In selecting my sites, I thus turned to this guide as another lens through which to pass my decisions through.

Another way of considering these four methods were, I considered, as tools to rebut accusations of being merely descriptive or journalistic and so to provide an initially steady basis for thorough analysis. Though Yin had presented arguments for the single-case study, the draw of multiple cases was still present: undoubtedly this was partially due to an initial nervousness that there wouldn't be enough data from one case, but in reading further, the array of potential differences between the potential sites I had identified excited my interest in being able to theorise based on more than one example. These differences were in the scale of the productions and thus the number of relationships to observe, but also in the nature of the physical spaces which each case study could then interrogate. My instinct from early in the process was that the space of performance and other physical spaces (like the rehearsal space) might be extremely important for the research; having both small and large spaces, small and large numbers of people and objects to observe might provide a sound basis for theorisation. This reasoning fell into the category described second above, which Silverman terms purposive sampling (Silverman 2000: 104). But there were other factors which influenced the selection of the sites too – the category described third above, termed theoretical sampling (Silverman 2000: 105) and these are not easily disentangled from the purposive sampling reasons outlined above.

Selection of the Site

The decision to select the general area for the study was, as I discussed earlier, based on a considered instinct. The selection of an ANT-inspired methodology to undertake this task was based upon another instinct: that paying attention to the agency that practitioners themselves flagged for objects and spaces within the production process (specifically, looking at the detail of material interactions) would provide data and lead to a theory which could potentially contribute to two areas. Firstly, a more nuanced exploration of the process of theatre production and understanding of what sort of object a play was would provide an exploration of an organisational process which, it was hoped, would contribute to ANT literature and address some of the less well explored aspects of process change and

workspace literature. Given that making a piece of theatre is not only an organisational process, but is also something which occurs within other organisations (in order to train employees, for example) it was anticipated this might add to the current literature in these areas. Secondly, the theory might be applied to the way in which theatre itself, and the roles of those within it, are understood when theatre is applied as a metaphor within Organisation and Management Studies. A contribution to the understanding of whether the use of theatre as a metaphor in its present form enriched or misdirected scholars, and whether an enhanced understanding of the nature of roles and agency in this process was useful to enhance academic explorations of organisations which employed this metaphor, was anticipated as a potentially useful outcome.

As a result, my selection of setting was profoundly influenced by theoretical sampling. The right settings would combine both an opportunity to observe networks flashing into existence and disappearing over a period of time – as discussed elsewhere, limiting an ANT account's boundaries of exploration is difficult since factors well before the beginning of an event being studied could be considered important. The boundary between enough and too much time was difficult to pinpoint – but certainly I should be in a position to see the beginning of the creation of the production physically at the point at which all the participants began to come together, and this proposed to me the start of rehearsals.

A number of different types of studies were possible depending on the productions selected. For example, I might generate interesting data by considering two productions of the same play in order to consider the implications of different actors acting upon identical material; however, the likelihood of the same play being produced over the time allocated for field study was very slim and the reconstruction of one of these narratives historically – for example, through interviewing people who had at one stage created a play, was a technique that I had decided, for the reasons detailed above, to avoid. Comparing two plays with some qualities in common – in this case, the presence of music in the text – and two different scales, in order that the relationship to space might be contrasted and compared, had the potential to generate theory by comparison between two different situations rather than relying on data from one site alone. The time period and intensity of the observation meant that I settled on two productions.

Initially, I had negotiated permission an arts venue in Edinburgh, which was hosting a large number of performances over the Edinburgh Festival Fringe, to observe the process of plays being performed in their venue; with this aim, I began to take some notes on this production, visiting the building prior to the Fringe beginning. I believed one production in particular had the potential to be an especially interesting subject of study: the performance began at 11.30pm one evening and took place over that night, finishing with a breakfast at 6am the following morning. Interacting with a large number of spaces throughout the building, a former veterinary college, the production was a version of the story of Medea reimagined in a contemporary time period, played out with the audience as active participants in both the physical space and the artistic storytelling space of the play. The production sat within a tradition of creating work in non-theatre spaces known as sitespecific (or site-responsive) theatre. The interaction with an ancient text and with so many spaces, and thus including movement and manipulation of the bodies of the audience, seemed likely to produce a large quantity of data to form the basis of at least one case study, and the material specifics of the site of production seemed similarly likely to bear up to detailed analysis. However, I was aware from the beginning of the process that I would only have the opportunity to see one stage of the translation of the text: the play in performance, played out in real time before the audience. As the production was being rehearsed in Brazil it was impractical to access rehearsals. By this stage in the process, the process of translation had been negotiated; much of the potential to observe the conflicts and negotiations between translations of the (play)text and between actors was lost. There might have been a comparable richness in data available through the repeated observation of the same performance over many different performances, but without the presence in the rehearsal room as the different translations were emerging, I was not confident that I would always recognise and be able to accurately and coherently theorise about the processes under observation. Another factor was the toll of the research: the performance mentioned above, occurring overnight almost every night for a month, did appear to be a particularly gruelling challenge to observe – one which would have been cheerfully

undertaken had it otherwise been an attractive research site, but in light of the other factors, I decided to look further for more appropriate research sites¹⁴.

The empirical sites chosen for the study were, finally, a production of two new plays where the entire process from the beginning of rehearsal to the final performance could be observed. This had the additional benefit of garnering data which could be used to create a dialogue with Organisation Studies literature on the use of theatre as metaphor more directly than might have been possible in using site-specific theatre examples.

The plays were selected due to the multiplicity of translations expected to result from the production process – each rehearsal process employed between eight and forty participants, with audiences numbering the thousands over the period. The differing scale of the productions and availability of access to the entire rehearsal process were another factor in selection. They presented an interesting contrast in their spaces, scale and division of role. Forked Up had many participants occupying singular roles (performer, musician, lighting designer). Rap-punzel had few participants occupying multiple roles (writer/director, composer/performer, writer/performer). Thus the sites were selected both theoretically and purposively.

The potential pitfalls of the case-study method were ones which I was mindful of before embarking upon the study: in particular, a form of bias which can emerge when in the course of the research, "the original research design is no longer appropriate for the research questions being asked" (Yin 1994: 42), particularly in a holistic case-study, whether single- or multiple-case. Yin points out that the perceived flexibility in the model can allow shifts in the *object* of the study but not the *objectives* of the study – or the method becomes prone to theoretical imbalance:

"...an investigator must be careful not to shift, unknowingly, the theoretical concerns or objectives. If these, rather than the cases themselves, are changed, the

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 $^{^{14}}$ On careful consideration, the reliance throughout the piece on improvisation, whilst it would certainly have made an interesting study, might have provided a very complicated production to observe, more suited as a single-case study in its own right. I later had the chance to see the piece in performance and as I was chased through the corridors of a Victorian veterinarian school at 4am by a Brazilian man who was naked and covered in blood, I did get a pang of regret that such an interesting site remained unexplored by academic research.

investigator can correctly be accused of exercising a bias in conducting the research and interpreting the findings."

(Yin 1994: 52)

Again, in project design, the methodology suggested by ANT was in some ways a safety-break to avoid the study falling into the methodological disarray outlined by Yin. By continuing to keep central tenets of ANT-inspired methodology central – tenets such as, objects and humans can potentially behave in agentive ways, thus must both be considered in the research process – there was a way to at least partially mitigate this potential pitfall. To aid in this process, a list was created of several of these central tenets, based chiefly on the chapter 'On the Difficulty of Being an ANT: An Interlude in the Form of a Dialog' in Latour's 'Reassembling the Social' (2005: 141-156). Many of the questions of what ANT is not, or what it does not do, are addressed here, as outlined earlier, and with this list for reference I hoped to keep my focus whilst taking part in observations in line with the initial project design.

To aid further concrete discussion of methods and methodology, I will here briefly describe the sites themselves.

Forked Up

Forked Up was a work that combined spoken and sung text with an operatic score and a live on-stage presence, based around the concept of a television cookery show which threatens to go horribly wrong. The story of the 'sort-of opera', as it was referred to throughout, follows two television cookery show hosts, June and Philip, who discover that a monster, Mr Granules, is coming for dinner. They create a meal from some sentient vegetables and attempt to turn a similarly-sentient banana into custard. Mr Banana escapes this fate by providing them with sensible advice and by helping them with the cooking in co-operation with their butler, a giant egg named Mr Egg. June and Philip procure meat from an operatic Butcher but when Mr Granules arrives, he eats June and fatally shoots Mr Egg. Philip and Mr Banana must save June from Mr Shit, a dancing blob of faeces, as she is ingested by the monster's digestive system. The performance ends with June and Philip's traditional farewell to their audience and a posthumous toast to Mr Egg. The creative team consisted

of a director, composer, writer and designer, set designer, sound designer and lighting designer. The cast comprised of five performers: performers Pauline, Philip, Martin, Mitch and Peter, and puppeteer Denny. Pauline, Philip, Martin and Mitch are all performers whose background was in theatrical performance whilst Peter's experience is chiefly in opera. Denny is a recent graduate.

Forked Up was produced by a small-to-medium sized professional theatre company, anonymised here as BrightLight, who are based in Scotland and regularly funded by Creative Scotland, the arts funding body for Scotland. BrightLight produce one or two productions a year, funded on a project-by-project basis with some core funding to maintain a staff of two to three all year round. The production of Forked Up took place over three nights at a medium-to-large sized arts venue in Glasgow, here referred to as Black Box, with rehearsals occurring for five weeks prior to that. BrightLight produce work in venues throughout Britain, not just at Black Box. Black Box is an arts venue, converted from a tram depot, in a large city in Scotland. Its main space, Black Box 1, had a capacity of four-to-six-hundred. The venue does not produce work itself, instead receiving touring shows.

Forked Up was directed by Rich, artistic director and founder of BrightLight, who is an experienced theatre and opera director. In conversation with Rich, he said that the impetus for Forked Up had came out of work which he and the composer, Mick, had done together during a project some three years prior to the production of Forked Up. This project, run by BrightLight, brought together artists from several disciplines for two weeks to let them explore ideas that were at an early stage with practitioners from other disciplines. It was here that Rich and Mick first worked together and it was during this period that they decided they'd like to work together again. After a number of conversations about what form that work might take, they decided to approach Daniel – an internationally-renowned visual artist based in Glasgow – to ask if they might all develop a project together, with Daniel taking the lead on creating the text. Daniel, though primarily renowned for his sculptural and graphic work, had previous experience in developing and producing short animated films which had been successful both critically and popularly. After initial conversations and a week of development – during which Rich, Daniel and Mick explored potential stories and character with a number of actors – an opportunity to apply for an appropriate funding stream came up through Creative Scotland. The specifications for this

funding stream were that submitted projects were at an early stage, with the funding guidance notes emphasising that ideas should not yet be developed in too much depth.

Rich put together a funding bid, and BrightLight was awarded the funding to mount a full production of Forked Up.

Rap-punzel

Rap-punzel was a pantomime based on the fairy tale of a traditional Brothers Grimm fairytale and produced by a small-to-medium sized professional theatre company that produces lunchtime theatre in Glasgow, anonymised here as RollPlay. Pantomime – a form of popular theatre, typically "a Christmas entertainment with a special appeal for younger audiences" (Law, Pickering and Helfer 1988: 453) is a form with a long tradition within British theatre dating back to the 18th century; in modern pantomimes, the stories are derived from traditional fairy tales which are generally re-written by each company as they head towards the production process. Pantomimes traditionally combine spoken text with music, as Rap-punzel did; however, this production was aimed at an adult audience. The pantomime was performed over a three-week period, often twice a day, with a two-week rehearsal period. Anonymised here as Rap-punzel, the plot of the play followed the rough trajectory of a traditional fairy tale in which a regal maiden is ultimately rescued from an enchanted state by a charming prince; in keeping with the pantomime tradition, the production subverted elements of the narrative, inserted stories and characters from other fairy tales and provided contemporary commentary, references and elements of characterisation to the story.

RollPlay was founded and is led creatively by Hugo. Hugo is an experienced producer with some forty years of involvement in making theatre in Scotland. He is particularly renowned within that community for having had a pivotal role in making work with several influential and successful touring companies within recent Scottish theatre history. RollPlay do not receive funding from Creative Scotland, but instead receive sponsorship from a Scottish media company and financial support from a larger theatre company in Glasgow; they employ three staff year-round. RollPlay also uses the income generated by ticket sales to fund their productions. Throughout the year, the company produces short plays of between forty minutes to an hour long, performed every lunchtime with a two-week rehearsal period

preceding a week of performances. The auditorium generally seats around one hundred audience members who also receive a drink and a snack prior to the performance, the cost of which is included in the ticket price. This operating method was reached through arrangement with the venue, Old Church, from which RollPlay operate. Old Church also hosts music gigs, club nights and dinner dances, and has a profitable and popular bar on the floor above the stage space. RollPlay has been a very popular and successful venture, leading to partnerships with a number of high-profile theatres to co-produce work in a similar format in cities including London, Edinburgh, Dundee, Newcastle and Dublin.

For this production of Rap-punzel, Hugo is directing as well as having co-written the script with Dave. Dave is an experienced musician, composer, actor and writer with whom Hugo has been working, on and off, for the duration of his long involvement with theatre. The cast is comprised of Dave, George (a musician and performer who is another long-term collaborator), Cat (a young performer who appeared in a RollPlay pantomime the year before) and Juliet. As well as being a long-term collaborator and a performer recently renowned from her part in a popular children's TV show, Juliet is also Hugo's wife.

ANT and Methodology

It is worth noting from the outset when considering ANT methodologies the assertions of scholars working in the area that ANT is not a "fixed point" (Law 1999: 10). Nor does the term cohere into a solidified and unified methodology, the ANT 'community' having – as Law puts it – "a productive non-coherence" (Law 1999: 8). The multiplicity of viewpoints within ANT is one of its characteristics, and thus one of the challenges in assessing the literature is to extract commonalities of method amongst a body of work which inherently resists being classified as such. However there are clearly methodological commonalities which come from the shared ontological positions of ANT scholars, so these positionings lead to some shared methodological threads within the field. An ANT methodology takes as one of its ontological positions a scepticism towards any *a priori* assumptions about the setting – its workings, purpose, or importance: so when Callon proposes that "to understand a market it is necessary first to agree to take what it does seriously" (Callon 1999:192), it is indicative of not only the setting in one study, but of an attitude towards the object of study throughout ANT.

Across the body of work that makes up the literature of ANT, there are a range of methods employed. A common methodological thread that emerges within ANT and ANT-influenced studies is an emphasis on ethnography. This particularly takes the form of observation of emerging or active networks where it is possible to do so. Where there is generally not an explicit statement in methodology within articles or books that observation has occurred, the accounts often indicate or imply a bodily presence by the researcher – for example, Callon's early proto-ANT paper (Callon 1986) seems to indicate the physical presence of a researcher in some of the discussions mentioned: "a handful of researchers discuss a few diagrams and a few tables with numbers in a closed room"; "[the scallops were represented] in the form of larvae anchored to collectors and in the form of diagrams discussed at Brest before a learned assembly" (1985: 15). Latour's extensive work within ANT often explicitly demonstrates the researcher's presence at the research site – for example, Latour 1999a, where photographs from an Amazonian research trip are included in the paper and process of making the trip to Brazil are detailed as part of the narrative of the paper. "As for me, I'm the one taking this picture and describing this scene. My job as a French anthropologist is to follow these three at work", Latour states, both making it clear that the researcher is present and acknowledging the possibility of including that presence in the account of the data (Latour 1999a: 26). In other accounts, the residue left from the use of interviews is clear. Gomart and Hennion makes reference to data "that we can find in interviews" (Gomart and Hennion 1999: 231) in their study of the commonalities between music fans and drug users.

Some accounts seem to be more thought-experiments into the everyday object, for example, any of the numerous articles Latour has written on the door-closer (for example, Latour 1988, 1992), or Leigh Star's monograph on being allergic to onions, which puts the researcher at the heart of the research (Leigh Star 1991). In both these accounts, personal experience and anecdotal remembrances are given space in the account as valid material for the researcher. Verran too describes an "embodied account" (Verran 1999: 136) as she describes the different teaching methods for communicating the measurement of distance and time in Nigerian classrooms.

A further category is that of historical reconstruction through secondary source material.

Latour's work on Louis Pasteur and the network which 'created' pasteurization makes use of historical documents rather than direct observation (Latour 1999a) as does Law's exploration of the navigational techniques of Portuguese sailing ships in the sixteenth and seventeenth centuries (Law 1986). This technique is not necessarily limited to historical matter from times long past, however; Law and Callon reconstruct the trajectory of an aircraft's development from the late 1950s to the present day (Law and Callon 1992).

Of course, most accounts combine a number of these methods in different ways, as well as types of data not yet detailed. Mol, for example, uses a combination of detailed observation and interviews in combination with medical charts and data to create her post-ANT consideration of the construction of atherosclerosis (Mol 2002), as does the (similarly 'after-ANT') consideration of the construction of childbirth of Akrich and Pasveer (Akrich and Pasveer 1998). Akrich cites newspaper articles in her ethnographic observation account of photoelectric lighting in French Polynesia and electricity on the Ivory Coast (Akrich 1992: 217). In each of these cases, mixed methods are used to get a full sense of the data gathered. As a result, in designing the research for this study, I felt confident in selecting a number of approaches to gather data, whilst centering participant observation.

Ethnography and Participant Observation

Easterby-Smith, Thorpe and Lowe suggest that ethnography is particularly well suited to organisation and management studies as a method:

"one of the distinctive research styles [in fieldwork] is *ethnography*. Here the researcher tries to immerse him or herself in a setting and to become part of the group under study in order to understand the meanings and significances put upon the behaviour of themselves and others".

(Easterby-Smith, Thorpe and Lowe 2002: 49)

Participant observation is one method used to gather ethnographic data. Easterby-Smith, Thorpe and Lowe propose participant observation as breaking down into four classes, particularly as used within the research of management and organisation: researcher as employee; interrupted involvement; observation alone, and research as the explicit role

(2002: 112-4).

The first form of participant observation is particularly suited to situations where the presence of the researcher might present a barrier to accessing data as the fieldworker need not necessarily disclose their status in full. This in turn presents ethical issues arising from deception or pseudo-deception. Even if the role is explicit, eliminating the ambiguous burden of secrecy, there is a potential for physical and intellectual exhaustion in carrying out two roles simultaneously.

The second form of participant observation as described above 'interrupts' the research by moving in and out of the organisation, concentrating on different work groups or sites and observing different people and phenomena. Whilst the participation in work is thus perhaps minimal in comparison to a situation in which the fieldworker is also an employee, there is an extent to which the relationship to the organisation as a whole frames the participation, and gives the researcher the opportunity to access material in a variety of setting, potentially employing different methods, over a period of time (2002: 113).

The third form of participant observation is described in brief as an observer who observes at a remove (insofar as any remove or objectivity is possible), describing but minimising contact with those being studied in order to create "accurate pictures of what takes place and how long they take" (2002: 114).

The fourth form is what Easterby-Smith, Thorpe and Lowe describe as Research as the Explicit Role. With access pre-negotiated and, preferably, the freedom for the researcher to follow their instincts into the situations of most interest to their research, there are not ethical issues provoked by deceit. Participation in the workplace becomes a form of "strengthening relationships" (2002: 113); whilst this aspect of the fieldwork requires management and judgement on the part of the researcher to ensure that the two roles work together appropriately to the setting, the combination of access and time to observe fully make the method "most often favoured" (2002: 112). This also seemed to me the most fitting for these research sites, especially given the relatively small size of the organisations and the impracticality of presenting myself as anything other than a researcher in such a highly-skilled area.

There was one further area I wanted to consider in advance of beginning observations. I had a strong preference to build a data collection framework which would enable analysis alongside the collection of data; there was an awareness from the start of the data gathering period that particularly in my repositioning of role within a production process from practitioner to researcher, having the opportunity to spot potential blind spots and become aware of new strategies to gather data whilst still within the field would be advantageous (Miles, Huberman & Saldaña, 2014). Given the nature of the field, there was also an awareness that this might not be possible. From my professional practise, I knew that the rehearsal and then production process frequently involves long days of eleven or twelve hours continuous activity for many days on end when the activity of all the participants in the production process was factored in. The quantity of data produced and the potential for data to emerge at unpredictable times or in unexpected circumstances was great. As a result, it was predicted that it might be difficult – over the period of the month over which a full production like 'Forked Up' was created – to set aside much time for reflective analysis of the methods and strategies I was employing, especially taking travel time to and from the site into account. The initial fieldwork construction plan was to mitigate this circumstance by having a gap of several weeks between observations of the two different productions so that some analysis of the data could occur in the intervening period. However, the preference of the contact through which access to the second site was gained was that I observe a production which began on the Monday after the final performance of Forked Up; my wish to observe the get-out¹⁵ for Forked Up on the day following the final performance meant I had no gap at all between my observation of Forked Up concluding and that of Rap-punzel commencing.

In practise, there were periods of time in which it was possible to begin analysis during the observation period. The fifty minute train ride from the site back to Edinburgh provided a period for reflection on the data gathered on the occasions where I was not joined by another member of the production team (which was, itself, an opportunity to collect further data). There were also periods of musical rehearsal in the process of observing *Forked Up* which were extremely repetitive and did not generate a great deal of data after a few initial sessions of observation. The intensity of the process also brought with it a number of

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 $^{^{15}\,}$ This is the process by which the set is removed and the properties and costumes put into storage

advantages: long hours spent with the participants in the process meant that I seemed to become a more generally accepted part of the room than if I had appeared sporadically. But in addition, the elision between observation periods meant that the methods and initial tentative codes I had established as of interest from the first data collection period were still both fresh and malleable in my mind in approaching the second data collection period.

The Object of Study

Having become familiar with ANT and ANT-influenced studies, I had begun to consider in more detail the object which should be the central one around which the study was focused. As has been outlined in the introduction, my dramaturgical ontology in the field of study as well as my observations about the agency ascribed by other actors to the text of the play alerted me to the potential to use the text as the starting point – the primary object to keep central to my observations. As rehearsals progressed and I began to analyse the data, I clarified exactly what the object was which was being followed – but as this account begins, I take the text as the primary focal point.

Focus of Observations

Methodologically, ANT combines ethnographic methods with respect for and often reproduction of "the rich vocabulary of the actor's practice" (Latour 1999:20). As a result, I decided I would spend as much time as possible recording the precise details of the words the human actors involved in the process used to describe their actions and the actions of those around them. In terms of the objects who were actors in this process, I would pay particular attention to their needs and requirements, the ways they behaved in the situations I observed, and occasions in which their agency was recognised. Had it been practical, I would have considered making audio recordings of the rehearsal rooms, performance spaces and other spaces in which these networks acted to capture the precise words used in conversation; in test recordings, however, the size of the rooms in which rehearsals took place created recordings which were unclear and disproportionately favoured the voices closest to the recording device. One rehearsal and performance spaces in particular were very echoey and led to poor quality recordings. Furthermore the many

shifting sites in which the research occurred made the methods which could have been taken to counter this – permanent microphones and perhaps video recording equipment – impractical, so the main method of observation was selected as detailed annotation with diagrammatic detail and photography to record spatial elements of interactions, as well as to act as a prompt to memory at the stage of data analysis.

In keeping with principles from the ANT literature to observe the creation of agency in detailed examination of a network in action, I intended to be present for as much of the process of mounting the production as I could. The process for observing both the productions I would study was that I would enter the rehearsal room on the first day and witness first-hand as much of the interactions between the actors in the network as they worked towards the live performance of the play. I intended to record through detailed notes how actors interacted, what the nature of these interactions were, and the results. I intended to take photographs of these same moments and to draw diagrams to capture spatial positions. My objective was to be in the rehearsal room, production meetings, artistic meetings, technical rehearsals and the fitting of technical objects like lights into the performance spaces, the sessions in which the properties, costumes and set were made and in any other interactions which I observed.

The data I aimed to capture during these interactions was how each translation was reached by the actors, human and non-human, in combination. I aimed to pay attention to the performers, director, writer, composer, operators, performers and other creative team, but also to the physical properties or 'props' that were used on stage, the set, the lighting and sound equipment. My particular interest were those objects which might not have a loud voice in the (play)text-in-performance — objects indeed like the lights, so much part of the performance of a play and whose agency was difficult to discern from outside of the production process. Did the lights have agency? How did they agence others around them? Ultimately, a picture of all of these elements would give me, I hoped, a sense of the qualities of the network and its workings. I aimed to do this from close observation of the two sites, semi-structured interviews with professionals involved or outwith these particular settings but within relevant roles. I also aimed to take many photographs so that the physical arrangement of the space remained present in my observations. My aim was to see how each actor in the process formed the part of the performance they were responsible for

generating, and what other impact any one of these had on each one individually; the second goal was to observe the (play)text-in-performance and see what its qualities where, and whether my proposed object of the (play)text as a multiple (fractional) object cohered in the face of the rehearsal and performance

Prior to beginning this project, I had spend several years working professionally as a dramaturg in theatre in Scotland. I have outlined the consequences of this work more fully in my introduction, but mention it here to refresh the memory. Dramaturgy is the process of developing a piece of theatre paying attention to each of its individual components – so, the structure, storytelling, character development, tone and objective of the piece are all considered in developing it dramaturgically. Dramaturgy is considered by all of the actors developing a play, but it can also be assigned to a separate role – that of the dramaturg – who solely focuses upon these elements rather than combining it with another role. Dramaturgs work within theatres that produce new plays and for approaching four years previous to this study, I had fulfilled this role at a theatre which produced new plays in Edinburgh.

As a result, whilst I had experience of working in rehearsal rooms in a dramaturgical role, my background was not in technical theatre nor stage management and so I was concerned I might miss important details when observing the technical and stage management staff perhaps in being unsure as to what they were doing, I might miss some of what their interactions signified. Consequently before observing the production process for Forked Up I undertook interviews with several former colleagues from my role at a producing theatre in Scotland. These took the form of open-ended, semi-structured interviews. This included the Head of Stage, who managed the technical operations of the theatre and the technical staff there; another interviewee was a stage manager who had been working for companies within the industry for a decade. The interviews with them strengthened the basis of my observations on how the technical and stage management teams interacted internally and with one another. As part of this process I told them about the focus of my research. Reactions to this explanation varied from a succinct nod to the observation that "it was a bit woolly". However I was encouraged that, in keeping with my objective to build an account that accorded with my professional experience as well as fitting with the literature which I had read, none of the actors to whom I spoke expressed surprise about the concept of the

(play)text which I had at that time developed, and if there were any reactions against my conceptualisation of the process of translation they were not raised with me.

I identified some potential productions that I might study through conversations with industry professionals about upcoming work. It can sometimes be difficult to gain access to information about forthcoming work due to embargoes on information – theatre companies often publically release details of their productions close to the time when rehearsals begin, and the window of time in which I could conduct field research was relatively tight. As a result, I used my existing relationships within the industry to access information which might otherwise have been difficult to obtain. I wondered if ethically this was a sound basis on which to proceed. In my professional life, I had often been in the uncomfortable position of observing that other theatre professionals were keen to form relationships with me based on opportunities they perceived I could offer them professionally, and I did not want to exploit any residual aura of this position of privilege, consciously or unconsciously, in seeking a subject for this study. After reflection I decided that I would be explicit in any conversations that I no longer had any influence or formal link to my former employer prior to talking about my research to minimise this possibility.

My association with Nick, the director of *Forked Up*, had begun some four or five years previous to this research when he had taught a module at a university which I was attending. Whilst not part of this course, I was invited to contribute to it through working dramaturgically with the students, who were studying directing. The relationship with Nick had endured throughout my professional career in the intervening years, and I had approached Nick near the beginning of my research period to see if he might be developing any projects to which he might permit me access for my research. As a practitioner but also someone who taught at a university, I felt he would be both sensitive to my needs as a researcher and clear about the reason for my presence in the rehearsal room. Nick was sympathetic to my quest for a suitable theatre production and described the work he was developing over the forthcoming year. One of the productions he mentioned was *Forked Up*. It sounded like a complex and ambitious piece to create, with many interactions between different types of personnel, different venues and rehearsal spaces, as well as physical contexts. After a discussion, we agreed some three months before the beginning of my observation period that I might observe *Forked Up*.

I had met Hugo, producer of RollPlay and director of Rap-punzel, a number of times through my work at the Traverse Theatre but did not have a relationship with him as such, despite having seen many of the plays he had produced for RollPlay and having been sub-contracted to work dramaturgically on one of their productions. RollPlay's productions at Old Church seemed like they might be an interesting source of material: all their productions occurred over a short rehearsal period, with two weeks from the beginning of rehearsals to the first performance; plays were then generally presented for one week. I also found the interaction with the venue – also a pub and live music venue, but at which RollPlay were resident rather than visiting for a few days – potentially interesting. I initially emailed Hugo to ask whether there might be a possibility of observing a RollPlay production in the summer and received an affirmative reply, but further e-mail enquiries garnered no response. Eventually I decided to watch a performance at Old Church and attempt to speak to him afterwards in the bar. I caught him mid-pint, post-show as he discussed the production with Dave, and we negotiated that I could observe Rap-punzel throughout December. The production was unusual by RollPlay standards because as the Christmas play, it would be rehearsed for two weeks as normal but performed for three weeks, to include two shows a day at times. The traditional RollPlay seating was also suspended – generally the audience sat at tables so they could eat the snack included in the ticket price, but high demand for the pantomime meant that the auditiorium would double in capacity by having double rows of chairs and no tables. Although I had initially anticipated that a more conventional RollPlay production might make an interesting study, some of these features – alongside the presence of songs in the production, adding an additional layer of complexity – suggested to me that it could be particularly interesting to observe this process.

Observations

The date for the first day of rehearsals for Forked Up approached and the lack of a reply to my emails asking where and precisely when rehearsals would take place had left me a little worried; all I knew was the date rehearsals were due to begin and that they would take place in Glasgow. Eager not to miss the first session, I speculatively went to Haymarket Station in Edinburgh at 9.15am and stood on platform four awaiting the arrival of the train to Glasgow Queen Street. I had no idea of where I would go once I reached Glasgow, but maintained my sense of optimism with the thought that at least being in the correct city

would place me at an advantage should I be able to find out the location. On the platform I met Dani, the producer for BrightLight, with whom I'd many close interactions during my time in the Traverse Theatre in Edinburgh, where she had also worked in a variety of professional capacities. She assured me that I was expected and that Nick had become caught up with practical preparations for rehearsals: just as the train pulled in from its station of origin, Edinburgh Waverley, a text message arrived from Nick apologising and giving me the address of the rehearsal room. Nick was on the train: Dani and I boarded the train and travelled with Nick to Glasgow.

Forked Up rehearsed for three weeks in rehearsal rooms owned by an opera company in Glasgow. The production was described as "a sort-of opera" and featured singing throughout, so the acoustics and equipment in the building were appropriate to the productions needs. The majority of theatre productions in the Central Belt rehearse and play in Glasgow, which has the largest number of theatre companies and venues, so many performers choose to live there rather than in Edinburgh, where BrightLight were based; as it fell to the company to pay the performers' travel expenses, this was another reason why it made sense for the company to rehearse in that city.

The rehearsal space was, for the first week of rehearsals, a large room on the first floor of the opera building and for the remainder of the period, an even larger room on the floor above. As other spaces in the building were also in use by the resident opera company, it was quite common to hear the sound of opera singers echoing through the marble of this colonnaded Edwardian building. Originally home to the Institute of Engineers and Shipbuilders, entry to the rehearsal spaces was through an columned marble entry hall with a large memorial to those who lost their lives in the sinking of the Titanic, up a sweeping staircase of marble worn by a hundred years of use; the building itself was an homage to the materiality of production.

My observation of the Rap-punzel rehearsals followed directly on from the Forked Up observations. Armed with a new set of notebooks and pens, I took the train that I had caught every morning for the previous four weeks to Glasgow and cycled the hills from the centre of town to the West End of Glasgow, frequently drenched in wintery rain. The physical space of the RollPlay rehearsal room was intimate; the pantomime was being

rehearsed in the front room of a private flat belonging to a friend of Juliet and Hugo, and the entire creative team who attended day by day totalled five including a directing assistant attending from a local university. We fitted easily around a trestle table. The flat had been the venue for rehearsals of many RollPlay plays over the past few years: a sandstone tenement with four bedrooms, it provided not only two rehearsal spaces not dissimilar in size to the small stage at Old Church, but also accommodation for any creative personnel who might be traveling from outside of Glasgow. Rap-punzel, however, was to be the last production rehearsed there: a nearby resident had complained to the council that the premises was not being used for residential purposes, and Hugo had been informed that they would not be allowed to continue rehearsing there, a decision he had accepted, though not without some uncomplimentary observations about the character of the neighbour who had precipitated this change. The flat was generously proportioned and equipped with a large kitchen. In the first week of rehearsals, another play was rehearsing in the other room at the front of the flat, and so it was usual to see a performer from the other play muttering their lines to themselves in the hall or trying on a costume in the kitchen. Alongside the production process observations, I also took the opportunity to conduct two open-ended, semi-structured interviews with Dave and Hugo, drawing on their twenty or more years of experience to ask them about the specific context in which pantomime in Scotland has developed over that period as well as the developing tradition of adult pantomime at Old Church over the past three years.

Limitations

There are limitations to the methodology employed here as well as the limitations this particular project would experience. As mention about, my aim was to generate theory as a result of the case study data I gathered using the constant comparison method. The disadvantages of this method are the nature of the theories which can be built and, in Glaser's words, "a perennial problem with qualitative analysis is conveying the credibility of a theory" (Glaser 1965: 443), given that the method is created from the data itself, but that it is difficult to always see the process by which data became theory. A further drawback is that the theory developed from the data cannot be used to test the data from which it sprang (Glaser 1965: 438). Eisenhardt draws attention to the risk that, due to the large amounts of specific data that might be gathering, there can be a tendency to apply too

much data in the process of theorisation, resulting in "theory which is overly complex...which is very rich in detail, but lacks the simplicity of overall perspective"; there is a risk that the overload of data can result in a convoluted theory with little application outside that case study (Eisenhardt 1987: 547).

There were also limitations specific to this particular study. I knew in advance that there would inevitably be limits to what I could record during the period over which I was to observe during both productions. In some instances, this was because work was occurring simultaneously on different sites, some of which were difficult to access: for example, during the observation of Forked Up, I had hoped to visit the puppet-maker at work, but she was constructing the puppets in another part of Glasgow with her assistant and the space was not physically big enough for three people to be present. Ross, the Company Manager for Forked Up, was a frequent go-between carrying messages from rehearsals in the opera building to Black Box, but his work occurred during the time when rehearsals were occurring and I had to decide whether spending three hours in a van with Ross in order to observe a ten-minute conversation with the Black Box technical team would be more fruitful than spending the same time in the rehearsal room. In addition to these constraints of time and space, the type of conversations which I could or (ethically) should record gave me cause to reflect. The lines between formal and informal conversation were frequently blurred: Mick, Nick and David would often go for lunch together and come back ready to make changes which must have been discussed whilst they were eating. It occurred to me that this would be an excellent space in which to have meetings that appeared impromptu – and thus to which certain personnel, myself included, need not be alerted – whilst in fact being planned. I do not imagine that any of the participants in the process would have consciously blocked my research but nor, understanding the politics of the rehearsal room, could I have begrudged them the odd meeting beyond the range of my watchful eye.

Ethically, I had to negotiate some related territory in my interactions with the performers in both plays in particular. As I observed Forked Up, the performers frequently discussed work whilst we ate lunch together on the leather sofas outside the rehearsal room. Was it fair to record and then use what was said outside the work space? For all the personnel involved in the production, work clearly occurred over a number of different sites — with performers working at home to learn lines, design meetings that spanned lunch breaks, and a director

who spent most of the train ride home reading and re-reading the text – so I concluded that I felt ethically justified in using material gathered outside rehearsal room building and the theatre spaces of Black Box. However I did not then conclude that every conversation was thus an ethical source of material, at least in part because I was hesitant to disregard the intelligence and decision-making skills of the human actors I was observing. For example, the performers knew I was present during some of the conversations during which they were critical of artists within and without the process of creating Forked Up; it would disregard their intelligence and draw hasty conclusions about their motives to omit this material out-of-hand. I frequently drew the conclusion that it was precisely because I was present, listening to their frustrations and paying attention to what they said, that the performers raised the issues that they did. However, there were occasions where the performers might not have realised I was listening to them – although I did not hide behind colonnades with the intention to eavesdrop on private discussions, the pre-existing nature of some of the performers' relationships to one another meant they inevitably wished to share some things privately; some of their conversations were not intended for me to hear. I decided that I would not use material which I overheard in conversations where my ability to hear the speech of all parties was not clear. I also decided that where the speakers indicated – through lowered voices or whispering – that I was not included, I would not record information.

At first, I considered not anonymising the names of the companies and people under observation; neither director pressed for nor seemed particularly concerned about anonymity, but the decision to anonymise was eventually on the basis of the fear that the various human subjects might, as people somewhat in the public eye, "only provide information they regard as public or nondamaging" (Miles, Huberman and Saldaña 2014: 57) or censor themselves in any of the unpredictable situations which might occur. Furthermore, as the "meta-agreement", to borrow Miles, Huberman and Saldaña's vocabulary (ibid.), was made with the director of each production: at the point of agreement, both of the directors had a mixture of confirmed and not confirmed participants in the process; in the circumstances, anonymity seemed the most fitting, respectful and ethical decision.

My observation of Forked Up in particular was complicated by some of the features of the production process. Daniel had from the outset engaged a film crew to record material for a 'making of' documentary, and this film crew were present in rehearsals, during technical sessions, and during performances. Performers have contractual ownership over their image and are entitled to royalties when it is broadcast, championed and enforced by the performers union, Equity; some of the cast, privately and publically, expressed some consternation that they were being recorded and presented is as a matter for discussion as to whether they had been fully consulted in the decision to film rehearsals. It occasionally felt as though my presence too was perhaps a related source of unease because whilst I was not recording their performance or rehearsal through moving image, I was often writing down their words and taking photographs in which they featured. My negotiations of access to the rehearsal room had been with Nick rather than with each individual actor at the beginning of the creative process: as at the time of casting, our research arrangement had not been formalised, the performers had not all known in advance that I would be present. A rehearsal room is a place of experimentation and also of negotiated ownership in the production of any play; as the words of one person are spoken through the lips of another, there are anecdotally frequently thorny questions of what performers 'own' as part of a production process. As a result, to varying degrees the performers seemed at times to view my presence as another form of potential appropriation which they had to negotiate. The degree to which this seemed problematic was notable in its variance from individual to individual. The performers, to varying degrees, did seem to enjoy speaking with me about my research and its relevance to their own thoughts on the production process; they never seemed self-conscious or displayed any hesitancy in speaking to me about their work. Those with whom I had previously worked in my theatre career seemed entirely open to talking to me about somewhat sensitive material, apparently trusting from our previous interactions that I would not use this material in a way which would harm them. I was aware of how often I felt the "confusion of identity" and of roles that Easterby-Smith, Thorpe and Lowe describe as an inevitability of part of the participant observation process (2002: 111). I was aware too that this was by no means a unique experience nor would it have been mitigated by a choice of other research methods: as Baszanger and Dodier suggest, there is always a tension in research, given the fieldworker "is present in two agencies, as data gatherer and as a person involved in activities directed towards other

objectives" (Baszanger and Dodier, 1997: 9), whatever the field or site, though I did find myself in the strange position of being both separate and inside of my "familiar universe" (Baszanger and Dodier, 1997: 12).

My potential to cause harm was an issue with which I engaged with from early in the process. Investigating perspectives on ethnographic observation, I felt a resonance with the following sentiment as expressed by Angostino:

"...interactive membership-orientated researchers *are by definition* intrusive – not in the negative sense of the word, to be sure, but they are still deeply involved in the lives and activities of the community members they study, a stance fraught with the possibilities for 'harm'."

(Angostino 2005: 736)

As a result of my previous involvement in the field and my reflections of the possibility (acknowledged or not) that I had the potential to do harm, to an extent my position did seem to me to be somewhat reminiscent of an interactive membership orientated researcher, who participates in group activities in the setting for extended periods of time, although my particular involvement with these two productions did not extend to contributing dramaturgically to the production. The intrusiveness, then, of the researcher became a concept with which I felt I must further engage. The complex intersection between my position as researcher and my employment history became especially clear to me as I moved into my observation of Rap-punzel. The methodology of the production was that everyone would do what it took in order to realise the performance: it became apparent early in my observations that the team did not believe that I should consider myself exempt from this system merely because I was not performing in the show. The attitude of the company is perhaps well summed up by the image of the researcher being despatched to the corner shop for more milk for the break-time tea: there was no hiding in the rehearsal room from work that needed to be done, and whilst the actors involved in creating this production clearly understood why I was in the room, they did not see this as a reason not to help with some of the practical matters of the production. At various points I was part of a group who recorded songs for the production, ran through lines with Juliet as she memorized them, was consulted on appropriate rhymes for a song, looked up a music

video on YouTube, and provided applause. To expand on the first of these examples, the decision was made in rehearsals that there would have to be some elements of sound recorded and played during performance: included in this were a song and some chants from a crowd. One morning, Hugo marched all of the company (including me) to the performance space and had us record the song and the chants – this was the same session in which he had Andy record the sound of his shoe hitting some wood to represent the sound of someone knocking on a door. If I needed any reminder that I had become part of the production process, it was amply provided by the sound of my voice coming through the speakers during every dress rehearsal and performance.

Furthermore, the spirit of collaboration in the RollPlay rehearsal room occasionally tempted me to contribute as one of the team, and I was horrified to realize that a rhyming couplet I suggested during a tea-break had made it into a song. My relief that the song was later cut from the show made me further consider my own position towards the material. Was I happy to believe that I had no impact on the production process if I was not directly influencing the words of the text? This example would seem to indicate that I was; intellectually I could not help but feel that everyone in the room was influencing what the play would become by their very presence, even if I might like to believe I was a neutral 'observer'. I too was part of the network making the text, as become clear in every performance whenever I heard my voice singing from the speakers.

There was a further way in which I found I could not escape myself in the RollPlay rehearsal room: my presence in the room was remarked upon by the performers, thus becoming part of the research notes themselves, and the RollPlay team never attempted to pretend that I was not there. As was the case during the Forked Up observations, there were one or two meetings that I could not be part of: this was either due to the fact that they occurred at the same time as rehearsals, or because they took place in a venue a number of the creative team had no access to – Juliet and Hugo occasionally came into the rehearsal room having discussed an aspect of the production at home over their family dinner. Whilst my interactions with those creating *Forked Up* were sanctioned by the director and were participated in willingly, there were frequently hours which passed where I was not acknowledged in rehearsals; whilst it was never stated that there were places I could not go, circumstances like the impromptu lunch meetings occasionally made me aware that there

were discussions occurring that would always be outwith my reach. In the creation of Rappunzel, the opposite was perhaps true – the company seemed entirely comfortable with my presence, if occasionally bemused by the fact that I would choose this production as an object of academic study, and frequently commented upon my presence. Two examples of this follows. During the first day of rehearsals, Dave performs one of the songs for the first time, and George asks if the pitch of the song is too high. Dave asks if they "can go to a C and up an octave", to which George asks Juliet if she "takes it up the octave". The doubleentendrè caused a lot of laughter, after which Juliet remarks to me that she is "interested to read what my conclusions are". At another point that same day, as new couplets are added to an existing song, I write down Hugo's comment that they are now making "the same sandwich with different bread" – observing that I am recording this phrase, the company as a whole laugh. These reactions, I concluded, stemmed from two different reflections: one, that I was recording the sort of data that the participants did not imagine could be relevant to a research interested in this process, especially when the content was risqué; the other, that the idiosyncrasies of what would generally be ephemeral utterances, throwaway comments, were being recorded so consistently. Their references and observations about me, which I then recorded in my notes, meant that these moments too became part of the production process; by recording their reactions to me, I was indelibly, inescapably drawn into the research materials.

During the rehearsal process for Rap-punzel, I wondered whether there would come a point where my involvement in the production, small though it was, would limit my ability to successfully use this play as a research topic; were there details that I had missed out because I was busy singing about lions, or was I blinded to interesting data such as conflicts in process because I felt warmly towards one or other actor? It was a worry resonant to what Easterby-Smith, Thorpe and Lowe describe as the "crisis of identity" caused by fieldwork and "confusion of roles" that can ensue (Easterby-Smith, Thorpe and Lowe 2002: 111). I concluded by the end of the observation period that there had been no significant encroachment. On the first question, this may have been due to luck, or it may have been due to the fact that the majority of people involved in this production had a wealth of experience in making theatre in this mode that gave them an inherent sensitivity about when it was appropriate to involve me and when it was not practical for me to do so. Less

clear is how my attitude towards the people taking part influenced my perspective on the site of study; it's pointless to deny that researchers are also human beings, and it would be understandable if they felt more warmly towards a group of people who have shared cake with them than a group who have occasionally eyed their note-taking with suspicion. In revisiting my data, I wondered whether I had behaved correctly in my attitudes to the productions and to the people I observed; was I wrong to feel attached to the theatremakers in either production? Should have maintained a cool distance from them? In reading on qualitative methods, I found a resonance with Agostino's comment that researchers need not search for some sort of "idealised empathetic state", perhaps implicitly suggested as necessary for 'proper' research prior to the rise of post-modernism in research methods in the 1990s:

"...the question is whether such a state is even relevant to ethnographic research and whether it is desirable to describe and or interpret cultures as if those definitions could exist without the ethnographer's being part of the action."

(Angostino 2005: 730)

Smith and Hodkinson (2005) also speak of what they characterise as the chimera of objectivity (2005: 915) within any broadly relativist epistemology:

"There is no possibility of the objective stance or view... the idea is to move past the epistemological project, to change our metaphors and images of research from those of discovery and finding to those of constructing and making, and to accept that relativism is our inescapable condition as finite humans... relativism, as we understand the condition, is not a theory of knowledge and advances no pretence that we can escape our finite- or time- and place-constrained position in the world."

(Smith and Hodkinson 2005: 921)

It seemed ontologically adroit that, in the observation of a process of 'constructing and making', the metaphor for understanding the product of that process be in itself viewed as one of building and creation. My ontological understanding of the play production process and my construction of a narrative about how in these specific cases it occurred was, I cautiously concluded, valid. Furthermore, in accepting that it was impossible to erase

myself from the record of these performances being made and that my ontology was in itself inescapable, there came an acceptance that it was acceptable that I was not invisible in the rehearsal room. I knew, of course, that I had never *been* invisible in either rehearsal room; though at times it seemed in the Forked Up rehearsal process that I was unseen, the illusion was painfully clear whenever I had to be introduced to a new member of Black Box staff, or as the smiling stage management team posed for my photos with the giant foam vegetables from *Forked Up*, or as the writer hugged me as I sat perched next to the backstage monitor just before a performance. In the construction of these enormous, temporary structures of theatre, joining so many actors together for such a short time, it would be to ignore the tenets of materiality if I were to claim that it was possible for me to observe and not affect the (play)text.

Reading once more through ANT literature, I was reminded that in articulating their own reaction to materials to an 'outsider' (even though my position was somewhat more complex than this), some ANT-influenced practitioners like Latour made their 'outsider' status a methodological choice: Collins and Yearley (1992) describe Latour's approach as "observation informed by the perspective of the estranged visitor" (1992: 311). It occurred to me that the acknowledgement of this strange position both felt more honest to me and more in keeping with ANT methodologies than attempting to write a record of those rehearsal processes that expunged all reference to my presence.

My final concern arising from the data I had gathered was to some extent a selfish one. I spent some time concerned about the ramifications for any further professional interactions I might have with the participants in the research. I felt a responsibility to create an account that seemed to me to be compatible with both my own observations and ontology as a theatre professional and as a researcher, but how would they react to the picture I built from what I had observed in their rehearsal rooms? Again I took refuge in Agostino's questioning as to whether a truthful or accurate representation can ever be built from the bricolage of perspectives which comprise the account of any event, but in particular the following phrase:

"Ethnographic truth has come to be seen as a thing of many parts, and no one perspective can claim exclusive privilege in the representation thereof."

Whilst accepting that my perspective was in one sense privileged by the fact it was recorded and analysed and eventually committed to bound paper, I hoped that the influence of the ANT-related methodological concerns – the commitment to symmetry of vocabulary and the acceptance of the relational generation of agency rather than to a pre-ascribed order – would favourably dispose any of the actors described in this account who might read it to, if not recognise either a commonality in the account here constructed, at least keep the complication of objectivity in mind – to take seriously and for themselves, as Agostino puts it, "...to question whether observational objectivity is either desirable or feasible as a goal." (Agostino 2005: 730).

I was particularly mindful in revisiting this data of the need to write this account from a place of, in Silverman's words, "being non-judgemental" and "avoiding the 'divine orthodoxy'" (Silverman 2000: 201); I suspected there was a particular potential risk in the first instance due to the potential for my sometimes-binary opinions on theatre to interfere with my research role, so remained vigilant to my own tendencies to exercise hyperbole in my rhetoric both in recording data and in the storytelling of this account.

The Shifting Relationship to the (Play)Text

If I came to an acceptance that I had a relationship to the (play)text and that this was not a methodological failing, it then seems appropriate to give at least some small account as to the nature of that relationship and how it changed as the rehearsal periods progressed.

In the case of both productions, the move into performance brought with it a shift in my relationship to the (play)text. To believe some of the accounts within Organisation Studies which details the aesthetic effect of a work of theatre upon a receptive audience, here my separation from the performers should have been absolute and my position as a receiver of the (play)text confirmed. But what of the performance of Forked Up I watched from backstage, sitting next to the monitor which showed the stage so that the Deputy Stage Manager could time cues and stage action? What of the performance of Rap-punzel I watched from beside the operator, roped off by Andy so that I could sit next to him as he

operated the light and sound cues? In each case, I was both and neither audience and participant, participating from both within and without in creating the (play)text.

The interactions I had with the company creating Forked Up were quite different. The entire creative team for the production would have been over thirty, if the orchestra, design assistants, actors, composer, puppeteer, puppet maker, and other personnel were included. Day by day, there were not many more people in the room, but the larger physical space of the room meant that I was more separated from the performers, director, writer, composer and repetiteurs immediately. Most of my time was spent making notes and taking photographs from the table where the stage manager sat. On the first day of rehearsals, I introduced myself as a doctoral candidate investigating the production process, and occasionally a cast member would ask me about my research during a break, but there were no instances where my presence was acknowledged during rehearsals. The most explicit reference to my physical presence was during conversation with lighting designer Ed prior to the second performance of the play. I remarked that I would be sitting in a different part of the auditorium that evening, and he jokingly mentioned that I should make way for an audience member who had paid for their seat; when I made reference to the fact that I was indeed paying for my ticket, he registered surprise. Here, my visibility and invisibility as a researcher collided. Ed's surprise at the fact I was paying for a ticket came from the fact that I had been present throughout in the rehearsal room; his first reference made it clear that I was in some way separate to the 'true' audience for him, particularly as I had spent much of the previous three days sitting with him in the auditorium as he negotiated the lighting levels with the lights, the lighting board, and the venue technicians. There was an implicit recognition of my presence in the production process: how could I be a 'normal' audience member when I had been present at every stage of the (play)text's creation? But I was rarely referred to, mentioned or agenced into the (play)text except when it was unavoidable. One instance of this did occur when a documentary television crew from the BBC came to record snippets of the rehearsal process for The Culture Show. Everyone who appeared on camera had to sign a release form to say that their image could be used; on camera, my physical presence could not be denied, and so I signed a form alongside the director, actors, and stage manager.

Revising the data, I also came to the conclusion that in fact none of the performers observed during the production of Forked Up had a particular issue with my research or my presence on its own terms, but rather as part of a portfolio of topics on which they might have anticipated, rightly or wrongly, to be further consulted. In my research memos, I noted that, in contrast, the technical crew at Black Box seemed entirely unconcerned by my presence and were happy to facilitate any access I expressed an interest in over the week-long period that the creative team were resident at Black Box. Technicians too are represented by a powerful union – the Broadcasting Entertainment Cinematograph and Theatre Union, or BECTU – who have in place parallel agreements to Equity on recompense when their members appear on film. This was highlighted by an incident during the building of the set when the camera crew were filming the technicians at work. A senior technician told them they were not permitted to do this. The camera crew cropped their shot so that only the technicians' feet were being recorded, at which point the senior technician asked them to cease filming entirely. It was clear by their very different reaction to me that the technical staff did not equate me with the camera team in any way.

One of the more difficult aspects for me to overcome was not truly in relation to my own visibility or invisibility, but my own negotiation of transition in role. I knew several of the personnel involved in *Forked Up* well from my time in professional theatre, and whilst Hugo did not remember it, I had worked on a RollPlay production some years before as a dramaturg. As a dramaturg often provides (constructive, it is hoped) criticism to the creative team on the shape of the play, I did not want any suggestion that I was covertly in that role. Not only was that not accurate, but it was not necessarily a helpful suspicion for any of the participants to have. In practise, once my relative silence in each rehearsal room was established, I presumed that the transition was clear to the personnel who were aware of my professional background.

I also had to consider my own attitudes towards theatre-making and my professional ontology. However much I might have consciously disengaged my critical engagement with the text, I did still have opinions on effective and less effective ways to make work, and professional as well as personal tastes on what works well and less well in creating a play. I could not entirely shelve my dramaturgical instincts on why moments of each play worked and why they did not and there were moments where I would have been compelled to

comment as a dramaturg where I was bound as a researcher to stay silent. My strategy was to occasionally make a separate note of these instances in order that I could acknowledge and dismiss the thoughts. To exemplify, on at least one occasion I was very aware that the nature and the purpose of one of the characters in Rap-punzel had shifted quite significantly. When professional training and experience positions one to force oneself to speak about a difficult shift such as this even when it is not easy to do so, it runs counter to ones instincts to have to remain silent. Across the observation periods of both Rap-punzel and Forked Up, ultimately my methods remained the same, though I found that due to the small size of the room, it was more difficult to take pictures of the rehearsal site for Rap-punzel than it had been in the cavernous sit of Forked Up rehearsals or the large space of the Black Box auditiorium. I continued to take detailed notes and draw diagrams and take photographs when I could.

Data Analysis

Due to the philosophical foundations of ANT, accounts produced within this field show a systematic commitment to complexity. This can be seen as an essential component of Actor-Network Theory accounts, in common with a number of related relativist ontologies. Law proposes that for an ANT engagement to have integrity, "simplicity should not displace the complexities of tension" (Law 1999:1). This has consequences not only for the data collected as part of an ANT study, but also for the presentation of this data. The reflexive prerequisites of ANT have generated a number of solutions for the presentation of consequent accounts, such as Mol's double text which juxtaposes a 'dominant' narrative with a subtext that follows its own discrete path beneath the main text (Mol 2002). Another method is the dialogue exemplified in both Woolgar, Coopmans and Neyland (2009) (a 'rough' and 'smooth' telling of events) and in earlier Woolgar work (for example, Woolgar 1988). Here a 'smooth' account in a unified and assured (if reflexive) voice is supplemented by a 'rough' account, characteristically raising questions and pointing out problems that the 'smooth' account might bypass or sidestep. These accounts embody a resistance to closing down the multiplicity of possible answers and of perspectives within a work, even when there is a single author. They resist, in their form, giving unproblematic answers and in doing so, mirror the complexity of the networks they explore. Even when there is no subtext versus text, no rough versus smooth dialogue, a problematisation of the impulse

towards the smooth and dominant narrative can be implied by recourse to rhetorical questions within the text (often destabilising earlier statements made in the same document) or the pursuit of alternate paths of enquiry within one document – either through the same material (as in Woolgar, Coopmans and Neyland 2009) or a parallel one (as in Mol 2002).

One of the characteristics, then, of studies applying an ANT methodology is a hesitation to narrow down perspectives within the data and to create a solid, unifying perspective or voice through the presentation of that data. ANT studies present the multiplicity of voice within the setting being explored as a natural extension of the attention to symmetry in the language: if the pursuit of semantic symmetry is a central thrust of the field, then presenting them as an essential part of the account is as important as listening to and recording those voices. The multiplicity of voices involved in creating and stabilising an object infers, in accounts, a hesitation to privilege any one voice or to accept that there can be an unproblematic dominant outcome — that is to say, a suspicion of accepting that the results of the controversy or conflict explored is truly stable or universally accepted. In this way a reflexive consideration of the nature of truth and knowledge are often features of the account itself. The struggle to stay reflexive, to resist homogenising the account or making statements that are positivistic, presents a constant tension in the writing process.

As I had gone into the observation processes looking at any translation processes that I could observe, I gathered large amounts of data during both rehearsal and performance processes. I had around ten thousand words of written notes, diagrams and photographs from the observations. As I mentioned earlier in this chapter, in the small space of the flat where Rap-punzel rehearsed was more difficult to take photos, which inevitably being unpleasantly close pictures that did not incorporate the interactions I wished to capture. However, several of the photographs taken during rehearsals for Forked Up proved illustrative; in both cases, the photographs were in retrospect an excellent aide memoire when the writing up process began.

To navigate the large quantities of hand-written notes, first I digitised them by typing them up on a word processing programme. The documents were then easy to search for keywords, and I began coding as detailed below. At this point, coding began, and in this

process the first clusters of codes began to emerge. Simultaneously, opportunities to follow particular actors in more detail began to emerge.

One of these instances concerned the lighting design. I had ended up sitting next to lighting designer Miles in rehearsals and, as we knew each other in passing from my work in theatre in Edinburgh, we had a number of informal conversations about lighting design, during which I noted interesting aspects such as the moments where Miles felt the design was first created (at the point where the lights, his plan and the lighting board began to meet). I asked if I could come to observe the plotting and focussing sessions at Black Box instead of staying in rehearsals, and found that our conversation in the rehearsal room had informed my ability to make sense of the processes occurring once we arrived at Black Box. I found the ways in which Miles spoke about lighting resonated closely with the concepts that I'd begun to develop and due to the highly visible nature of the actors involved in the creation of the translation of light, was able to spend a good deal of time observing the intricacies of the long process of developing a lighting design. The semiotic intricacies of the copyright, so clearly stated on the lighting design, gave another type of data to analyse in the context of the observations I had undertaken.

Coding and Analysis

Once all field notes and other source materials which were not already in a digital format were digitised, coding began. This incorporated field notes, memos, photographs, and diagrams. The digitisation of material was in order that word searches could be quickly carried out to aid in the organisation of material and thematically coding the field notes.

I considered carefully whether to carry out coding manually or using software. I considered carefully the benefits of using software like NVivo to assist in the coding process. After an initial learning process, such software had been invaluable to research colleagues and is enthusiastically recommended by many methods sourcebooks – Miles, Huberman and Saldana, for example, consider the researchers who do not engage them as "hampered in comparison to those who do" (Miles, Huberman and Saldana 2014: 46). Graham Gibbs (2010) presents a more ambivalent overview and suggests some drawbacks of using software, suggesting that these programmes tend to work best with small over large chunks of data.

I anticipated that I would need to take seriously the contextual implications of spoken words, gestures and interactions occurring together; coding action and interactions (physical as well as reported) was of particular importance. Given the intricate relationships of these factors I believed that coding might incorporate large chunks of data within single codes. I considered this in the context that my previous research work had occurred prior to the development of these programmes and thus considered carefully whether I wanted to continue with methods I had previously used or invest time in learning to use NVivo. My final decision was that coding manually was the best fit for this particular research project.

The decision to employ an ANT-inspired analysis also influenced the process at this early stage in coding. Influenced by the ANT importance of following objects as well as humans through the processes of trial which enable us to see networks, there were particular types of interactions and ways that human actors had of speaking about objects that felt particular relevant to the study. As a result, the methods employed were a mixture of, in Saldana's terms, holistic and provisional coding (Miles, Huberman and Saldana 2014: 77).

Thematic coding began with a detailed read through of the field notes in their entirety and annotation which detailed the recurrent themes and words which emerged from the data. Notes were taken throughout: both reflections on interactions between codes and on unexpected or prominent thematic recurrences. From this material, an initial list of codes was created and from here, a first set of code definitions.

From this point, these initial codes were applied to the text. Relevant sections were digitally highlighted in the source notes and, at the same time, pasted into a document with the code name so that the material existed in toto as well as in discrete thematically coded units. In revisiting the source material and codes, subcodes were created to nuance the codes and aid in later categorisation. As a result, the process was both iterative and combined aspects of deductive and inductive code development.

The process of analysing the data produced through codes was based on a combination of methods suggested by Boeije (2002) and Eisenhardt (1989). Eisenhardt suggests analysing data using a within-case analysis first then proceeding to a cross-case pattern search to become familiar with data then force the researcher to "look beyond initial impressions" (Eisenhardt 1989: 533). Boeije (2002) in his definition of constant comparison method

fleshes out this process still further. Calling these two strands "fragmenting and connecting" (Boeije 2002: 394), Boeije suggests the process by which to achieve this familiarisation and defamiliarisation in a systematic way. The example given is of interviews involving dyads, so a five step programme emerged. The technique suggested, as coding is undertaken, to begin with a single interview and find codes within it, some of which may yield more than one example of the same code. The second step is to compare other interviews from the same group – in this example, other interviews from people who also have MS – then to compare interviews from a different group – in this example, interviews with the spouses of people who have MS. The penultimate step is to match up the partners and compare codes and finally, to compare different sets of partners with one another. Whilst admitting there is hyperbole in the term 'constant' comparison, the process, Boeije suggests, creates a "sound plan" from which to begin comparisons and thus theorisation (Boeije 2002: 406).

Writing Up

During the process of writing up this data, I once again found myself working in a professional theatre environment. As my new theatre employed as its Head of Sound an experienced sound designer, I took the opportunity to conduct an open-ended, semi-structured interview with him. My objective was not only to clarify some small details on the practical process of sound design that I had observed as part of the Forked Up production process, but also to gain a sense of his perspective on the parallels between sound and lighting design. I initially questioned whether this was a methodologically sound, useful exercise or oversaturation of data, eventually referring back to Eisenhardt's statement that it is legitimate to add to data collection methods in this type of study given the objective is "to understand each case individually and in as much depth as is feasible" (Eisenhardt 1989: 539).

In *Reassembling the Social*, Latour imagines a conversation with a student confused as to the methods and perspectives they should use and whether they create a compelling ANT study:

"When your informants mix up organisation, hardware, psychology and politics in one sentence, don't break it down first into neat little pots; try to follow the link they

make among these elements that would have looked completely incommensurable if you had followed normal procedures."

(Latour 2005: 141)

One benefit of having recognised that ANT studies were particularly sympathetic with my objectives and questions within the field meant that there was the strong suggestion of a methodology¹⁶ based on ANT's principles and objectives. This provided the basis of fitting data collection methods and a tentative focus for observations: it was not only in terms of methodology but also in terms of methods that I found Silverman's reassurance that "a theory should generate a series of directions" for research resonant (Silverman, 2000: 40). 'Following the links' between informants (the term I have used is 'participants' and 'actors') suggested longitudinal study over a process in order to see the progression of these links.

Latour's discussion also suggested a moment-by-moment perspective was appropriate in terms of both the observations and, eventually, in the storytelling of the write-up. One way to "follow the link" (Latour 2005: 141) was to detail processes as they occurred; describing them in this way in the reports was a choice made to help the reader follow the objects, too.

In revisiting my data and compiling this chapter, there was an opportunity to revisit and reflect upon the methods of data collection employed and their relative success. In revisiting the interviews I had conducted with stage managers and lighting technicians, I realised that they had indeed been a useful resource for my research in that they had given me an understanding of some of the roles I was less familiar with and that would have been difficult to find out about in the midst of the research. The technicians, lighting designers and stage managers on the productions I observed were very generous with their time, but there were also basic elements of their job, universal in their application within the sector, that prior knowledge of helped me understand and in understanding, minimise the amount of questions that I needed to ask of actors in the case studies during their work time. I was aware during the period when these actors were undertaking the core tasks of their role that I could easily damage our relationship by interrupting their work — I think of the example Easterby-Smith, Thorpe and Lowe employ of the health researcher who assisted on

¹⁶ Latour strenuously resists attempts to codify 'an ANT methodology' throughout his writings, preferring, for example, to think of *Reassembling the Social*, his somewhat-methodological sourcebook as "a travel guide" to "where to travel and what is worth seeing there", analogous to "what is usually said under the pompous Greek name of 'method' or, even worse, 'methodology'." (2005: 17)

wards when it was busy but knew to be less involved and more of an observer when occupational therapists and physiotherapists needed to work (Easterby-Smith, Thorpe and Lowe 2002: 113). I was careful not to place too much emphasis on the explanations of people who were not part of these unique processes but where data was missing, I was able to tentatively find some explanations of the more prosaic acts. Whilst this knowledge felt useful for my general understanding and in the case of the interviews which took place before observations commenced, did help me to focus my research question, in retrospect perhaps I found myself in the trap that Silverman describes of using multiple methods "because they seem to give you a fuller picture"; nevertheless, these interviews were perhaps usefully part of the "dry run" of my data gathering (Silverman 2000: 50).

The following two chapters are an account of the two productions which were observed, drawing on other materials, like these interviews, where appropriate.

Chapter Four: Translations

This chapter firstly sets out the multiple forms of that the play took and then examines the implicit and explicit instructions contained within. From here, instances of conflict between the different translations generated by the actors are exemplified and the resolution of these conflicts detailed.

I have used the word 'translation' throughout to refer to that which is created by each individual actor involved in creating the play. In each production, there were numerous actors making different objects which contributed to the performance. The first phenomenon I noted was the need to name the object generated by this process by each actor involved in order to talk about it theoretically but, earlier on, even to describe what was occurring. This was a process with an aspect of the performative to it; the appropriate name for the series of actions undertaken by an actor which built a coherent process of activities might be a performance. It co-ordinated with the same object generated by other actors and was provoked by material from text, score, material surrounding, and other resources the actor possessed, from their body to their ideas; from the constitution of their software, from the electricity flowing through them, from the age of the bulb in their sockets; from the age of the wood of the instrument, from the shape of their bulbous horn. But the term 'performance', as I remark within the text, is both suggestive of human action and unhelpfully metaphorically rich: is a performance really truthful? There is an unhelpful suggestion that performances can be picked up and put to one side at will. The field, too, made this word a confusing choice: in a world full of performers who are distinct from actors, and actors who are distinct from performers, and a production which is performed, it seemed courting confusion to apply this word.

There is an extensive ANT interaction with the term 'translation' which usefully incorporates these concepts without privileging the human actor, as mentioned in the review of the ANT literature in Chapter Two. So, I adopted the term 'translation' to indicate a performance which can be created by a human or non-human actor, and to shed the baggage of the word 'performance' as one with confusing overtones based on cultural understanding of what it means for humans to 'perform'. Translations spring from the raw material and purpose of the production: a lighting board translates electricity, programming and circuits which

connect to a number of lights into a lighting state, and then a lighting design. A performer translates the words of the text into a series of gestures, sounds, movements, songs.

If we assume that our starting place is the text itself is the key origin of the production — though as I mention above, this in itself is not an unproblematic assumption — the texts of both Forked Up and Rap-punzel resulted in both a number of forms of the text. Forked Up generated the greatest number and range of translations, given the scale of the production and the number of different actors involved. But to begin with, I shall explore the two recorded forms that the play of Forked Up first assumed — as a score and as a set of words.

The Score

The full score, with each of the eleven musicians' parts scored and laid out alongside each other, was present in the rehearsal rooms at all times. It contained all of the notes each musician or actor should play or sing alongside the spoken words of the text. However, the expense of having the eleven musicians who would eventually perform the piece present for all five weeks of rehearsal would have been prohibitive, meaning the cast rehearsed for the majority of the rehearsal period with one of three répétiteurs — a musician who would play a reduced version of the score on the piano as the actors rehearsed. The reduced version that the répétiteurs used contained the key melodies for each section so that the répétiteur could approximate the music created by the orchestra. The three répétiteurs used one copy of the score between them; the version they used, then, was a source text specially translated for the piano. As a result the répétiteurs were a type of metonymic substitution for the orchestra, both in their practical incarnation (to reproduce the notes the orchestra would play) and in explaining to the performers some of the orchestra's function.

At various points, the reduced score was checked against the full score by one of several people: as rehearsals progressed, either the répétiteurs or Colm would often refer to the full score to check what instrument was playing a particular set of notes, and this was then relayed to the actors. On occasion, a répétiteur might describe the type of noise the instrument would be making — "there's an exotic sound there: it's a tam-tam, a strange metallic sound" — to prepare the actors for the difference between the sound the piano made and the sound they would hear in performance with the orchestra. As the timing of the instruments and of the sounds (sung or spoken) produced by the actors had a

relationship to one another, this information helped the actors to place their lines correctly within the music. None of the répétiteurs would be present in the final performance and their reduced piano parts would not have a final part of themselves in the performance — but their work was both essential and embedded in the translations created by the performers. Without their work, there would be a lack of concordance between the performers' translations and those of the orchestra, so whilst their work was in the end invisible to the audience, there was still agency to the versions of the text they created.

There was also a further version of the full score, revealed by Rich on the first day of rehearsal. Colm had created an audio version of the score through a composing programme on his computer and e-mailed it to Rich, who had then loaded the files onto his iPod to play to the cast via a speaker on the first day. This version contained all the notes of the score played through a synthesiser to create a MIDI file, an audio rendering of how the different types of instruments would sound together, but as the programme could not reproduce the words of a human voice, an approximation of the timings of the words was made using a monotone, choral voice which could only reproduce a long vowel sound. Once again a metonymic representation stood in for the orchestra's work.

There was no paper version of the score for Rap-punzel. As it also contained songs, there was an equivalent to the full score that appeared on the first day of rehearsals – however, this score was not recorded in musical notes. It remained in the heads of George and Dave (who were collaborating on the musical aspects of the production) and in George's synthesiser as rough draft audio recordings. Several of the songs were still to be written, and upon hearing the ones which had already been composed, Hugo suggested several cuts.

The Text

The words of the text of Forked Up alone – the text, or script – had been sent to all of the actors and other members of the creative team, but a problem emerged on the first day of rehearsal when it became apparent that not all of the scripts had arrived at their destinations. Some people had all of the script; some had only received half of it, as the two parts were posted on different days. It later emerged that the script had only recently been completed, precipitating a later delivery of the second half of the text. The total text was fifty-two pages of white A4 paper.

The text of Rap-punzel took a similar form: it was a forty-four page document on A4 paper. Interestingly, in retrospect Hugo explicitly stated that for him, having the text of the play was quite distinct to having the play itself: by the end of the second week of rehearsal he refers to the company as "hav[ing] the play now", suggesting that he did not feel that they 'had it' at the beginning of rehearsals. Indeed, within the first few minutes of rehearsal, Hugo states that the text is "perhaps a bit long" and suggests "we'll do a bit of hacking later on". The explicit statement that the text would be altered in the process of becoming the final performance is made; the text as it stands is portrayed as a starting point when brought into rehearsals, not a finished object.

In the rehearsals for Forked Up, there was an instance in which it became clear that the current text preserved echoes from earlier drafts. Mr Banana is a sensible character in Forked Up, providing a counterpoint to the irrationality of the characters around him, despite his large, comical, custard-coloured manifestation. In the play as produced, Mr Banana was the voice of reason – in press interviews that Daniel gave and even in the flier, he was referred to using this term. But as Daniel, Rich and Colm all mentioned at various points in the production process, it was originally Mr Sausage who was the voice of reason: in fact, this epithet that had been applied to him in the character description that had formed the first page of the script. But when Mr Sausage was excised from the script due to the financial considerations, as further outlined below, it was Mr Banana who fulfilled this function. The text required a voice of reason and in the absence of the resources necessary to provide the function as originally detailed – through an extra character – Mr Banana fulfilled the role.

There are a number of other translations which became apparent as the rehearsal process for each play continued, but for the time being, I shall move on to how some of the instructions within the text manifested themselves: how instructions from the text were coded into both the production as it developed and the music.

Instructions within the text

The texts for both Rap-punzel and Forked Up contained both implicit and explicit instructions about a number of aspects of the play, and thus certain aspects of the production were fixed by the text in advance of rehearsals. The most obvious aspects of this

were specifics such as number of characters, storyline and setting, although in the case of Rap-punzel these were perhaps not quite so set as it might first appear. As I have mentioned already, some translations of the play were influenced by financial constraints — these constraints had limited the number of characters in Forked Up, including necessitating the removal of Mr Sausage, and Dave mentioned early in Rap-punzel rehearsals that he knew he would have to change elements of the text when he realised there would be no scene changers.

Explicit instructions for physical action were coded into the text through words, either in the stage directions or dialogue. Straightforward directions such as 'June lifts the telephone receiver' or 'Rapunzel turns to audience' set out direct instructions as to what the performers ought to do at this point. To help distinguish stage directions from the dialogue, the texts both used the standard script convention of italic font for stage directions. Dialogue also provided signposting for the way in which the performers should behave at points during the performance: lines like "we will go to the local butcher" and "I have to go to work now" indicate upcoming change of location for these characters which indicate how the space within the play might be translated.

Implicit instructions were also coded into the text through a variety of methods. Dialogue could again indicate, for example, a certain action or reaction by a character and, by implication, performer. Implicitly, shifts within scenes — a change of tone, subject, or direction of address or location could indicate that one performer might have to move physically closer to or away from another performer. A stage direction stating that one character 'grabs the shotgun. Aims it at him' carries with it implications for the performer playing the target in that instance; it is no great feat of directorial ability to work out that this suggests the performer moves away from the person holding the gun. "I have to go to work now" is quite a clear instruction to a performer, but of quite a different kind is the instruction implicit in the supplication suggested by "oh dear Lord Butcher, please help us". Intention to act and implicit motion are coded into the text in these ways.

It is not just to the performers and directors that the text provides instructions. A change in mood almost inevitably suggested a change of lighting state to the lighting designer. The

implicit as well as explicit instructions within the text profoundly impacted upon the various translations.

The Source Text

On the first day of rehearsals of each play, there was a text, but as I have briefly sketched out above in my overview of the way in which Forked Up came into being, this text was not quite the beginning of the story – for either Rap-punzel or Forked Up. It could be said, for example, that Forked Up started with a group of people with an urge to work together, as outlined in the context provided in the Methods chapter, and an awareness of the roles which they could play in making a piece of work together: Colm writing the music; Rich directing; Daniel writing the words. It is difficult to determine how far back it is useful or possible to go to trace the inception of the written text: to when the writing began, or when those relationships began? To the first conversation about the story; to the first mention of the concept; to the creation of the characters?

I follow the last of these as an example. As Rich mentioned to the performers in the first week of rehearsals, the draft which the cast and the rest of the company were all reading was draft six. When the idea had first been written down, there were over ten characters. The text which reached the rehearsal room table contained nine characters. Four of these were puppets, operated by a puppeteer; two of the remaining five characters were not on stage at the same time, and so could be played by one actor. This meant that the cast of the play could be reduced from its initial number to a more modest five actors, including the puppeteer.

The impact of the number of characters upon key aspects of a production is significant. Staff costs constitute a large part of a production's expenditure as actors must be paid for their time when both rehearsing and performing. The large and powerful actors' union, Equity, ensures that performers receive both a minimum weekly rate for their work and certain working conditions, such as breaks during rehearsal and minimum rest times between performances. Equity rates are used, practically, to calculate production costs and fees for all performers, whether they are members of Equity or not: the majority of professional actors are members and with a few exceptions, all performers in a subsidised

theatre production must be paid the same rate¹⁷. For a professional, established company mounting a large-scale production at an established venue, failure to comply with Equity minimums could lead to a company being blacklisted, making it unlikely that professional performers would choose to audition for the production and thus reducing the pool of experienced performers from which Rich could hope to cast. Failure to comply with rates once production had begun would lead to objection from performers, their agents, and ultimately Equity themselves. For this reason, cost cutting through reduction of individual performers' fees was not a possibility: the number of characters directly impacted upon the number of performers required, so although imaginary, characters have a very real financial dimension and implications.

There is a further complication to the financial aspect of having a large cast. As the production applied to, and received, funding from a public body, the number of performers required to perform the play was critical to the likelihood of the production being funded at all. Even if the base rate of £372 a week (Equity minimum at the time) was applied, a production with an extra two cast members would increase the cost of a production by £3,720 in wage costs alone, not taking into account additional expenses such as travel and subsistence allowances. In applying for funding from a pool of public money with financial limits, each project is in direct competition with a number of others – thought reductive, it is accurate to say that the lower the budget can be whilst maintaining artistic quality, the more likely it will be awarded funding. Thus it is not that BrightLight saves money by cutting characters from the play: large numbers of characters endangers the very possibility of the production being funded so cutting characters makes it more likely that the production will be funded and thus able to exist at all.

Even when the characters are not to be realised on the stage as sentient beings, they have a financial implication and one which is, again, mediated by a number of external actors. The four puppets which appeared in Forked Up had to be controlled by Denny, the puppeteer, who was also subject to Equity performer rates. They had to be made by Sarah and the

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 $^{^{17}}$ Equity also sets out minimum payments for non-actors appearing on stage – for example, stage managers who are 'in character' whilst changing scenes – with different rates for those who are not speaking, or who speak one line. Commercial theatre operates using different levels of pay and conditions.

design team from materials that BrightLight paid for, in time for which Sarah was reimbursed. Inanimate characters shared a financial dimension with their live counterparts.

Characters also have a spatial implication. During Forked Up rehearsals, the costume-maker consulted with the set designer at several point to ensure that the dimensions of one of the costumes – the foam egg which Mitch wore whilst playing Mr Egg – would allow Mitch to fit inside the wooden fridge which was being built. Claudette too spent some time ensuring that Mitch could manoeuvre himself into position for a fall through the sliding doors that the stage management team would operate.

The Aesthetic

Intricately sewn into the text were instructions on the coherent sensory world that the production would have in performance. The aesthetic of the production was determined by a number of factors. Daniel designed the set and costumes - given how keenly his reputation as an artist was foregrounded by the company in marketing the show, it perhaps would have seemed strange if he had not. The design – from the fliers to the set, the puppets to the programme – was highly influenced by his visual art style. However, the way in which this design was physically achieved required a great deal of input from other actors. The puppets were designed from detailed drawings that puppet-maker Sarah created based on the sketches with which Daniel provided her. The white set model was designed and created by design assistant Alice and built by carpenter Craig. Stage Manager Claudette sourced stage properties ('props') such as pepperpots, a prayer desk and a menu cover from eBay. Ross, the company manager, facilitated and oversaw the creation of built aspects of the set, many of which were not seen by Daniel until three days before the first performance. The concept of 'a design' – and the credit of 'design by' – hides a number of important divisions of labour, creative inputs and convergent translations of the play. Not only the individual appearances of each object were crucial to the creation of an aesthetic, but also the way in which they were combined or used together

As a result, overlapping and potentially conflicting translations or contests of agency from different version of the play were difficult to discern without an examination of the entire design process. This pattern is repeated elsewhere within the production process, as I outline later.

So, clearly there were more actors involved in the process of achieving the visual dimension of the production than just Daniel. But the network through which the actors achieved their aspect of the design was also more complicated than one actor (Daniel) expressing preference and having this achieved by other actors. eBay, which the stage manager connected to via piggybacked wifi from the hotel next to the rehearsal room, made it possible for Claudette to present Daniel with options about the cruet sets that were seen as desirable for the production. However, the cruet set which was chosen was not Daniel's unmitigated personal choice, but the one which was most successfully matched the production's aesthetic requirements. One of the first problems was that, even if the cruet set was undeniably an actual, functioning cruet set, it also had to 'read' as one from the audience. Its inclusion into the production was dependent not on its authenticity as an object, but was mediated by the requirements of the play and its restrictions – for example, the size of the Black Box auditorium, which meant that an audience member in the very back row would have problems identifying a very small object on stage.

'Reading' was referred to in both Forked Up and Rap-punzel as an important concept: at base, it referred to the audience being able to see and recognise a prop, gesture or situation. It was not enough that Claudette had purchased an actual cruet set – this is of little or no importance to the audience unless it can be recognised as such. The way in which the cruet set and other objects on stage had to read were as an integral part of the world of the play and also that they read well in concordance with one another. Thus Claudette worried that the holder for the cooking utensils was "too shiny" and "cheaplooking" not because she worried that the audience would think BrightLight hadn't spent enough on their props, but because they needed to aesthetically contribute to building the convincing world of a televised cooking show. The chosen cruet set needed to avoid the potential to disrupt other translations within the production: it should be easy for the performers to handle; it should not reflect the stage lights so well that it was hard for the audience to see what object was beneath the glare. In this way, the cruet set became agentive in creating the physical manifestation of the production.

Or would have, had it been included in the final performance. The same day that the set arrived from eBay, it was cut from the production. Though explicitly referred to in the text of the play, the interpretation that the director and performers created in combination was

one which did not require the cruet set to physically be on stage. Influencing this cut was the already-large number of objects already in use on the stage, and in particular in this scene. Props, however fantastical in concept, have a physical reality; they take up actual space and they need to removed from any scene in which they are not physically present. They can slow down scenes or manipulate the paths of the performers – for example Martin, the actor playing Mr Banana, spent most of one scene setting out props required by Pauline's character in the next, in order that the latter scene could progress more quickly and thus be read more clearly by the audience. It became part of Rich and Martin's job to find a reason for Mr Banana as a character to do this that made the action feel natural to Martin as a performer.

At various points, a variety of actors express that the jointly imagined world of the play needs to be coherent. Director Nick says "What we need to do is create a world where it's natural that you would open the fridge and there's a giant egg inside it". Here, Nick is addressing the performers. He makes it clear that the purpose being served by their interpretations of the play at this point is to service a need of the physical incarnation of the play – the need for the aesthetic to be presented as physically, tonally and temporally coherent. He states that it is up to them to make a 'world' – which they do through their gestures, movements, tone, intonation, and interaction – within which a physical object seems not out of place, which will help the audience to 'read' what they are seeing before them. The performers' interpretations must concur with one another and with the physical world of the play, as well as maintaining an individual coherence which gives each actor their character journey through the play. The prominence given to the play's nonnegotiable characteristics here is an assertion of agency by the director and (by their complicity) actors: it is not negotiable that it is natural for the actors to find a giant egg in the fridge, and their translations of the text must reflect this.

Around the same time, Claudette confides her worries to me that the utensils she has purchased for the show look cheap and are too shiny. Although this might seem on the surface to service a different concern to Nick's worry that the actors make a giant egg seem normal, both Claudette and Nick are concerned with making a physically coherent context in which other actors' interpretations can comfortably co-exist. As stage manager, Claudette is responsible for overseeing the purchasing of small physical properties ('props') for the set –

in this case, rolling pins, bowls and spoons and so on. She works in conjunction with the set designer (Dave) and assistant set designer (Alice) to make sure the aspects of the set which are built from scratch to their design – the giant fridge, the kitchen counter – have the same 'feel' as the props she is buying. Her concern that the props might look cheap is not a value judgment in itself: if the play was a set in a student kitchen, she would not worry about the utensils looking as if they were inexpensive because that would be consistent with the 'world' of the play. This play, however, is set in a respectable TV studio and deals with a prim cookery show, and as Claudette is also under pressure to ensure that the cost of the properties remains within the pre-arranged budget, a solution to the props perhaps looking cheap is not just to buy expensive items. Whilst it may seem trivial, the stakes are high as the wrong utensils might unintentionally lead the audience or any of the other actors to misunderstand the premise and thus the world of the play. The performers might misunderstand the poshness of the studio, affecting how they interpret their characters; the audience might think it's a down-at-heel cooking show and filter their interpretation of the whole production through this assumption. A suggestion picked up in the wrong way might create a rupture between what the text of the play is intended to express and the meaning received and processed by any of the actors.

Clues in the text

Mr Shit – a dancing blob of faeces – is expelled from the play after a cry of "Get back to hell, you dirty devil!" by the character of Philip. The text of the play alluded to his expulsion – he does not appear again in the play and the heroine clearly escapes his clutches, thereafter to be seen enjoying a toast with her friends. The music appears more triumphal after Philip's words, providing another hint as to his fate. But the text provides no direct explanation as to how Mr Shit is vanquished, nor how this might physically be achieved by the company. As a result, this was a section much debated in rehearsals. A number of serious and semi-serious suggestions were made, including the recurring and popular suggestion from Mitch, the actor playing Mr Egg and Mr Shit, that a giant white toilet brush descend from the roof to sweep Mr Shit off. Another suggestion was that a white spotlight track Mr Shit's progression stage right as he left the stage, as if he was being blinded and so subjugated by some unseen force. The popularity of some of the suggestions seemed, in part, to be linked to its appropriateness to the generally surreal air suggested by the text: it seemed tonally

appropriate. The tone of the production seemed generally understood by all the human actors to be a combination of its aesthetic, philosophical and physical rules: this was a world in which vegetables could talk but still be made into soup; this was a world where a woman could tap-dance at the front of the stage yet still be understood to be inside the puppet near the back of the stage.

Ultimately, both of the above suggestions were quashed by (respectively) Rich and Miles, the lighting designer. A giant toilet brush would be expensive and difficult to hide from the audience for the duration of the show to create the real coup de theatre it would need to be, Rich said. Furthermore, company manager Colm said it would not be possible for Craig the carpenter to build one in the time left available to him. Miles explained that a spotlight bright enough to look dazzling was indeed possible, but would require a special Xenon light which would then "have a cost implication". In this case, the play's demands were mitigated by both financial and practical concerns – the practical benefit to the production was balanced with the benefit for the audience. Further to this, the demands of a particular scene were contextualised with regards to the text's demands as a whole: a lot of expenditure on one particular item would have negative implications for some other aspects of the production.

Further implications arising from the discussion of the exit of Mr Shit can also be seen in the dialogue it precipitated between Miles and Rich about where and how Mr Shit should enter. This dialogue incorporated aspects of theatrical tradition as well as an acknowledgement of Miles' own long theatrical career. At several points, Miles and Rich joked that Mr Shit should "of course" enter and exit stage left¹⁸, although he did end up entering and exiting stage right. The joke came from the fact that Miles had for many years appeared in various pantomime roles at one of the large theatres in Glasgow: theatrical tradition dictates that the pantomime 'baddie' enters and leaves stage left. This is derived from a tradition originating in Commedia del Arte productions, common in the seventeenth century, when productions knew that the audience associated stage left with hell and stage right with Heaven. In their jokes about this, Nick and Miles acknowledged both Miles' connection to this tradition and acknowledged the intertextuality of Forked Up with a longer theatrical

 $^{^{18}}$ 'Stage Left' refers to the part of the stage which is on the left as the audience view the stage.

tradition. Here, the stage space itself has a series of pre-coded meanings or qualities that influence the way in which other actors interact with it; it is read to have different metaphorical and physical qualities simultaneously.

This sample of engagements between the characters and the examination of moments in the process of creating several of the translations of the text, then, exemplifies a number of characteristics of relationships between some of the human actors and the object of the text. Actors not physically present in the room – Creative Scotland, Equity – also influence the translations created.

Words vs Play

In observing Forked Up, there were several moments which highlighted the internal contradictions between the interacting translations which combined to make the play in performance, perhaps particularly in those moments where conflicting interpretations or understandings of the text were displayed. On the first day of rehearsals, Rich suggested to the two principal actors, Pauline and Philip, that they work without their scripts for a while. Daniel's incredulous reaction ("Without scripts?") seemed to incorporate both confusion and a sense of unease at this suggestion. Rich led a session with the two principal performers during which they explored gestures that these actors felt were appropriate to the characters, experimented with different tones of address between the two characters, and improvised a 'normal' day on the television cookery programme that the characters both present. At the end of this session, Daniel interjected with a description of what the characters were like "in reality".

It seems, in this vignette, that there were two different interpretations of what the text of the play was and that they were to a degree conflicting. Daniel's interjection and his later explanation of the characters' characteristics "in reality" indicated a perception of the words of the script as definitive; they would, he seemed to anticipate, determine the behaviours and methods of interaction that would result in the play as performed. This exchange seemed to imply that Daniel's perspective was that the play as performed would be the words on the page made live, rather than something created by the performers in combination with other actors: Daniel did not appear to conceive of play as a mutually coconstituted entity but rather as an enactment based on the words which he had written.

Even mildly questioning the value of working without the script suggested Daniel believed that the script alone would be all the performers might need to portray the story described in it. The exercises that Rich had initiated would, by this standard, appear irrelevant: they are not written down in the script and will never be physically performed as they were in the rehearsal room. But these are the foundations upon which the perfomers base their performances: without physically exploring aspects of their character's behaviour in a range of spatial situations, through the actual and metaphorical spaces of the rehearsal room, they performers cannot play the 'live' moments written into the script with subtlety or understanding: they are part of the process of translation by which the text becomes the performed play. Elements of the gestures did also end up incorporated into the physical performances. The performance of those secret moments in rehearsals – the moments which are part of the process of creating the play and performing it on stage, but never intended to be seen – are, for the performers, as much part of the process of making play as the moments written into the text and would seem to be implicitly accepted by the two performers through their compliance with the director's suggestion. The importance of these non-textual explorations ensures that, whilst it is never necessary for them to be recorded as part of the text, they do become part of the production.

To all the actors, even in these preliminary stages, the text of the play is something which at every stage requires translation. That translation involves space (the rehearsal room), other people (the other actors and director) and movement as well as a text. It is in the combination of these aspects that their translation, and ultimately the play as it will be performed, can begin to emerge for the actors.

Building the Play from the Text

During the rehearsals of Rap-punzel, a different sort of conflict emerged through which the boundaries between different emerging translations of the text were apparent and by which one process of translation became more clear. After the first full performed read-through of the text (and thus fairly close to the first public performance), Hugo expressed concern about lines being missed out of the text. As he put it, "we've got the script now"¹⁹. The

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¹⁹ I found it interesting that he referred to both a 'script' and a 'play' in this exchange, something which as I mention in Chapter Six was to become important in later theorization.

previous two weeks had involved a lot of moments of improvisation and deviations from the words as written in the script but Hugo articulated that this phase was now over. He did add that there was an option to alter the words of the text if required, but both the words which were to be spoken and the movements the performers would make needed now to be fixed. If alterations were to be made, they now needed to be formalised: both by recording the lines in the text, but also by settling the movements and interactions which would constitute the play in performance. At this stage, it was now not an option for the performers to, as he put it, "busk" (improvise). Even though the play was a piece of performance that was collaboratively created and the text was much altered during the rehearsal process, there came a point when each of the translations presented by the performers needed to be fixed – both for other performers and for other translations of the text created by other actors. As Hugo stated, "there are certain lines which are cue lines for Andy [the lighting and sound operator] – you can't be busking them". Although the text has multiple translations, in order that the play in production proceeds smoothly, there needs to be a central point of agreement, or concordance, of these versions. The performers must all be in the same space and time in order to perform together but they must also ensure that their translations of the text exist in the same space and time; that they are as concordant with one another as the cruet set is concordant with the aesthetic of Forked Up. The wicked queen must ask a particular question in order for huntsman to reply with a particular line; the operator must hear the huntsman's line in order to provide the lighting cue. The multiple translations, whilst not mutually exclusive, are co-dependent and so must in certain moments be predictable, despite the overall unpredictable and initerable nature of the medium.

The use of simile

One recurring trope within Forked Up rehearsals was the preponderance of cultural touchstones in communicating meaning or refining interpretations of the text. From the very first day, recognisable public figures were invoked to help clarify elements of the script and create concordance amongst translations. One of the first to be mentioned was Margarita Pracatan, a Cuban singer who appeared on UK television in the 1990s on a popular talk show hosted by Clive James.

Pracatan had several defining characteristics as a performer. During her appearances on 'The Clive James Show', she was always dressed in glamorous eveningwear and feather boas. She came across as an exuberant and joyful performer. She was flamboyant and hyper-aware of the audience and camera, often addressing them directly in her performances. She did not have a pronounced vocal talent and both her sung and spoken English was heavily accented. Her performances were variously directed to the studio audience and at home audience through direct address and she used a very heightened style of address in her performances. To expand on the latter of these characteristics, Pracatan's stage presence was hypertheatrical: it overemphasised the difference between the reality of the screen and the naturalism of everyday life and this was heightened by her extravagant costumes and accessories. This persona was raised in conversation during Forked Up rehearsals as an example of the type of tone that Philip and June might try to emulate for the moments in the text that are written as 'on-screen' – those moments when in the reality of the play, the camera is on and they are presenting a TV cookery programme within the play, versus the moments when in the text of the play the camera is off.

Pracatan was one of several public figures, either real or fictional, to be evoked within rehearsals. At one point during Forked Up, Pauline sings about how wonderful it is to be a vegetable as within the play, the unwary vegetables who are about to be made into soup gather near her. In a discussion about how Pauline "should be" around them, Pauline suggested "like Julie Andrews?" Here, well-known performer Julie Andrews' role in 'The Sound Of Music', where she cares for seven small children, is suggested as a model. The twist – that this character is about to kill, rather than nurture and care for, her charges – underlines the dark humour in the contrast of these situations. In another scene, Mr Banana is threateningly approached by June and Philip, who plan to make him into custard. Salacious talk show host Jeremy Kyle is suggested as a model for the hosts. Jeremy Kyle's talkshow has become synonymous within British culture with explosive confrontations between ordinary people in conflict with one another over issues such as infidelity, betrayal and paternity. Kyle, as facilitator, often appears to be a dispassionate ringmaster manipulating the guests on his show for maximum drama. Within the Forked Up rehearsal room, it is the mercilessly, bloodthirsty but detached qualities of Kyle which are being evoked, though the bloodthirstyness of the real-life talk show host is understood to be of a

different nature. In a sung section, a series of stylised movements emerged, and Daniel suggested that Pauline motions as if holding up Yorrick's skull as she sings her line "scoop up the poop", summoning up the image of a famous scene from 'Hamlet' where Hamlet is prompted to reflect on human mortality after discovering the skull of a clown from his childhood. Here, humour is suggested in the contrast is between the scenes: where Hamlet reflects on mortality, June mentions excrement. Rich asks Daniel if there's something "vaguely Richard Madeley" about Philip's questioning style in another scene, invoking a popular daytime TV host and his tendency to ask somewhat inane questions.

The fact that these myriad popular figures and images are evoked by the human actors suggests a wish on the part of each individual to communicate something of their understanding or interpretation of the text to the other human actors in the room, but these figures are also all intrinsically relevant to the production. Personal interpretations filter into the production: it is an image, attitude or word in the text that provokes these actions and the purpose is at once to clarify and to check for understanding as the performers build their translations separately, but with an awareness of their eventual coincidence. These multiple intertextualities communicated instructions or suggestions about how the actors should pitch their performances or understand an aspect of character: they also helped to build a shared understanding of how each actor imagines an aspect of the performance. They are still and tangible amidst developing and changing interpretations, translations. They are a form of shorthand between members of the creative team, and they also serve to contextualise this production itself as another piece of performance within a world of performances. In this way, these external references both draw attention to the unity of understanding within the company whilst highlighting a world external to it. They seem to indicate that the play is – in having been written in this historical time, in this cultural context, and in provoking such invocations from other actors - inexorable from its context. The frequent channelling of these external figures can be seen as a method of building a shared meaning on which the production can be formed – or perhaps as a way for the play to communicate something about the ways in which it might, as a piece of performance, be read. In the case of Yorrick's skull, for example, the pose which centuries of actors have adopted for this moment of drama is a very recognisable, stylised and somewhat clichéd theatrical pose; its invocation at this point both mobilises

and pokes fun at the greater theatrical context in which Forked Up nestles, for the audience as well as for the performers. It is not integral to the understanding of the story of the play that every audience member understands this reference.

The reference to Pracatan is one which is especially interesting, because it seemed to help resolve a situation that caused much debate throughout the rehearsal period for Forked Up. The story of Forked Up, as I have mentioned, involved a TV cookery show; as part of the story, the play showed Philip and Pauline performing scenes from this show as if it were being transmitted live, with the real audience playing the part of a TV audience at a live recording. Whether any given scene was from the TV show or not was not marked with any headings or direct labelling in the text: it was marked through the tone and directness of address in the dialogue between the two principal characters. At one point, Rich specifically said to lighting designer Miles that he would like to have a conversation with him about the "on-air and off-air" moments in the text, making it clear that this was a division that had implications and consequences for a number of actors' translations of the text. In order to interpret spatially and in relation to bodies and objects whether a scene was on- or off-air, there were frequent discussion of these moments – it certainly necessitated a number of discussions and moments of physical exploration for the performers to come to a sense of "on-air" and "off-air" that read clearly enough to the audience for Rich to be satisfied.

The quantity of work put into ensuring that the performers established a sense of on-air and off-air that read to the audience was some measure of its importance to the director. Rich tried to establish a style and tone that helped make sense of this world for the audience, and to make sure that the actors are all inhabiting a world with similar rules – in the same way that time was devoted by Alice, Daniel and Claudette to ensure there was a coherent visual style that gave a unified and consistent aesthetic physically for the audience to experience. That this took on some importance seemed linked to the lack of an instantly recognisable logic in the world of the play – to link the audience's (presumed?) need for a coherent world with the crazy world of the play seemed, again, an act of translation, filtered through direction of gaze, method of address to between actors, and aspects of vocal technique (for example, louder voices and greater projection). Pracatan helped this process because she gave the actors a joint remembrance of a situation where a very pronounced type of theatricality was displayed; as she was also someone who appeared on television,

her imagined simulacra also gave the performers a practical hint of how they might portray such hypertheatricality in a noticeable, readable way to an audience. The stakes for this were much higher than in some of the earlier examples. It was not necessary that the audience recognise a couple of seconds or less where 'Hamlet' is referenced, but it definitely was necessary that the audience understand that part of the show they were seeing was set in a television studio.

It is perhaps useful to briefly note at this stage that the use of public figures – Margarita Pracatan, Richard Madeley, Julie Andrews – as examples of types or styles of behaviour were combined with more explicit statements regards tone in rehearsal, for example through comparing the different registers of speech within the church. During one scene, Rich asked Peter to repeat a section using a different intonation. Peter confirmed by his reply that he should "do it as [Colm] set it, rather than at a natural – yeah...", picking up Rich's suggestion that "it has that slightly artificial... " with a simile that confirms understanding: "like in a high church".

These similes were highlighted to be of particular importance in communication between the human actors at points where the difference between the logic of the world of the play and the logic of our own world were mentioned. Daniel asserts, when asked by Martin whether Mr Banana acknowledges the cameras, that "foodstuffs can't present cookery programmes". We are in a world where an egg can be a waiter, vegetables can talk and a monster can come over to dinner – but the lack of a naturalistic or recognisable logic in those situations does not entail any consequent logic; the logic of the aesthetic is generated by the interaction of the text and the performers in space and need not bear any relation to the logic of 'real life'.

Instructions within the Music

One of the recurring patterns throughout rehearsals of *Forked Up* was the way in which the musical translations of the text influenced other translations. The musical notes themselves proved to be coded instructions to the rest of the actors about how they should move and act; they provided clues about the mood of the play at that point; they provided information about the interpretation of the meaning of certain words or phrases that had been made in creating the musical score.

At certain stages in rehearsal, the cast and director had to 'block' scenes – they had to work out who would be standing in what position, and what physical actions they would perform. But physical positioning choices were not arbitrarily decided, nor were they decided solely by the human actors: they acknowledged the ramifications of other translations of these decisions as they were created.

In negotiating a scene where one of the characters is cut open by Philip, Mr Banana and The Butcher, the following exchange occurred:

PHILIP: It says here [points to score] that he cuts him here.

RICH: There'll be a trapdoor in the table so the puppeteer will go through it

and out. So the first thing to come out is oesophagus.

NEIL: Is that us seeing it...

RICH: "Pull it out in front of us" – so then you bring it out...

PETER: At B1, it's quite a textual change – in the music, so that's going on...

So that's the orchestra saying, "get back to it" ("meat meat meat")

RICH: And then it's an instruction – "hold his arms and hold his feet".

"Duodenum liver spleen"... something needs to come out there. [to PHILIP] Because you need to see that the digestion is about to start...

The words of the text here provided some quite direct instructions through a mixture of methods. The underlined text above refers to a stage direction, 'Butcher plunges his knife into Mr Granules' stomach'; Philip drew attention to the specificity of this instruction. "Pull it out in front of us" was also a fairly direct instruction (though it is not a stage direction but words spoken by Philip) which was quite easy for the actors and director to translate into action, as Rich then points out in reference to the later "duodenum, liver, spleen". However, the music also provides more covert instructions to the performers and director.

The "meat meat" referred to by the actors (bolded above) is chanted by the orchestra, and is expressed in the score by twelve crotchets over two bars – at the denoted 120 beats per minute, the chant is thus moderately fast and repetitive. The volume of these sung

words increases over these twelve notes from p (piano – quiet) to ffff. The use of ffff in itself is interesting: fff is fortississimo, or 'extremely loud'. The composer's use of the extra f is a way of providing emphasis, and denotes a sort of relational 'high' of noise – a piece of musical hyperbole, a forte-fortississimo²⁰. The notes are also marked with an accent to denote that they are sung with 'attack', and with a dot above the accent to indicate that they are delivered staccato – that is, with a slightly shorter delivery than a note of that length would normally demand. It is interesting here to note that all musical notation of the above type is relational – fortississimo for example has no context except that which it is given in relation to piano. The orchestra and conductor working together set the level of what is loud and what is quiet and the relationship one bears to another consequently follows²¹.

At the point referred to by the above quotation there is, then, quite a lot of instruction from the musical version of the text. Peter's understanding of all of these instructions – the dynamics, length of notes, and delivery style – is then transferred into a translation of the mood of the orchestra. He infers that this part of the score communicates insistence on the part of the orchestra that the characters of Philip, the Butcher, and Mr Banana do something – in this case, "get back to it", or, continue with the actions they had earlier begun. Each aspect of the music here is paramount to the interpretation. If the words "meat meat meat" had been set as semibreves, which are equal to four crochets; if they had been held over six bars; if they had been at the much slower pace of 84 BPM, as had been encountered two pages earlier; if the volume of the chant had not increased to *forte-fortississimo*, this would have provided quite a different context for those words. In turn, this would not only have provoked a different interpretation of the meaning of the play at this point, but a different translation on the part of both Peter and the other actors: the resultant play in performance would have been changed.

Restrictions in Access

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 $^{^{20}}$ it is very infrequent that dynamics louder than fff are indicated in a score.

²¹ A parallel reflection on the relational nature of music is satirized in the film Spinal Tap, where one character explains that they have increased the level of noise their band is capable of by increasing the number on the amplifier to eleven rather than ten. The amplifier, however, has not been altered to output more power. With no consequent increase in actual power, the increase in the number on the amp is meaningless.

From the beginning of rehearsals for both Forked Up and Rap-punzel, it became clear that the source material from which the play was to be formed in its various translations was not unilaterally accessible.

One example of this was the Forked Up's score. The above example – in which Peter interprets the orchestra's notes as having an insistent, instructional quality – demonstrated a moment in which Peter's extensive musical training enabled him to confidently translate the source material into an understanding of the play's intentions at that moment, and how to place his own movements and behaviour in relation to those intentions. Someone who could not read music – or was familiar with some but not all of the notations used to denote different tempos, deliveries and changes in the music – would not have been able to fully access the instructions of the source text at this stage unless they had been communicated to them by some other means.

There was another related example of this later in the rehearsal process, where Stage Manager Claudette was recording the movements that the performers were making on her copy of the score. It was important that physical actions occurred at certain moments during the music, and as part of her job Claudette needed to record the movements during those moments quite precisely. However, at this part of the play, there was no words. The Stage Manager's translation of the movements of the performers into a diagram on her score depended on her ability to read music both to create the record and to then follow it during the performance. She needed to be able to mark quite precisely how the various translations of the play accorded with the music at that moment in order to transmit sound and lighting cues to the lighting and sound operators. Company Stage Manager Ross, however, could not read music. One day I observed Claudette writing out detailed descriptions of the points in the music at which certain cues should be given, co-ordinating the physical translations of the performers, the music of the orchestra and the score in front of her. She was doing this so that Ross could work out what should have been happening at any one time in the performance using a compass other than the score, should he have needed to do so. In being unable to read music, Ross would have otherwise been excluded from this translation.

In both of these cases, not only the play itself, but also subsequent translations (such as Claudette's diagrams of the actors' movements) were dependent on certain pre-requisite knowledge – they pre-suppose an harmonious ontology. Without these prerequisites, actors were unable to engage with aspects of the (play)text, or at the mercy of an interpreter like Claudette.

It would be possible to conceive that, as there was no score for Rap-punzel, the musical source of the play was more accessible: reading music was not a prerequisite to accessing and potentially contributing to songs or other music. But in this case, access to - and alteration of – the songs and sounds that comprised the musical translation of that text was still mediated, but through a different means. For Rap-punzel, sounds were produced by a synthesiser – an electronic keyboard which could also record sounds as files to be transferred from this machine to a computer. Different sound effects and qualities – organ, piano, piccolo – could be produced by this piece of equipment, but to navigate these effects, technical knowledge of the processes of the synthesiser was first required. Several types of technical knowledge would be required to translate ideas from an actor into a form that could be assimilated into the play. To reproduce sounds and effects imagined by the operator, technical knowledge of the workings of a piano would be required; another type of technical knowledge would be required to record the sounds into the machine, and still further to export them into a format that could then be programmed into the sound and lighting board at Old Church, where they could be played through a sound system during a performance. There was a further potential barrier in that the equipment was owned and operated by George: whilst this might not have constituted any formal barrier, to some extent other members of the cast seemed hesitant to engage with the equipment.

On some levels, it would appear that the audio versions of each play might be accessible of all. They required no specific knowledge to be 'read', except the ability to hear sound waves – but there are notable restrictions hidden within this. The MIDI audio version of Forked Up could not incorporate the speech and song of the text accurately, so some of the information contained within the score could not be accurately represented by this translation. The audio version of Rap-punzel, broken up and scattered across different files on George's synthesiser, was no more or less coherent than the Forked Up score in the end even although it at first appeared to require less specialised knowledge to access it.

There seemed to be an inherent contradiction within the network creating the play together. The play as performed was, each time, a one-off event. Yet each discrete element of which it was composed needed to be defined, accessible, reproducible and repeatable. This was clear to see on the occasions where lines were mislearned or misperformed, in particular when these coincided with cue lines (the lines another performer uses to orientate themselves in the text, or to signal them to begin a certain action). The very unrepeatable nature of the play in performance depended upon the repeatability of its discrete elements – the translations all the other actors created.

Material Agency

Through looking at the way in which conflict between different translations was negotiated, this section not only looks at the instances in which a non-human actor's translation of the text was recognised as agentive, but also the process by which this occurred. Tracing a journey through conflict, negotiation and resolution, this section sets the scene to ask further questions about the nature of this agency and its consequences for the production as a whole.

On the very first day of rehearsals for Forked Up, as the cast and company assembled to listen to the music of the play for the first time together, composer Colm said:

"Well, we never really talk about acts, but when I was doing the music it seemed to fall into three acts...and that's the end of the first course – act."

Here, Colm refers to the structure of the play. As the composer, Colm's choice of wording here is interesting: he creates the music which then 'seems to fall' into a particular structure. It is the agency of the score that Colm signals here: once created, the music in dialogue with the time over which the performance will occur has its own agency. There is, too, more than a suggestion of the material in the imagery he uses, imagined as it is in Euclidean terms with acts that can 'fall'. Similarly the score – the physical manifestation of the music Colm has composed for the performance – is also recognised as agentive by Colm himself. Colm stops during a break to force the pages back into the folder in which it has been placed. When director Nick notices, there is the following exchange:

Nick: Having a problem with your binding, love?

Colm: Not even a binding can hold the score!

It is the material nature of the script that becomes the focal point of their joke.

In other instances, the agency of a material translation was implied by one of the actors correcting the translation of another actor in order that there was concordance between the different translations. At one point, Nick pointed out to Philip that he was missing a word from a song. The phrase was as follows:

"Mushroom, mushroom, a wild mushroom, a mushroom soup."

Nick pointed out that Philip was singing:

"Mushroom, mushroom, a mushroom, a mushroom soup."

It does not seem likely that the word 'wild' would make much of a difference to any of the actors' interpretations of the world of the play. The song of which this line is a part is a long list of different types of soup, and none of the performers acknowledged any particular significance in the fact that the soup was wild mushroom. So it is not the content of that word which is important. What is important, however, is that the words of this song correspond to the music that the musicians and Philip are creating. If Philip misses out the word 'wild', his line finishes one eighth of a bar too soon, as the word 'wild' is a crotchet in length. When Philip sang the line incorrectly, he also tended to place a different intonation on the remaining words of the line. These differences, though slight, could cause a rupture similar to the ones created in the above examples. In this instance, the translations created by the musicians could be disrupted – hearing the line finish too soon, the musicians might misread their own place in the score. It could be distracting for Philip himself – after singing the line incorrectly, he might stumble over the timing of the next section, as sometimes occurred in rehearsal. It might draw the attention of sharp-eared audience members either directly or indirectly (for example, if the consequence of missing out the word was that Philip or a musician made errors). So whilst it would be misleading to assert that the error is pointed out as a slavish deference to the score, the need to have commonality between the different translations being created by Philip, by the musicians, and by the audience, point to the fact that the agency of this non-human translation is here being assigned agency by the director.

Throughout the rehearsal and performance period, there were numerous examples of adjustments being made to check that different translations were in accord. The lighting designer, for example, checked with Claudette that the plan he has of the playing space accords to the one which assistant set designer Alice has been using. In the following exchange, a song full of recipe suggestions, sung to Philip's character by Pauline's character, is probed for meaning by Répétiteur 3 (R3):

R3 (pointing to script): That [word] could be more vocalised – that could be just worked into your ruminations. There's obviously something in nut clusters that's beyond the pale.

Philip: I think maybe he's allergic to nuts.

Here the actor finds a logic that enables his translation to accord with the intention of the script and score – a logic that makes sense to him of why these words are louder than the others around them.

Being reliant on the translations of the play which are not one's own can, of course, cause problems. The degree of fidelity to the score and to the script is unique to each individual and differs in each performance. There are points of departure from that score in every performance: mistakes; moments of improvisation; pauses for audience laughter or reaction. The performers are especially vulnerable when relying on another actor's version of the play because they cannot have a copy of the script nor the score in front of them, as the musicians do. It would be a feat of memory indeed for the performers to memorise how each musician's transsation relates to every other musician's version, as well as to their own – a feat that the musicians, able to see the different instruments' parts laid out on the page should they wish, need not perform as the score is accessible to them; the musicians can re-orientate themselves within the play by referring to the physical copy in a way that the other performers cannot. Propped up once more by the laws of physics, some of the translations the musicians create are more powerful than the actors' versions for other reasons. During rehearsals, continuing to translate the score for the performers, R3 warns Mitch that a particular line needs to "get in" before the rumble of percussion as he's "not sure how loud it will be". Mitch may wish to be as true as possible to the script, but this fidelity will be meaningless if he times the line wrong and it is drowned out by the

percussionist's translation of the text; the mechanics of this particular materiality are not negotiable.

It was not always the case that a translation had to be represented by a human actor in order to negotiate and 'win' its place. During the closing moments of the play, Philip had the following line:

"Thank you for being with us here with us today with us today."

Stage manager Claudette in particular found the line amusing, and it received a positive reaction from whatever audience watched the rehearsals²². The line was part of a segment added to the script by writer Daniel in response to suggestions from the actors and director that the ending of the play came too soon. As a relatively new addition to the text, Daniel did not see this line performed until several days after the actors had incorporated it into their performances. In one run-through – a part of the rehearsal process where the actors and répétiteur performed the play without stopping, like they would in a dress rehearsal – Daniel, lighting designer Miles and Claudette happened to be sitting together. Miles remarked on this line, eliciting the response from Claudette that she enjoyed it as part of a running joke about Philip's character misreading the autocue. Daniel then joined in the conversation saying "Okay, let's go with that – it was a typo though."

In this moment, Daniel recognises that the words of the script have contributed to a translation that has been given agency. There is a recognition that it is now no longer truly in his control unless he alters the script and so Philip's translation. A reason has been found to incorporate what might have been read as a typo into the logic of the aesthetic. Interestingly, despite the fact he is highlighting the agency of the text — and partially other actors' interpretations of the text too, as the performers have already incorporated these words into their performances — his acquiescence also contains an assertion of his ability to make such a decision. "Let's go with that" at once accepts the version of the play that Claudette as an audience member has interpreted, and also highlights his view that there still exists a 'real' state of affairs — "it was a typo though". Ultimately he positions himself as still ultimately able to limit or curtail the agency of the text should he wish: even when he is

²² Audiences are dealt with extensively in the next chapter; for now, it will suffice to say that sometimes the audience comprised of Claudette and myself.

directly contradicted by the words on the page, Daniel presents himself as having the ability to manipulate the interpretation which emerges. Whether this was accurate or not is unclear as he did not attempt in this instance to leverage this agency.

There were further examples of situations in which actors negotiated with other actors, not always human. One day in rehearsal, Répétiteur 3 (R3) asked composer Colm if the length of the pause he left during his performance "had the correct 'hymnal' quality". There was no pressure on R3 directly to accord with any other translation at this point; it is his choice how long the pause is. It does influence the translation being created by the performers at this point in that répétiteurs leave invisible traces in the play as performed (as discussed previously), but as the length of pause the conductor will choose in performance won't accord with the time the répétiteur chooses here, R3 might essentially have chosen his own length of pause. However, because the composer is in the room, R3 chooses to defer his own agency in this situation to Colm. This also enables all the human actors present to understand something of the play without this being explicitly stated to them: there is a quality to the silence which *is* hymnal, which has been communicated to the répétiteur through the score, and which the conductor too will communicate in his translation, no matter how differently his translation might manifest this.

Throughout, the nature of the score, this musical version of the play that Colm had created – incorporating many different types of accord, based on an understanding of principles not everyone could immediately understand – put him in this position as a gateway for other actors who looked to gain from him enough understanding to create their translations. I use the term here mindful of the qualities it proposes: a gateway may have a gate across it that impedes access, or it may not; it suggests free passage as much as restrictions, whilst still marking a shift of space or perhaps time. Colm's understanding of all of the aspects of the score, and thus all instruments in use on the stage, meant that he was in a position to make suggestions and be consulted on decisions which had large implications, as well as those which had relatively small ones. Examples of these macro decisions have been discussed already, but Colm was also involved in being a link between the score and other actors on smaller matters. One of these involved suggesting to the trombonist – who was operating the deflating balloons used to express the voice of one of the vegetable puppets – that he might need smaller balloons as the noise was louder than suggested by the score. Colm's

position as a gateway to the score enabled him more than some others to make this suggestion.

At some points, however, there were demonstrably limitations to how much an actor could alter an aspect of the play, even though he wished to do so. Early in rehearsals, Colm remarks that he may have to take the music down an octave for one of the songs which Mitch sings. He notes, though, "I can't transpose the key for the instrumentals". The reasons for this are not only related to the conceptual integrity of the piece, but it also has a basis in the laws of physics and of music.

The physical world of the play (represented by objects), the movements and words of the actors, the music created by the ensemble all contributed to making the play in performance. But to break down the black box of 'music created by the ensemble' a little further, the music is a number of different musicians' versions of the score combined. Each musician's translation only creates the play in performance when combined with the versions other musicians are creating, and it is that overall effect that the composer has written into the score. Even though each musician's version has individual integrity, there are conceptual limitations to altering one part of the music: the play's music is not then the same. But beyond this, the combination of notes which 'go together' in the ear of the listener (to create the effect desired by the composer) are governed by the rules of harmony – rules taught to musicians and composers that have a basis in physics and biology.

Each note is a sound created by air vibrating at a certain frequency, and each frequency has a name: middle C is the name musicians give to a sound made on any instrument that has a wavelength of 132cm and a frequency of 261.63Hz (Michigan Technology University Website 2012). Music is dependent on the behaviour of sound in space and, in as much as any natural laws are non-negotiable, so too (within a particular culture) the laws of harmony are intractable and non-negotiable presences in the score²³. The score here represents and codifies the laws of physics, and Colm transmits this knowledge to the actor: there are limitations to the type of alterations Colm can make to the actor's song without rewriting each of the musicians' parts. The score is predicated upon certain physical laws governing

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²³ How intractable 'fact' and scientific laws are is a matter that has been the subject of debate within a number of fields, including that of ANT (see for example Latour (1993), in exploring the context under which scientific discoveries are codified into the context of society at the time)

harmony, and on this point, the score cannot be negotiated without also attempting a negotiation with either the laws of physics or every instrumental part written into the score.

So, these limitations Mitch and Colm encounter here are created by a number of factors: the nature of harmony; the way in which human hearing works; the frequencies and pitches of each instrument in the orchestra; the nature of space and soundwaves. Ultimately, these are encoded into the score and, with these factors holding it there, materially fixed by other factors; the score requires certain conditions to be fulfilled before it can be altered. Colm wishes to make the song easier for Mitch to sing – more in accord with his vocal range, which was not known at the point at which the song was written. But he is not able to make the change to the score without consequences. It is Colm's knowledge of the conditions of harmonies, pitch, and so on which make him recognise the agency of the score in this situation, and so even though he acts here as a gateway to it in other situations, he acknowledges his own inability to change it simply and quickly: it is the agency of the score, predicated on both cultural mores and the laws of physics, which is here most clear.

There were many instances throughout the rehearsal process during which the needs of the play and the needs of another actor were in conflict and needed to be negotiated. Every possible combination of conflict between different actors seemed to be exemplified during the rehearsal period – a number of these are explored below. In each case, I explore how the incident follows a pattern from conflict through negotiation to resolution, and the different paths these negotiations took.

Actor vs Script

I don't want to say 'vomit', I just want to do it...

In the above example, Philip states a preference to express through a physical gesture a concept which is expressed as a word in the script. Whether this preference is allowed – both externally (through director Nick's assent) and internally (by Philip himself) – depends on whether the concept can be clearly communicated by a word, not a gesture, and remain clearly 'readable'. It is also dependent of Philip's ability to make the gesture physically, dependent on both his physical capability and his physical relationship to the space, people and objects around him. Nick, acting on behalf of the script, registers no objection, and by

Philip's continuing use of the gesture, the gesture is incorporated into the play as it will be in performance. The performer's own agency in finding a path through the script of the play is here respected by other actors, and is found to be compatible with the material needs of the play at this point.

Actor vs Score

R3: For thine is the filling – breath –

Here R3 is suggesting a breathing point for the two actors singing this line. The score has to be negotiated by the actors: if they cannot breathe, they will not be able to sing the music as it is written beyond a certain point (here, the last half of the sentence). R3 provides a method of negotiation with the physical requirements of the score which enables the actors to perform the line comfortably whilst remaining true to the source material.

Another instance of the same type of difficulties – here, the difficulties of correctly timing spoken lines alongside a musical accompaniment – are mentioned by Pauline. The actor finds it hard at this point to translate the text as it asks two actions of her which, if not contradictory, do not comfortably co-exist. To time the lines correctly, Pauline hopes to count the bars of the orchestra's music, but she finds it "impossible" to time one part because she's speaking throughout: it is hard, even with musical training, for her to speak and count at the same time. Here, the performer's normal method of ensuring she times her performance correctly is revealed – generally Pauline counts the bars of music played by the orchestra – but in this instance she is unable to use this strategy. This particular problem was resolved by the performer taking her timing from other actors' versions of the score – in this case, the music of another instrument. Pauline uses another translation to create cues for herself – markers that help her to time and pace her own translation so that it correctly contributes to the play in performance. A particular sequence of notes becomes important not because of its content but its physical position, in the same way that the cruet set was important not because of any essential 'cruetness' It inherently possessed, but because of how it was received by the actors around it.

Essentially Pauline devolves agency to another actor – here, the violinists – to fulfil the counting function for a limited time. The actor's own translation at this point cannot be successfully created and performed except by reference to other actors' versions .

There were also examples of similar difficulties, if not impossibilities, being directed towards actors by the play: for example, towards the orchestra members. The score at one point calls for the orchestra to chant "meat meat meat" and then "gravy gravy". This was to be underscored by music, so the musicians had to play and chant at the same time. In contrast to Pauline's challenge to count and talk at the same time, which is very difficult but not impossible, for some members of the orchestra, playing and chanting at the same time was simply not possible at all. The trombonist, trumpeter and other woodwind musicians needed to breathe into their instruments to create sound, so – unlike the string and percussion sections – it would not be possible for them to sing and play at the same time: not through any lack of dexterity but because of the nature of their instruments. This created, potentially, a problem in performance: the first time this section was played with the full orchestra, the words could not be discerned as they were very quiet. Both Colm and Gerard, the conductor, were concerned about this: it was important that the audience could hear these words so that the overall effect required of the play is achieved, and so that the nature of the interactions between characters at this stage are clear (in particular, so that the audience understand that the orchestra are here a 'character' interacting with Pauline's character). A number of solutions were discussed, including the potentially expensive solution of suspending microphones above the orchestra, but in the end it was a simple solution which prevailed: Colm asked that those orchestra members who could sing did so particularly loudly, and the audibility of the lines was drastically increased. Once again, the play required a certain effect which is achieved not quite in the way that the composer has written it, but via a path achieved through a method dependent on other translations.

Another moment at which it became clear where the boundaries of different forms of the object lay were where one translation seemed to come into conflict with another. As mentioned in Chapter Three, the actors performing in Forked Up mentioned that they found it quite unnerving to have the documentary crew present so often. The practical concerns for them were not some prosaic dislike of being on film (they are, of course, well used to appearing on screen). They seemed to grow from the fact that the performers were in the

process of creating their translations and because the translation which the videographers were producing was a new translation over which the actors had no control.

To take the latter of these concerns first, in addition to controlling rates of pay for performers, another of Equity's agreements covers the use of performers' images in recorded media. Actors are entitled to payments from any body which films a performer performing or rehearsing with the intention to broadcast their image, over and above any payment they are receiving for the performance itself. Thus when a major television channel sent a camera crew to record some rehearsals for a segment on a culture revue, the performers had to sign a release form and provide their agents' details so that their image could be used and that reimbursement could be provided. The ownership of the sounds and movements produced by performers' bodies is recognised as an extension of their rights to fiscally control their monetisation as performers; much as the right of the lighting designer is formalised by the text in his contract and on the lighting plan, so too is the ownership of their image protected on behalf of the performers. When the camera crew from the revue arrived, forms were signed and all proceeded smoothly. But with reference to the documentary crew, agreement had not yet been reached with the actors as to how they would be reimbursed for the use of their image in the documentary – the documentary was being produced by a small production company and had not been sold to a broadcaster yet. It seemed that this lack of financial and legal clarity added to the uneasiness of the performers in this instance. It is interesting that in this instance, Equity's agreement explicitly differentiates between the play in performance and the recording of the play in performance. In asserting the right of a performer to be paid for the distribution of their live theatre performance through broadcast media, the agreement semantically divides the two.

The former of the assertions – that the actors objected to the recording of their process due to it *being* a process – was expressed several times by Philip, one of the actors, both in conversation with his colleagues and to me directly. He mentioned that rehearsal was where he tried ideas out, and that he felt uncomfortable having this recorded. Another performer who had been recorded whilst auditioning for a part in the production expressed uneasiness that their process – literally, the *process* of their translation of the text into the

play – was being made permanent and exposed to an audience outside of the rehearsal room context. As this performer put it:

"I said to Daniel, "This is my sketchbook": the audition process, the rehearsal process. "You wouldn't want someone to go and exhibit your sketchbooks, would you?" "

The appeal to Daniel's understanding of a translation process with which he might be more familiar (that of creating his own visual art) highlighted this performers' understanding of a common process – the one I refer to here as translation – as well as delineating the boundary of their own work by stressing that it is *their* translation. The performer is essentially claiming ownership of the version of the play they materially and imaginatively produce. In doing so, they both reject and embrace the joint ownership which results in the play in performance: they reject the perceived staking of sole ownership of the play that Daniel's hiring of a documentary crew might suggest, whilst not asserting that their *own* ownership is of the entire project, but of that one translation only. Again the particulars of this case study suggest that the nature of and site of creation is understood differently by the performer and writer – the performer expresses their discomfort because the rehearsal is a 'sketchbook', unfinished, full of unexplored options and creations which might be incorporated into the translation or discarded, rather than a finished object ready to be displayed.

There were instances where in addition to the performers' translations being altered in order to accommodate the needs of the play, a translation was altered in order to accommodate the needs of another actor. In rehearsals of Rap-punzel, Juliet was experiencing difficulties getting onto the stage before she began to sing. It was important that she get to the stage before singing so that her words were audible to the audience, but due to a costume change before this point, it was difficult for Juliet to move fast enough through the space. As a result, Hugo suggested to George that he add a second bridge to the introduction to her song in order to ensure there was enough time for Juliet to reach the stage. This particular negotiation incorporates not only the requirements of the performer

but also the space through which Juliet moves and indeed, of the audience²⁴. Each translation carries with it a measure of agency and the negotiation is one which must take into account the needs of all three parties.

The importance of physical space was again apparent in one particularly noticeable example during the creation of Rap-punzel. Early in the rehearsal process, designer Patrick and director Hugo had narrated and negotiated the interaction between the physical space and the needs of the script, talking about what furniture should go where on stage in order to best create the material translation of the play, the performers' translations, the lighting requirements, and the spatial requirements of the play. The space of the stage was small and difficult to transform into different spaces, especially as there were no stagehands to make this happen, so all changes had to be effected by the performers. Patrick and Hugo discuss the design of the largest piece of stage furniture: the bed. Patrick suggests that as once on stage the bed "will be difficult to get off again", it should be utilised in different ways as part of each scene. Patrick suggests that the bed be made so it can represent two different objects at two different parts of the story: firstly a bed and secondly part of a forest. To achieve this, the duvet will look like a normal duvet on one side and on the other, part of a canopy of leaves. The headboard will look like a normal headboard at one angle but have been painted to resemble a forest when turned to one side. Patrick and Hugo discuss the sight-lines – what particular audience members can see from various seats – if they include certain elements into the design and agree that this will work. When Juliet asks whether the bed will be available to sit upon, Patrick replies in the affirmative, though Hugo says "but you always play panto downstage anyway". Patrick goes to his workshop to make the set as required, remarking in passing that "every single thing has changed" since the initial design conversations he and Hugo had before the beginning of rehearsals.

On the morning of the technical run through – that is, a day before the play opens – Patrick and assistant Siobhan try to turn the headboard to change the location of the scene from bedroom to woodland. They realise that if they turn the headboard, part of the bed hits a light positioned upstage right. The light cannot be repositioned as it is needed for the

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²⁴ The audience's requirements are a translation which I return to in Chapter 5

lighting design; however, the bed cannot turn in front of the light, and so cannot turn fully enough to reveal the woodland painting. Patrick and Hugo discuss the situation. Patrick asks why wheels were not put on the bed to begin with: Hugo says it was they didn't want the bed to move if it was sat upon, though now due to changes in the performers' actions, nobody sits upon the bed. Patrick suggests fitting wheels the bed, but Hugo says they are out of time. As a solution, Patrick and Kirsten jigsaw the top of the scenery attached to the bed as it stands on the set; Patrick suggests the set is never now turned all the way round as was originally intended as this will reveal aspects of the hastily-jigsawed set. Patrick is clearly not happy with the situation, but when the jigsawing is complete and they are ready for the technical run through, Hugo asks everyone to give a round of applause to the design team, which is followed by compliments on the appearance of the set from the cast.

In this situation, several actual and projected translations of the play are negotiated. Initially, the requirements that Hugo presents are that the bed fulfil two scenic duties, one as a bed and the second as a piece of forest. He also requires that it be available for the performers to sit on without moving. He also implicitly requires that it does not interfere with any other translations: it must be negotiable by the performers; it must not block the view of the audience; it must not hit the ceiling nor the lights. When a conflict between two of these translations occurs, it no longer matters that the some of these requirements no longer exist. Time and space both exert their agency over the production and a solution must be found that avoids the time-costly redesign of the lighting.

In conclusion, as translations are individually created, points of concordance are necessary to ensure that the end goal – the play in performance – is reached. In the process of creating the translations, moment of negotiation between translations occur. Each translation impacts upon the visual appearance of the play in performance and thus the aesthetic of the production: objects, audience, director. This can be influenced on predicted behaviours – knowledge of what type of light a particular piece of equipment emits, experience of what on-stage behaviours cannot and can be seen from a certain part of an auditorium – or on actual interactions – a performer agreeing to one position as a certain note is played in the orchestra. An actor need not be physically present in the room to influence the building of another translation: Equity were not present when the conversations regards the documentary crew began, but their implied influence was. This is

particularly relevant in relation to the next chapter, devoted as it is to the audience, who were both present and absent to varying degrees throughout both rehearsal periods — whether they were materially in the room or not.

Chapter Five: Materiality & the Audience

One of the characteristics of ANT accounts has been, from the beginning, the call to question why agency is commonly recognised in humans but not in objects in networks of creation – by this I mean an arrangement of entities (to use the terms of Law (1999)) whose work creates, whether the final result is a piece of theatre or an aircraft.

If we agree with the definition in Law (1999) of ANT as chiefly concerned with the process of performativity and relational materiality, as discussed earlier in this thesis, and if we agree that each entity is created in relation to other members of the network, each entity is potentially agentive and potentially interesting as a focus of study. Furthermore, studying one part of the network should reveal not only qualities of the whole network, but also (through the relationships displayed in interactions) qualities of other entities within the network. If the network's chief characteristic is that it is relational; if the properties of each part of it are dependent on the properties of other entities and performed rather than essential; if actors are the effect of the network (Law 1999:5): if these claims are accepted, then to study an actor, be it human or non-human, is to study the network itself; to study the agency of an actor is to study the distribution of agency in a network; to study how an actor is assembled is to ask how the network is assembled. The distinction between human and non-human actor becomes not so interesting as the terms of the constitution of the network because, as Brown (2011) summarises, "there is no stable definition between people and things, since both make each other" (2011: 25). Muniesa, Millo and Callon (2007) propose in their study of market devices that the study of an object is beneficial as it inherently suggests an act of abstraction (2007: 4)²⁵.

As a result, objects are of equal importance as humans in studies with an ANT sensibility and are established as an interesting and worthy object of study in order to examine networks

²⁵ They define this abstraction not as a drawing away from a setting and thus from specificity, but suggest "abstraction needs to be considered an action (performed by an agencement) rather than an adjective (that qualifies an entity)" (2007: 4): in this light, it could be possible to view abstraction as the outward articulation of an agency embedded *in* a setting.

and their qualities as a whole. Furthermore, as we have more often than not heard the story of humans, that objects are perhaps particularly well represented in ANT literature is an indication of a commitment to redressing an historical imbalance.

In this section, instances of interactions between spatial and physical realities and theatrical objects are considered, drawn from the close observation data.

Physical Space

Throughout the observation period on which these two case studies are based, space was both verbally and physically acknowledged in different ways. The human actors appeared to be adept at negotiating the ways in which they should 'read' space, which could be real, metaphorical, or both at once. These spaces were created by two processes: by verbal agreement, frequently reinforced, or by physical markers which then had agency in enforcing a physical reality. Frequently it was a combination of these two strategies which were used.

The space in which traditionally theatre is presented is separated from the outside world by auditorium doors, by ushers, by a fee charged for admittance. The physical reality of the auditorium – the position of the structural walls, the width of the stage – are restricted by limitations which are not only physical. The Black Box stage featured two walls to the side of the stage which protruded into the playing space – the space that the actors could move freely upon to be seen by the audience (see Fig. 1).

The walls are immovable without destroying the space: however, the walls may be negotiated with. The set was designed to negotiate these physical objects: the raised platform that was built from steel decking avoided them, so the performers would not move behind the walls and be obscured from the audience by them during performances. But the walls were also used at one point to obscure an exit by Mitch: to avoid Mitch having to stand inside a wooden fridge inside an egg costume for 15 minutes, the walls allowed him to exit discreetly. There were further elements of this particular moment which showed a combination of translations co-ordinating to negotiate a physical feature, so it is an example to which I will return.

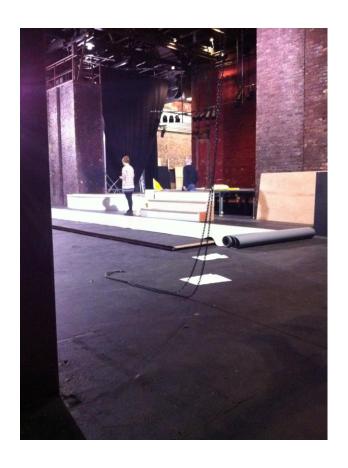


Figure 1: The two protruding walls at Black Box, seen here to left and right of the set

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In her analysis of the negotiations involved in installing a bus into a second-floor museum space as a piece of visual art, Yaneva (2003b) encountered a similar situation when the bus

proved to be too heavy to stand directly on the floor of the museum. She sums up the situation as follows:

The artist's demands and negotiations with permanent actors are not powerful enough to change radically the properties of the floor...the controversy is resolved by the rediscovery of the immutable fragility of the floor. They achieve [a good solution] by constructing a wooden platform, mediating between the bus weight and the museum floor.

So whilst negotiations can be carried out as to the relationships with physical space – through an intermediary such as a wooden platform – certain features remain non-negotiable, either to the audience, performers, or both.

(Yaneva 2003b: 120)

This is one dimension in which stage space, like the space of the museum floor, exists: it is physical, and hard (though not impossible) to negotiate with. But it is also metaphorical, in that it communicates meaning when combined with bodies and objects. Even the initial contract between the audience and production is an act of metaphor – the audience place themselves within a space of meaning-creation and storytelling. It is not a position of subjugation but one of potentially active creation as they are able to disrupt or interrupt the performance in real time if they wish; they can also fall asleep, talk, or leave should they wish. And the theatre space is also one which is constructed by the viewer, who people it with imagined things which are not there – for example, invisible doors and walls – as well as (by registering them) things which are there, such as pepper pots and salt shakers. The servicing of that world is done by numerous bodies and objects who give it meaning: whether it be ushers, who help the audience to negotiate their way into and through the liminal space between the stage and seats, or the lighting technicians, who enable them to see their way as they do so. In observations of both Forked Up and Rap-punzel, physical markers were put in place in rehearsals to signal a change of space.

One of the activities which began a day in the Forked Up rehearsal room was the stage manager marking out the 'playing space' on the floor of the rehearsal room using coloured tape (see figure 2). The spatial dimensions in which the performance would eventually take

place were physically marked on the floor of the Forked Up rehearsal room²⁶. This act helped the humans in the room become familiar with the dimensions of the performance space in advance of being present on the stage itself. When the performers were rehearsing in the spaces marked out by the tape, they treated them differently from the way they treated the same space during their breaks. During breaks, they might pay no attention to the series of lines in a box on the right of the stage. During rehearsals, they would treat the same set of tape marks on a floor as if they were a set of stairs. Their pace of movement and precision of gesture was determined by this representation. There was agreement within the room that the physical marks made by the brightly coloured electrical tape carefully placed on the floor by Claudette metonymically represented the space of the stage.



Figure 2: rehearsal space being marked with dimensions of the set using electrical tape

From early in the rehearsal process, the tape marks were used by the performers to start to build their performances both individually and in relation to the other actors. The positions

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²⁶ In an interview with a stage manager, the interviewee mentioned that part of this role could mean scaling up or down the space of the stage according to the correspondence of the rehearsal and performance stages; the physical representation of how that space worked, then, could be manipulated by mutual agreement.

the performers took in relation to one another and in relation to the position of pieces of set – marked in a different colour of tape – were first tried in a number of different ways, then decided upon, then fixed. Sometimes this process would be quick and sometimes lengthy; sometimes decisions were made individually and silently, and sometimes in negotiation with another performer or the director. Performers would negotiate objects both present and absent: they would pick up and put down props, real and imagined, and orientate their bodies towards an audience who were not there. As the rehearsal period progressed, Claudette moved from recording positions and movements in the book in pencil, rubbing out and re-drawing positions daily, to recording them in pen. With this change came a move to informing either Nick or the performers themselves when the performers deviated from the movements recorded in the book, or indeed the combinations of movements and words. By the time rehearsals were nearly complete and the set was partially in place or nearly in place, the space that the kitchen unit and the fridge took up were already familiar; individual journeys and footfalls varied every day, but never from a significantly predictable pattern which was neatly ascribed in the book.

The marking of the playing space was also a feature of the rehearsal day in the flat that the Rap-punzel company used to rehearse. The space was not to be used for anything in the evenings so the playing space did not have to be taped down every morning and removed every night as it did at the opera rehearsal rooms that Forked Up used. The shorter rehearsal period meant that the Rap-punzel company had less time in the flat and also less time rehearsing on the set in the venue itself. The set was relatively simple and the technical support more limited – there was no money for scene changers, Hugo had mentioned, so the set was built to be flexible and multi-purpose. An example of this was the bed: it was painted so that looked from one angle it looked like a forest and the other like a more naturalistic bed (though there were problems with this dual purpose, as I explore later).

The physical boundaries of the utilisable space for performance at both BlackBox and Old Church were more varied than the lines of tape on the rehearsal room floors, but equally as definite. The space of the stage was clearly delineated from the rest of the spaces in the venue: doors were inaccessible to all but the performers by being elevated or divided from the public space; sometimes they were physically accessible but patrolled by ushers or other

members of venue staff. Lights pointed at the stage were brighter than the weak but cheerful lights above the seats where the audience would sit. The stage space faced the seating, bringing the performers face to face with an audience pointing at them. Objects as well as humans had to obey these spaces – for example, stage lights pointed at the stage rather than into the audience; the steel decking upon which the set rested stopped before the two supporting walls.

In the rehearsal room, by physically creating both the boundary of demarcation between and physical connection between real and imagined space, the stage manager (or the people fulfilling that role multiply, in the case of Rap-punzel) was responsible for the transformation of a space from a rehearsal space (often with prosaic, multiple uses) to a theatrical space. Like a priest laying out an altar cloth to signify the ritual use of the space, the stage manager could alter the way in which the space the company inhabits is understood. As part of the rehearsals of Forked Up, the marking of theatrical space occurred on a daily basis. On the floor, tape was laid out to mark the dimensions of the stage at Black Box, the eventual production space. Claudette, the stage manager on Forked Up who laid down and took up the tape which marked out the size and shape of the space which the performers could navigate, fulfilled other roles related to defining the nature of that space and the negotiations with it in which all the actors had to engage. In production meetings, she raised concerns about the dimension of costumes in relation to that space. As one part of the rehearsal process, Claudette mocked up a cauldron, using cardboard and cable ties to create an object which did not particularly resemble a cauldron in many ways, but which stood in for the as-yet-unpurchased prop and was understood by other actors to represent it. It not only metaphorically and symbolically, but also physically, communicated the cauldron's qualities to the performers, who were then able to adjust their relationships to each other and to the other props to more closely approximate their physical behaviour as it would come to be in performance. So whilst the primary purpose of this object was to physically communicate size and shape, the way in which it was used also helped to affect a change in how the space in the room was understood. The verisimilitude of the object was unimportant in recognising what it was and the function it fulfilled; it became incorporated, invisible, into the way the performers made their work. Through mutual acceptance of these objects, the humans in the room imbued physical objects with metaphorical functions. It was through mutually agreeing to treat the cauldron as if it was metal and heavy that Pauline and Philip created a moment of concordance between their performances and, individually, with the physical dimensions of the material world in which the play was being created.

These physical and metaphorical spaces co-existed contemporaneously. Materially, there was a physical space in which bodies and objects could move in order to present the work that the companies were creating; a story²⁷ could be meaningfully created and experienced. Facilities existed to augment that space to create a physical world which was different in its rules and mores to the world outside that space. The facilities included specialised equipment such as lighting and sound systems and non-specialised objects used to establish boundaries (for example, the raised space of the stage). The designers (for set, costume, lighting and sound) and those acting on their behalf (such as the stage manager, who purchased the props) considered how to create and enhance this world the audience experienced through the use of the space and of the other tools at their disposal.

The other purpose of the space is as the raw materials, literally, for the creation of metaphor in performance. By delineating it as physically separate, the space becomes understood by the audience of one that is both real and not real; metaphorical, as acts which cannot be real understood to be real in the same way as the seats they sit on and the lights that illuminate the stage are real. At the same time, of course, the bodies moving and the bricks in the wall and the light above the fire exit and the sound of the words being spoken are real: these phenomena really are happening, and they are being experienced by the audience. The temperature of the auditorium is real. The performers on the stage are real. In the separation from the audience and the invitation to watch, extended by the space of a stage, beautifully lit and angled to be best seen by the audience, there is a tension between the two different type of 'real' that the audience see.

The positioning of bodies within a space is a deliberate act of meaning-creation – an act of communication, and of connection between the bodies and objects on stage and the bodies and objects of the audience off stage – and it received much attention from the directors as

²⁷ I hesistate to say 'story' here as whether or not a story is necessary for theatre to exist is highly contested. However in both the cases studied here there was a strong storytelling element to each production.

a result. The directors of each production spent a lot of time adjusting the movements of the performers so that they helped to communicate effectively with the audience. This was partially achieved by adjusting physical proximity between performers and the set, or performers and one another. In one scene of Forked Up, Mr Egg and Mr Banana join hands to walk down a set of stairs, a gesture of trust and friendship. In one scene of Rap-punzel, a grandfather drew his grandchild close to him to convey the closeness of their emotional bond. Physical proximity and contact communicated emotion of varying complexity in both productions: Pauline's character despises Philip's, but the director and performers often decided to portray them in close proximity in their roles as TV hosts. In one moment, Pauline's character calls Philip's character a "silly great tit" through gritted teeth, their faces pressed together and smiling; their physical proximity helps to communicate a more complex dynamic than the two examples above.

Another more complex dynamic occurred in the building of a scene which featured some magical gravy. During the Forked Up rehearsals, the following exchange occurred where the proximity of Martin and Mitch to a skillet full of gravy is discussed:

DANIEL: It's not that they want to eat the gravy.

NICK: It's the mysterious power of the gravy, and in particular June's gravy.

DANIEL: Pre-Raphaelite gravy – there's a Pre-Raphaelite painting of Medea cooking... it's like that.

Here the director and writer emphasise to the performers that what they are communicating by their closeness to the skillet is a relationship with its contents that goes beyond a normal sensory experience. The performers are communicating that the gravy has a "mysterious power" through their physical proximity to it – a power that then is communicated the audience. The object in question (the gravy) provokes a physical reaction to the performers that is then communicated to the audience by their positioning on stage – thus the space takes on an interpretive and metaphorical dimension as the

audience deciphers what this proximity tells them. The interpretation is enhanced by lights, music, and other stage-craft²⁸.

There is also an intertextual quality to the space even during rehearsal. The performers and other actors, from the space itself to lights, musicians, and instruments, are spatially communicating not just the wonder of this moment – and of this gravy. Written into the text, intertwined between its words, are echoes of other spaces in other worlds: in this case, the work of Pre-Raphaelite painters like Frederick Sandys. The writer made explicit reference to Sandys' painting 'Medea' in communicating to the rest of the company the effect that the gravy should have on the performers²⁹. It depicts landscape to the foreground of which a woman is seemingly entranced by a cooking vessel with a mysterious glow. No knowledge of this painting is required to feel its influence in the final production – it is communicated solely by the positioning of the performers close to the skillet – but it does have an influence, both as it was in the writer's mind as he describes the scene, and more tangibly because he mentioned it in rehearsals as an example of what atmosphere the performers should try to transmit to the audience. It becomes embedded in the performers' understanding of the scene, of the way that they move, of how they positioned their bodies: in revisiting material from this production. One of the publicity photos published alongside some of the print reviews for the show came to be a picture of Philip and Martin watching Pauline try the gravy: in the photograph, Philip and Martin both have open mouthed, glazed stares that resemble the expression of Sandys' Medea.

Intertextual meanings were also important within Rap-punzel. It was observed in a discussion between the set designer, Paddy, and the cast and director as to how to design the bed, an essential prop:

HUGO: How about we take the flap idea but instead attach it to a pole and attach it to the head of the bed as a panel?

 $^{\rm 28}$ The gravy is also mimed – an object which has influence though it has no physical mass

²⁹ The interplay between the spatial dimensions suggested in this painting, too, carries and communicates meaning to the audience who can 'read' it – in combination with the title of the painting, the viewer is given access to an additional layer of meaning to the composition if they know the mythological story to which it pertains – but that is another thesis.

Paddy nods.

JULIET: Then would we be able to sit on it as woodland?

PADDY: Yeah...

HUGO: But you always play panto downstage anyway.

'Playing downstage' means pointing the body towards the audience rather than positioning the body to point towards, say, another performer on stage. 'Playing downstage' acknowledges the audience: it is a signal that the actor is aware of their presence, rather than pretending they are not there, as naturalistic theatre stylistically implies³⁰. Positioning a body and speaking words in this direction communicates something to the audience: it communicates that the mode of address is more personal and less like a traditional 'fourth wall' performance. It was noticeable that none of the performers questioned Hugo's statement.

The invisible object which becomes embedded in the performance and which the audience are not necessarily asked to see is a rich motif but one which pulls slightly away from the focus of these observations. More directly relevant is the interactions observed between the audience, the performers, and invisible objects that the audience were asked to see. The invisible gravy mentioned above is one straightforward example of this. A more complex example came about during more than one performance of Rap-punzel. At one point, the wicked queen knocks on a door, disguised as an old lady selling apples. In this production, the door was invisible: when the performer made a knocking gesture in a space in the air in front of her, a sound effect of a door being knocked was played. For the scene to work, the text required a door, and Hugo had decided to make this one invisible. The sound cue was the result of a directorial and set design decision, co-created with a gesture by a performer in a particular space; it is the result of speakers, a sound board, electrical power, a computer and a sound file co-operating. The reasons for this decision are multiple: it fits with the aesthetics of the play; it fits with the intertextual aesthetics of pantomime,

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³⁰ The 'fourth wall' is a shorthand for expressing a style of theatre which ignores the audience (so called to envoke the image of the performers being in a room, represented by the set, which has a glass wall through which the audience observe them). From its overabundance in the theatres of the UK, it would appear naturalism is still the dominant form within British theatre.

which has an emphasis on hypertheatricality³¹; it is practical to achieve in the small performance space of the Old Church stage.

So the door in the theatre space need not share the qualities the audience would expect of a door outside of that space, such as a physically tangible construction. But the sonic door is subject to vulnerabilities in the same way as the object we might recognise in the 'real' world might; this door existed only when a certain set of actions physically combined: when the performer made a knocking gesture in space, and the sound effect was played through the sound system. In the same way as the cruet set would only exist correctly in the world of the play when it read as such from the audience, despite any persuasive physical qualities it might possess off-stage, the Rap-punzel door could not appear without certain conditions calling it forth.

This was particularly clear during one performance when either through a failure of the technology or through technician Andy not activating the sound effect in time, the performer knocked, but the noise did not play. The effect of this incident and its resolution are ones I return to later in this chapter.

By the Book

I briefly mentioned the book before: a term for the copy of the text of the play which is annotated to include diagrams indicating the physical position of performers, set and properties in relation to one another. This acts as a record of the actors' physical journey through the rehearsal space. As rehearsals progress, movements which could be quite different day-to-day begin to be systematised: the stage manager records them and will begin to alert either the director or the performers themselves should they deviate from what path of movement has been agreed. In combination with the sound and lighting cues, added towards the end of the rehearsal process, the book becomes a physical manifestation of the play as it will be performed — a guide to what has been negotiated between the human and non-human actors as well as a template for recreating it. The book becomes an organising device.

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 $^{^{31}}$ part of pantomime tradition contains experimentation with this type of mixing of reality and theatricality

The book is an important object for a number of reasons. The process of performing the text for the performers requires a lot of remembering. Words, lines, gestures, and movements must be remembered and played out in the correct sequence, and in addition the result of each performer's labours must interlink with the performance being created by the other actors creating the performance: other performers, the lighting operator, the sound system. Failure to co-ordinate these moments of connection could lead to a problematic overlap: a word obscured by another performer's line; a gesture lost in a moment of darkness on stage. As a result, the book can become an arbitrator in disputes. At one point during Forked Up rehearsals, Nick had repeatedly advised Philip that he was moving in the wrong direction around the table. He asked Claudette to check the book, which she did, telling Philip what path to take around the table on the basis of the sketch within it. As well as mediating this dispute, the book can also be a method by which certain actors may objurgate responsibility: in asking Claudette to consult the book on where a performer has previously positioned themselves, the director can avoid censoring a move or a gesture as 'wrong', demurring to the book instead.

The book is a vital piece of equipment for the production. Several phrases which pepper the language of theatre practitioners make reference to 'the book': for example, where there are a team of stage managers, one of them will be referred to as 'on the book'. This is the stage manager who will make the annotations to the book and 'op' the show; they will provide prompts in rehearsal if performers forget their lines. Performers in both processes were referred to as being 'off book' when they had learned their lines by heart. The process of recording the movements and positions of actors was achieved by idiosyncratic methods, but in both cases there were diagrams drawn on the blank page opposite a page of the script with descriptive notes beneath. The extent to which the book is embedded in the specific vocabulary of rehearsal is telling of the centrality of this object to the human actors.

The movements of the cast and their positions in relation to one another and the space and set were was all inputted on the Forked Up production by Claudette. The precise nature of the information was to an extent determined by her – how precisely her diagrams reflected the movements of the performers or positions of the props affected how legitimately she could interject in the moments where a performer's movement or position of a piece of furniture seemed to be incorrect. The book will be a permanent record of how this

production looked, when read by someone who can interpret Claudette's notation, and how it could potentially be recreated. Kept alongside the rest of the production files, it will be a permanent record of this ethereal event; in theatre, these ephemera³² are all which will remain when the production stops running. As a consequence, of course, both the book itself and Claudette, in choosing what to add to it, have power: the decision as to what gets added to the book and what is omitted has the possibility to tamp down or open up possibilities for a performer's work; to end experimentation or promote it.

For each production, the book was used for a variety of purposes and as part of different processes. In Rap-punzel, notes on the physical position were limited to one or two marks about which exit and entrance were used at given points, a quick sketch as to positions ("figure of eight here" to indicate a dance move, for example) and the sound cues were marked onto the book for Andy, the technician, to operate. Throughout rehearsals, the book was variously maintained by either Hugo or Sarah, a directing student from a local university who was attending rehearsals as part of her course. This book was far less used to keep the movements of performers concordant with space, objects and other performers than the book used on Forked Up. The cues and diagrams were relatively simple, though as a result performers were asked to be more responsible in ensuring that their performances remained consistent to what they had previously performed in rehearsal. Forked Up, with its multiplicity of lighting cues and more complex physical set, had a book with many cues and diagrams. It was the responsibility of stage manager Claudette to operate ('op') the show: during every performance, she sat with the technician operating the lighting board in the area at the back of the auditorium known as the box and told him when to operate the next cue through the use of 'cans' – headsets with headphones and microphones. The cans also allowed her to communicated with Claire, who was also using cans backstage, when to operate the few mechanical cues of the set. These involved Claire pulling a rope to open a set of doors and being underneath the stage at the right time to dispose of objects that appear to be eaten by one of the puppets during a dinner scene. Claudette would cue the opening of the door by saying 'go' at the correct time so that Clare could perform the required action in synch with the rest of the actors on stage; from her position backstage,

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³² That objects like fliers, programmes and so on are called 'ephemera' is an interesting inversion as it is not these objects which are the most ephemeral within the process.

Claire would not have been able to tell the correct moment, nor adjust her actions to accord with the actions of other actors. The headsets meant that other information – such as the fact that the auditorium was now open, or that a piece of scenery needed adjusted on set could also be communicated quickly and quietly to the technical and stage management team at large. The headsets meant that the audience did not have to hear these cues being given. The book, in each case, was a complex artifact with multiple functions, deeply influenced by the multiplicity of needs placed upon it and the circumstances under which it had been created, encoding the spatial relationships within the play and the nature and timing of their concordance. As pointed out earlier in an example, where Ross was unable to interpret it due to his inability to read music, the book did not make the spatial relationships of the play and their interactions accessible to just anyone. In addition, Claudette was also expected to check the words and notes of the songs were being performed correctly – a task that she commented was difficult to do whilst, for example, trying to ask the writer's opinion on which prop menu he wanted to use on the set. After the dress rehearsal, Claudette admonished Claire for asking her a question during a section of the play in which Claudette's only orientation was by counting bars of music performed by the orchestra. When the only physical concordance was possible through counting, it made it difficult for Claudette to do anything else.

Shedding Light

Every actor involved in creating the performance experimented with the materials available to fulfil the tasks required of them in achieving the production. Their 'performance' was created through a complex process in which combined the actors' skills or qualities combining with in-the-moment reaction to the physical circumstances and those of the actors around them. As my research progressed, I found myself grappling for a word which would encapsulate the qualities of the individual journey through the play that each actor created but which was more fitting than 'performance'. The term is problematic; one of the suggestions it carries is of acting something false; that there is guile to what the actor creates, that something truer can be located behind it somewhere. Another suggestion is that there is a separation of the actor to this process, a choice to begin to 'perform'. There may be some useful qualities to the word – after all, we talk of inanimate objects 'performing a function', of a market 'performing' – but creating a 'performance' as part of

the theatre production process for me created an unhelpful muddiness in one of the areas I wished to bring a little more clarity to: the application of theatre metaphors in organisation studies. As a result, I returned to ANT literature to find a term which might be helpfully applied.

The term 'translation' as a result was adopted to refer to the individual course of action and material interaction generated by any one actor. It incorporates, too, a useful neutrality that suggests that not only humans can generate a translation: helpful, given one of the translations I was able to observe in creation most closely involved a number of non-humans generating translations.

This research was unable to access the very start of every individual's contribution to the production: as mentioned earlier, Colm, Daniel and Nick had discussed the concept for *Forked Up* several years before, and both the text of the play and the score had been created to some extent before rehearsals began. But some of the translations created by actor were easier to observe due to the very physical articulation they required in the space of the rehearsal and performance spaces. One such example was the translation created by lighting designer Miles and by a number of technologies involved in lighting the stage.

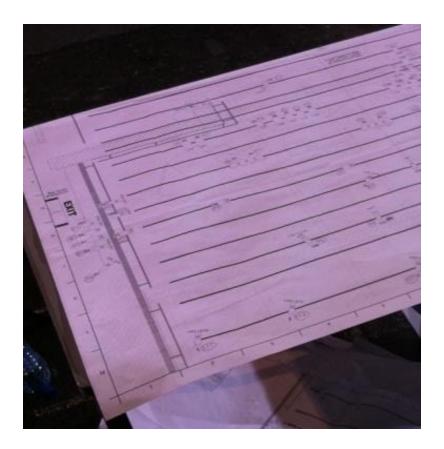
Through observation (in combination with a semi-structured interview with Miles), the following stages in the process of creating the lighting for the play were observed. Miles met with Rich to discuss how both parties perceived aspects of the text and then visited the auditorium at Black Box to assess it. Exposure to the model box – detailing the furniture and layout of the set in miniature – and knowledge of the equipment available at Black Box refined Miles' ideas for the design: what lighting would be used in each moment, and how it would change, as well as how he would physically achieve certain lighting effects. The objective of his work was to create a number of individual lighting moments ('states') that created an artistic effect that interacted with the other actors' translations of the play. When these states were run in combination with other translations, they became the lighting design. To communicate them to other human actors and to record how the effects were achieved, Miles made a lighting plan: a diagram that showed how all the lights he planned to use were to be positioned.

The equipment available to achieve the lighting design was a combination of many different lights with different capacities for illumination, size of bulb and physical bulk. It also involved lighting board which could control the supply of electricity to these lights, and which as a result could make the lights bright or dim, on or off (see figure three). The lights could be used in combination with thin sheets of coloured material, called gels, which could be placed in front of the light into slots that could then be remotely moved in front of the bulb to achieve different colour effects, so that light hitting the stage would appear any of a number of colours. Each lighting state was programmed into the board and saved so it could be activated on cue. In theory, as the board was able to run each cue for a set amount of time, the board could have run the entire show once 'go' was pressed at the start of the performance; in practise, as the lighting design was only one translation of the text and needed to accord with many others, each state was individually activated by an operator at a time that was synchronised with the other translations. This meant each lighting state was programmed sequentially and activated manually by a technician based on the cues provided (in this case) by the stage manager, timed to coincide with the translations of the other actors, such as the performers moving on stage. This gave the maximum chance that the lighting states would occur at the time they had been designed to do so.



Fig. 3 – The lighting board at Black Box

Miles said that his knowledge of how light would behave in the physical space of the theatre was a mixture of observations made throughout the years and experimentation in the venue; how to create the atmosphere or effect that he aimed for was a combination of tacit knowledge and in-the-moment experimentation³³. The equipment available also had an effect on what could be achieved – the shape of the lamp and the bulb affected the qualities of the light and the age of the bulbs affected their brightness. Combining all these elements – pre-existing knowledge of the behaviour of light, knowledge of the equipment available and observations of the model box and Black Box space – Miles created a lighting plan on his laptop and printed it out (see figure four).



³³ An example of the way in which this tacit knowledge was observed during this process, there were at least three occasions during the observation of Forked Up where Miles was able to discern that a bulb was old or a light set to the wrong intensity by looking at the quality of the light that emerged.

Fig. 4 – Lighting plan for Forked Up (with symbols representing lights)

A computer programme called AUTOCAD (in conjunction with a programme called Vectorworks) enabled Miles to mark the position of lights on a pre-existing chart of the theatre space. Using a key, the designer was able to communicate to the technical staff at Black Box what lights he wanted to be positioned where and facing in which direction; close to the time when rehearsals moved to Black Box, the technical staff were able to 'rig' the lights onto bars near the ceiling (the lighting rig or 'grid') that supported their weight, using chains and cables. This was achieved by using a crane with a movable platform onto which a member of the technical team could stand, informally called a cherry picker.

The lighting plan, then, depends on the interweaving of two systems of representation of physical objects: the plan of the theatre and the diagram, drawn on AUTOCAD, that shows the position of the lights. To turn the plan into a system that could achieve the each lighting state and thus the design as a whole, the technical staff need to be able to read the lighting design, relate the design to the lights in their store and rig them to the lighting grid. It also depends on the lighting designer using the correct measurements of the space of the auditorium – I have already mentioned an occasion in which Miles checked with Claudette that the plan of Black Box he used was correct and up-to-date. It is only through overlaying the representation of the physical space of the stage and the symbols representing lights that the designer can communicate to the technical staff how to match up the two. As with the coded book, the plan required technical knowledge in order to interpret it: it restricted access to its meaning to those who can decipher the symbols and match them up with the physical objects represented. As with the coded book, though, guides were available, such as the key to the different type of lights (see figure five).

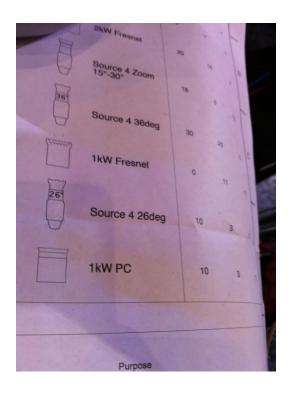


Figure 5 – Key to the Forked Up lighting plans

With all of the lights in place, Miles then arrived for a session with the technical venue staff and the lights, experimenting with different levels of light intensity and direction as well as with different combinations of lights. Some of the most commonly-used lights featured as part of their design gates on the front which enabled light to be directed quite specifically onto a particular spot on the stage. As a result, as well as adjusting the position of the lights and their intensity, there were small adjustments which needed to be made physically to these gates so that the light was manipulated in a way which achieved the effect outlined in the plan.

In negotiating a path between the physical position of the lights and their intensity (controlled by the lighting board electronically), there were a number of factors that restricted how each lighting state could be achieved. All but the very tiniest theatre spaces have a lighting grid onto which lights can be placed and moved – even the small space at Old Church had a small grid – but the grid has physical limitations. The type and number of effects that could physically be created by the materials at the lighting designer and

technical team's disposal were myriad, but with each light that was added to the grid, the lighting design was closer to being physically achieved but also the possibilities for how it *could* be achieved became increasingly limited. Not only the lights themselves, but the system by which they were suspended from the roof and the lighting board by which they were controlled, added restrictions. If there were too many lights hanging from any one pole of the lighting grid, it could collapse; if there were too many lights on one side of the grid and none on the other, it could be put under stress and become destabilised.

Once lights are in place and any gates were adjusted, in neither of these case studied could they be moved remotely: the operator can control whether the light is on or off and they can control its intensity, but cannot alter the position of the light. Once gels were loaded into the gates in front of a light, they cannot be changed so there are a finite number of colours which any one light can produce³⁴.

Some lights had very particular requirements of their own: for example, Miles had to programme some very bright halogen spotlights to come on before they were required because, as he explained, "if we stick them straight on at eighty per cent, it'll blow the system". In this instance, the requirements of this particular light had consequences for the entire electrical system. Not only the halogen lights but all of the other lights had qualities that had to be considered in creating the lighting for the production – each light's size and shape, the age of its bulb, its weight was significant. The qualities that gave the light its specificity and thus its place in the lighting plan also placed restrictions on other actors: you cannot load too many of this light on this side of the grid because there are too many and they are heavy. This light has two gels on it already so you must find another way to create a yellow light on this side of the stage. In this instance, it was clear that the physical mass of the lights gave them agency and that in this case, individually and in combination with other physical objects, they needed to be negotiated with carefully to achieve the effect Miles desired.

The Creation of the Lighting Translation

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³⁴ However, the gels could be combined to create more than one colour per light – overlapping yellow and blue would make green, so pre-loading both a yellow and a blue gel into the light would give more flexibility than just pre-loading a green one.

In the course of a semi-structured interview with Miles, he said that the lighting design for Forked Up was created from all of these raw materials in the plotting and focussing session. This is the session in which Miles selects the light effect he wants for each moment of the play and the lighting technician programmes these into the lighting board. For Miles, there was an assertion that the act of creation was situated in *this* moment – the moment where he sees, for the first time and with the assistance of many other actors, the lights hit the stage, and the effect of all the material aspects combining in that space.

The plotting session is the point at which the lights were first turned on with the set present. In the focussing session, the intensity and direction of the lights is adjusted to fit the space – at this point the ideas that Miles had about how the lights might work together to create the effect he required were adjusted, changed or left unchanged. Every lighting state that Miles had envisaged was created in turn and, through raising or lowering the intensity of particular lights, adjusted. This was done in three stages. The lights for each proposed state is turned on and any that Miles does not want to use are turned off. Each light that is on is focussed if necessary by the technical staff physically adjusting the gates. This is achieved by knocking the gates lightly with a long pole which could reach them in situ, dangling as they are near the ceiling. The intensity of each light is adjusted as necessary with Miles asking the lighting technician to adjust the light on an intensity scale expressed as a percentage – Miles would ask for a light 'at seventy', then 'at eighty', then confirms 'that's it'. At this point, the state is complete and the stage manager enters a note of the timing of this cue in the book.

This act of creation – the act of a translation springing into being – is possible because the stage is now peopled with the set and, as the days roll by, by the performers. It is important to Miles, he states in conversation, that he sees the lighting states with objects and people in place so that he can see how the light changes when it hits the different materials on the stage. In this moment, a powerful assemblage is created: the performers, physical properties, space and light. All of this work is done from as close to the audience seats as Miles can get, so he experiences something akin to what the audience might see as he adjusts the angles of the lights and mitigates where he can against glare. At the end of the process, the operator, stage manager and Miles run through all of the cues to ensure that the lights functioned correctly and that Miles was happy with the effect in the space.

The lighting board had a great deal of capabilities: had it not been for unpredictability, individuality and changeable nature of each translation by each actor, the board could have run the entire lighting design from start to finish based on its timers. In combination with the lights, the board operator and the power supply, the lighting system was a powerful assemblage in its own right. And just as human actors' bodies limited the lighting board's actions in the moments where light had to be focussed upon them, so too the light too restricted the human actors' actions. Once the lights were in place, they were focussed so that every object or person on stage was lit in a way that Miles and Nick felt was suitable. Not only did this necessitate the performers standing still and moving to several positions for the lights to be focussed in different states around them, but it was another moment at which the translations became fixed due to an intersection with physical boundaries: if Miles lights a certain part of the stage but the performer then fails to enter that spot, the production will falter. The actors upon whom the lighting acts interact with the lighting states – especially when the lighting state is lodged into the board and becomes difficult to alter, such as during a performance.

I promised earlier to return to the two walls at the side of the set. At one point, Mitch needed to get off stage in a giant egg costume or he would have to remain in the wooden fridge for a period of 10-15 minutes. Ideally he would have liked this to happen without the audience noticing. The physical space of the auditorium assisted with this process; in consultation with Nick, Miles also manipulated the lighting to assist in the process of distracting the audience from a large white egg. Miles made sure that stage left was in semi-darkness as Mitch descended, but also chose this moment (marked by the rumbling of a samba drum) to illuminate Mr Banana on the other side of the stage, illuminated in a bright yellow light. Two effects of the lighting and one of the physical space of the building worked to focus the attention of the audience on something other than the performer. Several translations worked together to achieve this affect.

An example of an occasion when a negotiation between the lighting design and another physical translation of the text was necessary in one of the production meetings, where technical elements of the show were discussed amongst the creative team, in week four. Nick and Miles discussed the fact that a sign which said Forked Up – which was to be prominently displayed and illuminated – would not be painted in time for the first of the

focussing sessions. It is not only the size of the sign but also its finish that has consequences for the lighting design: when Daniel asks if the sign will be illuminated, Miles explains that it will be, "from straight on – so a matte finish would be best for lighting". In the same meeting, the lighting requirements for the musicians were also discussed. Nick asks Miles if the company should source lights for the music stands: Miles advises they should otherwise the musicians will all need 'profiles': that is, fixed lights above them creating the constant illumination that will enable the musicians to read their scores. A similar negotiation occurred in the same meeting in relation to the sound design. Alongside composer Colm, Kenny had been employed to help make sure the audience could hear the music and speech of the play clearly by utilising microphones and the acoustics of the space. In this meeting, Kenny was asked by Colm how the carpet would affect the sound design: Kenny was pleased with the decision to use carpet because "it cuts down on footsteps", which would otherwise create additional noise heard by both the audience and the performers.

In all four of these cases, (at least) two translations are in negotiation. In three of them, the qualities of the physical set – the size of the sign, the reflectiveness of the sign and the noise-producing qualities of the flooring – will impact upon the actions that need to be taken to create the effect the designers wish to achieve. If the sign is glossy rather than matte, the intensity of the lights upon it will need to be reduced so that the audience can read it; if it is too thick, it will cast shadows, disrupting the lighting design. If the floor is wooden rather than carpeted, microphones will need to be adjusted in sensitivity. The sign is not yet made so it is straightforward for the lighting design to prevail over its size and finish. The carpeting is already purchased so the performers' microphones can be sensitive.

The lighting of the musicians' scores is more of a struggle. To create individual profiles is a possibility but Miles expresses reluctance to add more lights to the rig; he would also have to plot and focus these lights around the musicians, who were not at present asked to be at those sessions. Adding more lights to the rig would also mean that existing elements of the design would need to be altered to accommodate the newcomers: additional lights would quite possibly be in conflict with what he has already created. In this instance, it is Kenny who volunteers the solution – he says that he can "get a quote from the sound place" for individual stand lights, adding "you always need lit music stands or they'll ask for profiles over them". However, this solution also has disadvantages for the lighting design. During

the second dress rehearsal, the underlighting which had been planned for beneath the steps of the set had been installed – this had been achieved by installing a length of LED cable directly into the stairs. In a lull during the rehearsal, one of the performers said that he supposed Miles must be happy with the stair lights. Miles replied that he was, but also expressed frustration: just as he could not control the lights on the orchestra's stands, so he could not control the LED lights under the stair which also had to remain on. Whilst sourcing the lights for the stands separately was a good solution for many reasons, it also had disadvantages in that these lights could not be controlled: their individual agency versus the entire design became problematic.

Lighting is assigned importance as part of the process of creating a performance because, a set of lighting states presented in conjunction with other translations of the performance has the ability to communicate meaning. This set of lighting states, taken as a whole, is a lighting design. It is developed from the script and from interactions with other actors who take part in the process of creating a production, and it is unique to that performance.

Alongside the drawing number, date, scale; beside the names of the director, lighting and set designers; the lighting plan displayed a piece of text.

Do not scale. Verify all measurements on site.

This drawing, and the design it represents, are copyright of the lighting designer.

Unauthorised reproduction and use is strictly prohibited.

This drawing represents design intent and concept only. The designer is responsible for the visual aspects of this production only, and all specifications provided relate solely to the appearance of the lighting and not to matters of electrical and/or structural safety. The designer is not qualified to determine the electrical or structural appropriateness of the design, and will not assume responsibility for damages resulting through improper engineering and/or implementation of this lighting design.

The lighting plan explicitly states two things. The first is that the lighting plan is *not* the lighting design: the wording of the copyright message distinguishes between the drawing 'and the design it represents'. The lighting design is a concept and it is captured in this

instance in the form of a drawing; the plan states that the reproduction of either the plan *or* the design itself is an infringement of copyright. In associating the design with the word 'use', the lighting plan communicated that the design too is an object – despite not being physically tangible. The plan need not be used for the design to be infringed upon.

The second is that the text on the lighting plan separates this idea – the 'concept' and 'intent' – from the physical manifestation of the lighting. The physical manifestation of the lighting is not the responsibility of the lighting designer – but the lighting design does need to be achievable physically. The *plan* is valid only where it is physically achievable, and the onus of determining that achievability does not lie with the lighting designer. The *design* is the result of a negotiation of that physicality with the plan – and to that aim, the plan may enrol a number of other actors in order to achieve the *design*.

The consequences of these divides were quite viscerally displayed in a situation which arose at the end of the initial run of Forked Up. The documentary film crew engaged by Daniel recorded part of the live performance. However, they had not cleared use of the lighting design with Miles prior to this. The lighting that they had recorded during rehearsals had caused Miles no problem because, it would seem, it was not for him the lighting design – it was several separate lighting states. Miles previously stated that he conceived of the lighting design coming into being only when other translations generated by other actors combined together in the same time-frame, as part of a performance. As a result it is only when the performance is in action that the lighting design exists and thus can be recorded. The infringement occurred in this instance because the recording of the performance creates a new object, already defined as the intellectual property of Miles – and as copyright protects the lighting design from reproduction without Miles' express consent, it is unauthorised.

The Physical Dimension of the Audience

Many types of conversation are constantly occurring between all of the human actors: performer and director; musician and space; audience and writer. One of those conversations was in between the creative team and, through various media, the audience. As previously discussed, this begins in as basic a premise as the name of the show. The pseudonyms selected for both plays reflect something of what the actual titles

communicated to the audience. Rap-punzel suggested in its name a retelling of a classic story in a new setting, with a suggestion of wit and playfulness in the willingness to undertake such an appropriation; Forked Up, whilst perhaps not giving any direct hint as to the intention or content of the story, referred obliquely to the setting (a kitchen) whilst suggesting the kind of subversive innuendo that fans of Daniel's work would recognise.

Forked Up made extensive use of Daniel's illustrations to communicate to the (potential) audience of the play. Daniel's highly recognisable illustration style was the basis of the designs for the posters and fliers for the show, a trope which continued throughout the audience's engagement with the production. His illustrations were present on the website, the posters and in the magazine adverts which promoted the show. Right up to the time when they opened the information sheet about the play, which also used Daniel's illustrations and handwriting, the audience was surrounded by visual reminders of his style and his work.

The marketing copy used on Forked Up also invited the audience to engage in a very particular way from early on. The marketing materials provided information on elements of the story but relied on the audience to assemble these into a narrative which described the show to themselves. The print communicates with potential and actual audiences about the perform performance they could/will see in a number of ways. The copy said it was "a show with actors, music and food. It's a bit like an opera, but with vegetables and fruit." The print provides a sensory context for the story being sold. It describes the elements in the show ("actors") and the subject matter ("cooking"), but in its form also puts forward an invitation to acknowledge that it is the audience member themselves who composes the elements of the story into the performance by providing a series of disconnected sentences describing an individual aspect of the story or characters. The copy uses an exaggeration of the conversational tone ("Oh and someone gets eaten. Did we mention that?") to underline to the audience that the creation of this piece is a collaboration between the elements onstage (the actors, the vegetables) and the audience. It also draws attention to the fact it is a performance ("it's possibly the only show you'll see this year...") rather than asking for the suspension of disbelief or an investment in the reality of the story.

The translation of the performance that the audience build, then, starts with their first act – the act of reading the title, and then perhaps the description of the play – are cognitive functions that create a text – a text, a text that might have very little in common with the play as it actually comes to be, but that will probably have a good number of characteristics in common with it if the title and description have been written well.

In reading the title of the pantomime, the potential audience for Rap-punzel are intended to understand that this is a pantomime, but that it will not necessarily tell the same story as 'Rapunzel'. This is emphasised in the description, both in the style and content of the blurb and the name of the play. The content of the blurb outlines some details of the plot of the story, whilst the style too communicates what the audience might expect. The conversational style draws attention to the genre of the story:

"...a relationship The Media have kept under wraps for decades – nay, centuries.

(Although you don't have to say "nay" – it's a Pantomime word)"

The description of the word 'nay' as "a Pantomime word" here communicates that the genre of which this play is a part has different rules – different words, different forms of address, a different lexicon. It creates an expectation that the world of pantomime is different to the 'real' world. It signals too that the rules of pantomime are different from other artistic worlds by what is not said here: "nay" isn't described as a *theatre* word. The production, no matter what state of existence the source material of the text might be in at this stage, is already being brought into existence by the audience, who are creating their own productions of the mind by reading these words and drawing conclusions from them. In this way, there is already a process of creation of the performance occurring.

The way in which the plot is described also communicates that this story will depart from the story that the potential audience might have experienced before:

"In the meantime, Dark Forces are Abroad. That's all you need to know – Dark Forces! Abroad!"

In this segment, both known and unknown are evoked for the reader. Traditionally fairy stories have many tropes and themes in common, and almost unilaterally the hero

encounters harmful influences which s/he must battle to overcome. Here, the audience is both reassured and prepared. They are reassured that the story will have familiar aspects dark forces, just like in the fairy tales they read as a child and which they know pantomimes to be based upon. They are also prepared for the fact that this telling may depart from the familiar by the direct address, pre-emptively admonishing them for expecting details of the plot from the synopsis (which is, after all, what a synopsis might generally do): "that's all you need to know". There is also an echo of the earlier joke about the words which signal a different world – communicating that the world of this play is different both from reality and from other artistic forms – in the abnormal capitalisation of 'abroad'. Primarily, contemporary usage of the word is overwhelmingly in its sense of 'away from here', and even more specifically, 'in a foreign country'. These meanings developed in the mid fifteenth century. But the meaning evoked here is an even older one, from the mid thirteenth century, when the word 'abroad' first developed from the Old English 'on brede' to mean something like 'at wide' (close to our 'at large'). The sense communicated in the synopsis is that Dark Forces are close at hand, not that they are far away, so 'Abroad' here means the exact opposite of its general current usage³⁵. Use of archaic words, or as in this case words with an archaic meaning, is another hallmark of the fairytale and once more signals to the audience something about the world of the play. However, when placed in the context of capitalisation and emphasis through repetition and exclamation marks, however, the production appropriates this word and its associations to communicate that the audience that what they should expect is not the 'real' world, where 'abroad' is where you might go on holiday, nor is it straightforwardly the world of fairytales where action takes place naturalistically and synopses do not admonish you. Rather, it communicates that the pantomime will exist in a third space – one which has hallmarks of the fairytale world, but which may have differences in style and tone from that which the audience might normally expect.

If the production has been successful in enrolling an audience member to be part of the process of co-creation, the next role of the audience in creating a translation which will

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³⁵ A number of words in the copy signal particularly strongly to the audience that they are approaching the boundaries of 'fairytale land'.

contribute to the performance occurs before they take their seats, and it occurs through two different roles in which they are cast. The first is predicated on one particular action: the purchasing of a ticket. The second is predicated on imagined or known behaviours worked into the actions of the other actors in the process: the creative team, actors, and all of the staff in the building make predictions of how the audience might behave.

The first type of audience has influence on the production because of their physical presence. In the course of the rehearsals for Rap-punzel, it was discussed that – based on an experiment carried out the previous year – the normal Roll Play configuration of the seating for the audience would not work for this production. Generally, the stage for the plays was in front of banks of chairs and tables so that patrons could eat their savoury pastry which was included in the ticket price as they watched the play. Because pre-sales were so high for Rap-punzel, these tables would have to be removed to make sure there was enough room for all the audience to be seated comfortably. Hugo mentioned that this decision was taken on the basis of a mixture of existing sales and predictions, combined with experience from last year's show.

This decision was based on the actual behaviours of audience members – that is, ticket sales – which then influenced the physical configuration of the space through their actions. The audience bought tickets – places to seat them had to be negotiated. Nor did the performance space remain unaffected by this change, as I shall discuss shortly in the discussion of 'sight lines'. Exits and entrances of the performers were affected by the positioning of the audience, meaning the interface between the audience and performer space had to be negotiated on a number of occasions as a result of the actual and predicted behaviour of audience members.

The second type of audience influenced the creation processes which would end in the production no less, and their influence was chiefly seen within the rehearsal room. The imagined audience were constantly present in rehearsals when the other actors considered how they would create their translations. As a result, none of the human actors could forget the audience because it was clear that they always considered themselves to be communicating their part of the play to them. The words of the text, for example, were changed by the actors if the point being communicated was not seen as being transmitted

clearly enough, or if a gesture or movement was suggested which seemed more appropriate in the context of the production as a whole. Thus when during rehearsals for Forked Up Philip said "I don't want to say 'vomit', I just want to do it...", it was because there was a moment in which the connection between the performer and the audience requires clear communication which Philip, from his experienced, suggested was better served by a gesture than a word.

It has already been mentioned that early in rehearsals for Forked Up, a discussion between performers Philip and Pauline, writer Daniel and director Nick occurs about how Philip and June communicate that, as part of a particular scene, they are sometimes looking at (imagined) television cameras, sometimes at the (real) audience as if they were the audience to the television show, and sometimes looking at (real) monitors, on which they will be able to see the (real) conductor. There was heated debate about whether it was useful or confusing for the performers to 'play' these distinctions – 'play' here being used here as a synonym for 'communicate'. In the end, Nick made his point:

"My feeling in a way is if we set it up like that, the audience will get it."

The debate here is not as to whether it was confusing for the performers. The main question was whether the audience would understand what they were being told and what that meant for how the audience understood their role in constructing their own translations of the play. For the audience in this instance are being asked to play a game — in the world of the performance, they play the role of an audience present at the filming of a television cookery show. Behaviours were asked of the audience which depended on their understanding of this role — for example, they were asked to applaud 'their host', which is standard behaviour for a studio audience at the recording of a television cookery show but not in most theatre performances. It is essential that the audience's version of the play accords with that of the other actors.

This conceit is part of the way in which the audience is considered in each individual translation of the production as it is created, as emphasised at various points during the script. In this instance, the variety of tools used to communicate this included speaking directly to the audience, what the theatre makers referred to as 'direct address'. The opening words of the play, delivered into a microphone by an unseen actor, addressed the

audience directly as "ladies and gentlemen". These were instructions to the audience about what the rules were of the world they were in and hints as to what their active role in creating their translations is. At certain points during Forked Up, explicit instructions were involved: one of the characters encourages the audience through gestures to chant the words he is reciting, underscored by the flashing of lights pointed at them. These multisensory signs to the audience of what was being expected of them – both physically and imaginatively – and in this moment, the lights are part of the process of enrolling the audience into the production and signalling their expected behaviour.

A number of similar moments occurred during the rehearsals for Rap-punzel, which had the challenge of representing to the audience on a number of occasions that something which did not 'exist' in reality, but existed in the world of the play. In particular, part of the text called for the performers to interact with several invisible walls and an invisible door. I hesitate to assert that these items did not exist, because during both rehearsal and performance, as an observer (and therefore as an audience member) I came to learn their characteristics. They were bound by time, meaning that they existed in some moments in time but not others; sometimes they had a physical reality to the performers, and sometimes they did not. Hugo told Cat "not to worry" about them during one part of the performance, yet traced the path the walls took at another point. In his words, "they're only doors and walls when we want them to be" – though I might take issue with this statement and suggest that it was the reality of the play which determined when they were doors and walls, and when they were just fresh air. Hugo also missed out the fact that sometimes we could hear them – or rather, sometimes we could hear the door, which made a knocking sound when a performer rapped it at one point, and a splintering sound when a performer kicked it at another. This audio clue was provided at certain times only and only when the production was enacted through the sound technician, computer, the Q-lab software which stored the sound file, and speakers to produce audio waves. The walls and door were, by consent of the translations created by the audience, performers, sound equipment, space and of other translations of the play, real for certain moments of the play. The audience needed help to make the actions on stage make sense.

At all points in the creation of the productions, the directors considered what the audience experience, both individually and collectively, could be: not only what the audience as a

whole experienced, but what any one audience member might experience. This manifested itself into checks on the visual and aural accessibility of the actions taking place on the stage. During rehearsals for Forked Up, Nick visited different parts of the auditorium during the dress rehearsals and performances of the play to check how visible different aspects of the performance would be. Checking the view from different seats in the auditorium is known as checking the 'sight lines' – the view that any one seat or group of seats has of the action on stage. Sight lines are checked so that the director knows that each member of the audience can get a good sense visually of the key elements throughout: it is common practise to remove certain seats from sale if they are found to be visually compromised, or even to physically remove them, should the logistics of the venue allow this. Lee, the sound designer, went through a similar process when the performers reached Black Box and began to use their microphones: using sound measuring equipment, he and his assistant both measured an even tone played through the speaker and checked that the volume and balance of each different voice at different points in the auditorium were all equally audible when the performer and musician microphones were in use. The intention of this check was, once again, in service of the production – if the microphones, performers, sound designer, composer, acoustics of the space, and musicians all 'performed' their duties correctly – if all these translations combined and played out in the correct order over the allotted time, it would still not adequately create the fullest form of the play if the volume was too low, or if an incorrect balance meant that one type of sound drowned out another at a certain place in the auditorium.

Sight lines were also considered during rehearsals for Rap-punzel. At one point, Juliet had to decide whether to sit down or stay standing during a scene:

JULIET: If it's very busy, people find it very hard to see if people sit down, don't they?

George nods

JULIET: You're probably right, because of sight lines.

Here the audience are again brought into the room as a necessary intersection between the translation Juliet is making with the one it is predicted that the audience will create. If we were to consider this moment of frisson between actor and imagined audience in greater

detail, it is clear that Juliet opts not to sit down because the audience probably won't see her – and her knowledge that the venue will be busy is based on the actual behaviour of the audience as they've exhibited it so far. The two chief characteristics that the audience *in absentia* exhibit are their propensity to buy tickets and their inability to see people in chairs, the latter of which is understood by both performers' joint knowledge of previous audiences. The need of the play here on one level remains constant: it requires communication between those seeing and those being seen. An essential and shared characteristic of both the performer's translation and the audience's was that Juliet be generally visible at this point from the audience.

In both productions, the performers considered how to orientate themselves in the space both to provide clear sight lines for the audience and how to communicate their lines through tone, volume and direction of delivery, but also through their gestures and movements. Without their actions being able to be interpreted by the audience, the performance is not communicated fully – it is not necessarily the act itself but its perception and meaning which is important. To return to an earlier example, when the stage manager is buying props, the real function of the objects is not important: the salt and pepper shakers do not need to contain salt and pepper, nor to distribute salt and pepper successfully as we would normally expect of such items. What they need to do is communicate the idea of salt and pepper shakers to everyone who sees them – from the audience member in the back row to the one in the front row, from left to right, on every night. The audience need to understand that these are meant to be salt and pepper shakers in order not to be jolted from the world of the play by the realisation that they are not quite right³⁶.

Failure of the Performers

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³⁶ It has been suggested to me by a theatre practitioner that the experience of being jolted out of the play's world by a detail is analogous to a problem in robotics and computer generated imagery called the uncanny valley. The hypothesis in this context is that humans experience a sudden drop in empathy when a piece of robotics is almost, but not quite perfectly, similar to human beings – that the combination of similarity and difference provokes a feeling of revulsion, possibly based on an instinctive connection in that context between inactivity and our own eventual deaths. Applied to performance, the hypothesis would be that audiences can process huge leaps of the impossible or unfeasible with no problem when these are in keeping with the world of the play, but that audiences can become unsettled by a small detail because it reminds them of the fact that the story presented is a fiction; thus an object that causes the audience to examine it in too much detail, instead of registering its intended function and continuing with their engagement with the play, could cause the audience to 'fall' into a theatrical 'uncanny valley', a state of disengagement.

It was clear through the two case studies that each production had established its own unique set of rules and hints – and thus different relationships – between audience and performers, audience and space, audience and objects. This is perhaps an apposite moment to describe the ways in which this became apparent not only to the researcher, but also – in brief moments – to each audience.

I have related already two examples of instances during Rap-punzel where invisible objects did not appear due to a failure of one or more components which generally made it present, though not the reaction of the audience to these events. One of these was when an invisible door was meant to be broken into splinters by a kick; another was when a knock was meant to sound on a door.

When Juliet knocked on the door and no sound was produced, the audience reacted with hoots of laughter. As the next few lines involved a scene based on a "knock knock, who's there?" exchange, the door was required for the scene to progress. Juliet ad-libbed "oh, there's no door here, I'll try again". She moved a few steps stage left and performed her knocking gesture; the knock sound was played. So the new door, required in order that the next line and the scene made sense, moved – it was brought into being by the collective action of the various actors (Juliet, the audience, the space itself) and appeared in a new location. A new reality – one which would fit with all of the translations that needed to work together in that moment – was set up by the performer working in combination with her material surroundings and, when the knock sound was finally heard, with the aural translation of the play.

A similar reaction was provoked in the audience by the failed kicking down of the door. During one performance, the splintering of the door sound effect failed to play. Dave laughed and repeated the gesture. When George spoke his next scripted line, which was "Did you break my door down?" Dave replied "eventually", receiving the same uproarious laughter as the missing knock had elicited. The audience's delighted reaction seemed to come from the fact that the audience knew that they were watching something going wrong. It seemed that they appreciated they were witnessing a unique version of the play which would not be repeated at any other moment in time. There also seemed to be a moment of realisation by the audience that their own belief in the invisible world created

for them was, in some ways, ridiculous. The humour perhaps also came from the realisation that the production needed to be appeased – that in order for the performance to continue to work, the performers would have to depart from the lines they had learned in order to get back to a place where all the human actors could continue to make sense of the material of the play.

These moments were intricately linked to the reaction of the actors, but also to the physical space and the environment with which the audience had been presented with in all their contact with the play. In one performance of Forked Up, Mr Banana failed to deliver a line which contained a cue for Philip. After a pause, and when it became clear that Martin was not going to deliver the line as planned, Philip began an improvised sentence which contained some of the key words from Martin's line, and which therefore contained the information they would both need to move from this part of the play onwards – prompting Martin to say the line himself and resolve the situation. When there were moments of departure from the script in *Forked Up*, for example, this error received no such uproarious laughter.

The audience of both plays did not know what was coming, so they do not necessarily notice when something is 'wrong' with the performance. However, they will realise something is wrong if the performance stalls – if all the actors remain frozen on the stage, and minutes tick by with no music or dialogue. The actors of this production do not have the same relationship with the audience as the actors of Rap-punzel – if they were to break character and laugh on stage, their laughter would not necessarily be greeted with reciprocity from the audience at Black Box. The realities each actor seems to have taken into account when creating their translation of the play influences the potential reactions of the audience:

Martin and Philip did not laugh, but quickly moved on. The rules of this performance and the way in which it expects the actors as well as the audience to behave are different, and in this instance this production requires that the actors resolve the situation as quietly as possible and move on as if nothing has happened. The artifice through which this play is constructed is hidden; Rap-punzel, however, allows for flashes of revelation of this artifice to exist. In these moments, the multidirectional relationship between the audience, the play in performance, and the performers became visible – and these moments were never

more clearly demonstrated as in the difference between the way that the two different audiences reacted to perceived or actual breaches of the rules of the play upon the actors.

Yet this artifice is not, itself, straightforward. Another line which always received a positive reaction from Rap-punzel audiences was a seeming ad-lib between Juliet and Dave after one of the scenes in which Dave had to change from one costume to another. Dave, as Prince Charming, asked the audience if they would distract the queen if she attempted to look behind the curtain by saying "there's someone coming" and pointing to the centre aisle. The audience always agreed. Dave then exited behind the curtain and changed into the huntsman's costume; from here, he skirted the edge of the auditorium and returned to the stage via the centre aisle. Meanwhile on-stage, Juliet as the queen attempted to look behind the curtain numerous times and was told by the audience to look towards the central aisle, shouting "there's someone coming". After some back-and-forth between Juliet and the audience as Dave changed, with Juliet saying "there's no-one there, oh no there isn't" and the audience replying "oh yes there is", Dave entered using the centre aisle. Juliet's line to him, delivered in a different tone and accent than the voice in which the wicked queen had been speaking, was then "you're going to have to get that quick change a hellavalot quicker, I'm dying on my arse up here". The line never failed to receive a rapturous reception as the artifice of the setting was revealed and the audience responded with delight. The contrast between the Received Pronunciation accent Juliet used throughout the play and her native Scots accent seemed, too, to add to the humour – as if the audience recognised and applauded this subversion of the norm or the expected.

The delight of the audience seemed to be at a mixture of different things. The characters had been dropped, and revealed as theatrical props themselves serving the performance: Prince Charming is, of course, not behind the curtain and Juliet is a performer adopting an accent not naturally her own. The actor playing the wicked queen, they realise, was aware of the silliness of saying "oh no there isn't" and engaging in such a clichéd pantomime exchange. Furthermore, the pantomime exchange had all been a tool to manipulate time, to cover up the time Dave needed to get changed. The production had provided an elaborate reason for the audience to engage the character on-stage in an exchange, but not for the reason presented to them by the plot: the audience were serving the practical mechanics of the production, not the workings of the story of Rap-punzel. If the audience

were laughing at themselves – at being tricked – they seemed to be laughing at the way in which the performance had manipulated them into serving its own ends. There was a further level of artifice to this moment, though in that the line was not ad-libbed; it was, in fact, part of the text. The apparent departure from the script was part of the artifice into which the audience had semi-knowingly bought.

It is important to point out that pantomime comes from a long tradition of what O'Brien (1998) describes as "afterpiece and between-act performances" (1998: 491). These had been common in Britain since the seventeenth century and in their position – often "positioned in the interval between the full-length mainpiece and the close of the program" (1998: 489). These entertainments came from a tradition, then, of inverting authority and closely linked to Harlequinning (clowning), tricks and conjuring. This context of trickery – of the playful mocking of the audience – is clearly still very much part of the expectations of the modern pantomime audience.

The Role of the Invisible Audience

Entertaining the audience was always a primary concern of the actors creating Rap-punzel, and the role of the audience in creating the production was often carefully considered. Not only entertaining but also understanding the audience was a goal of those creating the production. It seemed that this audience took two forms – the form of the imagined coparticipants, and the role of the real audience – with overlap between the two.

Funny, in the instance of Rap-punzel, seemed to be a important aesthetic for the production of each actor's work, and thus for the eventual performance. From the beginning of rehearsals, the four actors and the director frequently judged what was funny and excised elements of the play deemed unfunny. The most effective argument against removing a piece of text from the play, time and time again, was to argue that it was funny – and the rationale through which this occurred was frequently attributed to the play itself.

At one point early in rehearsals, Hugo was trying to decide at which point in the performance to hand out masks to the audience (mentioned above) that they would hold up to symbolise six of the seven dwarves at infrequent moments during the performance (the seventh of the dwarves being played by George).

HUGO: I wonder if this is where we get the masks. I'll add that - "bit of business

with masks"

(BEGINS TO WRITE ON SCRIPT)

GEORGE: There's something funny about that – "you six stay there".

HUGE: Okay, forget about that just now.

(STOPS WRITING ON SCRIPT)

Not only is there an appeal to humour here, but George does not directly say that he finds

the joke funny: he says that "there's something funny" about it. He does not directly claim

the joke as a piece of humour that particularly resonates with him, but the fact that there's

"something" humorous in it is enough to prevent this section being cut at this stage.

Indirectly, George appeals to the imagined, idealised audience – he conjures up their

potential reaction (finding this section funny) in justifying the continued existence of this

line. For it is the audience whose agency is recognised and engaged with in this moment:

their enjoyment is foremost in the thoughts of the other human actors in creating their

translations.

Seeming 'discrepancies' in the logic of the physical space expressed in the performance are

also explained in reference to the funniness of the situations, often explicitly filtered

through imagined audience expectations of the theatrical form. I have mentioned examples

already of instances in which the invisible walls and doors of the invisible spaces of the play;

throughout the rehearsal period both George and Hugo allude in conversation to the

intrinsic humour in this concept:

CAT: How did I get in?

GEORGE: That's the gag.

Later in the rehearsal process, Hugo tells Cat "not to worry about walls etcetera" in her song

- that "they're only doors and walls when we want them to be". Hugo also tells the cast at

large to "go downstage when interacting with the audience – ignore the walls... We'll just

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assume the walls move a little." Here, the cast make a judgement that the audience will find it amusing that space presented to them in some ways malleable.

Cuts to the play were also made at points where the clarity of a joke was in question. Hugo felt "the marshmallow gag" was "getting lost" during a speech, and the dialogue surrounding the joke was cut in order to make it clearer to understand, again invoking an imagined audience's ability to follow a joke as a reason to alter the text.

Despite the acknowledgement from the first read-through of the text that cuts needed to be made, jokes were even inserted at an early stage in rehearsals. During one scene, a pig is killed and left on the stage. George immediately saw a joke:

GEORGE: "You can't leave that lying there" "It's not a lion, it's a pig"

(THE CAST LAUGH)

HUGO: It's going in.

Expectations about what the audience might find amusing informed the process of refining the script. The audience are invoked as a justification to alter the script: the integrity of the words on the page is respected until the play is seen to be in danger of being misunderstood by the audience. Thus it is fine that the invisible walls "move a little", but not that the joke "gets lost" – it is the audience's translation which assumes primacy over the translation of the writer as expressed in the script.

The next chapter conceptualises of the data from these chapters and forms from it some a theory and an object which can be applied to the literature.

Chapter Six: Conclusions

In the following section, I revisit the data gathered in terms of the original objective and research questions of this study. I revisit the object that was the marker followed throughout the case studies and explore the concept in relation to findings from the data. I also explore the vocabulary of a number of ANT writers and propose a system of combining them which creates a set of words with which to sensitively and with precision to analytically explore this particular area of study. In doing so, I revisit the literature to suggest from these findings where this work fits. I address the limitations of this study then suggest the contribution that this work makes to different literatures, suggest areas for future study, and assess its impact on my practise.

To revisit for a short spell the original conceit, I proposed that a theatrical performance occurs when people and objects collaborate with the intention of producing a pre-rehearsed piece of work which will be performed in physical space over finite time. Using analytical tools and a methodology suggested by Actor-Network Theory (ANT), I undertook detailed observation of the process of producing two professional theatre performances.

Translations

In each production, there were numerous actors making different objects which contributed to the performance. The first phenomenon I noted was the need to name the object generated by this process by each actor involved in order to talk about it theoretically but, earlier on, even to describe what was occurring. I adopted the term 'translation' to indicate a 'performance' which can be created by a human or non-human actor, and to shed the baggage of the word 'performance' as one with confusing overtones based on cultural understanding of what it means for humans to 'perform', as well as to accord with ANT vocabulary. Translations spring from the raw material and purpose of the production: a lighting board translates electricity, programming and circuits which connect to a number of lights into a lighting state, and then a lighting design. A performer translates the words of the text into a series of gestures, sounds, movements, songs. This description seemed to fit as an appropriate one to describe, metaphorically, what each actor created in making their own strand of what would become the performance. They created a translation; the act

was to translate. There was a useful sense, provoked by comparing the data with the concept as it developed, that something new was created as a result, which was what I observed in the rehearsal rooms: where before there was a line in a text saying "he moves", there was now a body of a performer moving, and the body of a performer moving in space is not the same as a line of text saying "he moves".

Based on these case studies, a translation is an element from which the (play)text is constituted. It can be characterised as having a broadly recognisable, repeatable shape; which springs from the originating material of the play (in these two cases, a text) in combination with some form of matter (a body; building materials; electricity flowing through a circuit; sound waves vibrating through the air); which is designed to play out over a fixed period of time to connect in pre-arranged moments with other translations of the (play)text to create the (play)text in performance.

It is a translation because it is unique to the actor who generates it and is particular to them. No two actors produce the same translation and where an actor is substituted, a whole new translation will need to be generated. The sense of α translation also suggests a lack of a necessarily definitive quality to it, which looking at examples of this process, was often a feature: the performance each of the répétiteurs generated from the score was different from another of the répétiteurs reading the same music and playing it upon the same piano, for example. These performances were different to those generated by the orchestra when they played the score on their instruments. The MIDI version of the score was different to the version that appeared when the performers sang. Each depends upon the qualities of the actor generating it – the performer's interpretation of meaning, the age of the bulb in a light, the metal from which a bugle is shaped. It also depends upon the qualities of the materials used by him, her or it (for example, their body, or the piano) and the time in which it is performed in (as performances, for example, varied from one day to the next). Also, like a translation of a piece of text, a translation communicates to an audience. The word translate heavily implies someone consuming the translation.

The (Play)Text

At first, how I articulated the object of study that I followed was the production of a piece of theatre from the source material of a text. But from the beginning, I was aware that the text was not solely what I followed.

In coding data from the case studies, by far one of the most used words in my field notes and memos was 'play'. In subcoding, I noted that this word occurred in a variety of contexts: it sometimes referred to a script; it sometimes referred to a performance; it sometimes referred to an initial idea for a story; it sometimes referred to the production; it sometimes referred to one translation. I was also able to find examples of something I had been struck by and recorded in a memo: human actors frequently used many words interchangeably to refer to these different concepts, or ambiguously, to mean more than one of those concepts at once. Hugo on one occasion had used the phrase "we've got the script now" to refer to having all of the words of the play written in the text and finalized, but the context in which this was said referred not only to the text but to the translations of it which he had just seen (unsatisfactorily) performed. The interacting translations generated by each performer and correlating to one another's translations are part of what he is referencing. There was a difference in the words that the Forked Up team and Rappunzel team used these terms: Rap-punzel actors referred to the 'show' more than those working on Forked Up. But across both case studies, actors overwhelmingly used the word 'play' to describe what I nuanced in my descriptive chapters for clarity: they did not talk about the production, but the play; they did not talk about their copy of the script, but their play; they did not talk about when the performance was over, but when the play was over; they talked about the future life of the play, and not the production.

This took me back to the initial observations that had provoked this study – the way in which practitioners referred to the play as if it had agency. What it was that had agency had been many different things: the production, the performance, the text, the idea. All of these subtly different elements were being assigned agency.

After these first analyses, I quickly started to find that the more action of the rehearsals and performance I observed, I more I was aware that the object I was describing was more

complex than the words I was using were able to communicate. For example, when I described the activities of the lighting board in chapter five, I used the following sentence:

"In theory, as the board was able to run each cue for a set amount of time, the board could have run the entire show; in practise, as the lighting design was only one translation of the text and needed to accord with many others, each state was individually activated by an operator at a time that was synchronised with the other translations."

To use the example of the above sentence, I glossed that the lighting design "was only one translation of the text". But what did I mean by 'the text'? The orchestra generated their individual translations based on the score of the play. The performers generated their individual translations based on the score and the text of the play. They both had the same objective: to create a play from their interacting translations. But they were not using different source material – the score and the text were both part of the same project. The writer and composer had both generated the documents which I had followed through the process based on a shared idea, but the documents themselves were not the play: the idea for the play predated them and these were a way of capturing what the creators were to ask the actors of the play to try to achieve together. Forked Up, for example, had originally had far more characters, but Mr Sausage was removed and Mr Banana became the voice of reason, absorbing the traits that Mr Sausage once possessed. A 'voice of reason' still existed: it was now Mr Banana who provided it. The number of performers required was adjusted by having a puppeteer perform some of the characters. In Rap-punzel, Dave played a number of characters and in one section, Juliet performed a long exchange with the audience to allow time for him to change costumes. The doors and walls of the cottage were not achieved in wood, but suggested invisibly by a combination of gesture and, at times, sound effect. In all these examples, it is not always that the team are being forced to achieve the effect in the text in an unsatisfactory way; it's that there is an element of interpretation in what the material form of the text might take. The text does not specify that a door is made of wood. The text does not say anything about how to achieve a sentient carrot. In serving the idea of the text (there is a carrot on stage. There is a door on stage), there are many options as to how to achieve what is suggested.

To return to the passage above, it is clear that the text was *part* of what provoked the creation of the lighting design. The objective, like the objective of all the other translations, was that a piece of performance be created: a piece of performance specific to the space of Black Box, and one that specifically interacted with the other actors involved in the process. So it didn't spring solely from the text, but every material interaction that was prescribed by every other actor involved. If a slightly taller performer played the part of Mr Banana, the lights would need to be adjusted. If a performer with a different register of voice than Philip played his character, the music would need to be adjusted. If the stage was more shallow or the set bulkier, the performers would adjust their actions. If the audience were to be further away, the sound would need to be louder.

The objective of staging a play was also to create a piece of performance that was unrepeatable in its exact qualities. not by intention but by the nature of time. The performance would be different every night it was performed: the lights a little dimmed by the bulbs having aged; the performers older; the audience composed of different people, or even people who were the same but inevitably changed by the day's activities. It was not just the text of the play which provoked translations, but all of the ideas it contained: ideas about what utensils exist in the world of this play; of what a cruet set looks like; of what a door is composed of. And each translation was a contribution not only to the performance that night, nor the performance every night, but to the cannon of what the play meant, how it communicated, what it smelled like, how objects and humans within its world behaved. All of these un-articulated qualities were touched upon by individual translations which made it onto the stage and into performance, in a process by which the text and the performance and the space and the audience and the objects interacted: they created the (play)text, a temporary stabilization of all the possibilities introduced by every individual actor, defined and limited in one moment to a definitive choice, a series of definitive choices that cohere individually and concord with other definitive choices.

The development of the concept of the (play)text as an object, and in fact the object that I was studying, therefore, came from a consideration of stability and instability as individual strands which would come to constitute the production were developed by each actor. In trying to work out the way in which these individual strands worked together, I returned to ANT literature and applied the concept of translation to the process I was observing, find it a

match that described how the source material (text) turned into a piece of performance. In considering the material setting and interaction with material objects, I saw in the data that the process of tying these translations together was the source of stability of the eventual performance. Points of agreement, or concordance, were what enabled individual translations to vary. These points of agreement were frequently tethered to the material.

The nature of the object I discovered is that whilst it draws from the text and other source materials (such as a score), it is not the text itself. The (play)text is a bricolage of 'translations' of a piece of written and rehearsed work bound together by time and combined action. I propose the (play)text can be defined as an agencement which perpetually refines and redefines each of its component parts: it is a dynamic object, stabilised only briefly in the moments of its performance.

Returning to the Research Questions

In order to explore the findings of the study, I have returned to each of the research questions in turn.

When did a piece of text became a theatre production, became a 'play', who and what were the agents in this process, and what were the natures of the processes each of these agents engaged in?

Based on these case studies, the process of creating a performance from the text in combination with a material form was one characterised by a movement from many possibilities to fewer possibilities. Possibilities were limited in the first instance by the prescriptions of the setting: the size of the venue, the cast, the budget, and the availability of other resources. The form that these possibilities and manifestations in matter took was dependent on the actors. The designer can choose one of thousands of props, but not all props are easy to discern from a distance. The performer can choose from hundreds of gestures, but not every gesture will be comfortable, appropriate, repeatable, communicate what is required to the audience. The lighting could create a blinding white light, but there will be a cost implication.

Creating a translation was an iterative process; innovations as a result of this process were on occasion incorporated into a translation according to the subscriptions of the (play)text

as a whole. Jokes spontaneously inserted into the text became incorporated into the text for future performances; a gesture instead of the word 'vomit' is incorporated into a performer's role.

None of the translations produced by any one actor was created or performed in isolation, but instead these translations were consistently mutually dependent on one another from early in the process. Without the participation of one necessary actor, the *agencement* faltered and failed. There were occasions during these observations where these failures occurred: strategies were employed in these instances to mitigate or reform the *agencement* and to maintain the integrity and stability of the network despite these failures.

Different translation processes required different materials – each translation combines the visible and invisible to varying extents.

How did these processes interrelate and reach a point of accord and a state of stability – in other words, how was order achieved?

A point is reached where no matter how flexible or wide-ranging the process of building each translation had been, in order for the (play)text in performance to work, a concordance between each translation must accord. This is the moment that the (play)text in performance comes into being. Simultaneously combining all of the translations together, this assemblage is therefore the most agentive of all the incarnations as it leverages its own agency on every translation of which it is comprised. Moments of concordance between translations provided stability.

If a particular translation failed in a moment of concordance, a new way of reaching concordance needed to be found. The gap created needed to be filled by a new concordance. Without this, the (play)text would stall. When Martin, one of the Forked Up performers, forgot a line which would provoke movement for him and other performer, Philip, Philip had to create a line of text. A missed point of concordance, a gap, affected a number of other actors. It did not give the performers the clue of what part of the stage to move to next. It did not give the audience the information of what the meaning of this movement meant in terms of the entire play. It did not give the stage manager operating the lights the cue to change to the next lighting state. When combined with the gesture of a

performer kicking the air, a sound effect was meant to play during Rap-punzel of a door splintering. When this failed to happen, the performer had to improvise a combination of a gesture and a line which helped create a new concordance. By repeating the gesture and giving the operator another chance to play the sound effect, he provided the necessary information for the audience and his fellow performer to move to the next point of their translations.

How, if at all, did the material surroundings influence this process, and what was the relationship of this process as a whole, or any one process, to change?

It was through materiality that translations became fixed in matter and in time. The process of building the translation was observed to be one of constructing a shape that contained the appearance of coherence from small discrete units. These small units gave maximum flexibility in performance. The lighting design was created from individual cues operated by a human who had a record of the moments of concordance to give the opportunity to adjust the lights to the individual timings of every show. Individual gestures created from working without the text were incorporated into performers' translations.

Early in the process of creating translations from the source plus the material, points of concordance between translations were proposed and became fixed. The (play)text in performance is an object of stability created from a series of very unstable actions; the greatest point of stability in each translation is the point of concordance with another translation (as Hugo said, "we've got the play now" when gestures, movements, light and sound are all in accord along with the spoken lines and the space of the stage). Thus concordance between translations cohered through the material; however, though concordances were material, this did not mean the material was always fixed, and flexibility remained within each translation outwith moments of concordance, as evidenced by continual adjustment to incorporate innovations of speech and movement, or mistakes in performance that were rectified.

The degree of precision involved in concordance varied from absolute (the invisible door) to approximate (an improvised line mentioning the word 'Butcher' which provokes a performer to remember his line, which is a cue). The fixed nature of moment of concordance was not necessarily visible to all actors in the process, in particular the

audience. In fact, for the benefit of the audience, the appearance of spontaneity was courted in a number of ways: by the performers learning the words of their script; by the delivery of lines which sounded like ad libs, but were not. In this way the appearance of spontaneity was more convenient than actual spontaneity. The form gives the appearance of impulsiveness, but seems profoundly choreographed through the assembly of these concordances. There were occasions on which the form these material concordances failed to occur and in these instances, translations had to be re-formed to allow the (play)text in performance to continue; invisible doors had to move and new lines had to be invented to explain an impenetrable gesture where a sound effect fails.

Throughout all of these processes, the audience, in compiling these aspects together, created their own (play)texts; they compiled all these translations into an individual contribution to the performance, whether there was one of them in the room, or over two hundred. Both their material mass and predicted behaviours were essential in the process of creating the (play)text.

Who or what had agency in this process? Did the play, or the text, have agency?

The actors who took part in this process are agentive and need not be human; humans acknowledged the agency of non-human actors in their speech and in their own translations. The anticipated behaviour of non-present actors influenced the translations of the other actors – for example, the points at which an audience may laugh inform the timing of the performers' lines well before they are ever physically present.

Being part of the (play)text-in-performance is the ultimate objective of creating each translation, except those translations which are created for the sole purpose of standing in for another (like the répétiteurs of Forked Up). There are a number of these translations and traces of them are left in the (play)text-in-performance; some may be visible to the audience (an iconic pose like Hamlet holding a skill) and some are unlikely to be (the echo of Margarita Pracatan in a performer's movements).

The (play)text as a whole only exists when every actor is present, including the audience, though throughout the audience's matter and their reaction are considered by the other

actors. It is only in performance that the (play)text can settle into an apparent stability, and only in performance that each translation too is stabilised.

Each translation had agency and so every manifestation of it was agentive.

Some translations of the (play)text were accessible only to some people. Versions of the (play)text may contain instructions which need not be explicitly understood by all the actors in order to be followed or communicated by the (play)text in performance – for example, music. In these instances, until a translation could be accessed, it exerted more agency than other translations, demanding that a solution be found: examples of the (play)text failing were moments in which the agency of those translations were displayed. Imagined objects could be as agentive as those which were physically present.

To view the text as a text and the work of all the other human actors without a questioning of their relational impact on one another could potentially obscure moments of agency as they are being created.

What is a play: what it was composed of; how its composition related to the text?

A play is an assemblage of translations, built specifically and materially by actors whose translations are unique to them. The text can, but need not necessarily, be the source of translations; ultimately it too is the expression of the ideas behind the (play)text rather than its perfect expression. The most perfect expression is the (play)text in performance, which is the expression through the material and spatial form of the ideas conceived of and coded into the text. The book, in recording the expected interactions of each translation, is as close a record of the (play)text in performance as it is possible to achieve.

Exploration of the (Play)Text with ANT

I originally suggested that the (play)text was an interesting object to study because it was a placeholder waiting to be filled with meaning. In revisiting the literature, I discovered a number of concepts which resonated with this concept and with the data I had gathered. Firstly, I took one of the terms Akrich and Latour (1992) suggest to describe the basic concept of the area of study. What they call the setting is, for them, "the object of analysis" – the situation in which the researcher is set to observe the actions of the network (1992: 259). Although I had designated the object of my study as the (play)text, this was the object

through which I intended to view the workings of the network *creating* the (play)text, and so followed their vocabulary throughout.

In order to form a way of thinking about the actions of the network which respected the symmetry and methodologies suggested by an ANT-inspired methodology, I examined the processes proposed by Callon (1986) and Akrich and Latour (1992), keeping in mind the complexities that Law (1999) outlines. As vocabulary came up, to use a metaphor drawn from the research site, I held a number of definitions to the light separately and together to see which seemed the most fitting to accurately reflect the processes I had seen taking place.

Callon (1986) and Akrich and Latour (1992) were chosen not only because they resonated with the observations I made during the research period, meaning I could clearly picture the chains of events both articles suggest occurring, but also as a result of my observations, I noticed commonalities in each system that could productively speak to the other; in each, modifications of the other seemed to strengthen the ability to analyse the examples I had seen occur. Encouraged by Law (1999) and his call to commit to the complexity of description in ANT accounts (1999:3), I re-examined the portrait of the network Callon (1986) describes and the possible behaviours of networks drawn from Akrich and Latour's (1992) vocabulary.

As Law (1999) particularly clearly articulates, in observing networks, one witnesses the process of entities forming and acquiring attributes (1999:3). These entities lack inherent qualities except what they perform in relation to other entities. These entities "retain their spatial integrity by virtue of their position in a set of links or relations" (1999:6). Entities are thus an effect of the network. In applying these thoughts to the data gathered, there was a great deal of resonance.

To return to the example of the cruet set from Forked Up, here was an object which was part of the physical translation of the (play)text. The physical translation of the (play)text was comprised of all of the stage properties with which the human actors interacted, the set, the space of the stage or rehearsal area, and the building itself. Suggested by the stimulus of the text of the play, the physical translation of the (play)text was built from the individual objects within it, each of which in turn had forms and attributes which were

relational. No matter how much the cruet set had been designed to fulfil that process and sold under that label, if it did not interact in a term that was both in keeping with its function and its relationship to other translations of the (play)text, it was not a cruet set. Some important translations for the cruet set were the interactions with the performers: if the set was slippery and easy to drop, it would be interrupt the (play)text-in-performance and cause it to stall; if in various parts of the auditorium, the audience were distracted, trying to work out what the object was, the (play)text-in-performance would again have failed. During rehearsals and performances of Rap-punzel, a very visible (and invisible) example of the physical translation of the (play)text developing attributes and form only in relation to other translations were the invisible walls and invisible door of the cottage. It was only through the combination of a number of different translations of the (play)text that the door existed in any form – without the translations of the performers, the sound operator, the sound board and the audience agreeing that there was a door present, there would have been no door. It was clear to anyone watching on the occasions that the door failed to appear that it was visibly and physically only "by virtue of [its] position in a set of links or relations" (Law 1999: 6) that the door existed.

So far, these concepts relate well to the data gathered. However, it was less clear what the source of the (play)text's many translations were. From my professional practise, I had come to think of the basis of a play as the idea that a playwright had, an ideal which could never be realised except in conjunction with the translations of it that all the other actors brought to the process. Imperfectly recorded by the words on the page, this text was then the stimulus to produce the play, with each actor contributing their translation until the network itself was stabilised by the (play)text-in-performance. Like the eye of a storm, the (play)text-in-performance, consisting of moving translations all around, in the moments of its performance is perfect and complete in its agency. No actor acts except in its service; its demands are, for this short time, perfectly serviced under any circumstance. If, as occurred during the research process, a translation failed (a line was forgotten) the (play)text-in-performance paused until either that translation was resolved (the performer remembered

the line) or another translation assisted the movement to another place of coherence between translations (another performer rephrased the line as a question)³⁷.

Brown and Capdevila (1999) borrow from Deleuze and Guattari (1988) their concept of the refrain, exemplified in the persistence of myth, constantly repeated and reiterated, renewed each time and always somewhat different but sharing similar qualities. They see repetition as "what holds together networks" (Brown and Capdevila 1999: 37) and the embodiment of this is the refrain: a movement back and forward, a constant check, a reiteration of relationships as they are performed. There is a suggestion in this, I think, of some sort of essential quality, but whilst this is to be approached with caution in the context of a theorisation that proposes all qualities of an entity are effects of a network, in the instance of these case studies, it could be said that there was a central commonality as a result of the stimulus of the text which was indeed like a refrain, echoing through each of the translations. These refrains might be a shared concept of what pantomime was and what the style of a pantomime is, which the audience and the performers share and that is reiterated and refined in every moment of interaction. It might be the spatial dimensions of a fairy tale wood as understood by a performer and set designer quite separately but united in the physical space of the stage as it is used.

Applying this to the concept of the (play)text, perhaps it is useful to consider the ideas and aesthetics of the text itself as the refrain that echoes in each translation and, finally, in the (play)text-in-performance, the ultimate articulation of each translation. The appeal to a shared understanding and tacit knowledge does not perhaps entirely undermine the concept of all the network's features being relational. In either case, whispers of joint understanding and objects which were once present but do not appear in the performance clearly become part of the (play)text-in-performance, referenced physically in translations or through the effects of timing. In this way, Mr Sausage is somehow eerily present in the scenes where Mr Banana speaks his words; R3 lives in the pause Philip leaves in a song.

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³⁷ The only actor whose translation would trump the (play)text-in-translation would be one whose translation endangered the physical safety of the human actors: thus a fire in the building would (temporarily at least) trump the (play)text-in-performance.

Language

Callon (1986) was particularly important in the explication of the process of translation and the naming of its parts. In this article Callon identifies four processes that comprise a translation: problemitisation; interessement; enrolment; and mobilisation.

Callon defines problematisation as a process of entangling actors with one another, with mutually dependent identities and objectives, and inexorably intertwined with a central and urgent concern or question. Problematisation, in his definition, is the posing of a question or problem by certain actors in such a way as to ensure those actors become indivisible from the process itself: it frames the actors. Callon proposes that these agents "[have] determined a set of actors and defined their identities in such a way as to establish themselves as an obligatory passage point in the network of relationships they were building" (1986: 6). Callon highlights the interdependent nature of the identities and objectives of all of the actors, stating "it would be absurd for the observer to describe entities as formulating their identity and goals in a totally independent manner" (1986: 7).

The next stage is *interessment*. Callon presents *interessment* as a process of stabilisation, and to some extent of limitation, control, and definition of boundaries. "Interessement is the group of actions by which an entity...attempts to impose and stabilize the identity of the other actors it defines through its problematization." (1986: 8). The terms of the *interessment* is not necessarily, however, solely for the benefit of the actor(s) who provoked the problematisation: "for all the groups involved, the interessement helps corner the entities to be enrolled" (1986: 10). As the 'identities and objectives' of the actors are mutually dependent, this stabilization process affects each actor as well as the network as a whole. If the problematisation is the framing of the actors, the *interessment* is the beginning of the process of definition of positions in relation to one another.

With a proto-network established, the next stage of the translation process is enrolment, a process whereby the stabilization of the network is ensured by securing roles and assigning behaviours for each actor: this process "designates the device by which a set of interrelated roles is defined and attributed to actors who accept them" (1986: 10). The process, in common with each stage of the translation, is not static, but is a description of "the group of

multilateral negotiations, trials of strength and tricks that accompany the interessements and enable them to succeed" (1986: 10). This stage, Callon proposes, has a number of features, including a metonymic process by which 'spokespeople' are designated: "a series of intermediaries and equivalences are put into place which lead to the designation of the spokesman" (1986: 14). Groups not present can partake, symbolically or practically (through these spokespeople): in this way, "these diverse populations have been mobilized." (1986: 15).

The final stage, for Callon, is mobilization. Mobilisation is the process of transforming representation into "active support" (1986: 15): of making the signified symbolically present. "Interposed representatives" (ibid) are negotiated as if they are the larger groups they represent, and thus actions have a symbolic as well as actual dimension.

Translation, as Callon points out, "a process before it is a result" (1986:19). The transitive nature of translation is an important characteristic enthusiastically echoed, in different language, in Latour's descriptions. For Latour too, translation is a process: "it refers to all the displacements through other actors whose mediation is indispendable for any action to occur" (Latour 1999: 311). Latour elaborates to characterize the process as one which is composite in nature: "chains of translation refer to the work through which actors modify, displace, and translate their various and contradictory interests" (Latour 1999: 311). Latour continued to develop his what Latour would later articulate as a problem with 'the social'. 'Social', he proposed, had become a black box term which could be applied to phenomena to explain why they behaved in certain ways: Latour perceived its use almost as a collective noun for "a bundle of ties that, later, may be mobilised to account for some other phenomenon" (Latour 2005: 1). Social had become an explanation, internalised and accepted by social scientists as a neutral term. It was not, Latour proposed, being challenged as a term, nor as an explanation.

For Callon, then, the whole crisis is the translation: in itself a unit which, of course whilst containing multiple elements, coheres as a system or network to create one translation.

I drew too on Akrich and Latour (1992) for vocabulary. Akrich and Latour (1992) is an article devoted to defining what they felt were key terms in exploring, thinking about, and writing about the subjects of ANT study in a symmetrical way.

Akrich and Latour 1992 use the term 'setting', referring to "assemblies of humans and nonhuman actants" (Akrich and Latour 1992: 259), with the parallel definition of imbroglio being an alternative term which has the benefit of carrying with it a useful and looming sense of entanglement (e.g. Latour 1992; Callon 1999).

Akrich and Latour do not include the term 'performativity' in their glossary. Different scholars describe this quality using under a number of names, including 'enact' (Mol 2002). Mol dislikes the term 'perfomativity', suggesting not only that it carries within it connotations of a distance between the spectator and the performed that suggest an asymmetry at odds with ANT-influenced practice, but that also implies "success after the difficult work and the practical effects of words being spoken" (Mol 2002: 41), thus privileging the human account over symmetry between humans and nonhumans once more.

Whilst Callon's analysis is rigorous and provides an excellent model for analysing a network of production, after becoming familiar with it, I was drawn to Law's observations on ontological multiplicity (1999:3) and fractional objects. Law suggests that the "the objects we study, the objects in which we are caught up, the objects which we perform, are always more than one and less than many." (1999: 11; emphasis in original); he suggests that we shift our thinking on how objects exist to incorporate non-Euclidean forms; he proposes that thinking of the objects we observe as fractional, ones which are "more than one and less than many", is important for the future of ANT and ANT-related theory. To combine these two theories, then, is to open up the possibility to properly consider the translation (from Callon) of an object which is not singular (one) nor so open as to lack any shape (many) (from Law). With this rationale, it was possible to consider the nature of the object I would follow.

Having some experience of rehearsal rooms already, but eager not to presuppose too much about the process, I considered whether the text of the play in its journey towards becoming a piece of performance might be such a fractional object. Although all the cast,

creative team, technical staff and audience respond to what appears to be a common source (the text of the play), they can produce quite radically different products and respond to different elements of it. A sound designer with whom I conversed described how he felt his role was particularly important in transitions between scenes and at the beginning and end of the play in creating atmosphere: his reading of the play would inevitably be quite different to a performer, who might not even register the transitional moments but might be very interested in scene three, where he has a long speech. It seemed to me that in this example, these two different actors would seem to be going through some of the steps outlined by Callon of creating a translation: selecting the boundaries within which they would work by honing in on the section of text most relevant to them or perhaps the version of it they might need, such as the score (problematisation); locking allies into place, such as the 'pallet' of bird sounds the sound designer suggested he would bring to a technical rehearsal to look for a match with the atmosphere of the play, or the other performer who interacts with the performer in scene three (interessment); they adjusted, co-ordinated and defined their role in action with relationship to others rehearsing their roles or trying out the bird sounds in the theatre space alongside the music (enrolment). The mobilisation of allies process that Callon describes fits with the idea of the actors coming together, but it made sense, given these principles, to see these translations coming together as the creation of another fractional object – composed of many translations and reliant on them all to coincide in time and space. It seemed possible that the process of translation could then begin again, taking not the human or non-human actors as its raw material but those translations they had produced – the performance would then be a translation of the translations, a super-relational entity that was entirely formed by the meshing together in a network of individual actors' translations. In this way, I developed the term '(play)text'. The (play)text is a fractional object provoked by the text of the play; it is one translation by one actor, but it can also be, as the (play)text-inperformance, that translation entwined and (per)formed with many more. Given that theatre is a collaborative medium and I had never experienced, say, a performer who did not expect to perform their translation in combination with other performers, designers, directors and writers, this seemed like a potentially fruitful concept to apply to theatre.

Implications for ANT

The people who make plays are certainly quick to assign agency to the (play)text. They talk about what a play 'needs' or 'wants' easily and freely, in conversation or in the act of making a (play)text. "I just feel like it needs something here," they might say. "It's crying out for a pause at that moment," they might frown. I wanted to capture those moments in action, and ask what they meant. In observation, there were moments where agency was recognised in the (play)text, but more striking was the moments where the (play)text went ahead and demonstrated its agency: when the lights made the audience look stage right; when the music made the performer perform a specific gesture.

Removing the primacy of people helps to analyse their behaviours and expose us to new forms of interaction which might not otherwise have been visible. Looking at the relationships of those human making the artistic object to the concept of what is suggested by the stimulus of the text – looking therefore at a multiple object called the (play)text, explored as various translations of this stimulus – and of the individual acts of creation that are required for this to occur has two purposes. It gives room to acknowledge the agency required for these acts and it gives room to more symmetrically examine who or what has agency in creating the work from a new perspective, outside of (potentially) the expected hierarchies of making and of agency.

The research I have undertaken examines the empirical material through a theoretical lens which has not been applied to this area of creative production. In doing so, it provides a different conceptualisation of both the topic and the sites to which ANT methodologies can be applied, combining two concepts — Callon's process of translation and Law's urge to explore the fractional — to open up the possibilities of expanding the reach of these analytical tools.

Implications for Understanding Theatre

The theorisation of the (play)text as a concept as developed here builds upon notions suggested by reader-response and reception theories; in particular, the writings of Derrida. The extent to which the audience can be considered to co-construct a piece of art has been engaged with by the literature of both Literary Criticism and Theatre Studies – two areas which have a significant crossover. Reader-response and reception theory deals with the

extent to which "other people other than the author or creator contribute to the meaning and import of a work of art" (Fortier 1997: 132). In the observations which comprise the data for this study, the audience emerges as having always been present, their behaviours predicted by those creating the translations of the (play)text which must emerge long before the audience arrive. It is not only in their final attendance that they have agency but also in their imagined presence throughout. Whilst reader-reception theories propose that the audience are essential to the creation of meaning, this study goes some way to exemplifying particular moments in the act of artistic creation where their projected behaviour literally helps make the work. It is not only an active act of reception but also an active act of creation in which they take part.

As mentioned above, reader-response and reception theories see the audience as cocreators of meaning. But where these theories perhaps reach a limitation insofar as this study is concerned is at the point at which there is a supposition that the act of creation as not only a singular but also a static act, epistemologically presupposing a finished object which is tangible and iterable. As I have already explored, the very *in*-iterability of the (play)text is one of its defining characteristics, along with its plurality. The conversation which creates a (play)text is not a monologue or a duologue, but a cacophony of voices – a choir sounding out from the stage itself, from the filaments of the lamps, and, yes, from the seats in the auditiorium too. Reader-response and reception theories ask that we consider all the different types of actors in the process – writer, carpenters, lighting boards, actors, ushers, the space itself – as a unit, without exploring each of these elements separately. If reader-response and reception theories accept that the audience can respond to a work in a way that creates meaning for that piece, why not also the different responses that the cocreators add, from the stage manager to the actors' microphones, from the playscript to 'the book'?

Moment by moment, the (play)text in performance was created by different translations interacting. The combination of different translations combining, like three colours beamed from a cinema projector hitting the screen together, create the (play)text in translation. The effect of these moments in sequence gives the illusion of progression but each moment is individually created, in the same way that playing frames of a movie in sequence creates the impression of continuous movement, despite each frame being a discrete product.

This was acknowledged by some of the human actors: the lighting designer communicated that each moment (lighting state) he created contained no meaning until combined moment by moment with other translations to create the (play)text in translation, at which point it became the lighting design.

In the process of creating the (play)text in performance, each of the actors involved in the process of producing the (play)text-in-performance created a different translation of it. During Forked Up, the actors created a series of physical movements and sounds; the stage manager created a version of the text with these movements annotated on it. The sound designer created an aural landscape in conjunction with human voices, instruments, a computer, microphones and speakers. The lighting designer used a lighting design, drawn on a computer, to create light effects using bulbs, electricity, a computer and coloured pieces of gel; the technical staff took part in the process of assembling these items together. The carpenter created stairs, a fridge, a worktop; the props and set created a physical world, installed by the technical staff. The vegetables were created by the prop maker using foam and fabric, and the lungs and innards of the monstrous beast were created by the deputy stage manager. The writer created the text, the director created a concept to join together the actions of the actors to the set, and the composer created the music. And the audience - the audience, both by their physical presence and their imagined reactions and perceptions as evoked in the rehearsal room – the audience too contributed a translation. In compiling these aspects together, they too created a version of the (play)text; they compiled all these translations into a performance, whether there was one of them in the room, or over two hundred.

However the non-human actors also interacted not only with human actors but also with other non-human actors. These non-human chains also had agency; they too needed to be negotiated by other actors, and their own needs were acknowledged too.

Dant says of the material: "it is the meeting of body and object that constitutes the relationship" and though "groups of people do react together" it is "most often to a performed cultural event rather than as an interaction with a material object" (Dant 2005: 3).

The nature of the performed then is proposed as being a singular relationship, a unilateral relationship between two actors. What the development of the (play)text does is suggest that the entire network is in constant communication, through moments of material concordance, that then creates a group experience of the material. Rather than a performance being a singular if material experience, a performance can be a shared material experience.

This work as a result on one hand contributes to the understanding of how organisations can interact with objects and the material and on the other, the nature of performance to the material. Just saying that performance has points of material relationship is not enough; performances are uniquely generated by the material circumstances around them. They are also tied to the performances (the translations) of other actors. These actors may or may not be human. Performances can be understood as not only generated by actors, but as generated by actors in relationship to the material and to space in a process which is both dynamic (constantly changing) and consisting of stable moments. These stable moments are intricately linked to the material circumstances of their creation.

Implications for Practice

An article published a few days before this text was finalised in the UK's most prestigious performance newspaper, The Stage, spoke, in terms of dramaturgy, of the "new generation of theatremakers...now shaking things up on British stages" (Anderson, 2015). The article neatly summarises the imprecision applied to contemporary dramaturgy in Britain, which is generally based on a vague at best understanding what a dramaturg is, does, or tries to do, and a tendency to gloss the role as varied and malleable without defining any characteristics of it. A central finding of this article that the role is flexible:

"There are no hard and fast rules for mapping the precise function of dramaturgy.

As a practice, its principles are based on adaptability and versatility."

(Anderson 2015)

However, this is directly followed by the assertion that "it is [the] analytical function which underpins both [European and British dramaturgical] disciplines" (ibid).

When the nature of my role is reflected back in the narratives of peers or in articles like the above, there does appear to be a certain imprecision in the renderings of the work: as both adaptable and versatile, yet analytical and rigid, without any particular reference to where these dynamic qualities might have come from. In applying concepts developed through this thesis, there are two potential applications of this work to my practise.

It is not unusual for me to come across contradictions like this in my working life. I constantly encounter other theatre workers who doggedly demand that I define my role in general conversation, and not only those who may have little contact with the role: a large part of conversations with other dramaturgs is generally a delicate exploration about the commonalities or differences between our roles. The confusion over what a dramaturg does is only exacerbated by the many different tasks that come under my remit as an employee of a literary department: as I mention in Chapter One, there are many elements to my job which are not dramaturgical, including some that employees of many organisations would recognise as familiar, like replying to emails, booking space for workshops, organising travel and booking tickets. Dramaturgy is the core of my working life, but it is not always the core of any one working day.

If the concept of translations is applied to the work of a dramaturg in a rehearsal room, it can be conceptualised as as varied or responsive to the material consequences and surroundings as any other actor in the room; the flexibility and analytical basis mentioned above is, after all, a quality which was observed in the creation of any translation of the (play)text – a quality required at every moment when concordance between translations was required. Perhaps the visibility of the dramaturg's flexibility is a result of not of any qualities particular to the role, but rather a position within the industry which draws closer attention to the actions of a dramaturg when they are in the room than that, say, of a performer, whose role is more generally assumed to be understood. In that the dramaturg is, in my experience, particularly in the room in order to check that all of the translations of the (play)text accord, they naturally draw attention to both the existence of different translations and of the moments of concordance between them. As a result, one result for me of this research is the evidence that the dramaturg is not more flexible than the other actors working on a (play)text, but that other actors are more flexible than has generally been accepted.

Another implication for my practice is outside of the rehearsal room, when I may be one of only a few people who will ever generate a translation of a play – for example, if a script is delivered which will ultimately not be produced by my theatre or perhaps any other theatre company. My process in this case is to write a letter with feedback and advice to the playwright. These letters feature reactions to the play and advice on how it may be developed. Applying the (play)text model to the reading of a play, I see the concepts theorised in relation to the creation of a production still apply when I am the sole reader of the script. For example, there are still moments of concordance when I ask (rhetorical) questions of the writer such as "if it's your intention to portray this character as sympathetic, you might think about whether his behaviour at this point negatively impacts upon that intent for the audience by portraying him as cold and insensitive." Even though the writer is not present and the audience may never exist, I still consider how the (play)text binds them together.

The recurrent preoccupation with roles and definitions of practise has been something I have revisited throughout the course of writing this thesis and reflecting on my conclusions, there are a number of elements that I now take back into my working life. One is the extent to which applying a role can mask actual activity or agency within my own work. The above example explores the way in which a dramaturg can be seen to have more flexibility than some other roles in a way which is perhaps unhelpful. A script is not 'predetermined' and a piece of choreographed movement is not necessarily fixed: indeed, to maintain the appearance of being fixed, a lot of action must occur [Orlikowski REF]. Perhaps there might be opportunities for me too to spread in my practise more nuanced understandings of the fluidity of role in the rehearsal room; but in practise, of course, these fluidities are already experienced and negotiated, as they have been for decades, in the space between the outside perception of a role and its material performance.

I have considered whether I might take the term '(play)text' into my professional work. It is a useful term when talking about the assemblage of all of the aspects of a play: anything from the germ of the idea to the performance of a play, the production to the text, the play as performed one night and then the next, can be communicated. If anything were to make me likely to want to do so, it would be the ability of this word to convey a joint purpose: the urge to organize and communicate.

Currently, I work within a new writing theatre in London and am constantly engaging both with (play)texts-in-performance. Sitting in a theatre space 'reading' the space and thinking of what I am seeing and not seeing in the performance: all the invisible objects which influenced the translations; the way that agency is exercised by the lighting and sound equipment; how the interplay of the translations in front of me affect each aspect presented, those which are seen and still unseen. But what I reflect on most of all is the great benefit that having been able to reflect on my area of work from the outside has given me: an opportunity rarely afforded to someone working in any area to question the assumptions built into their working lives and to challenge their practise by looking at their practise with a questioning eye. This same questioning eye has undoubtably refined the precision with which I write in all aspects of my work.

With this study, I feel that I also achieved one of my personal objectives: to produce a piece of work which would feel based in an ontology and vocabulary that would not feel alien to theatre practitioners, were they to read it.

If I had to choose one term to define my function as a dramaturg, I would now say that at the centre of a dramaturg is the urge to organise: to organise the story and to order and accord the translations each actor generates. But then, at the centre of every production are a number of organisers, and even the text of the play seems to exhibit a wish to be organised in the agency it exerts to generate translations of the text which so neatly accord.

Limitations and Future Research

Considering the sites from which I gathered data, I reflect on whether two case studies was sufficient, or indeed if two case studies was too many. On balance, in order to make comparisons across cases, less would have been problematic, but there were some limitations to the study caused by having access to the sites only once rehearsals began. Time spent with actors before rehearsals began might have added useful data about how the text and score developed, for example, before rehearsals began. As I remarked in the introduction, however, the process of creating a text is one which is hard to access even when a writer is sitting right next to you; nevertheless, it would have been useful to have access before this process began. It may be that this sort of case study would have been

particularly possible as an employee of an organisation over a long period of time when productions could be followed from their genesis (for example, when an idea is pitched and commissioned by a company) all the way through to production.

A method used and recommended by Dant (2005) in ethnographical observations is the use of video recordings. I experimented with audio recordings to capture conversation, which did not work well due to the size of the first rehearsal room, but in retrospect, being able to witness the material interactions of the actors again at will might have been useful in my analyses.

It would also have been beneficial to have been able to test some of my theorisations further, perhaps on a subsequent site. Interesting too would have been to probe particular areas of my theorisation with the human actors who created this (play)text. For example, I theorised that the joint understanding of cultural figures was a way in which the human actors reached accord with one another. Would the performers have agreed that Pre-Raphaelite gravy stayed with them as the 'tone' they were communicating in the gravy scene, or that Margarita Pracatan was a useful way to communicate hypertheatricality, for example?

General research frustrations – for example, wishing to have captured particular moments in photographs or hearing better a slightly muted phrase in a busy room – were present, but one in particular stayed with me: I wished that I had taken a picture of the book and its diagrams, which was packed away and put into storage the day after the production finished; thereafter, it was inconvenient for the company to give me access to it.

Having developed the concept of the (play)text, I would now be interested to apply this concept to other sites to investigate whether there were commonalities and differences in other settings. Having become particularly interested in the agency of objects, it would be interesting to apply a (play)text model to other situations in which objects and humans heavily interact to create an artistic object — other sites of artistic creation with multiple interacting actors like dance are potential areas of interest. It would be interesting to pursue the model in different theatrical settings: would the concept of the (play)text radically change if the theatre was produced in a commercial setting, or an amateur one? Within Organisation Studies, there is still an emphasis on the study of organisational theatre — theatre used within another type of organisation. It does not seem to me to be productive

to separate organisational theatre entirely from the consideration of theatre as a whole. Its mechanisms and workings are based on the same principles as theatre in a non-organisational setting: looking at the ways in which these principles differ or accord could generate data that stimulates further analysis of the ways in which organizational theatre's effect within an organisation are felt. More important might be the *way* in which theatre production is analysed. Applying an ANT methodology to corporate theatre could help break down the 'black boxing' of corporate theatre, presented as a separate entity to theatre produced for a paying audience, and invite circumstances in which the agency created in the making and consumption of a piece of corporate theatre is possible.

In addition to the study of theatre in its natural habitat, there are also several sub-types of organisational theatre which could be interestingly explored by organisation studies. Perhaps of particular interest to the field of 'theatre of technology' is the use of Theatre in Education (TIE). One of the largest sub-industries in theatre, TIE is theatre that has as one of its primary motivations the objective of communicating messages about complex or timely subjects to children in schools – for example, companies might deliver bespoke plays covering history or interpersonal issues like bullying or sexuality. A mobile 'technology', TIE is a big business and a vital part of the theatre industry 'ecosystem', providing an income and space to hone their craft for many professionals. It also has in common much with the processes of making theatre as an aesthetic object, as exemplified here, and any differences or commonalities might be usefully explored by further study in this area.

It might therefore provide a space in which to explore the similarities and differences between theatre in a theatre space and theatre in an organisational setting. Furthermore the power differential between 'managers' (teachers) and 'employees' (children) in an educational setting would be likely to generate interesting data to contribute to the organisational theatre literature.

Looking at theatre in non-organisational settings could also influence the conclusions that these studies themselves reach, or the way in which they do so. For example, Meisiek and Barry (2007) conclude from their study that after watching a piece of organizational theatre, "it is also clear that the managers' declarative power did not allow them to determine what

gets noticed" (Meisiek and Barry 2007: 1822). A more thorough understanding of theatrical processes could help to strengthen such conclusions and it might be fruitful to compare this metaphorical 'noticing' to the physical process of 'noticing' that occurs when an audience are co-creating a performance. An audience watching a piece of theatre can look anywhere, yes, but the (play)text directs their attention in particular ways: for example, the position and brightness of the lights. Comparing the physical process of making a piece of theatre more closely could help to find new ways in which these observations can be applied to organisations in studies which treat organisations as like theatre or those which say they are theatre. Cornelissen (2004) claims that "the 'organization as theatre' metaphor has not broken any new ground or led to any conceptual advances in organization theory, but has just provided a language of theatre (actors, scenes, scripts, and so on) for framing and communicating identity and role enactment within organizations" (Cornelissen 2004: 705); instead of disposing of the metaphor entirely, however, more research into the processes of creating theatre might instead provide new areas for insight and connections to be made within organisation theory which are/might be..... When these roles are examined not as free-standing but as intrinsically acts of co-creation, relational ones, what insights might this bring to our understanding of ways in which organisations too have agentive, relational aspects? You tell us...

This study also contributes to the literature discussing analogy and metaphor in organisation studies. If, as Meisiek and Barry (2007) suggest, "the relevance of an analogical source for a target domain shifts over time" (Meisiek and Barry 2007: 1822), thorough knowledge of the basis for the metaphor is important to enable researchers to consider the implications of that metaphor for their own object of study, as well as (as above) informing the literature on that particular topic.

In particular within this type of analysis, the physical manifestations of translations made visible through objects as embodied in the achievement of the lighting design were ones which generated rich data that felt easier to observe in emergence than some of the other translations of the (play)text. In combination with subsequent data from interviews conducted with other sound and lighting personnel, it would be interesting to make a case study which paralleled the sound design processes with those of the lighting design process

within the same production to further explore the distribution of agency in two different translations of the same (play)text. In the instance of the two productions which form the basis of these case studies, where a sound designer might normally sit two rather more bespoke solutions occurred. In the case of Forked Up, there was sound designer on the creative team but rather than designing the soundscape to the show as a designer might normally be asked to do, he ensured that the sound that the composer had composed and the performers and orchestra performed reached the ears of the audience in a consistent way. In the case of Rap-punzel, George, Hugo, Dave and Graham had worked together to create the soundscape for the production.

In an interview with David, another sound designer, David offered his perspective that the process within Forked Up had been atypical of the techniques found within theatre and more like techniques found within sound design for music festivals and large-scale performances where an identical experience of sound from any part of the auditorium or arena is advantageous; in theatre, he proposed that this was generally not something for which most sound designers would aim as a "uniform sound experience" was not generally the objective of a theatre sound designer, but a design that responded the theatre space both instinctively and acoustically was. In discussing Kenny's processes, David was reminded of work he had previously undertaken early in his career as an assistant, where his sound designer had specified that he required the balance and volume of sound to be exactly the same in every differently- sized and shaped venue that a production had visited: David remarked that he and other members of the creative team had sometimes felt that the sound balance, though technically identical to the previous venue's show, felt inappropriate in a new space due to its lack of direct response to the dimensions and atmosphere of the room. The observations that the sound designer made fitted well with some of the conclusions about inclusive and exclusive championships between different versions of the (play)text. He offered the example of a current piece of sound design he had been working on where he had to design a sound environment that evoked a hotel room in Singapore and noted that even here, where naturalistic sound was the intention of his design, realism was secondary to audibility: no matter how useful or realistic the sound of a slamming door might be, if it obscured a line, it would be excised.

Coming late as it did in the research process, this perspective was both helpful to the researcher's understanding of the processes of sound design and a suggestion of a direction for future research. Not only a comparison of how sound design was achieved in comparison to lighting design within one version of a (play)text was suggested as an area of study, but multiple other ranges of sound environments could prove interesting areas for research where an artistic object is the final objective. How might a sound design for a piece of corporate theatre (such as features in Biehl-Missal's 2011 piece) vary versus a piece with an artistic context, and how would a rock concert compare in its production network in relation to a piece of theatre? Would the distribution of agency vary as a result of the varying production processes and if so, how would those distributions manifest themselves and what would the visible traces of them be?

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Appendix 1: Names and Roles of Participants in the Play Production Process for Forked Up

This list provides a summary of the majority of the personnel observed in each process and a compressed summary of their key responsibilities. The relevant explanations of their work is expressed as necessary in the body of the text.

NAME	ROLE	TASK SUMMARY
Nick	Director	Directing performers, communicating meaning and spatial interpretation of text
Colm	Composer	Creating score, communicating qualities and realisation of the music
Daniel	Writer/Designer	Creating text, communicating meaning and realisation of the text/design concept for production, communicating qualities and realisation of design
Pauline	Performer	Interpreting and performing part of June
Philip	Performer	Interpreting and performing part of Philip
Mitch	Performer	Interpreting and performing parts of Mr Egg/Mr Shit
Martin	Performer	Interpreting and performing part of Mr Banana
Denny	Puppeteer	Interpreting and performing parts of vegetables (turnip, potato, carrot)/Mr Granules
Ross	Company Stage Manager	Overseeing needs of performers, transfer to Black Box venue

Claudette	Stage Manager	Managing stage management team, maintaining rehearsal and performances space and properties, recording and maintaining physical achievement of the scenes
Claire	Assistant Stage Manager	Working with Claudette to physically achieve rehearsal and performance spaces and properties, operating mechanics of the set
Alice	Set Designer	Working with Daniel to achieve design and construction with carpenter, Craig
Miles	Lighting Designer	Designing lighting in response to the text, achieving it in combination with technical staff at Black Box
Technical team	Technical team	Physically achieving requirements of the set: assembling and installing scenery, hanging lights, assembling stage
Kenny	Sound Designer	Achieving clarity and audibility of music, speech and song throughout auditiorium

Appendix 2: Names and Roles of Participants in the Play Production Process for Rap-punzel

This list provides a summary of the majority of the personnel observed in each process and a compressed summary of their key responsibilities. The relevant explanations of their work is expressed as necessary in the body of the text.

NAME	ROLE	TASK SUMMARY
Hugo	Director/Co-Writer	Directing performers,
		communicating meaning
		and spatial interpretation
		of text /Creating text,
		communicating meaning
		and realisation of the text
Dave	Co-writer/Performer/Co-	Creating text,
	composer	communicating meaning
		and realisation of the
		text/Co-creating music,
		communicating qualities
		and realisation of the
		music/interpreting and
		performing multiple
		performance parts
George	Co-composer/performer	Co-creating music,
		communicating qualities
		and realisation of the
		music/interpreting and
		performing multiple
		performance parts
Juliet	Performer	Interpreting and
		performing multiple
		performance parts
Cat	Performer	Interpreting and
		performing multiple
		performance parts
Paddy	Designer	Creating design concept
		for production,
		communicating qualities
		and realisation of design
		with assistant Siobhan and
		carpenter, Gary

Andy	Technician/lighting and	Designing lighting in
	sound designer/operator	response to the text and
		director/ achieving

Appendix 3: Ethical Approval Form

NB The change of title of the thesis was raised with the Ethics Committee and as the change was after the research was undertaken, resubmission of research materials was not requested.

24 March 2010

Louise Stephens

School of Management

Ethics Reference No:	MN6262
Please quote this ref on all correspondence	
Project Title:	Dramatic Interventions: Promoting Intellectual and Cultural Capital
Researchers Name(s):	Louise Stephens
Supervisor(s):	Professor Barbara Townley

Thank you for submitting your application which was considered at the Management School Ethics Committee meeting on the 19 March 2010. The following documents were reviewed:

1.	Ethical Application Form	1 March 2010
2.	Participant Information Sheet	1 March 2010
3.	Consent Form for Interviews	1 March 2010

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for three years. Projects, which have not commenced within two years of original approval, must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the 3 three year validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely

Convenor of the School Ethics Committee

ccs Professor Barbara Townley

S Deigman