

Can We Fix it?
Archiving and Analysing ‘Bob the Builder’
– A Resources Paradigm and Research Method

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Abstract

As a practice, archiving preserves and protects information that would otherwise be lost, offering important resources to researchers to interpret, chart and define what the archives represent, allowing the public to reflect on records held within them. Archiving is open to many disciplines, organisations and institutions with distinctions made in the care and organisation of records maintained under these disciplines.

In terms of animation, archiving finished films on various formats is an established practice, and researchers interpret those films within their own research, but the animation production materials, used in the creation of the films are not privy to an established form of archival practice. Whilst these archives – or collections of materials do exist, they are archived without any unified, peer reviewed specialist interpretation of the care and organisation of the collections using a taxonomy that reflects the unique aspects of animation production. There is a clear need to establish the archiving of animation production materials as a distinct practice with its own taxonomy and philosophy. Examining the current practices from other forms of archiving that are applied to animation production collections and developing a distinct model of practice from these models can achieve this. Once archiving animation materials is an established practice and data is managed in a way that reflects the acknowledges the distinctive aspects of animation as a form, data and records created from the collections can then be used as empirical evidence to enhance the study of animation.

This thesis begins that work by developing and applying a model of practice, using a collection of previously uncatalogued materials to explore the possible ways in which an animation production archive would best be used as primary research material. The collection is used to conduct an investigation into British children's television animation. As a form, animation is often neglected and often lost in semantics as a children's genre and within that neglect is a disregard even within the study of children's programming itself, a body which would claim to take children's televisual content seriously. Even bodies such as the Office of Communications (Ofcom) and the British Audience Research Board (BARB) have no definition of what an animated television show for children is, and yet continues to provide data with this absent definition present in their research.

By using a collection of animation materials to create a taxonomy and studying the records created whilst using this taxonomy it is possible to define the form of children's television animation and in doing so prove the use of a collection of animation materials as a model of research and the practice of animation archiving as worthy of its own distinct identity, philosophy and practice which can continue to be developed for all types of animation.

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I've often heard the tongue in cheek acronym for PhD is "Piled Higher and Deeper" or "Patiently Hoping for Degree" but after the experience of putting this together I think it has to stand for "People Helping Doctorates" and I'm glad to have had so much moral, verbal and physical support and encouragement during this project from not only those mentioned above but others who would have made this quite a long list of thanks. Thank you, you know who you are.

“The lost cannot be recovered; but let us save what remains: not by vaults and locks which fence them from the public eye and use in consigning them to the waste of time, but by such a multiplication of copies, as shall place them beyond the reach of accident.”

— Thomas Jefferson¹

¹ (Jefferson 1791)

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Introduction

Though once a disparaged form, animation is now an established field of study which affords academics the opportunity to research the art form in great detail (Furniss 1998; Cholodenko 1991; Solomon 1987b). At the point of writing there has been little submitted to this field that addresses animation production material as a collection and the subsequent organisation and use of collections to create a resource to study animation. This practice led investigation will address this oversight, studying the practice of archiving animation materials and use the material created during practice to present this paradigm of animation research as a viable research method. Transforming this method from an arbitrarily used one into one that benefits from a system of data management that responds to the animation process will introduce the benefits of this paradigm allowing further researchers to develop and benefit from this method of study.

Whilst animation isn't a form that is exclusive or restricted to screens, as it precedes film (Wells 1998; Bendazzi 2016), the main focus of this study will concentrate on the contributions animation has made to television with a focus on what is arguably its most commonly associated form - children's television (Berry 1987; Crawford 1991; Wells 1998). Whilst the form of animation has been widely examined in its own academic field the distinctive qualities that define a British children's animated television series have not been properly articulated through an academic assessment. Within the larger context of children's television animation they are often referred to as cartoons, this description fails to acknowledge the variety that children's animated television series as a whole present and is deleterious to its study. Abandoning any need to detail the idiosyncrasies found within the variety of animated television that is made available for all ages stifles the opportunity to regard these animated programmes as artistic contributions in their own right open to further investigation on various levels academically. The absence of recognition is present both academically in texts that study children's reactions to television (Van Evra 1990; Gunter et al. 1991; Gunter & McAleer 1997) and in documents and studies conducted by television regulators such as Ofcom (Atwal et al. 2003) where this oversight is accepted terminology.

Given the variation presented in all children's animated television series, from preschool onwards², this thesis studies the British children's animated television series and by using a collection of animation materials as primary research material it will define an example of this genre. The collection used in this study will be the Loughborough Animation Academy Collection (LAAC), an assortment of materials from the animation industry that has been gathered to avoid its destruction and preserve animation heritage, but also to use the materials saved in animation research. As practice, a method of categorisation for the unorganised collection has been constructed to meet the particularities of an animation

² The Ofcom Broadcasting Code defines children as under the age of 15 (Ofcom 2013).

production whilst adhering to archiving standards. Due to the way animation production is currently valued as a process, collecting used animation materials for study isn't widely practiced so the practice of animation archiving and its specific needs have also been identified and explored during the course of this thesis.

As the practice of collection management for animation materials isn't clearly defined there are concerns that grow from this lack of definition that directly affect both the study of animation and the professional practice of animation. If we are to imagine a collection in a traditional archive from a cultural aspect, the items held within it are regarded with the upmost importance.

“...archives are, next to and beyond their functional aspect, an embodiment of cultural heritage.” (Dan & Kiraly 2006)

Preserving this cultural heritage is something that the academic and professional fields of animation should begin to take very seriously in order to protect and promote the legacy of the art form. As such the practice of archiving and its crossover with animation is paramount in this investigation and will be addressed.

To visually represent the crossover between the areas under study in this investigation a Venn diagram has been prepared (overleaf).

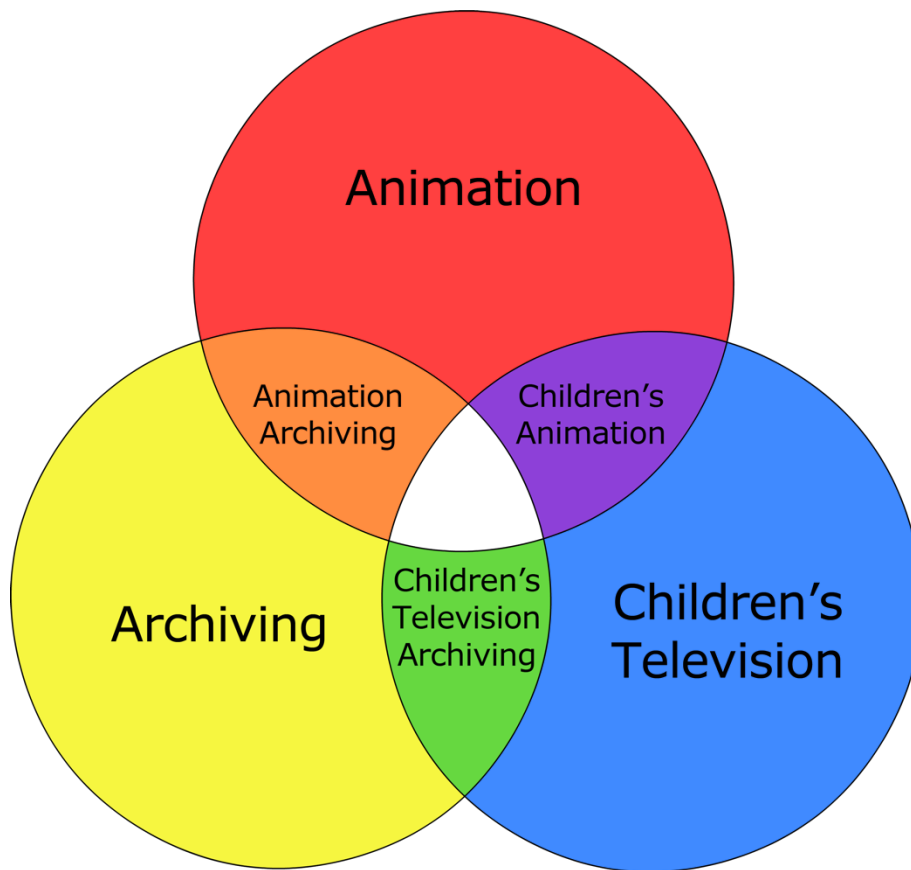


Figure 1: Archiving, Animation and Children's Television (Steve Henderson 2016)

Figure 1 shows the overlap between the areas of study where the literature of both animation and archiving can inform the underrepresented area of animation archiving. The same principle can be applied to the overlaps between children's television and animation and children's television and archiving. Central to this, the blank section in white, is this thesis in practice that addresses all three using a collection of animation pre-production materials.

This thesis will examine the uses for a collection of animation production materials and define a model of archiving that incorporates the specificities of animation, with this model the collection has been used to interpret and define a children's animated television series.

Though animation studies has developed into its own field there are still fundamental debates and questions that remain unanswered in this comparatively young field of discussion, the principles and practices of animation collections and the cultural heritage of children's animated television are two critical areas of study that this thesis addresses and introduces to the field.

Aims and Objectives

Understanding archiving and managing collections and applying that knowledge to the Loughborough Animation Academy Collection (LAAC) is central to this investigation. As a practice based PhD the practice of archiving has been studied and practiced to aid in the creation of a working collection of animation production materials to be used as primary research materials. The primary research material used in this collection began as a literal pile of boxes direct from actual animation productions with little organisation. Although the boxes had been subject to some organisation in the past, historic moving of the boxes has resulted in the loss of whatever databases or written records of the box contents existed before the start of this study. All that remained was a quantity of boxes with no knowledge of what was inside them.

Transforming this mass of material from the LAAC into a collection that can be used as reference, and then using that reference material, succinctly describes the practical element of this work. In order to turn this assortment of boxes into a working collection required the creation of a database so the items could be managed. Whilst creating the database, consideration for the material had to be taken into account in a way that would respect archival standards and practice, as well as addressing previously unaddressed considerations for the animation production material's unique set of particularities to document them efficiently, and store them properly.

This discussion establishes that there are major issues facing animation collections and demonstrates the usefulness of purposing a collection of animation materials as a method of research by way of establishing a resource paradigm and methodology thereby supporting the further study of animation.

Using the collection it is possible to take the data generated from its organisation and present a timeline of the production represented by items that have been catalogued and dated. By considering the context of these items and by identifying the evolution of the production, changes and influences that define a method of production specific to a British children's television production can be established.

Cultural Contribution

Establishing a collection of animation production materials and organising them so the contents are accessible as primary research material offers an intramural look at the process and a perspective on the subject that could not be revealed by evaluating the animated subject based on interpretation of the completed film. Whilst this thesis does not seek to disparage this tried and tested method, the use of a collection provides complimentary way of interpreting film, debunking myths and providing clear evidence of objectives or methodologies in the film making process.

The study of animated films is usually reliant on the finished form, with meanings pondered from the work of directors, with little attention paid towards the construction of a film. Animation is, by its very construction a process that requires the creation of numerous materials in order to see a finished product accomplished. Such materials can provide qualitative answers to questions. Darley (2007) identified a gap in the study of animation which he believed to be derived from an over abundant enthusiasm for those studying animation to answer ontological questions using post structuralism theory, leaving the field open to different approaches.

“One can’t help thinking that all too frequently such approaches produce not only highly tendentious argumentation (not to mention torturous, self parodic writing styles), but further, the disappearance of anything resembling animation per se (its practices, forms, techniques, production and reception contexts, let alone films and their possible significance and meanings) as this gets assimilated into endless (futile) searches for ontological/metaphysical legitimization or as grist for some overarching ‘theoretical’ claim or other.” (Darley, 2007)

Darley’s essay points the finger at those who use a finished animated film to their own ends, abandoning any consideration of the process of animation itself to support theories of their own. By using animation production materials as primary research in this study, the link between understanding films as a product of a specific applied process is maintained allowing a better understanding of practice so it can be contextualised with clarity.

Given the misunderstandings that academics occasionally share with practitioners understanding the source material first and foremost has to be paramount to this investigation.

“Surely *The Magic Roundabout* was drug- fuelled? "Here we go again. We've been through this every time," Wood says a tad impatiently. "It's a load of rubbish. It's not true." He claims it was academics with too much time to do too little work who made this ridiculous suggestion.” (Hattenstone 2001)

Animator Ivor Wood’s retort towards academic interpretations of his work demonstrates the fragile understanding that academics can sometimes develop when interpreting work based on the finished film or at the very least the image that academics have found themselves lumbered with based on similar misunderstandings. Though there is no direct reference to an academic paper interpreting *The Magic Roundabout* (1965) as a veiled reference to drug culture, this example still stands as a testament to how interpretations can often be retold as fact, even if the creator refutes it. Oliver Postgate, a contemporary of Wood reportedly hated his work being analysed by academics too³.

Using primary research material such as scripts, storyboards, meeting minutes and notes on production can work towards a definition of a film in the creators own words as opposed to an interpretation. Though Darley insists that his retort against “ontological/metaphysical legitimization” is not a call for instrumentalism, the basic gaps in our knowledge of animated forms and genres and their specificities can, in the opinion of myself be introduced by the use of a collection of animation production materials to establish the pragmatic differences between forms of animation which inform further debates.

With the research paradigm established a subject was chosen as a response to the collection and as a response to current literature on animation. The majority of the collection represents British children’s animation television production, an under represented area in Animation Studies. With this wealth of materials it was possible to address issues relating to the representation of children’s animated television production, specifically the lack of distinction of the form within reports and research.

In the latter stages of this investigation Rachel Moseley published *Hand Made Television: Stop Frame Animation for Children in Britain 1961-74* (Moseley 2015) a text that claims to be introductory in the study of British children’s animated television series. It’s claims are ill founded as it suggests that Animation Studies scholars have not considered this area before

³ I. Warburton “Loaf” (personal communication with the author, Aug 18, 2015)

and explicitly notes Prof Wells absence from studying this area of animation, claiming Animation Studies has a predilection to study the more avant-garde forms of animation. Within this study that concerns itself with British children's animation as a product of an animation collection, it didn't take long to discover Wells went so far as to introduce the idea of British children's animated television series as a form distinct from others (Wells 2008) even so far as noting the pastoral nature of the shorts which is a defining theme in Moseley's study. Though Moseley's work delivers a much-needed academic review of this area it was published too late to be included in this study.

Children's television has an important influence as both an entertainer and in most cases an educator to its audience (Home 1993: 9). Throughout the years there has been a clear definition of what children's television is by way of channels broadcasting children's programming at certain times of the day or within channels dedicated to children's shows in the United Kingdom (UK) such as Cartoon Network and Nickelodeon (Atwal et al. 2003) and more recent examples such as CBeebies and CITV's channels. Children's television is not just shaped by the intended audience but also by regulations and laws put in place to protect young viewers under the potential influence of the programs that are broadcast. With years of dedicated television programs created for children a cultural contribution has been deposited in the collective consciousness of the viewers and parents who have seen them. This has lead to children's television being explored and investigated by academics and critics over the years as television's developmental role in the lives of children is scrutinised to ensure the safety of young viewers. (Messenger Davies 1989; Gunter et al. 1991; Gunter & McAleer 1997)

How children interact with television, as a part of their own development is a fascinating area of investigation. As children age they amass an understanding of the language of television. Steadily, reality and fiction become separate as a child develops and understands the difference between an actor in a story and real life (Messenger Davies 1989: 14). Before this distinction can be made when an infant begins its relationship with television it must develop an understanding of the language of television such as cuts and transitions between scenes.

Although a lot of work has been done in the field there is little distinction between live action productions and animated productions within the studies. This is an unusual omission, if a child's developmental relationship with live action television can be investigated the apparent lack of investigation for a similar relationship with animation appears to represent an underdeveloped area of research that may begin with the classification of a children animated television series identifying the particularity of such a series. As live action and animated programs are often shown in television schedules side by side surely one has an effect on the other? Would a child's understanding of fiction come first after watching an animated talking

tractor or with an actor? There has been very little reception study work completed on children's animated television per se so this question has not been addressed. It is not the intention of this study to present a reception study on British children's animated television but it can be noted, through a collection of primary research materials that efforts have been conducted by the authors of such shows to appeal to the sensibilities and sensitivities of their audience.

When animation is mentioned within the field of children's television research, it is often done so as a cartoon or plainly as animation. Such blanket terminologies do not display the variety children's animation delivers and findings investigating children's television that use the sweeping term animation, or cartoons fail to differentiate between different genres of a form and so the final result cannot be justified. Gunter and McAleer fall short of defining the genres of animation when discussing violence on British television,

In terms of a strict mechanical count of acts per hour, cartoons were notably violent, with American cartoons being twice as likely to be violent as British ones. (1997: 99)

There is no definition in the text of what constitutes as an American cartoon or a British one, but the notable difference shows that there is a knowledge gap that requires exploration. This result demonstrates a shortfall in the way animation is represented in wider conversations about television and its developmental role. The term "cartoon" is specific to a particular form of animation and when used as a vague term to cover all animation it hinders the study of both. The widely accepted term of animation would have been better placed here in lieu of a more defined terminology. Though work has been done to define the various forms of animation nationally and internationally (American animation is not limited to the cartoon form) and this investigation contributes to the further definition of British children's television animation.

The lack of distinction between different animated forms is something that can continue to be added to using a collection of materials as primary research material. In using this collection to add to the definition of a children's animated television production a cultural contribution will be made to the fields of animation and archiving that can go on to inform television studies.

British Children's Television Animation

Children's television in the UK has a long history (See: Home 1993; Inglis 2003) and in spite of having made a cultural contribution domestically and abroad, due credit being is rarely received by its animated form. To discuss the history of children's television as a whole would be an enormous task and assuming "children's television" to be a genre or set category would be an inaccuracy. Children's television consists of many styles and genres, children's television drama, factual, entertainment, educational and many other categories each with their own history and place within the wider story of children's television. This thesis serves perhaps the most ill defined of those genres – children's television animation, and focuses on contributions made in the UK. Animation may be recognised as a form in some areas of study but within the public sphere animation isn't measured as its own entity.

When The Office of Communications (Ofcom) published a report into how children consume television and what devices they consume them on (Atwal et al. 2003) the programming watched by children was classified by the report as into the following genres;

- children's drama
- children's factual
- children's animation
- children's light entertainment
- children's preschool

The genres were set by BARB (Broadcasters Audience Research Board) genre classifications. These classifications divide programming up into genres but manage to gather all animated programming into the same category with no consideration into the fact that all of the categories can in fact be applied to animation i.e. "children's preschool animation". What are BARB defining as animation? BARB do not define genre classifications, this list of genres is populated by the broadcasters but maintained by BARB. If a broadcaster believes that a programme does not fit an existing genre type they can request the creation of a new one that would be considered by BARB⁵. BARB has not defined "children's animation" in this instance it has been defined by the broadcaster and therefor broadcasters are showing animation without definition in their genres. When animation is considered in this way, from the aggressive drama of shows aimed at teenagers such as *Samurai Jack* (2001) to the gentle character comedy of preschool programmes such as *Bill and Ben* (2001), results regarding animation consumption are not going to be delivered with any clarity as they have audiences as different as the live action audiences for factual, drama, light entertainment and preschool.

⁵ C. Martin Personal communication with author 19th January 2016

Instances such as this highlight the need for further classification for animation in television for the benefit of research.

Classifying animation in such a way is quite surprising given the long history animated television has in the UK. To discuss the history of children's television animation one must look at how it emerged in television schedules. This thesis focuses on work created in Britain and so to contextualise the arrival of animation a history of children's television will be discussed. Broadcasting entertainment for children is something that has existed before television in radio productions. The British Broadcasting Corporation (BBC) began broadcasting radio programming in 1922 and immediately dedicated programming to children with *Children's Hour*. With the advent of a regular television schedule a series of programmes under the same banner title began broadcasting on television in 1946 (1993: 15). Animation has always had its place in UK children's television animation, the Walt Disney short *Mickey's Gala Premiere* starring the eponymous Mickey Mouse was the last item broadcast on television in September 1939 before the television service shut down completely for the duration of the Second World War (1939-1945). The same cartoon was the first thing broadcast in June 1946 when the service restarted (1993: 15; McGown 2004). Broadcasting the imported Hollywood short animations intended for a general audience of cinemagoers were indeed a hit with children but in order to tell children's stories produced by themselves broadcasters would have to employ the use of string puppets instead of the costly process of animation. Programmes designed specifically for a children's audience (as opposed to the general, cinema going audience Hollywood cartoons catered for) employed the use of puppets such as *Muffin the Mule*, and later *The Flowerpot Men* to tell original stories for children. By 1950 children's television has established itself within the Lime Grove studio alongside other BBC programming. Amongst the dramas and news programmes broadcast for children the earliest animation, or at least the earliest mention of what would be called animation happened in 1957 with the broadcast of *Captain Pugwash*. The process involved painted cardboard sets which, instead of being filmed one frame at a time were recorded live as magnets and levers, hidden from the view of the camera would manipulate the characters and scenery (McGown 2011). Though there is no formal, universal definition of animation it would still be difficult to interpret this process as animation today as many definitions insist that animation is created one frame at a time. (see: Evidence Through Production Methods). In 1957 ITV commissioned Peter Firmin and Oliver Postgate's Smallfilms to produce *Alexander the Mouse* which they filmed under the same "magnets and levers" process but Firmin and Postgate named it "Visimotion" (Trunk & Embray 2014: 18).

The first animated programme created for television to be commissioned and created in the UK was Smallfilms *Ivor the Engine* (1959). The show was created for Associated Rediffusion, which would later become Thames Television and London Weekend Television. For the first

time, animation was used for a children's television programme created in the UK. The series was later remade in colour for the BBC. In 1961 Smallfilms produced the first stop motion puppet show for British television *The Pingwings* (1961). The simple characters were filmed using a camera that was rigged to automatically take a new frame every minute, allowing the animator to move the characters between each frame that was shot (2014: 41). Smallfilms would later go on to produce *The Pogles* (1965), *Pogles' Wood* (1966-68) *The Clangers* (1969-74) and *Bagpuss* (1974) to name their most popular commissioned creations. Another creator of note that made a transition from live-puppeteer programming to animated programming was Gordon Murray, who left Lime Grove in 1964 and teamed up with animators Bob Bura and John Hardwick to create and deliver *Camberwick Green* (1966), *Trumpton* (1999) and *Chigley* (1919) for the BBC. These programmes held a simplicity to them that was stood them apart from the imported American theatrical shorts such as the Disney and Warner Bros cartoons that were broadcast alongside them as well as programming from other nations that had carried their own cultural uniqueness into British homes such as Zdenek Miler's *Mole* (1957). Whilst the American theatrical shorts were not created for the express purpose of being broadcast in a time slot specifically designed for children, the commissioned films of Postgate and Firmin's Short Films and others were, and they had a notable difference in tone. Whilst distinctions have been made between animation created for television and animation shown on television but created for cinema (Crawford 1991) to date there is no comparative work done on the work created for British children's animated television and the cinematic work it was televised alongside. The frenetic pace of a cinematic Disney short, driven by quick gags and slapstick actions is created for a different audience than the work of Smallfilms, which was commissioned for the separate medium of television. And some notion of 'British Children'. Postgate used the British folk tradition specifically because of this. As children's television progressed, Postgate's work, when compared to later children's television work, had a noticeably slower pace often led by a narrator (Postgate himself), similar to the hand puppet stories that proceeded it.

Although revered today, maintained for years by a nostalgia generated by websites such as "Dragon's Friendly Society" (Warburton 2000) exhibitions, revivals and guest appearances on projects such as *Ivor the Engine's* appearance advertising the BBC Wales digital channel 2W (BBC News 2004) and the 2009 Children in Need charity single *Peter Kay's Animated All Star Band* (Harper 2009) that included Bagpuss, there did come a point where the work of Smallfilms was no longer considered required viewing by television commissioners. In a disgruntled article Postgate himself describes that in 1987 "audience ratings" and work by American researchers, determined that because of the lack of a "hook" the shows created by Smallfilms would no longer be commissioned by the BBC. Postgate describes a "hook" as "a startling incident to hold the attention, every few seconds." (Postgate 2003)

American cinematic animation was not the only television imported at the time, *The Magic Roundabout* (1965) which was created in France was also shown. Because the show was created for television it shared a similar, simple structure to the work of Smallfilms. This could have been because the stories themselves were not redubbed (the process of re-recording the same script, translated into a different language) but rather, the stories were made up by scriptwriter and narrator Eric Thompson to match the images onscreen (1993: 66).

The construction of television shows created for or presented to children have various national and international origins and may be contextualised based on the era they were created in or the platforms they were created for. The differences in the pace and language of storytelling are evident as editorial choices made by the program makers and contribute to defining each form as distinct.

Such editorial decisions appear to be made by producers and writers with the children's television animation format in mind. Through use of the primary research material, a collection of production materials from the format it has been possible to investigate how a production is created to understand how these decisions factor into the production. In order to explain this we must first understand the animation process and animation itself.

Evidence Through Production Methods.

The production of an animated television series differs greatly to that of its live action equivalent. To create an animated film every frame of the many that make up a second of television action needs to be created from scratch. This can be done in many ways such as through individual drawings, through the frame by frame manipulation and photography of puppets or through other methods of image creation which are then played in sequence to create motion. The way animation is broadcast on television does not differ from the way live action is, though the two forms of film making have different definitions. There is no unified definition for animation within academia with differing theorists and practitioners offering varied interpretations of the art form (Wells 2011:13), which also depends on who is defining and what their agenda is or how new technologies may impact on the process (Denslow 1997: 2). One only has to watch an animated television program and compare it to live action to see that there is a difference. The difference between animation and live action is that live action filmmaking captures movement whereas animated filmmaking creates movement (Solomon 1987: 10). It is this distinction that is best demonstrated in the production documents that are the primary research materials used in this investigation. The preparatory documents used to make a live action film and an animated film may be similar in nature and some items may even be titled the same (script, storyboard etc.) but the production process that they go on to inform shape them differently. A stop motion animation is limited by its very form and by budgets and other factors, and this is reflected in those preparatory documents. Adventures may be toned down, actions may be simplified and characters may be cut in order to meet budgetary constraints. On the reverse of that idea, animation provides a platform where imaginative ambition can be realised in a way not afforded to live action, having sentient machinery, anthropomorphic characters and other flights of fancy that would not suit the live action aesthetic are testament to this.

As a consequence of its technique, animation is a very material heavy process, many processes are required for the construction of the final film. It is important to remember that before an animation exists it is likely that none of the components required for its construction exist and so items need to be designed and made in order to make an animation. If you were to picture the process in chronological order with items from production used as markers you may begin with sketches and continue through with scripts, more sketches informed by those scripts, storyboards, animatics⁶, final animation and sound design before coming to the final piece. This list isn't comprehensive but it demonstrates a small part of the material that a finished film would require in order to exist. Within the material left behind one may find evidence of decisions made that shaped the production, perhaps held within different drafts of

⁶ The process of filming a storyboard, though sometimes original images and limited animation is also used.

scripts or notes and amendments added to drawings. All this can be used as primary research material. The use of original animation production materials as a primary source of data has never been accomplished on this scale before in a thesis. Through demonstrating the value of these materials as a rich source of data to investigate the animated form (in this case children's animated television productions) the possibilities of using the material for further investigative studies and the value of preserving the material will be evidenced through the process.

Understanding that the items created during the process of animation can be used as documentary evidence of the production process gives them a secondary use after their initial role is served during a production. Items may be used as educational or perhaps even inspirational tools, though they are not widely encouraged to be used in this way at present. The lack of reciprocation towards recognising these records of production as a valuable resource signifies that a change in attitude needs to be undertaken. As records of production these items need to be organised and preserved so they can be easily sourced and last for as long as possible, this is the undertaking of an archive.

Records

In its most basic form, a record is a piece of information. That piece of information will most likely be captured within a medium which can be used to reference or remember the information held within the record. Information is not fixed to a record. For example a nitrate or acetate film may be transferred digitally so that the information (in this case the moving image) can be transferred to another medium allowing the information to be referred to without the need to use the original film. Photocopies of original documents provide a further example. This information, or these records are the basis of research.

Archival records of organizations provide a good base for research, and many historians continue to value the traditional empirical approach to writing history that places value on the evidence base of administrative records. (Craven 2008)

Preserving a record also allows said record to continue to be representative of whatever information it holds. Using the collection of animation materials to study a British children's animated television series we not only find ourselves studying the series that the materials represent but we can use the records themselves to evidence the time in which they were created, as items used in production such as the prominent use of fax machines or the high volume of paper records in contrast to a digital production favoured at a later date would demonstrate the time in which a production was created. With the idea of a record established, we can turn our attention to their position within an archive.

Archives are a small proportion of all information, communications, ideas and opinions people generate that are recorded and kept (Millar 2010: 2)

If we take the basic understanding from Craven that records are information and the view from Millar that archives hold that information, we get our understanding of what an archive is. If we take this traditional idea of an archive, summed up above, it also becomes apparent how preserving the "small proportion" is incredibly important. Without the small proportion of preserved material there is no longer evidence of its existence. Collecting the proportion of information is practiced to differing degrees by different institutions and countries. In terms of archiving films (including animation) some governments practice legal deposits where films created or funded by government assistance are required by law to ensure that a copy is deposited in a collection. In the UK only print material is subject to a statutory deposit (Besek et al. 2008) so animated films are not under legal protection through any system. Even if it were the case that this country and others was subject to legally deposit film this would not cover the reservation of animation production material and therefore not preserve the items that represent the animation production process.

Evidence of existence is not the only information that can be gathered from preserved items, or as we shall name them in this context, records. Records can be seen not only as proof that something existed but they may also hold within them additional information that can be used in many ways. A scribble in the footnotes of a script could be evidence of an entire change of direction for a character or story in an animation. This is just a simple example of an immediate form of additional information that records may hold. In the case of this study, footnotes and evidence of the production timeline in action is of use but the same records may be of use to a separate study in a different context, if someone were to investigate other patterns in production, different information may hold much higher value. In the right context any record may evidence different things and so would have multiple uses for different studies. A simple production sketch from the collection would offer multiple avenues of exploration. For example Figure 2 (overleaf) is identifiable as being from the TV series *Bob the Builder* (1998) but to discover its position within the production timeline one must identify markers from the image to give a broader idea of its place within the timeline. Initial questions such “who designed it?”, “when was it made?”, “what was it made for?” can be answered by looking at the image itself. To those familiar with Bob and the rest of the cast may immediately recognise that both Bob and the others do not look as they do in the finished television series, Bob has a moustache, Scoop’s digger has become his lower jaw, Dizzy’s mouth is the entire cement mixer and Lofty’s head is on top of the crane. To assume that this is an early sketch of the characters may be correct but there are other possibilities to consider. Is it a proposed redesign from later in the series? Is it fan art? These are just two other possibilities of what this image could be. To answer the questions we must decipher when the image was created. Luckily the image has both the artist’s signature and a date “Curtis Jobling 13/10/97” in the bottom left hand corner of the image. This identification decreases the likelihood of the image being both fan created or from a redesign as the series first aired two years after the date on this image. There is also writing – possibly in Jobling’s handwriting noting “too straight neck” and “friendly” next to the character of Bob. Subsequent production material featuring Bob show him without the moustache seen here, this would suggest that the handwriting are notes and alterations needed to the character that may have come from an external source, possibly a producer.

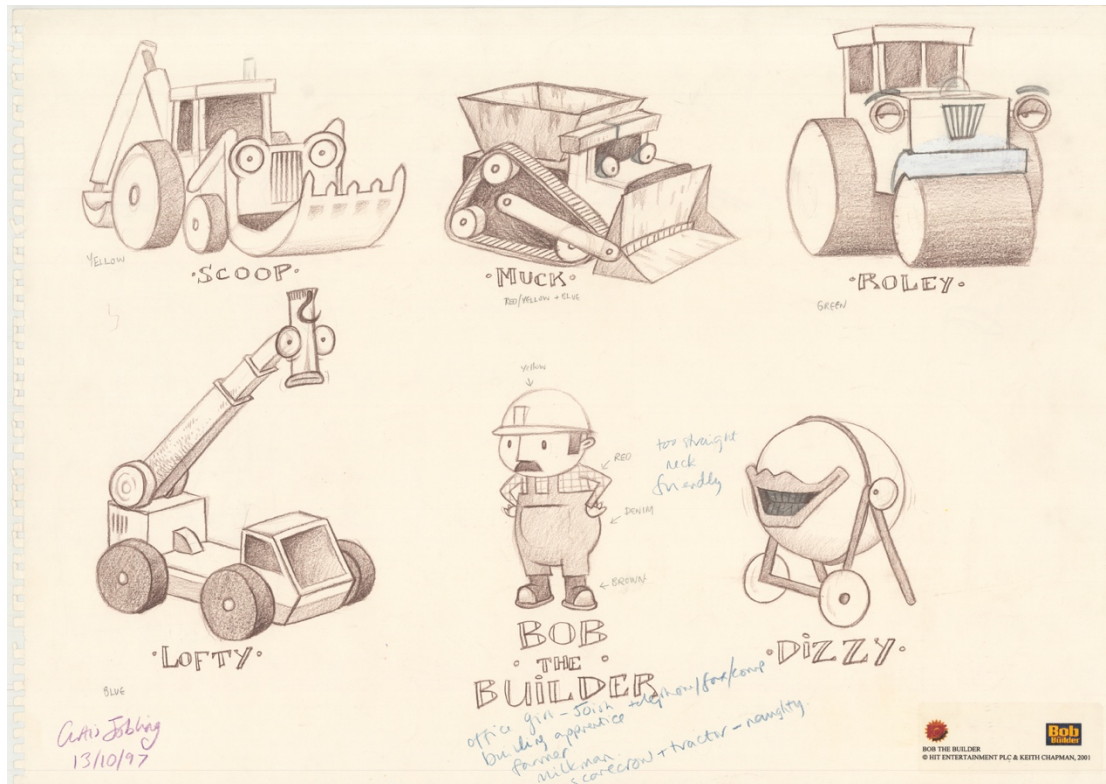


Figure 2: Curtis Jobling's original Bob the Builder (1997) (Source: LAAC)

There are further notes calling for “office girl”, “building apprentice”, “farmer” and “scarecrow and tractor – naughty”. These are clearly calls for more characters in need of designing. Whilst viewing of the finished series shows that the building apprentice is a character wouldn’t come to fruition we can safely assume that the office girl became Wendy, the farmer and tractor became Farmer Pickles and Travis and the “naughty” scarecrow became Spud. The reason you may believe that the handwriting describing the required characters are notes created after the drawing was originally created could be because it is done in a different colour to the original pencil drawing. We do not know if these additional notes are thoughts of the artist or of another person or committees. Subsequent records would help decipher if they were the result of instruction from another member of the production. If they were the thoughts of the artist himself or notes taken from a phone conversation these would not have been recorded, however if those instructions were directed at the artist in an email or fax we would have conclusive evidence of them and where the idea originated from. Through this simple method of examining the item we can place this drawing as a starting point for the development of the cast of the show, this makes this drawing quite important as a marker for the rest of the series as development can be traced from here, and if needs be, back from this depending on subsequent record that are also used.

The fact that all manner of information can be taken from records strengthens the idea that they should be preserved. Archives exist that preserve many different items, Audio Visual

(AV) archives exist to specialise in preserving film and things that are film related, and they have systems of organising their collections relating to the specificity of their media, therefore making it easier for a user to find what they are looking for in a collection (Edmondson 2004). AV archives recognise that there is an inherent difference between AV collections and other collections through practice and so a philosophy has been developed as a response to that fact (2004: 1-2).

Animation often finds a place within AV archives as a finished product on a film reel or videotape – but there isn't consideration for the production material used in animation production, there are no guidelines or suggestions that exist that offer assistance to those with an animation collection. Given that animation is a form in its own right, with its own methods and practices that produce items different to live action, the need to create recommendations and guidelines must be considered and will be considered in this study. The methods and practices of collection management within animation already exist, though there is no unified guidance for them nor has there been a philosophical consideration on what this management entails. This thesis is the first to consider these complexities in the field of animation.

The considerations of both the juvenile audience and the limitations of animated television production have a common link in the role of the producer. As mediator between the understanding of children's audiences and the production process the role of producer is one that touches all areas of production and their influence is clearly visible in collection's records.

This thesis will conduct a case study on an episode of *Bob the Builder* (1998), *Bob's Boots* to examine the writing process. This will chart the progression as the idea is taken from a simple outline, through drafts towards the final episode. This can only be done because of the records held in the collection and whilst highlighting the journey that a script takes before broadcast, it also highlights the limitations of animated television, the consideration placed upon the audience and the role of the producer. Within those scripts are narrative structures that speak directly to their intended audience and the role of a producer and the relationships within the production hierarchy that dictate the direction of the script, through the preferential or artistic choices of the writers and script editors to the managerial responses to the limitations of animation (i.e. no crowd shots because there are not enough stop motion puppets) and responses to broadcast policy that a producer provides. As this specific investigation can only be accomplished by the use of records it also highlights the case for animation production materials to be correctly considered as records worthy of scholarly interest.

Value and Heritage, Access and Usage

Building a collection of animation materials has revealed the need for definition and exploration into a line of heritage exclusive to animation production. The main focus of this study is British children's animated television programming which was investigated through a collection that has been organised by creating a method of recording data from the collection that is specific to the needs of the collection, primarily animation production. In accomplishing this not only has a children's animated television production been able to be defined, but methods and practices can now be developed to aid the creation of a system of animation archiving and a practical and theoretical debate that can be continued as a result of the findings in this thesis. The current absence in both established practices of animation archives, and animation archiving being identified as a distinct form of archiving leads to questions about how animation heritage may be defined and preserved.

By opening the debate calling for a greater number of collections to be used in academic research the future possibilities of the use of the collection in other scholarly activity become apparent. Collections do not just answer one question, but open the debate for many discoveries that challenge, enlighten and progress the study of animation. An animation collection does not have to be limited to the study of animation. The Bob Godfrey collection at Farnham holds material by the director Bob Godfrey, a filmmaker who's work covers a wide range of topics that could be studied for their contributions for ideas about sexism, political unease and methods of autobiographical storytelling. The completed films themselves can be studied, but the production material provides a much more vivid display of the construction of these ideas.

Thesis Structure

The primary source of data that will be used in the course of this thesis comes directly from a collection of animation production materials that belongs to the Animation Academy housed at Loughborough University. The collection itself contains work from multiple studios mainly collected in boxes. Though the items are in boxes they have not been placed in any order and so boxes have been opened and investigated individually in order to discover what is in them. This process, known as box counting has been used to determine which items went on to inform the rest of the investigation.

Children's Television

As British children's animated television productions are yet to be defined as a form with particular distinctions that differentiate them from the blanket terminology of just 'animation' or 'cartoons', one of the key objectives of the practice has been to use the collection and organise the records to create a "timeline" of animation production to evidence the processes. This has been done by examining records from the collection and identifying what stage of the production they were created in by finding identifying markers from each item. The easiest marker would be a date that is printed or written on an original document but there are other ways of deciphering the point of which an item was created for a process. Character designs placed side by side would show a clear evolution of a character as they change to suit the needs and practicalities of a production and could therefore be easily placed in order of creation. This can only be done once the items within the collection have been box counted. As the collection used in this thesis had not been collated in any way cataloguing the boxes had to begin from scratch. Box counting is the process of opening each box and viewing the contents in order to understand what is contained in each box. Whilst the contents are not recorded in explicit detail, knowing which boxes contain scripts and which boxes contain storyboards and other production artwork forms an initial understanding of the contents of the collection so a picture of the production timeline can be constructed⁷.

With the collection categorised by box counting the records can then be examined and a history of the studio and production used in this investigation can be uncovered. The selected production studio is HOT Animation and their most popular creation *Bob the Builder* (1998) has been selected. The reason *Bob the Builder* has been selected is because there is a sizable amount of material relative to the production held within the collection that covers the scope of the entire production timeline, from initial sketches through to merchandise design guidelines and other post broadcast activity. As a primary example of a children's animation

⁷ Foreknowledge of the industry comes from scholarship in animation, working in the industry and animation journalism.

production the material can offer a glimpse into the production process specific to British children's animation of the time.

Within these records evidence of the role and influence of a producer is a prevailing factor of the construction of a shows visual aesthetic and moral outlook. The moral aspect is likely to have been developed by external factors such as policy and regulation created to protect children viewing television that is upheld by the communication regulator Ofcom or its predecessors including the ITC (Independent Television Commission) and the BSC (Broadcast Standards Commission) as well as an understanding of children's narrative storytelling that has evolved through years of practice and experience or through adhering to a set curriculum (Wells 2007: 176). As the collection, like any other, has to be considered contextually the history of regulation that effects children has to be considered as well as the purpose of such regulators. In its reports, Ofcom itself often fails to consider animation in its own right, labelling animated content of all genres as "cartoons" (Chambers et al. 1998). Using the word cartoon as a blanket descriptor for all animated television productions in this way limits the discussion of animation as a form in its own right that is capable of providing, dramas, comedies and other genres to all audiences. If live action television is to be discussed separated into different genres then animation should be too to deliver greater clarity and understanding to the art form. The "Saturday Morning Cartoon" or indeed any cartoon or animation created for children is just one type of animation amongst many others (Furniss 1998: 30). This oversight will be explored and its effect on the overall position of animation as a form of entertainment within the broader children's television landscape will be assessed.

A producer's understanding of how children react to television is also shared by academics who have presented findings on the subject. Though this subject offers a deep understanding of the way children develop with all television there is no study into how their development is specifically affected by animation so these studies primarily offer conclusions based on children's exposure to live action television and not to animated ones leaving a knowledge gap that is waiting to be filled. A particular example of this is in "Children & Television" (Gunter & McAleer 1997), whilst studying violence in children's television animation, referred to by the all inclusive term of "cartoons", is disregarded altogether in order to present the outcome that children's television is not violent. In order to conclude that children's television is not violent cartoons are cited as the exception to the rule and the argument as to whether cartoons should be included is presented with no further discussion on the subject.

"Cartoons are another and more difficult matter, especially since there is some argument over whether cartoon violence should actually be regarded as a different form, or comparable with other forms of portrayed violence on television." (1997: 98-99)

This leaves the position of cartoons, and therefore animation in a rather ambiguous position. By abandoning the animated form in this survey of violence the author draws the line between the two forms, separating them. However the lack of follow up on the subject demonstrates a large gap in current literature on the position of animation within the wider children's television context. The dividing lines will be drawn again, leaving scope for more research.

Archives and Collection Management

The practice of archiving is central to this investigation. By creating a system of organisation that responds to the needs of the collection and to the needs of animation as a form will develop the argument for animation archiving to become a method of archiving with its own practice. As AV archiving has become a practice within its own right to preserve the idiosyncrasies of AV material a similar model is considered within this thesis that considers animation production as the basis for its own philosophy and practice.

As the concept and practice of "animation archives" does not currently exist in an established form that can be used to inform the organisation of the collection, practices from other forms of archiving such as AV archiving will be investigated, the philosophy and moreover the identity of AV archiving is also a factor that will brief the proposed initial principles of an animation archive. AV archiving recognises that it has developed from parental institutions and their practices such as librarianship, museology, archival science, chemistry as well as technical skills required in the broadcasting field (Edmondson 2004). Establishing whether animation is a specialism of a discipline such as AV archiving or a discipline in its own right will be considered throughout this thesis.

Whilst using the collection it is important to remember that interactions with the collection and the records in the collection are done as a researcher as a necessary part of research, and not as an archive manager or archivist with any formal qualification. That being said it has been good practice to ensure that correct procedures in the handling and preservation of records has been maintained to the highest possible standard in lieu of the assistance of the collection being in the custody of a qualified supervisor or manager and with the boxes having been uncategorised. In order to achieve this working literature on the subject has been sourced and used as reference to inform archival practice. A primary document for this process has been the General International Archival Description (ISAD (G)). ISAD (G) is a standard for archival descriptions created so archivists can promote greater accessibility within their archives. To do this the guide encourages clarity for the record creation process standardising a language of archiving through a glossary of words used in the archiving

context. The standard within the text can be adapted to suit the needs of most collections, as its suggested hierarchical model is adaptable and not exclusive to any one discipline.

The model of hierarchy follows the principle of “respect des fonds” that maintains the integrity of a collection by keeping items from the same source together to maintain their context (ICA Committee on Descriptive Standards 2011) The lack of guidelines that could be used to guide the construction of a system of organisation of an collection of animation production materials echoes the lack of academic work done on the nature of archives and their relationship to animation. There has been little written on the subject and what has been written will be updated in this paper. ISAD (G) will be used to begin this process by applying these guidelines on the collection of animation production materials.

Organising the collection to the point of which records can be extracted and used for study is the principle objective of the practice element of this thesis. Whilst ISAD (G) offers guidance on the organisational structure records will take, the physical practice of handling the documents correctly and guidance for standards of conservation and preservation are taken from PD 5454: 2012. This document by the British Standards Institute give detailed suggestions on the practical issues faced during the storage of these records and the environment that the records are kept in taking into account. This document also takes legal considerations into account such as data protection, building regulations and health and safety which are taken from existing regulations and acts of law that must be considered in the construction of an archive or in the case of this thesis, the maintenance and use of a collection.

The practice of archiving animation is not one that is bound by any current standardised text or recommended reading material. There is the case that there is the need for such a document as the archiving of animation materials is something that is currently practiced in the UK, though not on a large scale. There is an existing group of collections in the UK, both collections built from companies or individuals that no longer create animation, such as the Bob Godfrey Collection and working collections kept within companies that are currently trading such as Aardman Animations, the Bristol based company that employs an archivist. They have been unified once before at a meeting of the Association of British Animation Collections (ABAC) in 2010. The meeting invited archivists and collection managers to attend a discussion as to how the association could function as a group in order to create policy and seek the advancement of British animation heritage. Since the initial meeting, whilst the work of promoting items in collections through curated exhibition, screenings and books has progressed, an overall network between the associations has not developed and collections have changed managers in the time since. Over the course of the work on this thesis, communication has been established with some collection managers already associated with ABAC and new relationships have been established with collections that were unaware of the

existence of ABAC, and likewise ABAC were unaware of their existence to foster attitudes towards a “community of practice” within the animation collection community. (Wenger 1998)⁸

Whilst other collections and their practices may go on to inform the method of practice undertaken during this thesis the primary collection that will be at the centre of this collection is the Animation Academy Collection, housed at Loughborough. This collection is comprised of mainly other animation studio collections including HOT Animation, Hibbert Ralph, Triffic Films, Animation People and Halas & Batchelor but also items from Wilf Irwin Rostrum Cameras and the Irwin Company literature. A rostrum camera is a device used to film animation cells to make an animation. Whilst the finished films, information about individuals and studio practices of the majority of studios can be found with relative ease, for example the work of the Halas and Batchelor studio is well documented (Halas & Wells 2006; Halas et al. 2014), the work conducted by Irwin remains largely undocumented. Irwin created rostrum cameras for industry and so was an integral figure, supplying the very mechanics that made the films of his better-known clientele possible but there is no literature on him. What remains of his life work is in the collection and his personal documentation; blueprints and actual machinery can be studied to draw together knowledge on his practice and contemporise him as an individual working in industry at the time. Without the collection and without others passing on knowledge of him, Irwin and his accomplishments would disappear into the ages. This highlights the importance of maintaining a collection of animation materials. As the Irwin collection is mainly mechanical (motors, gears, metal structures) it would be catalogued differently to how items created for a television production would be (scripts and storyboards for example) but as an integral part of the animation production process. Items such as the rostrum camera demonstrate the wide variety of items that an animation archive may house; imagining that one would contain only drawings, scripts and maybe puppets isn’t considering all the components in the form of animation. Though this study primarily concentrates on television animation, perhaps the most prominent medium of the form, it is important to consider the wider context of the animated form which incorporates the use of many and varied materials in the process. An in depth listing and analysis of animation production techniques can be found in chapter 3 of *Animation Aesthetics* (Furniss 1998). In it she describes various techniques using examples and anecdotal evidence from the practitioners themselves. The fact that animation is not restricted to a standard set of techniques (for example traditional 2D, Stop Motion puppetry and CGI) or materials is evidenced by some unusual items housed in the collection. Amongst the most unusual are boxes full of clothes, which may seem unexpected but they were used during the production of *I Am Not An Animal* (2004) a TV series that used the digital photo collage and as such used the clothes during production.

⁸ The idea of adopting a community of practice within “animation archives” has been explored and will be detailed in this investigation.



Figure 3: I Am Not An Animal (2004) (Source: www.babycow.co.uk)

This deposit of clothes belongs to the Triffic Films collection. Triffic worked on title sequences, interstitials for television and often used mixed media in their work. The title sequence for the television series *Two Fat Ladies* (1996), a live action cookery show employed the use of pixilation and replacement animation for its opening. The replacements were cardboard cut outs held up on sticks which would be replaced in much the same way that a traditional cel animation would be but placed in a live action setting allowing the cardboard figures to interact with their surroundings as they drove around the table causing havoc.

A system of organisation has been created as a response to the items in the collection. As systems for animation collection do not exist in any official capacity this system has been developed from similar collections and altered in response to any discovery within the records themselves that shapes the system of management. Of the animation specific collections that already exist the most comprehensive system of management encountered during this research belonged to the Bob Godfrey Collection at the UCA in Farnham. By applying their systemic model of collection to the Loughborough Animation Academy Collection it became clear through practice what alterations needed to be made in order to create an informed database of records available to study the collections at Loughborough. This is not to say that the Farnham system was useless – it fit the needs of that collection specifically, the purpose of this investigation is to create a more universal system that fits animation as a whole and not the work of a specific director.

This practice represents a combination of the progression of previously existing collection models and a development of new ideas culminated by researching the needs of a working

collection. This is the evolution of the recording of an animation collection which will address limitations and shortfalls as well as correcting current issues that collection faces.

The construction of a system of organisation has been specifically designed for this collection and is responsive to the collection and not to a pre determined list of categories assigned by commercially available computer cataloguing software.

The practice of creating a system of collection runs parallel to the practice of maintaining the collection, as such consideration into the physical wellbeing of the collection has also being considered.

Extracting Data

The purpose of establishing a system of organisation is for the purpose of using records to analyse a British children's animated television production. Given the volume of records available to use as primary sources the options as to how to handle the materials from a data analysis point of view must be taken into consideration. Whilst quantitative data analysis may appear an early option it does not offer the qualitative data that this study requires. The decision of what to do with the collection was not predetermined and was made after interacting with the collection and discovering that the research lay in the documents themselves, as notes, amendments and communications on documents that could be used to chart the evolution of a project and can contribute towards a definition. Knowing what the data will be used for before it is extracted informs the type of analysis required for the data. Explained below.

“I find that my interests usually lie in “how” questions rather than in “how many” questions” Karyn McKinney (Silverman 2010: 11)

The interviewee in Silverman's text identifies a clear division between the processes of qualitatively and quantitatively analysing material.

Though there is no denying that the repetitive task of animation does generate vast quantities of material which can be analysed quantitatively⁹, the qualitative analysis of experience and interactivity within the records are of higher value in this study than any numerical analysis.

Using a box from the collection as an example the comparative data that can be extracted using both analytical methods shows which one is right for this practical work. The box in question is a randomly selected box of animation cels from a single production. The cels are

⁹ Such as a mathematical analysis of items in the collection.

accompanied by their roughs, the paper drawings that were animated and used for reference for the cels. The finished cels and roughs are placed in folders marked with production information and dope sheets.

Table 1: Qualitative vs Quantitative

Quantitatively	Qualitatively
Amount of drawings	Drawing style Animation technique (1's or 2's) Methods used Material used (cel size) Production information (studio, date client) Artist information (animator, lead animator) Rough animation to final animation comparison Timing information from dope sheet.

By analysing this qualitatively we are able to interpret the records as opposed to measuring them to any mathematical definition. The results will form a continued discussion on the nature of animation production archiving and collection.

The choice of analysis is important when extracting information but it is important to remember that qualitative analysis places the quality of the analysis over the quality of the source (Silverman 2007: 9). This means that the items that are selected will have needed to be assessed properly and the right information will have needed to have been extracted. A clear example of this in action would be that if a script had a note written on it in blue ink, the importance would probably be placed on what the note said, as opposed to the colour of the ink. Using the system of management it will be easy to extract records from the collection and use them to identify attributions that are key to a children's animated television series from both the production aspect and as an identifier of memes and tropes that are displayed through the writing of a show in the episodes created by the process.

Contribution to Knowledge

There is a lack of academic research on the practice of archiving and maintaining a collection that responds to the needs of item created during animation production. There is work that examines the importance of making film accessible through a collection focusing on the Dutch Animation Collection (Peters & Bosma 2011) and ASIFA Hollywood and the National Film Archive of India (Jones 2011) but these are journal articles and to date no work exists that explores the needs of an animation collection that uses practice as a guide for what may be required to instigate the creation of a philosophy and standardised practice for archiving and collecting animation materials which can develop from here.

Parallel to this there is a distinct lack of attention paid towards children's animated television programs that originate in the UK leaving a knowledge gap which this thesis addresses by beginning to define children's animated television by looking at the production practices of a specific example using a collection that has been developed into a working resource. This will offer a distinction between British children's animated television, other animated forms within children's television and live action. It is the purpose of this thesis to establish British children's animated television as a form within animation and cartoons through the use of an archive to investigate production practices.

Though the culmination of the practical work will be the creation of a usable collection that is accessible as primary research material, the use of a collection is not limited to distinguishing British children's animated television programming.

Research Questions

The purpose of this thesis is to investigate animation production material collections. As animation production material collections do not exist with any official standards of care and are unified only by a loose association. This thesis will question the needs, purpose and benefits of implementing standards to collections and explore the pedagogical aspects of using a collection in study by setting up model of collection and then using the collection as primary research material in an investigation into the authorship of a children's animated television show.

Animation Collections

1. How does the philosophy of archiving apply to a collection of animation materials?
2. What is the current landscape of animation archiving in the UK?
3. What are the benefits of creating and implementing a system of management to animation production materials.

British Animated Television Productions

1. What is the significance of developing a hypothesis in defining a 'British Animated Television Production' by using and evaluating its production process ?
2. What are the benefits of a formal definition ?
3. What is the purpose and value of using the collection to create that definition ?

The sections of the thesis work parallel to one another, contributing knowledge to each section as they progress towards the final outcome. There are three sections in total.

1. Children's television production and animation
2. Archives and Collection Management
3. Heritage

Children's television production and animation

In the current field of academic research surrounding children's development with television there is a lack of distinction between animation and live action, the question this poses is that if there is a lack of distinction is that because they are not seen as separate forms? Because they both appear on the same television screen are they considered equal? If that is the case then why are "cartoons" as they are often termed, excluded from study? Animated television for children needs identifying and clarifying. A primary question would be how do you define a children's animated television program and is there a distinction to be made for British productions? This study answers that question by investigating the animation process itself.

The Animation Production Process

What makes the animation process distinctive from live action? There is ample literature on how to make animation, the mechanical aspect of the process is clearly defined in books that offer a tutorial to those wishing to attempt or discover the art form. A mechanical process of animation can be attempted by anyone but decisions made in the production of something for television have an obligation to an audience. This is something that is not taught in “how to” books and so evidence will be taken from a primary source of production material.

Archiving

Philosophy and Practice.

The Oxford English Dictionary defines an archive as “A collection of historical documents or records” and so when we come to think of archives we may be inclined to think of rooms full of records, books and boxes usually on stereotypically dusty shelves. Beyond the typical imagining of what an archive is there lies a culture within the practice of archiving that maintains the collections mentioned. It is this practice of archiving and its theoretical perspectives that are key components to this thesis.

A collection in an archive need not just consist of books or papers, when considering collections one must imagine how archival principles would apply to various objects from the tangible nature of puppets, sets and equipment to the more intangible digital records which must be considered when you apply a model of archiving to the practice of animation within an animation production. It is the practice of animation evidenced through a collection of animation production materials that will be explored in depth throughout this thesis.

At the time of writing, if one were to research an animated film the most common method would be done by viewing the film itself. Thankfully, animated films are a ready resource, held by institutions such as the British Film Institute (BFI), in private collections and made available through distribution on home media and online. Watching these completed animated films is a perfectly acceptable way of understanding the ultimate intentions of a director but they do not present much evidence of the process used to create the final film. All of the decisions used in the making of a film can only be guessed at when viewing the final film and the multitude of different creative decisions that go into the creation of the film remain a mystery. The ability to view animation production materials used during the process to build the final film adds definite clarity to that mystery and presents the ideas that are unavailable to viewers of the final film. Clarification is important when demonstrating distinctions between animated genres or methods. As a clear demonstration of the process of animation the materials also have pedagogical uses and can be used to educate. These are a few of the benefits of using an archive of animation production materials.

Before applying a model of archival practice to an animation collection an understanding of the principles and practice of archiving needs to be ascertained. To begin this we must look beyond the dictionary definition to discover what implications those records may have in relation to the wider process of animation production taking place. The transaction that takes place when knowledge is recorded is described by Sigmund Freud in *A Note Upon The Mystic Writing-Pad* (Freud 2001) in which he describes the process and reasons why we record information as an aid to memory.

“If I distrust my memory - neurotics, as we know, do so to a remarkable extent, but normal people have every reason for doing so as well - I am able to supplement and guarantee its working by making a note in writing. In that case the surface upon which this note is preserved, the pocket-book or sheet of paper, is as it were a materialized portion of my mnemonic apparatus, which I otherwise carry about with me invisible.”

This is the basis of a record you may find in an archive. A thought has been translated from the mind to a piece of paper to be used later for as long as it is preserved. They may not always be human thoughts, they could be generated by machine but so long as they are created they become a record. For the purposes of an animation collection we will for the most part be investigating the processes that are governed by thoughts and decisions that are evidenced as records. A script, a storyboard, a sketch, the movement of a puppet by an animator are all thoughts recorded onto other mediums, a translation of the authors thought processes all which combine as the aggregate of the finished film.

The term “record” is being used in accordance with the General International Standard Archival Description publication that defines a record as

Recorded information in any form or medium, created or received and maintained, by an organization or person in the transaction of business or the conduct of affairs. (ICA Committee on Descriptive Standards 2011)

A record in an animation collection could be a scrap of paper, a script, a storyboard, a reel of 35mm film or anything that carries recorded information.

Looking at the recorded thoughts created during a production may serve as a reminder to the creator during the process of production but they may also be interpreted by those who had no part in the creation of the record and are seeing it for the first time, such as those accessing the records in an archive. In animation terms, most recordings are not created specifically for an archive nor are they required to be collected once they have served their purpose, though this varies dependant on production and company. An animation production would create recordings in the form of scripts, storyboards and film cells as a necessary part of the linear process of animation production – tools for the job, and not to end up in an archive like details of criminal activity in the form of police reports would be created specifically to be kept on a police archive for example.

Whilst recorded thoughts are evidenced it would be impossible and impractical to record every thought onto a piece of paper and store it for future use, this does not mean that those thoughts or experiences never existed, just that there is no evidence of them. We must also

think beyond paper and consider that recordings may be made in a variety of ways such as physical objects, aurally through stories or digitally. Whatever may be created and preserved can be archived. What can be preserved and what is actually preserved are determined by an assessment of value. A verbal communication may be written down as it is seen as more important than other thoughts (i.e. minutes from a meeting), if this written record is seen to have provided evidence of something of value, perhaps of historic interest they are preserved or archived. The value of a record may be interpreted through its use as a piece of documentary evidence or some other appeal it possesses (Millar 2010: 7). With the animation process this value may be presented through sketches, scripts or storyboards that display evidence of a story or evolution of an idea leading to the finished animation. These items have value as tools that are used to create animation and inform one another along the way. For example a script would be used by a storyboard artist to create a storyboard which would then be used to inform the layout artist, props designer and animator.

What is the use of recordings? The need to collect recordings must exist because they possess value so ascribing a value will in turn identify the need for them to exist. In *Archives, Principles and Practices* (2010) the context of the items within an archive is considered.

“A record does not, or should not, sit alone as an isolated item it derives meaning from a combination of its content, structure and context, from its relationship with other items as part of a larger body of unified records, created or received by the same creator over time and understood in the context of the whole, not as a discrete and isolated item” (Millar 2010: 6)

Here Millar points out the usefulness of a collection and how context can be applied using multiple items in a collection of records. Using a collection of animation materials one may discover more about a simple item and its role within a wider collection. Say for example we have a 1st draft of one of HOT Animation’s *Bob the Builder* scripts with dialogue crossed out and a note next to it that reads “Ring me – JC”. If we were to support the 1st draft of the script with the 2nd draft we would see that the dialogue that was crossed out in the first script has been altered in the second so we can conclude that the telephone call with the mysterious “JC” had resulted in a change to the script. Supporting these two scripts with a third document, this time minutes from a writers meeting we see that that particular script change is referred to again by JC, and by looking at the list of people in the meeting we see that the initials stand for Jackie Cockle, the producer of *Bob the Builder*. We can safely assume that she had a direct involvement in the editing of the script. Using these documents as primary research material we’ve been able to follow a small part of the production process.

Context does not necessarily have to be taken from notes; one can imagine the production process by knowing the time it was created in. The series that form the majority of the HOT Animation collection span approximately a decade from the mid to late 1990's onwards, this is evidenced by the use of faxes and the practice of printing off emails for files and more obviously by the dates and times often automatically printed on the top of the communications themselves. By dating items in the collection one can look outside of the collection to investigate relevant factors that might have affected the production process such as broadcaster regulations. It is also worth considering what production items may exist from a certain time, which tools for the job change as the medium evolves. For instance *Bob the Builder* radically changed its production process and stopped producing episodes using stop motion, by filming puppets, and began broadcasting episodes using Computer Generated Imagery (CGI) from 2010 onwards. With this information to hand searching for invoices and details of the model making or puppet fabrication process from 2010 onwards could be considered a waste of time.

Finding items used so far as examples is easier said than done unless a collection is organised in such a way that the items are easily accessible and ready to use. Organising a collection of records makes a huge difference to the way items within a collection are found. When organising a collection consideration must be placed on the order that a collection is stored in. Most collections are called fonds.

The concept of fonds dates back to 1841 where it was created by historian Natalis de Wailly as a way to organise records by collection, or by the person/company who made the items as opposed to organising everything based on subject (Millar, 2010: 29). Basing collections on subject would clearly lead to items being split apart and lost.

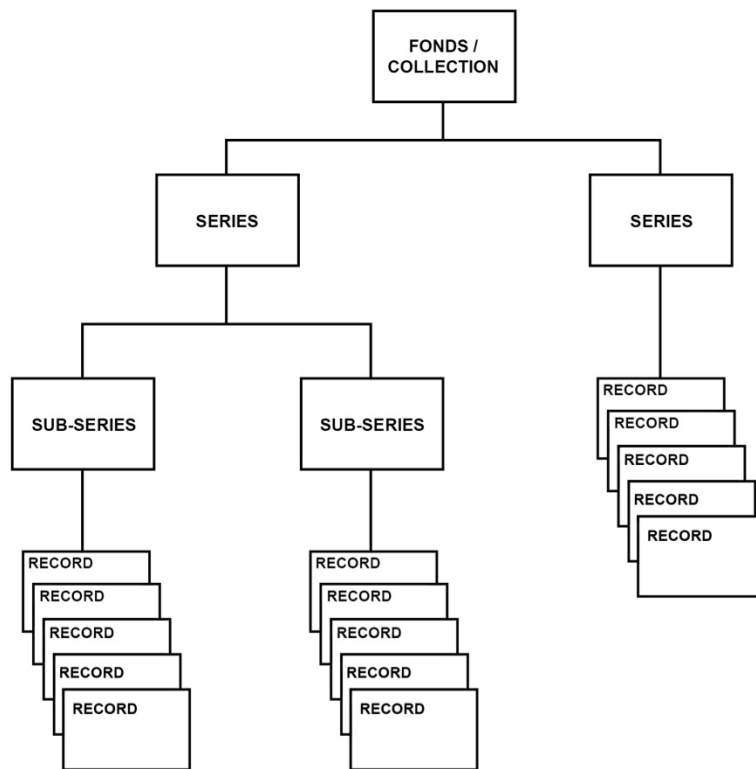


Figure 4: Fonds (Steve Henderson 2016)

Using the model of fonds based on the Hot Animation collection I would have the series produced by the company separated by sub-fonds and the numerous series separated by further sub fonds so it would be easier to find records in the shape of production materials belonging to series one of *Bob the Builder* such as storyboards, scripts, sketches etc.

Standards of Practice

Standards such as fonds, are an important part of maintaining any collection. Though there are no government imposed laws or rules that govern the management of a collection there are publications that exist that can be used as a guidance in the management of a collection.

A standard that is used most commonly is the General International Standard Archival Descriptions ISAD (G), which began development in 1988 by the Committee on Descriptive Standards, a committee of experts. The document is updated on a regular basis.

ISAD (G) provides an internationally recognised standard that archives and collections can use to organise.

“The purpose of archival description is to identify and explain the context and content of archival material in order to promote its accessibility.” (ICA Committee on Descriptive Standards 2011)

The records held in an archive contain information, and that information should be made available for research and study. Maintaining a collection so that the items within them can be used (i.e. promote accessibility) like an archive will be a key component of this thesis.

The standard itself is not an instruction manual for archiving. Although it suggests how items within an archive or collection should be catalogued it is not explicit in the way in which to go about such a task.

The rules contained in this standard do not give guidance on the description of special materials such as seals, sound recordings, or maps. Manuals setting out descriptive rules for such materials already exist. This standard should be used in conjunction with these manuals to enable appropriate description of special materials (2011)

Though there are no ancient seals or cartographers maps printed in the collection used in this research, there are materials that have specific care requirements that have not been documented in a way which could be used in conjunction with ISAD (G).

Animation Materials in Need of Specialist Treatment

If we are to identify such animation material that may require specialist treatment we could look towards animation cels. Animation cels are transparent sheets of acetate which are individually photographed in succession to create the movement of animation. These sheets are traditionally used in hand drawn animation. Using character animation as an example cels are typically painted, or drawn on. The transparency means that a separately drawn background or additional feature, such as a separate arm waving in contrast to the stillness of the rest of the body.

For a time, animation cels were one of the most prolific forms of animation used in productions worldwide. Though a vast majority of them were either washed (the process of cleaning the painting from them to use them again) lost or destroyed, some have survived often sold at auction as memorabilia. When kept, and placed together animation cels demonstrate the illusion of movement perfectly and can be studied for their technique. The Loughborough Animation Academy Collection (LAAC) houses thousands of cels used in various productions so the preservation of this material is of concern to the collection. In an ideal world one would consult the manual that details the specialist treatment required for

items specific to animation such as cels. However, there is currently no specialist manual that documents the specific care requirements of animation production materials.

There are individuals who have detailed their own ways of caring for animation production materials and following from the cels example we look towards Françoise L  merige who details his findings framed within the context of French animation and the work conducted by La Cin  math  que Francaise¹¹, an institution that houses film documentation and materials. This work was presented in April 2012 at FIAF (International Federation of Film Archives) in China. The paper introduces the concept that cels should be cared for as plastics and outlines common problems that cels can encounter. The study also approached several French institutions such as the National Library of France (BNF), the Annecy Castle Museum, Research Centre for the Conservation of Collections (CRCC) AND Geraldine Wolff, a plastics expert in order to conduct case studies and create a list of recommendations for the care and collection of cels (L  merige 2012).

Investigations into the preservation of plastics, with a focus on animation cels and other animation materials has also been conducted by Getty Conservation Institute in collaboration with the Walt Disney Animation Research Library (The J. Paul Getty Trust 2014a; The J. Paul Getty Trust 2014b).

The recommendations present a good idea of what to do with animation cels, but when we think about care and collections for animation we need to think beyond animation cels and think towards other materials as animation is a medium that encompasses anything visual. The work of L  merige or the Getty Trust on the preservation of animation cels could go towards a standardised text or manual recommending the care of animation collections alongside other research that covers items from different areas of animation. As L  merige has approached plastics experts and consulted on the preservation of cels other disciplines would need to be consulted for the preservation of other items of animation production materials. If one had a collection of animation puppets, they may wish to consult toy museums to address the best way to preserve items such as the clothing puppets wear or the latex compounds that they are constructed of. Within the Animation Academy Collection there are items relating to Wilf Irwin, a cameraman who developed rostrum cameras to shoot animation. These enormous pieces of machinery would need the advice of an engineer.

Assimilating advice and applying it to animation collections is not the definite solution. Information from different backgrounds needs development before it can be applied to the practice of archiving. And although there are overall concepts such as fonds or standards of

¹¹ <http://www.cinematheque.fr>

practice which unify the practice of archiving, there are specifics within the materials being archived that call for a distinctive process or even philosophy of archiving for this material.

To consider the philosophy of an animation collection we must look at how other archival practices define themselves as individual (for example, photography archives) from the individual practices (such as the preservation of plastics, metals, engineering materials etc) realise how they construct a practice and philosophy which is specific to their medium. As a visual medium I have selected the practice of AV (Audiovisual) archiving to demonstrate. AV archiving overlaps with animation as animated films can be stored onto AV materials such as tapes.

The Practice and Philosophy of Audiovisual Archiving

The information used to understand Audiovisual archiving comes from Audiovisual Archiving: Philosophy and Principles by Ray Edmondson (2004) a document that establishes and outlines the specificities of archiving AV material. The document also delves into the philosophy and principles of AV archiving and could be used in conjunction with ISAD (G) to guide in the creation and management of a collection. It is a document such as this that the practices and principles of animation archiving need to be guided by if the titles of animation archive and animation archivist are to be legitimised. At the time of writing, no such document exists for animation archiving.

The document is an attempt to codify the philosophy and practice of AV archiving. As a document, it recognises that archives shape “the worlds cultural memory” (2004, 1.1.3). This is important, to shape the memory you must first contribute and AV archives contribute to the cultural memory by preserving AV materials. Leaving one to question how, without an archive for animation production material, is the practice of animation production contributing to the world’s cultural memory.

As a practice, Edmondson notes that AV archiving is still in its infancy and therefore a victim of semantics and the public need to simplify the role of “archivist”. The AV archivist works against popular opinion and has “the need and the right to be recognized as distinct from *archivists*” (2004, 2.2.3) this isn’t a proposal to separate AV archiving from archiving per se, it is a request for acknowledgement that AV archiving, as an a form of archival practice deserves distinction.

In order to elevate AV archiving from its infancy and begin looking at it as a profession a set of definitions have been offered.

“As a working definition, it is proposed that a profession exhibits its own distinctive:

- Body of knowledge, and literature
- Code of ethics
- Principles and values
- Terminology and concepts
- Worldview or paradigm
- Written codification of its philosophy
Skills, methods, standards and codes of best practice
- Forums for discussion, standard setting, and issue resolution
- Training and accreditation standards
- Commitment: members spend their own time pursuing the best interests of their field” (2004, 2.4.1)

This is an evolving document which is peer reviewed and continues to be developed as a standard. As such the above list has certain elements that, at the time of writing, are in the emergent stage.

If we take the above list, that states the requirements to define a practice as a profession and apply it to a concept of animation archiving we quickly find the areas that need work and investment if a philosophy and practice is to be developed. The responses to the list also outline areas that this study will investigate.

1. Body of Knowledge, and literature

Animation Studies has a wide literature base, the practice and theory of animated film in many of its various guises, nationally and internationally have been much delineated on. This global conversation and understanding makes animation distinct. Specifically there is minimal writing on animation archiving such as Jones (2011) and Peters & Bosma (2011).

2. Code of ethics

There currently exists no established code or ethics when it comes to animation archiving, any codes or ethics currently come from archiving as an overall practice.

3. Principles and values

The principles and values of an animation archive would need consideration. This is something that would have to be peer reviewed.

4. Terminology and concepts

One of the major requirements of an animation archive would be terminology and concepts. As mentioned by Edmondson, AV archiving is victim to semantics (2004, 2.2.3) and the same could realistically apply to animation archiving.

5. Worldview and paradigm

The topic of this research. Suggestions will be made within this text with the aim for further delineation.

6. Written codification and philosophy

Suggestions will be made within this research.

7. Skills, methods, standards and codes of best practice

Suggestions will be made within this research.

8. Forums for discussion, standard setting and issue resolution

As such there is no official accredited body or forum where the conversation about archiving animation materials takes place on a regular basis, however work has been done in this area. The Association of British Animation Collections would perhaps be the most prominent candidate that could develop into that forum of discussion, standard setting and issue resolution.

9. Training and accreditation standards

This has not been possible to date, although animation archiving is conducted by individuals that are accredited, not accredited for animation archiving. During the course of this investigation, training volunteers was conducted.

10. Commitment: members spend their own time pursuing the best interests of their field

At the moment a lot of animation archiving is done almost by hobbyists. This will be explored in.

In taking the obligations put forward above and translating them to address animation archiving, the list quickly becomes a “to do” list of requirements necessary if animation archiving is to be recognised as a profession.

The incomplete nature of the list demonstrates the reasons why there is currently a lack of identity for animation archives. This study will address this lack of identity in an effort to determine what an animation archive is and create a clear list of recommendations.

Video Tapes

One of the issues raised by Edmondson is that of semantics. The need to simplify what an archive or archivist is leads to a basic terminology and a no clear distinction between AV archiving and other disciplines. The duty of an AV archive is to archive AV material, this would include film reels, tapes and other items used to hold audio visual information. AV

information could also include animation as it is, by its very nature an audio visual art form which is contained on items that hold AV material. When we consider an animation archive we must consider not only the final product which will be presented via AV material (video tapes, 35mm film, DVD, digital files) but the materials that constructed the animated shows and what informed that final animated film. An animation archivist will view their records differently to the way an AV archivist view their records and even when the same record is handled by two different disciplines it will be interpreted differently (see: The document on a Macro, Meso and Micro scale). The way in which a practitioner interprets the materials in a collection informs the philosophy that they adhere to.

“Animation Archives” – Thoughts on Terminology

The term “Animation Archives” is one that is used without question. It supposes two things.

1. That the parameters of the word animation are understood.
2. That there are uniform archives dedicated to this understanding through practice.

Both of these suppositions are not understood, and if they are that understanding has not been committed to writing or shared amongst peers. In addressing the first supposed understanding, amongst animation academics there is no clarity on what animation is. This has been pointed out by academics early in the formative years of Animation Studies (Solomon 1987a) through to the contemporary era (Wells 2011) with the various nuances of the form still under debate. As there is no written commitment on animation archives it can be assumed that we have no written commitment on the parameters of animation within those archives.

Whilst animation studies has flourished without the need to define animation, it can be supposed that those archiving animation materials do not encounter much of an issue in archiving to their own unwritten understanding or terminology of animation as many authors define their own terms based around a largely similar definition (2011). The second supposition that there is a uniformity to animation archiving, practiced by all those who use the term animation archiving has more potential to cause damage to the way in which the collection and management of animation material is perceived. When many collections of animation material to call themselves Animation Archives it creates the idea that they are bound by terminology, rules and a structure when there is no philosophy that binds them nor a practical guide or universal understanding that their practice adheres to. Incorrectly using the term Archive is also damaging when most locations have a collection that is not ordered by a system of data management or publically accessible.

In defining the term Animation Archive the current vernacular must be altered to better represent the true state in which animation materials are kept to encourage a greater communal approach to archiving animation material and managing said materials. Once this is done a philosophy and understanding of what an Animation Archive is can be understood through practice and peer review.

Worldwide Animation Collections

The overall practice of this thesis will focus on a collection of animation pre-production materials, as such an “animation collection”. Though there is no unifying descriptor or clarifying peer reviewed definition that links them, animation collections exist worldwide in various guises. Animation studios keep collections after production has ended in case they have to re-use or recycle the material and individuals hold onto material that they have either accumulated over the years or created themselves. Specific animation collections are not all that common in the UK (see: British Animation Collections) and there is currently no authority or commission set up to regulate the methods or definitions of practice that an animation collection would adhere to.

Looking abroad it is noted that individuals and organisations have decided to take care of their animation collections in different ways. These different collections demonstrate a myriad of possibilities, problems and solutions that serve as examples in the construction of a practice and philosophy of animation archives.

What follows is a survey of animation collections known to the author, it is by no means complete.

Netherlands Institute for Animated Film

In some countries there is a legal deposit system by which filmmakers (including animators) donate their film to be stored in an archive once production has ended. A law such as this has never been implemented in the UK and as a result institutions such as the BFI have to rely on voluntary deposits from individuals and companies. The task of building collections without any legal requirement to do so is a daunting one and one which leaves huge gaps in the timeline of animated films as potential collections are often lost due to indifference to their need. For example, an elderly animator dies, leaving his family with the task to clear up the remains of his animation career. If the family don’t understand the worth of the items the deceased had been collecting they could be thrown away. Another example would be of an animation company forced into closure. It would be easy for the company to just destroy the

material in their possession as, like the family, they have more pressing administrative matters to attend to.

A reflection on the need and urgency of correct preservation of animation is available in *The Dutch Animation Collection: A Work in Progress* (Peters & Bosma 2011) one of few articles that address the pressing need for archives and collections dedicated to animation. The article, commissioned by the Netherlands institute for Animation Film (NIAF) and written by Mette Peters and Peter Bosma focussed on the efforts made to safeguard Dutch animation heritage by using archives and collections. Though Dutch animation has a history akin to many other European countries much of its history is being lost due to insufficient preservation. This has damaged the legacy and heritage of Dutch for future generations to enjoy through screenings or debate in research. The all too shocking reality of this situation is that once the films have gone they are lost forever and whatever potential purpose they would have had disappears with it. NIAF no longer operates and so can no longer continue its work or follow up on the articles points. This leaves us with a brutal reminder of the fragility of the arrangements that seek to protect animation. Some work on animation does continue, however, in the Eye Institute, Amsterdam.

The all too broad concept of items being “lost” is broad due to the numerous reasons that any number of items can be damaged, destroyed or simply forgotten. In some cases items are literally lost due to poor management - a prime example of this is in 2014 lost episodes of the TV series *Doctor Who* were discovered in Nigeria “...left gathering dust in a storeroom”.¹² These were recovered to the delight of *Doctor Who* enthusiasts worldwide as the BBC had a policy of disposing of tapes to clear storage space (Bryant 1989) leaving the collection of the long running show incomplete. This example of a lost collection has a happy ending and even though there is still a substantial amount of episodes from BBC Television series of the 1960s missing this find is a welcome one. Even items within a well managed collection are still subject to the elements and can find themselves decaying if they are not stored correctly. When a storage need is met the work preserving the collection must continue to ensure that items are preserved to the best possible conditions. Equally, all archives have little time or the resources to address all the materials within them, so often they do not know if they have important or rare material until they are discovered by accident.

Without the chance discovery of the *Doctor Who* tapes the episodes could have been lost forever and it must be assumed that the popularity of the show ensured that the tapes were not discarded when they were discovered and action was taken. Unfortunately the work of those aiming to save Dutch animation do not have the same luxury of having people call them

¹² *Doctor Who*: Yeti classic among episodes found in Nigeria
<http://www.bbc.co.uk/news/entertainment-arts-24467337>

when a tape or piece of artwork is discovered so piecing together the animation heritage of the Netherlands does not have the advantage of worldwide recognition on the scale of *Doctor Who*.

Peters and Bosma's work debates the issues surrounding the Dutch system of legal deposit where government funded films are obliged to legally deposit their film into an archive. Once a film is handed over and deposited it won't necessarily end up with other films of its category in a dedicated place for them as the government assign destinations (collections) seemingly without consideration. The issue is that there is no collaboration between these separate collections and archival systems create problems when trying to survey the current status of which films do and do not form a part of the collection. Maintaining a collection is a huge concern that requires tremendous orchestration at all levels, from the preservation decisions that are applied to each item to the wider concerns such as arranging the items into an accessible system that outsiders such as researchers can access for their work. Accessibility and awareness is key to the continued survival of any collection and so the work of ABAC brought the concept of an association between archives in the UK to animators and animation collectors.

ASIFA Hollywood

Items in the Dutch animation collection may face the issue of recognition in the works surrounding their debate. As the works are not well recognised it is down to academics and enthusiasts to convince the public that their work is of value. This is sometimes the initial setback for collections and the reason that some collections disappear into obscurity.

However, there are collections of relatively well known productions that face the same issue. Just because someone is well known it doesn't necessarily mean that the collections themselves are in any way protected by being in the public eye. The Hollywood branch of ASIFA¹³ (ASIFA Hollywood) have a large collection of materials that they have accumulated since they began collecting materials. The ASIFA Hollywood collection had been collecting materials for years before the collection became unmanageable. The sheer volume of material meant that certain parts of the collection were inaccessible. In 2011 when ASIFA Hollywood elected Frank Gladstone as president, they called upon the assistance of The Academy of Motion Pictures Arts & Sciences (AMPAS) to curate and house the collection (Flores 2015). According to Anne Coco, the graphic arts librarian from AMPAS it took six

¹³ International Animated Film Association (Association Internationale du Film d'Animation) organisation founded in 1960 to promote an international communication and appreciation of the animated art form.

months of riffling through the collection before they could reach boxes that were inaccessible. Work continues on the collection to make it accessible via the AMPAS database.

The good will of ASIFA Hollywood led to many valuable materials being saved, though it took intervention and the strategy of a new president to transform the collection from a literal pile of boxes to an archive. Calling upon the assistance of AMPAS has no doubt made this achievement possible.

The Disney Animation Research Library

If you were to stop a stranger in the street and ask them to name an animation studio or company, the chances are that they would name Disney first. The company itself has many facets to its name now, but it started as an animation studio. Over its history, materials from the company's animation history have been collected and stored by the company in what was once affectionately referred to as the "morgue" but is now known as the Animation Research Library (ARL). Set up in 1970 by Dave Smith the location has grown to house over 64 million pieces of artwork from the company in a location that is both temperature and light controlled. The ARL itself is not a publicly accessible library of sorts, visitors must pre arrange their visit and are not allowed to disclose the location of the collection. The ARL also prepares materials for exhibition and has a dedicated design team that handles the design of such exhibitions. The materials stored can be used by animators or executives at the company who wish to use them for reference when on sequels merchandise or other design research requirements (Mason 1998; Cookney 2013).

This is perhaps the vision we have when we think of what an animation archive could be. A temperature controlled location responsible for maintaining and protecting the legacy of the art form. Though restrictive access contradicts the name "library" as this is more of an internal resource than the publically accessible interpretation of a library one may expect, The scale and financing of the collection is commendable in that it protects the legacy of Disney animation.

Conservatoire d'Art et d'Histoire

Located in Annecy, France, the museum houses a collection of 5,000 materials related to animation as well as 600 “pre-cinema” objects and 600 posters. Nearly 400 film makers and more than 30 countries are represented in the collection (Conservatoire d’art et d’histoire Annecy 2016)

The collection is closely linked to The Annecy International Animation Film Festival though it officially stemmed from a 1956 exhibition during the IX Cannes Festival when the popularity of the exhibition prompted organisers to propose a museum though it wasn’t until 2005 that a permanent exhibition in the Conservatoire d’Art et d’Histoire was established.



Figure 5: Conservatoire d'Art et d'Histoire collection on display (Steve Henderson 2016)

Though this is not an exhaustive list of the animation collections that exist internationally it does give a flavour of the none regimented nature of animation collections and how they respond to the needs that their funding institutions grant them. There are collections that exist within companies and within other collections (AV or moving image collections for example) in museums that have not been noted because of the lack of exposure to their existence. In the UK, exposure and a close working relationship between collections has been the goal of The Association of British Animation Collections (ABAC) an umbrella association of UK collections.

The Association of British Animation Collections

The initiative that would become ABAC came as a response to the “Aardman fire” in 2005 (Savill 2005; Wells 2016) which saw 30 years of Aardman history destroyed when a warehouse containing production material caught fire. This fire gave the Animation Academy at Loughborough the incentive to pursue production material care and “preserve, conserve and value animation production process artefacts and documents.” (2016)

Beginning with a meeting between Prof Paul Wells and Paul Goodman of the National Media Museum on 13 November 2008, the conversation to begin what was termed “British Animation Archive”. The initiative was put in place to enhance communication between known collections in the UK. The organisation was to be established to address the following issues:

There is no single organisation in the United Kingdom that collects, maintains and develops a comprehensive collection of British animation. As a result, elements of the industry are being lost for posterity; disposed of through lack of a cohesive plan. As a result, the United Kingdom is losing a wonderful artistic and technological legacy (Wells 2016)

On 3 Feb 2010 the Association of British Animation Collections (ABAC) was formally launched at BAFTA. At the launch guests were invited to discuss the possible direction of an umbrella association that would act as a communications link between different archives and collections.

The meeting notes from the day (taken from Wells 2016) also established the reasons for setting up an archive. Reasons included stating the opinion that animation is a distinct film form and not a genre. and that studio closures, lack of storage space for existing studios and the death of individuals holding personal collections, material will be “inevitably and irrevocably lost”. Of the materials themselves, distinctions were laid out.

Simply, the specificity of the scripts, storyboards, model sheets, preparatory visualisation and design work, animatics, sets, puppets, props, data files, production records etc in the process of making animated films, are also the intrinsic aspects of what makes animation distinctive, and consequently, present challenges to archives and archivists in their preservation, conservation, and further use. (2016)

These could be viewed as the beginning of a philosophy, the type of philosophy required in the establishment of animation archiving as a distinct practice (see: The Practice and Philosophy of Audiovisual Archiving).

The beginning of a philosophy would have to be peer reviewed. Crucially, those attending the meeting were asked to contribute their thoughts on the subject of British animation by answering five core questions. These answers give an indication of the mood and the possible direction of British animation collections during ABACs formative year.

- Why have you come to this event today?
- Given that it is inevitable that British animation materials will be lost / 'skipped' / not recognised, what 'British Animation' should be saved? (What kind of materials, from what period, etc ? How should we judge what's important?)
- What do you think ABAC as an organisation should do / prioritise? What are the key issues it should address?
- What resources 'in spirit' / 'in kind' / 'in principle' / 'in cash' can you offer ABAC?
- What next? (2016)

The following observations have been made from the responses in the document.

Why have you come to this event today?

In answer to the first question, the majority of people attending were part of the industry as either practitioners, educators or archivists. They were interested in being a part of a "more connected community" which would connect the animation industry with educational sectors such as libraries and archives. It was also noted that the group seemed interested in the "seemingly neglected" form of animation to be given a voice by an invested group, giving the neglected form better status in public forums.

What 'British Animation' should be saved?

In answer to the question of "What 'British Animation' should be saved", terminology seemed key. It was said that further definition would be needed for what a British animation is. Immediate questions posed were; would it include work made by a British animator in or out of the UK or a foreign animator working in the UK? This question clearly led to further questions that were not addressed in the meeting or subsequently.

This vital question was not answered in the meeting and cannot go unaddressed. Should the work of a Hungarian working in the UK be declared British? One wouldn't suggest that the work of Halas and Batchelor isn't British, even though Joy Batchelor had to renounce her UK citizenship and become an "enemy alien" for a period when she married John Halas whilst creating what we would call British animated films at the start of the second world war (Halas

& Wells 2006). Likewise the work of Australian born animator Bob Godfrey isn't considered Australian animation simply because of the director's birthplace. If this is investigated further it seems to work both ways, the work of foreign-born people working in the UK is seen as British and so the work of British people working abroad is declared as the work of whatever country they work in. British directors Sam Fell and Chris Butler directed *ParaNorman* (2012) an American feature film, set in an American town, telling a very American tale of Witches and zombies set against a "Salem" backdrop. When we look at production, UK animated productions are sometimes made overseas, an immediate examples being *Bromwell High* (2005), a TV series directed by a British animator Pete Bishop, set in the UK, written and directed in the UK with a UK cast but entirely animated in Canada. This complicates whatever simple systems could have been devised even further, adding extra details that need to be considered.

In defining a production as British, it clearly isn't as simple as defining one element of the production such as the production location or the director's birthplace. To answer the question, a series of further questions must be answered. The British Film Institute (BFI) distributes funding and tax relief to film, documentary and animated productions that define themselves as British. In order to qualify as British production proposed films are scored using a points system. The Cultural Test For Animated Programmes, has a total score of 31 with 16 points needed to pass as British. Categories distributing points are weighted different across four sections, (A) Cultural Content (16 points available), (B) Cultural contribution (4 points available), (C) Cultural hubs (3 points available) and (D) Cultural practitioners (8 points available)

Table 2: BFI Cultural Test for Animated Programmes

	Section A – Cultural content	
A1	Set in the UK or an EEA state or (Up to 3 points will be awarded for set in an undetermined location)	Up to 4 Points
A2	Lead characters British or EEA citizens or residents (or characters from an undetermined location)	Up to 4 Points
A3	Animation based on British subject matter or relates to an EEA state or underlying material	4 points
A4	Original dialogue recorded mainly in English language	Up to 4 Points
	Section B – Cultural contribution	
B	Programme represents/reflects British creativity, British heritage or diversity	Up to 4 Points
	Section C – Cultural hubs	
C1	At least 50% of the animation shooting or visual design or layout & storyboarding or VFX takes place in the UK	2 points
C2	At least 50% of the music recording or audio post-production or picture-post-production or voice recording takes place in the UK	1 point
	Section D – Cultural practitioners	
D1	1 of the 3 lead directors is an EEA citizen or resident	1 point
D2	1 of the 3 lead scriptwriters is an EEA citizen or resident	1 point
D3	1 of the 3 lead producers is an EEA citizen or resident	1 point
D4	1 of the 3 lead composers is an EEA citizen or resident	1 point
D5	1 of the 3 lead actors/voiceover artists is an EEA citizen or resident	1 point
D6	At least 50% of the cast are EEA or residents	1 point
D7	At least 1 of the 7 key HoDs is an EEA citizen or resident	1 point
D8	At least 50% of the crew are EEA citizens or residents	1 point
Total		31 points

The above table is taken from the BFI website and is accompanied by guidance notes (BFI 2015) that go into further detail. As an example, the table above states in section A that there are 4 points available if the film is set in the United Kingdom or the EEA (European Economic Area), there are caveats to this that determine the amount of points awarded. If at least 75%

of the programme is set in the UK/EEA the film is awarded the full 4 points, if 66% of the programme is set in the UK/EEA the film is awarded 3 points and so on. Interestingly if a programme is set on a “fantasy planet of land” or to put it another way, a place that isn’t explicitly identified as a known place outside of the UK/EEA, points can be awarded to it. This is a look at the way that the animated form represents what is seen as British, further down the form there is a more detailed look at the film makers and staff working on the short.

If we take the logic of the BFI Cultural Test for Animated Programmes and apply it to the animated films attached to the film makers mentioned earlier we see that *ParaNorman* (dirs. Sam Fell, Chris Butler) is still very much a US film as 0% of it is set in the UK, whereas the films of Halas and Batchelor and Bob Godfrey could qualify under these terms should the same table be applied. The same would apply if, instead of looking at the subject of the films, we looked at the staff in sections C and D. A table such as this, or a unique one that responds to the specificities of animation production material needs devising to service the British animation question for ABAC.

Returning to the five core questions posed in the ABAC meeting, answering the British question means that priorities could then be taken on what material to acquire. Of the materials already acquired and housed in existing museums, archives, libraries and private collections, a sense of what was already housed was a priority to build up a picture of what currently resides in museums and collections in the UK.

What do you think ABAC as an organisation should do / prioritise?

The priorities were split into Strategy, Practices and Public Role. Of Strategy, it was suggested that policy makers join the steering group. Creating policy and outlook was also suggested to aid in the creation of a “mission statement”. It was also suggested that on going awareness should be raised amongst animators who are often too “preoccupied with the immediacy of commercial, exhibition or broadcast demands, to understand the value of their work, and that it may have ‘a future’ beyond its production.” (2016)

In addressing the priorities under the heading practices, research into current collections, developing interfaces between collections to allow the flow of information to more freely, as well as creating a place where public data on animation archives could be accessed and the development of a temporary storage solution for extant collections was mentioned. Overlapping into the priorities under the heading of public role were the suggested creation of a public face, to operate as a hub and to extend the interest of the collection, creating a public point of access for materials and to operate as a lobbying body for the industry.

What resources can you offer ABAC?

The immediate observation from the attendees was that there were numerous challenging issues that needed to be addressed in order to create both the function and the identity of ABAC. Once those were addressed the issue of seeking funding could be met. The members at the meeting agreed that as a collective, the umbrella association could hold some persuasion when representing and addressing the issues facing British animation achievement and heritage.

The meeting was concluded by the following thoughts:

The initial development of ABAC has been welcomed as a positive step, and all those currently participating in the dialogue about the emergent organisation recognise that the broad aims and intentions outlined as pertinent and appropriate.

Although ABAC was at the time fuelled with the ambition and the mandate to continue the work, the initiative became a victim of its time, as long term government cuts to funding for arts and cultural institutions shaped the work for future years (2016). Funding bids were rejected on the basis of funding bodies wishing to fund and sustain established projects rather than fund new initiatives.

ABAC continued its work focussing on raising the profile of British animation collections through events at festivals, retrieving pockets of funding for small restoration projects and with Prof Wells presenting at various conferences and forums. In 2012 finance for a co-funded PhD was secured to develop a data collection system and explore animation archives. This PhD is the result of that funding.

Though the work of ABAC continues through the Animation Academy and through the efforts of this thesis, the association has not had a follow up meeting since 2011. This is due to funding cuts, people changing jobs and moving on from positions they once held. Although it could be argued that the lack of communication between the initial members of the steering committee, due to illness, absence and redundancy and the lack of people replacing those who once held positions has lead to ABAC becoming stagnant and unproductive. Whilst members of the association may well no longer be in communication, there is still a mandate and a remit for ABAC and it is down to a lack of funding that the ambitions of that initial meeting have not been accomplished in the scale that had been hoped. Progress has been slow and hindered by financial restrictions, but it has been progress nonetheless and without it there would have been no persons or bodies willing to address the aims of ABAC.

Some UK collections have come to light during the course of this investigation, and communication has begun with them in the hope of continuing the goals of ABAC. These communications have been detailed in this second survey of animation collections based in the UK.

British Animation Collections

Far from being a single warehouse or repository of animation collections, ABAC aim is to act as a link between animation collections in the UK. There is no archetype for animation collections or archives, as each one contains different materials by different authors using different methods of animation, though there are similarities in the production process (the use of scripts, storyboards, certain production materials such as cels or puppets) and in the final, animated, outcome. Collections themselves may also be working collections as opposed to donated collections comprising of the life work of a dead individual who can no longer contribute to

Collections in the UK may include museums, companies and private collectors as well as animation studios of varying sizes. The variety of people holding archives and collections demonstrates the different uses of a collection. A company may use their collection completely differently to an educational institution or a museum. Animation companies (particularly stop motion companies) may repurpose sets and reuse puppets to create new characters for ongoing projects whereas items kept after a company no longer trades wouldn't be keeping the work for that purpose.

In the years since ABAC had its initial meeting and the individuals in the room were made aware of the association they had with one another the ABAC brand presented debates at festivals on a yearly basis using the linked collections to evolve a wider understanding within the animation community about the essential efforts that all animators should consider when they have finished their films.

As there is no set forum, membership or regular meet up for the representatives of the associated archives, there is also no open call for new members so there isn't a lot of public awareness or awareness in the animation community for people to come forward with collections they may have. The lack of regular meet ups mean that when archives change managers or people leave the company there isn't any formal introduction to them. During my time handling the Loughborough Animation Archive Collection I made the effort to re establish relationships between the collections and in some cases conduct work that ensures the survival of vital materials.

As the practice taking place during this investigation developed it did so not just in relation to the LAAC but also through investigation and discovering other similar collections it was necessary to gather an understanding of the current state of collection and archives that specifically carry animation material and identify as Animation Archives. In doing so connections were made and maintained with collections that were not part of the initial ABAC meetings such as the Cosgrove Hall Films Collection and acting as a representative of the LAAC connections were established with new custodians of collection such as the Bob Godfrey Collection.

Connecting with such individuals and exploring their various methods of practice delivered a better understanding of current practices in animation archiving including document handling and data collection and presented a larger scope of what an animation collection can hold as the LAAC holds mainly paper based material and other collections hold puppets or other materials. Any system of collection management that would be developed would have to respond to the many materials an animation archive may hold.

University for the Creative Arts

University for the Creative Arts (UCA) at Farnham houses a large collection of animation material from Bob Godfrey and Farnham graduate Daniel Greaves. The majority of the collection focuses on the work of Godfrey who passed away in 2013. The collection was begun by Anthony Harmon and maintained by a team of volunteers led by Aaron Wood and Katie Steed who refined the cataloguing process based on the work housed there (see: Assessing Documents). During the scope of this investigation the collection was managed by Rebekah Taylor, Archivist and Special Collections Officer.

On the 22nd October 2013 I visited the collection and was shown around by Rebekah Taylor and Jim Walker. On the 5th April 2014 Rebekah visited Loughborough to look at the collection there. These exchanges were invaluable and the perfect opportunity to share knowledge and get a better understanding of what each collection held.

In 2015 after animation company Tandem Films closed I ensured that the films of Academy Award winner¹⁴ Daniel Greaves were transferred from Greaves private collection to the UCA collection at Farnham.

¹⁴ Manipulation (dir. Greaves) winning Short Film (Animated) category at the 64th Academy Awards

The British Film Institute National Archive

The British Film Institute (BFI) holds animation production material in what it calls its special collections. The institute also employs a curator who deals with animation and non fiction, Jez Stewart.

The special collections at the BFI cover many areas of animation from many practitioners. One individual who held a collection throughout his life was Harold Whitaker. When an individual holds materials in a private collection they rarely do so with the intention of creating an accessible archive of sorts, in most cases their collections are more an accumulation of their life work, not intended for public consumption. Whitaker was born in 1920 and so found his professional work develop as the animation industry in the UK blossomed, working in the 1940's for Anson Dyer and later Halas and Batchelor when Dyer's studio was absorbed by them to complete work on *Animal Farm* (1954). He would continue to work for Halas and Batchelor and in his later years he would work for Animation People (one of the collections present in the Loughborough Animation Academy Collection) and author *Timing for Animation* (1981), a key text amongst animation practitioners (Stewart 2014).

Although an inextricable figure in the history of UK animation, Whitaker himself was a shy individual who appeared to have no interest in self promotion or awareness of the value of his legacy, leaving no will or instruction as to what to do with his personal collection of artwork from his career (approximately 20 boxes, a few display boards from an exhibition, plus 3-4 shelves of outsized material) after his death. Leaving behind no children, it was left to his extended family to decide what to do with the various collections in his home. As something of a polymath, Whitaker's interests covered not only animation (of which he was best known) but also archaeology and painting and so he left behind personal collections that covered these areas. Fortunately for the sake of his animation collection Whitaker had collaborated in his final years with Vivien Halas on a documentary on her father John Halas, *Remembering John Halas* (Halas & Pickles 2012). This communication brought to light the extent of Whitakers personal collection and its importance. Jez Stewart of the BFI had maintained contact with Whitaker and his family so when Whitaker passed away Stewart's communication with the family continued and the work of Whitaker was collected and stored at the BFI¹⁵.

This demonstrates the continued need for communication between animation practitioners and animation collections as Whitaker's collection will now be collated and made available as a resource for research. It isn't too hard to imagine a scenario where communication with figures like Whitaker does not take place and collections and material that is vital to telling the

¹⁵ J. Stewart (personal communication with the author, July 11, 2016)

story of UK animation production simply disappears into oblivion. With this in mind it is important to consider outreach as a key task of ABAC.

The Halas and Batchelor Collection

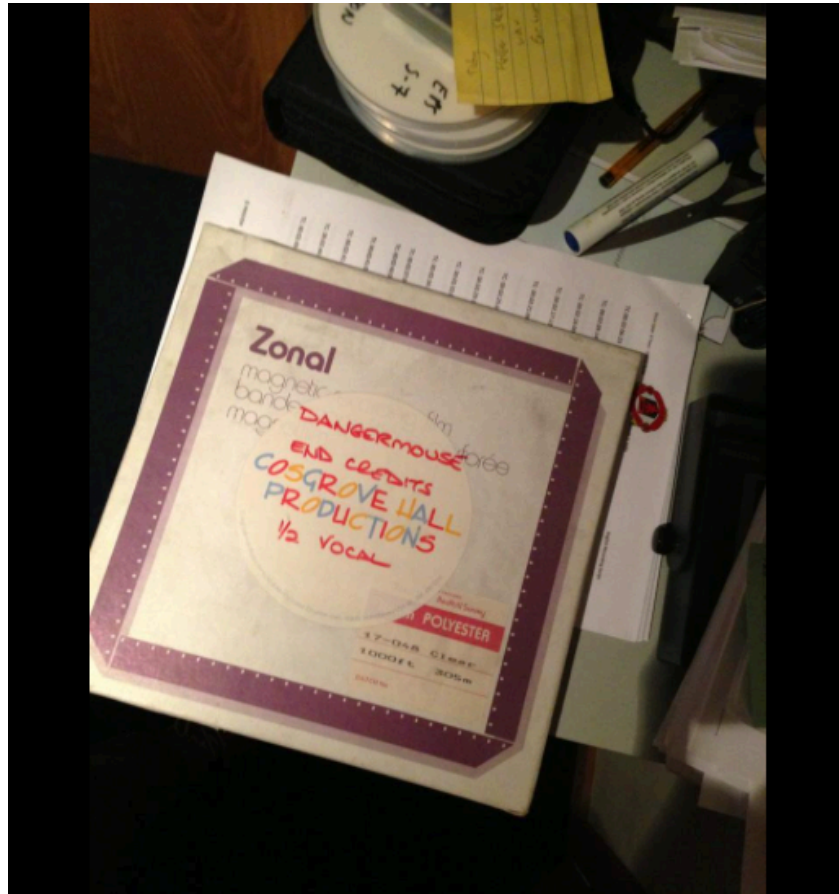
The Halas and Batchelor Collection comprises of the work of the Halas and Batchelor Studio. The collection was under care of company founder John Halas until he bequeathed it to his daughter Vivien. Vivien's role since has seen the collection managed in a way that promotes the legacy of such an important studio.

The collection maintained the legacy of the studio, using the collection to create books, documentaries and exhibitions to raise the profile of the collection in much the same way that the Ray and Diana Harryhausen Foundation has done (see: The Ray and Diana Harryhausen Foundation Collection). In November 2014 when Blue Dolphin films said that they were going to dispose of the 35mm prints of *Animal Farm* (1954) I co-ordinated the transfer of the prints to the National Media Museum in Bradford to ensure they were kept safe.

The close link that Vivien Halas shares with ABAC and the Animation Academy proved worthwhile when Halas decided to retire from maintaining the collection. With no museum willing to take such a large collection it was split in two, with a large amount going to the BFI National Archive and AV material going to the Loughborough Animation Academy Collection. Prof Wells and myself picked up the material personally in March 2016.

Cosgrove Hall Films Archive

Cosgrove Hall Films produced animated television programming between 1976 and 2009. When the company ceased trading the material from the company was placed in storage at ITV Studios. In 2013 the collection was due to be discarded when ITV moved offices to new premises at the purpose built Media City in Salford. It was at that point that ITV producer Westley Wood took custodianship of the collection, titled the Cosgrove Hall Films Archive (CHFA). This custodianship was reviewed by ITV in 2015 when it was decided that Wood could continue to safeguard the collection. I became aware of the existence of the collection when Wood using the social media platform Twitter to tweet my animation magazine *Skwigly.com* with a picture of one of the pieces that he was adding to the collection.



Animation Toolkit @AnimationToolkt · 8 Jan 2013
 @skwigly @marcsilk @DJAnimations Great bit of Dangermouse memorabilia. Just Found lying about at Flix Post Production!

← ↻ 3 ❤️ 1 ...

Figure 6: Screen grab of tweet (source: twitter.com)

This began a dialogue between Loughborough and the CHFA which continues as the collection is in search of a permanent location and cataloguing system. The CHFA only represents about 50% of what exists from Cosgrove Hall Films as Brian Cosgrove, co-founder of the studio holds a large personal collection of the materials.

Communication on social media turned rumour into fact. When research began on animation collections in the UK the only news available on the Cosgrove Hall collection was hearsay and rumours of it being destroyed, but it was an online presence on social media that opened up communication channels. This demonstrates the need for ABAC to be an open communicative forum with an active social media presence and public face.

The Ray and Diana Harryhausen Foundation Collection

Perhaps the highest profile animation collection in the UK, the collection spans the work of special effects film maker Ray Harryhausen and contains items dating back to the 1930's.

The high profile of the collection is down to a small but dedicated crew of people maintaining the legacy of Harryhausen through talks, exhibitions and books which give fans and enthusiasts a glimpse into the creative practice of Ray Harryhausen. Speaking with collections manager Connor Heaney and trustee John Walsh it was possible to get a clearer idea of the collection beyond the public view available in the books.

The collection comprises of an estimated 50,000 items which in 2016, have for the first time been collected in a purpose built place. They do not allow public visitors and the collection reviews applications to view the material for research purposes on a case by case basis. To date though there has been many books written on and by Harryhausen using the collection as a resource (Harryhausen & Dalton 2005; Harryhausen & Dalton 2011) and the collection is regularly on public display through exhibitions. The foundation honours the instruction of Harryhausen himself who before his death created a “letter of wishes” with instructions to safeguard the collection and create two scholarship programmes in order to pay for the education of an undergraduate student.¹⁶ The collection also aims to create a Ray Harryhausen museum.

Although the foundation and collection have no immediate concern in using the collection for postgraduate research purposes make this seem like a missed opportunity, the commercial mindedness and the efforts taken in securing the legacy of Harryhausen through his collection is a fine example of how to engage and continue such a legacy and perhaps establishing a solid foundation of public engagement could be the starting point to begin such work. The Harryhausen Foundation accomplishes this through the aforementioned exhibitions as well as social media on Facebook and Twitter and Heaney and Walsh host a regular podcast focusing on the work of Harryhausen.¹⁷

The National Media Museum

Located in Bradford, the National Media Museum (NMeM) is part of the Science Museums Group (SMG) which includes the Science Museum in London, the National Railway Museum in York and the Museum of Science and Industry in Manchester in its family of museums. The museum itself contains animation collections from the history of animation including items taken from other collections (such as UCA Farnham and Halas and Batchelor) to form part of its permanent exhibition on animation. The exhibition itself is the largest of its kind in the UK.

In 2013 the museum was put at risk when proposed spending cuts signalled the possible closure of the NMeM (BBC News 2013). A public campaign, led by ex museum employee

¹⁶ J. Walsh (personal communication with the author, July 15, 2016)

¹⁷ C. Heaney, J Walsh (personal communication with author, July 13 2016)

Tom Woolley gathered over 37,000 signatures in an online petition using 38degrees.org.uk and further signatures in other online petitions and lobbying from MPs and councillors saved the museum from closure (Tom Woolley 2013; Dr. Michael Pritchard 2013; BBC 2013).

Had the museum closed, as well as the implications for the staff, building and the local economy there would have been a considerable risk to the future of the collection.

There are other collections in the UK housed in museums, in studios and in private hands that have not been mentioned here. This was a brief survey of the collections that I had personally come into contact with during the course of my studies.

The Loughborough Animation Academy Collection

The collection that this investigation will use as primary research material is the Loughborough Animation Academy Collection (LAAC). What follows is a chronicling of its growth and development.

The impetus to begin what would become the collection was led by John Grace. Grace was an animation veteran, creator of *The Adventures of Portland Bill* (1983) and co-creator of the first fully CG television series, *ReBoot* (1994). Grace oversaw the arrival of the original donations to the collection which comprised of the work of closed animation studios in 2004. These were Animation People, Halas and Batchelor, Silverfox and Sirol. Grace had begun work in using the materials in the collection to create an interactive CD-ROM that would serve as an educational tool, but passed away in 2004 before the work could be completed.

2005 saw the arrival of Prof Paul Wells formerly of the University of Teesside arrive to establish the Animation Academy which would from then on control the collection.

After the 2010 ABAC launch, and the profile of ABAC raised, defunct animation studios donated their collections to the LAAC. These companies were HOT Animation, Triffic Films, Right Angle Productions and collections from the Wilf Irwin family. In 2016 the collection was boosted once again by a sizable donation of materials from the Halas and Batchelor collection which, upon the retirement of Vivien Halas, the collections owner, had to be distributed to the BFI and the LAAC in order to avoid it being thrown away.

Understanding the collection

When this investigation began the collection had been laying dormant in storage for a number of years. There was no formal handover or walk through of the collection though information about the history collection had been available through the assistance of Andy Chong, an

Animation Academy member who worked with John Grace, who assisted in answering questions. This was due, at the time to my supervisor Paul Wells' absence due to illness, and my other supervisor having no prior experience with the collection. This presented a platform with limited interference and the ability to begin construction of a data management system. Before a data management system could be constructed the material itself had to be safeguarded and made more accessible for this study.

The University had stored the boxes in one of their vacated buildings, the Frederick Street Building, the building was initially a teaching building purely for Visual Communication students where the collection stayed after the building had been vacated. Regulations at the university created issues around accessing the collection for study. Only members of staff were allowed access to a building that was no longer in use, but still owned by the university. Access issues were resolved by January 10th 2013 when the collection was first made available for this study. Whilst storage in an unused building wasn't the ideal situation the location was cool, dry and some of the boxes were stored off the ground. Such conditions are the minimum to consider when managing a collection.

On the initial visit to the collection an inventory was taken of the following¹⁸:

449 Animation Boxes

12 Large Animation Boxes (for backgrounds)

157 Archive Boxes

41 Film Canisters

6 Negative boxes

4 Picture frames

On a subsequent visit another locked area was discovered that contained an additional amount of boxes and film cans.

The volume of material and the location continued to cause access issues. Access to keys for an abandoned building are difficult for a researcher to get hold of, so it was decided that a sample of the material would be moved to Edward Barnsley building, close to the postgraduate research (PGR) room. A small sample amount of the collection was selected for study, part of the HOT Animation collection. It was relocated to the Edward Barnsley Building, but without a dedicated room it was into cupboards, backrooms and storage areas, scattering the collection throughout the building. The items that were not required for immediate study

¹⁸ A full list of what was recorded on the first visit to the collection can be seen in Appendix A.

such as the animation cells were tightly packed into a room so access to the boxes was difficult, though access wasn't necessary.

An area in the PGR room was set aside, initially full of the Triffic Films collection as that was then the focus of the investigation¹⁹. The room contained the boxes needed for study and one box could be investigated at a time for relevance for study. By taking a sample of the material to a more accessible place the working environment to continue the study had increased greatly. Instead of a dusty abandoned building that required keys to be granted by security when required the new location was preferable to the old one.

Accessibility is a key component of maintaining a collection. With the collection present as a literal pile of boxes, it was important to attempt to adhere to the guidance and best practice consulted from guides such as ISAD (G) and PD 4545 and try and get the collection into a position where it could be investigated and used for research purposes. Whilst the optimum scenario of a temperature and humidity controlled room was not a possibility due to the distinct lack of funding, maintaining the collection in a safe place was the best that could be achieved. The initial experience with the collection demonstrates the pragmatic difficulties that a collection of this size may face.

The Flood

Unfortunately this arrangement would not last long and the conditions that the materials had found themselves in would change drastically. On the weekend of the 25th May 2013 a vandal broke into the Edward Barnsley Building and left taps running on the top floor (Watkins 2013). Being the bank holiday the taps were left to run for at least 24 hours before a security guard noticed the break in. This caused considerable damage, flooding the whole building. Although most parts of the entire building required at least some form of repair due to the damage caused by the flood, remarkably, only one of the three locations that the collection was stored in was affected by floodwater. Although water from the floor above was seeping (in some places gushing) through the ceiling and into rooms below, the cupboard that the boxes were kept in remained dry with no water raining down onto the boxes from the ceiling. However as the floor outside the room flooded, water flowed into the cupboard under the door and was soaked up by eight boxes. It was remarkable that this was the only damage done to a mainly paper based collection when the structure of the entire building was crumbling due to damage. As much of a saving grace this was, the entire collection would have been safe from damage if the collection had been stored to the specifications recommended by PD 5454 Guide for the storage and exhibition of archival materials (The British Standards Institution 2012) that recommends that storage compartments (boxes) be stored 150mm from the floor.

¹⁹ The study would later change it's focus to British children's television animation.

This would not have been possible as the lack of space available to the collection meant that storage arrangements had to be improvised using any available space and not the ideal facilities one may image when one thinks of an archive or a collection. Simple commodities such as shelving were not available.

The lack of proper facilities in which to store the collection indirectly damaged the collection, demonstrating the real need for a permanent location for the collection, or at least a location that could have met the basic requirements set out in PD 5454. When the floodwater entered the room the boxes were held in, the front boxes soaked up the water acting as a barrier and protecting the boxes behind them which remained dry as a result. These wet boxes were taken away from the location and the damage was assessed by hand before they were taken away to be professionally restored. The items were taken away to Harwells who undertook the process of drying out and restoring the items. Fortunately all of the items were not damaged to the extent at which they were beyond repair and they were returned to the university and back into the collection.

With the Edward Barnsley Building under repair the collection had to be moved once again to another free space. The School of Computer Science on the campus had a spare office that was available which was used to store the collection whilst repairs continued on the Edward Barnsley building.

When the Edward Barnsley Building was repaired the space that was once used to store the collection was no longer made available and an alternate location had to be sourced. At the time, the university charged office space out at £10 per square metre, per year. Given the size of the LAAC and the lack of a revenue stream, there was no possible way of affording to store the collection in locations as of before. The possibilities of commercial storage were assessed and considered and the consideration of disposing of the collection was also looked into as a last resort. The troubles facing the collection found the attention of Tim Walton who managed the universities estates. Having heard the situation the collection was in he arranged a space for the collection to be housed. The new location was in the Charnwood Building, tucked away in the plant room in the roof space. The location was dry, accessible (provided health and safety regulations were adhered to) and large enough to work in. The space was free to use and a lockable cage was built around the collection to secure it further. For the first time it would seem that the collection had found a place where the process of archiving could begin. With the available space it was also possible to store the items the suggested 150mm from the ground using shelving and wooden pallets. Logistics for the moving of vast amounts of material from various locations to the new location were handled by myself with a professional removal firm assisting.

Whilst it was not originally the intention of this investigation to have any practical experience of disaster management and logistics the two practices were placed in the forefront of the operation to safeguard collection, the act of moving every box, emptying the water damaged boxes and getting a hands on look at the material delivered the opportunity to get a closer look at what the collection consisted of which may not have happened in such a way had the storage problems and water damage not presented themselves. The water damage also allowed the opportunity to react to an emergency in the way an archivist would have had to do, delivering invaluable, first hand, practical experience.

Handling the Flood

The practical aspect of the investigation always centred on the collection itself. The practice can easily be simplified and defined as developing an understanding the role of an archivist and relationship with the collection and taking that knowledge, developing a system of management that relates to animation and then in the role of a researcher complete an investigation. In this role as a quasi-archivist the primary objective is to be able to use the collection as a researcher but given the level of responsibility needed as the sole individual using the collection its welfare must be at the forefront of every decision made regarding the collection. Whilst a researcher would traditionally request materials from an archivist I find myself in dual roles, organising the material and “digging through” the boxes to discover what is in them, recording that information into a specific data management system relating to the collection and then making an informed decision as a researcher as to what items can be best put to use in answering the thesis question. Accessing the material in the collection when handling the flood was pragmatically done in order to save the items in the collection.

Whilst the flood had its obvious drawbacks it was perhaps the most preferential of disasters. Had the collection been stolen or if there had been a fire there would be no collection to research and a large hole would have been left in the animation heritage of the UK which the collection represents. Problems with funds and disastrous events such as fires and floods are not the unfortunate circumstances of an unlucky few but also something that can affect large institutes and even countries. Bosnia is facing the unfortunate consequences of a fire to their collection and a serious lack of funds to go towards the restoration and continued preservation of its collections in the Presidency Archives that were destroyed by anti government protestors in February 2014.²⁰ The tragedy of the fire is worsened by the fact that Bosnia seems almost reluctant to spend any money on its cultural heritage.

²⁰ Saving Bosnia's past from the ashes <http://www.bbc.co.uk/news/world-europe-30798537>

Cuts to the culture budget led to the closure of the National Museum in 2012, after its employees had gone for a year without pay. A valuable Jewish manuscript, the Sarajevo Haggadah - a symbol of the city's proud multi-cultural history - remains inside the abandoned building.

Whilst the government will not invest in the preservation of the country's historic documents volunteers have started to digitize what remains of the collection in an effort to save them from further damage and make the digital copies of the items available for researchers. Chris Bennett a British journalist and historian created the Foundation for the Preservation of Historical Heritage to undertake the work. They are looking for international funding to complete the work.

The efforts taking place in Bosnia loosely reflect the efforts taking place in Loughborough. Alongside those efforts are the key issues that the situation presents which is the need to preserve heritage through the storage of items in both collections regardless of the conditions that are presented. Just as Bosnia's heritage is at risk due to the unfortunate circumstances that surround it, the heritage of UK animation is at risk if the LAAC or any other collection is put at risk.

Events like the flood as well as possible fires, thefts and mismanagement are an unfortunate reminders of some of the variables that must be considered when managing a collection.

The Proposed use of an Archive as Primary Research

The collection of animation research materials represents an opportunity to investigate animation to a level that has not been accomplished before. Apart from simply having a collection at the disposal of this investigation, what makes it a viable tool to use in research?

To answer this question we must remind ourselves what a collection or an archive exists for. According to Millar:

Ultimately, archives are kept in order to be used, for any number of reasons by any type of user. Researchers, scholars and average citizens refer to archives to find proof; to gather information for research; to illustrate, illuminate or explain. (2010: 19)

So, within this investigation what exactly is being used? What will be proven, what information will be gathered and what needs to be illustrated, illuminated and explained? Used in this investigation is the LAAC, a vast collection that represents many animation companies. Amongst the collection is perhaps the best represented collection, the HOT Animation

Collection. HOT Animation were the animation arm of HiT Entertainment and produced children's television shows in the UK. The production is well represented, and the materials that can be used for research to represent the production process perfectly. So why exactly keep all of the production materials which are no longer being used? The job has been done, a film has been made and the list of credits at the end of the film demonstrates the process and those involved. This would probably have been the attitude of those wishing to destroy the materials before it was collected by the Animation Academy. When HOT Animation closed its doors, to the liquidators and the people clearing the studio floor, the work had been completed and the items used to make the work now seemed redundant. To the layman, that is a logical conclusion, but to the researcher who had no involvement in the production process, the items represent a repository of research able to explain the production process in great detail. The items in the collection are more than just curiosities, they can be used to substantiate claims, verify events and confirm obligations (2010: 20), and on an animation production there will be instances where the items can be used in research for just these reasons.

The study of animation takes on various forms. The theoretical implications of a social study can lead work open to various methods of interpretation and elucidation. Studying a completed animated film is sometimes the first port of call, allowing the narrative to lead the researcher on a path that compliments the theoretical reasoning of others. *Girls Night Out* by Joanna Quinn is often described as a feminine or feminist film.

“...The soundtrack is a constant babble of conversation as the film opens, simultaneously defining factory life and sexual titillation by focusing upon the image of a passing conveyor-belt line of cakes as they are being individually topped with bouncing cherries. By the subtle implication of breasts, and the chorus of chatter, the factory, and indeed the narrative form of the animation, is gendered feminine.” (Wells 2003)

Though Quinn has never personally admitted the film to be a part of an agenda in any writing by her or in any interviews²¹, her work is interpreted as such because those studying it will use their own methodologies to identify the films to be of a certain classification through identifying features which have been added by the director to the film consciously or unconsciously. The boisterous roar of female Welsh factory workers accompanying animation of applying bouncy cherries to the tops of cakes is interpreted as evocative of the feminine form, and the exaggerated, caricatured animation that pays direct attention to the female figure is seen as evidence that these films are feminine. According to the parameters set by

²¹ J. Quinn (personal communication with the author, August 31, 2016)

the academics these interpretations are correct, but in asking the director herself she claims this was not explicitly the intention.

“It was a simple funny repetitive action. Maybe I did this subliminally but I certainly never intentionally made them look like breasts” (Quinn 2016).

Quinn also acknowledges the intention to apply “an atmosphere of female camaraderie” and so gendering this film as feminine is correct even if it was not the *conscious* decision of the director to imply breasts with the bouncing cherries. This study does not intend to debunk this method of interpretation but instead distances itself from such critical theoretical interpretations of films and instead looks at using empirical evidence to critically evaluate and contextualise the film making process.

In constructing and applying a system of data management that uses materials in an animation collection this investigation will demonstrate that, as primary research materials, animation collections are a valued commodity in the field of animation studies.

Importance of Empirical evidence

It is this process and these decisions that will be investigated within this thesis. The script is then used as a tool to inform the rest of the production and is used to create storyboards, for voice artist to record the dialogue and to assist animators. The finished script itself does not signify the end of the writing process as alterations may continue to happen after the final draft is made as voice actors record dialogue and even after the animation is shot “post-production” scripts are made to sell the show to overseas markets such as America where certain words are changed and the dialogue is re recorded to suit that market (for example a Pavement becomes Sidewalk). The collection houses examples of these scripts. The script will go on to inform future production on a series as writers consult them to ensure they don’t duplicate storylines or ideas. The collection also has material used in the creation of scripts such as notes from planning meetings, email correspondence and script reports. These supporting documents show how communication between the script editor, producer and writer shape the episode. By investigating this process through the production material we will be able to see a clear demonstration of the considerations that are taken in the writing of a children’s animated television production.

The Problem to solve, British Children’s Animated Television

The information that will be extracted from this collection will go on to define a British children’s animated television series, demonstrating not only the usefulness of this particular

collection but also establishing the case for “animation archiving” to be identified as its own distinct practice. With this in mind choosing the series that was used to represent a British animated television series was done so because of the volume of records that were held within the collection associated with it. The volume of records increased the scope of what was available to investigate. This thesis wishes to investigate the process of creating a children’s animated television series and so records that demonstrate that process and its evolution are much sought after. If a subject only had a single script available as evidence for a series there wouldn’t be much demonstration of the evolution of the writing process. Within the collection we have a large selection of *Bob the Builder* (1998) scripts that demonstrate this.

A script is not the only demonstration of the writing process; it is just a finished product of the many creative and editorial decisions that the team behind the series put into it.

Summary

Archives are repositories of information, recorded onto tangible material such as paper or into intangible systems such as electronic databases. The information contained within archives can be seen as evidential (Millar 2010: 19). This information is organised into a system where items or information can be accessed. Information systems are created to preserve orders and “respect du fonds” ensuring that there is a formal structure to the records that reflects an existing hierarchy of the material that relates to a specific collection. If information needed to be accessed from a police records database, they may be stored alphabetically, by dates, or be stored by crime ensuring easy accessibility. This investigation looks at animation materials in a collection, taken directly from a production and proposes that there is an order that can be created that compliments the material and makes it available through a system of data management to be used as evidence in an investigation.

When regarding an order that could be adhered to a collection of animation materials the logical solution is to follow the animation production timeline. Animation materials can often find themselves tied to a particular area of production. Sketches based on initial ideas are usually created before scripts and scripts are usually designed before storyboards etc. This ordering of animation materials lends it to fonds nicely as production created by studios can easily be assigned as sub fonds for the studio itself which is the main fond. It is believed that using animation materials for study – accessed through a system of data management will prove that the production timeline can demonstrate, via the documents themselves either annotated or not, the evolution of a production as the items in the collection relate to one another linked through production in the first instance when they were created and then relinked through a system of data management.

Though “animation archiving” is practiced the ideas that support it have yet to be recorded and evidenced through a critical, academic investigation. Whilst there are efforts in joint communication between archives and collections in the UK there is currently an absence in the “animation archiving” community of a joint philosophy that binds and legitimises the practice of animation archiving as a defined practice that responds to the needs of those specific set of materials designed and used for an animation production, in itself a distinct art form.

In defining animation archiving as a distinct philosophy the material held within them can be used to define and distinguish areas of animation practice, to investigate and to answer questions that the material can assist with as primary research material. There are areas of study, both academically and governmentally that do not recognise areas of animation as a distinct form of practice. This serves animation as a form badly when it is seen as a genre.

Using the collection an area of distinction can be made by investigating the practice evidenced within the records.

As well as executing the practice of creating a system of data management based on a collection of animation resources, the system created will be used to gain an understanding of one of many unaddressed areas of animation production which is represented amply by the collection. British children's television animation isn't currently distinguished as a form academically or recognised as such by organisations such as Ofcom or BARB, it is important that this oversight is addressed using the collection. This will prove that when organised as records, animation production materials can be used as primary research material, providing empirical evidence in the study of animation.

British Children's Animated Television Series

Introduction

Children's animated television series have been enjoyed by many generations and form a large part of a viewer's childhood. They are trusted by parents and guardians as a means of entertainment, education and information (Berry 1987). To this end the producers and the broadcasters of the content find themselves under constant scrutiny by academics and by regulating authorities such as the Office of communications (Ofcom) to ensure that the programs produced for children meet the exacting standards of parents and the regulations imposed by broadcasters.

The area under investigation is children's animated television. Children's animated television comes in a variety of guises with content created for different platforms such as cinema filling the schedules alongside content made specifically for television broadcast and that particular audience in mind. The method of broadcast is interesting, watching a cartoon such as *Tom and Jerry* (1940), *Mickey Mouse* (1928) or a *Looney Tunes* (1930) cartoon it may be imagined by the audience as an episode of a television program. However, they were created as short films for the cinema, and now find their shelf life extended as they are broadcasted, years after release rather than projected to a paying audience at the cinema.

Using these American theatrical animations as an example, the series of short films were not produced with an audience of children in mind, rather a general audience. Many of these shorts are based on conflict, or the "gag and chase" formula where as animated television series created in the UK are based on more "parochial, community-orientated vehicles" (Wells 2008: 152). The cosy stories in Smallfilm's *Ivor the Engine* (1959 - 1975-7) and the peaceful hamlets of Gordon Murray's *Camberwick Green* (1966) and *Trumpton* (1967) attest to this.

The origins and makeup of a British children's animated television series differ from the foreign shows they are broadcast alongside. By understanding the history of British animated television series we understand both the context of why the shows were created, and an understanding of the arena they were created for. As the collection will be used for primary research material investigations into the history of the companies used in this thesis has been undertaken to place them within animation history and offer context to further discussions about them. The company that shall be used in this study is HOT Animation and this thesis analyses what is perhaps their most critically successful show *Bob the Builder* (1998), which is well represented within the collection through production material. To properly analyse the *Bob the Builder* an understanding of the time it was created in and the audience it was created for must be considered. By examining items from the collection that relate to the company and the show will reveal the show's place in animation history.

It is important to make the distinction between British children's animated television series and their counterparts because they are representative of a different set of values to their foreign imported counterparts. As we see children's television under the scrutiny of academics that study the influence of "cartoons" we also see that there is no clear distinction between the types of animation in their results. Often coupled together as "cartoons" the idyllic worlds of *Postman Pat* (1981) and the boisterous, aggressive world of *He-Man and the Masters of the Universe* (1983) find themselves judged together, or the latter gets judged with the former presumably included. These studies are flawed and whilst the different genres of animation are discussed freely within animation academia, when animation is studied outside of its academic circle it appears to be misrepresented. In the Ofcom commissioned What Children Watch (Atwal et al. 2003) animation is categorised as a genre alongside others such as drama, light entertainment and preschool programming. This vague definition of animation clouds the results as there is no way of telling if the children in the study were watching animated drama, action or preschool themselves.

If "cartoons" do affect children then there needs to be a clear definition on the difference between animated television shows. The effects of animation on young viewers needs to be clearly defined. Age needs to be considered too, as different ages are catered for by a variety of television shows aimed at their particular age group and so can be affected by programming differently.

British Children's Television History

As the items in an archive or collection offer a window into a production it is important to have a historical overview of the area under scrutiny. This prior knowledge offers the ability to contextualise the items. For example, a fax, which is no longer in common usage wouldn't look out of place if used in a production from 1996 but may seem out of place if found amongst items from the 1940's or even the modern era (in the UK at least) where email has taken the place of fax machines for quick and easy communication. Understanding the television landscape in which a television series is created adds to the understanding of its creation. For these reasons a study into the history of children's animated television has been undertaken.

The early days of children's animated television programmes from its emergence in the television schedules through to the beginning of animated television scripted specifically for children has already been introduced in this thesis. It is now important to understand the shape of children's animation to contextualise *Bob the Builder's* place within the history of the form.

In the 1960's when UK television animation was in its relative infancy programmes such as Serge Danot's *The Magic Roundabout* (1963) and Smallfilms' *Pogles Wood* (1966) formed a tiny part of the wider children's television schedules. These animated shows were created for television and shown alongside American cartoons. Monica Sims, the head of Children's Programmes at the BBC from 1967-1978 applauded the inclusion of such shows in her programming at the time in a report issued to the BBC's General Advisory Council stating,

"American cartoons whether comedy like *Deputy Dawg* and *Tom and Jerry* or adventures like *Journey to the Centre of the Earth* or *Marine Boy* always attract a very high proportion of satisfied child viewers, even though their parents may sometimes object to the use of American material or to the fact that the programmes are not informative or uplifting. My own view is that such comedy cartoons are first class entertainment and are so expensive to make that we could never afford to make our own" (Home 1993)

Sims clearly defines the work of American studios as a different to the animated work created in *The Magic Roundabout* or *Pogles Wood* as this statement was made in 1969 after the creation and broadcast of both series and whilst shows such as *The Clangers* (1969) were being created and broadcast. There appears to have been a popular notion that, in spite of animated work being created, that it was still an "impossible" task. This is confirmed by Ivor Wood, who animated alongside Serge Danot on *The Magic Roundabout*, "At the time, it was

thought to be impossible to make animated telly for children - too costly and difficult” (Hattenstone 2001). The mythology at the time was that animation was too costly and in spite of Sims appraisal for the use of imported animation this did not stop children’s animated television programs from being created and developed in the UK. British children’s animated television would continue to evolve a style that was distinct from the foreign imports it was screened alongside.

This thesis recognises imported cartoons as a part of the overall landscape of children’s television but endeavours to research British animated television programmes created specifically for children and not theatrical shorts created for a general audience or television shows imported from other countries. This historiographical look at British children’s animated television programmes will research the shows that made shows specifically for the UK and what influenced their production methodology. Although animation that is created for television with a children’s audience in mind exists - it isn’t officially recognised as its own form. This is evidenced by the work conducted into the effects of children’s television (Davies, Gunter et al) the closest description that leads part way towards a definition of the form comes courtesy of a section of *The Television Genre Book* (Boddy et al. 2008) in which Paul Wells sets the case for television animation to be recognised as its own distinct form, from cinematic animation. Whilst addressing the different forms of television animation attention is paid towards children’s cartoons in a separation between the form of the cartoon and the style of animation favoured by UK productions is noted

Significantly, in the British context, the “cartoon” has not taken precedence, and its animation aesthetic has been much more informed by the three-dimensional puppet films of figures like Bura and Hardwick, Oliver Postgate and Ivor Wood. (2008: 152)

The work of the individuals named conjured up a different world to the world of the American cinematic and televisual cartoon, focusing in on, as Wells puts it “community-oriented vehicles that foreground benign paternalism, eccentric heroes, domesticated heroines and consensual modes of living.” In many respects these values are present in works influenced by the success of earlier UK television animation that followed those described patterns through to the modern era so that description of earlier works of Bura and Hardwick (*Camberwick Green*, *Trumpton*, *Chigley*) fits *Bob the Builder* and it’s contemporaries too. Going by Wells’ assessment it is clear that British children’s television animation can be defined as its own distinct form.

Camberwick Green, *Trumpton*, *Chigley*, although animated by Bura and Hardwick were produced by Gordon Murray. Murray was originally a puppeteer for the BBC working on *The Woodentops* (1955) but was also a producer in the formative years of the BBC children’s

department but left in 1964 to create and produce the aforementioned *Camberwick Green* (1966), which was the first full colour animated TV series to be created for the BBC (The Guardian 2012). Other series produced as contemporaries to Murray included the work of FilmFair. The company created the series *The Herbs* (1968), *The Wombles* (1973) and *Paddington* (1975), the later two were based on pre existing children's literature whilst the first was created by the author of *Paddington*, Michael Bond. FilmFair director Ivor Wood co-founded Woodland animation with his wife Josaine Wood in 1973 to create series specifically for the BBC. The first programme generated from this was *Postman Pat* (1981) and later *Gran* (1982), *Bertha* (1985) and *Charlie Chalk* (1987). According to Home, *Bertha* was commissioned to balance the rural settings often present in children's animated television series. *Bertha* was set in a factory and not in the countryside like its predecessors *Postman Pat*, *Camberwick Green* and *Trumpton*, though it still contained a community-oriented storyline structure.

Whilst British animated television production began as a commercial enterprise with Smallfilms in the 1950's in the early 1970's British television animation companies began to grow in number with the arrival of Cosgrove Hall. Former ITV graphics artists Brian Cosgrove and Mark Hall began working under the name Stop Frame Productions where they produced title sequences and animated shows such as *The Magic Ball* (1972) and sequences for the live action puppet driven show, *Rainbow* (1972). Brian and Mark ceased trading as Stop Frame Production and established themselves in 1976 as Cosgrove Hall Productions, just as Filmfair was a subsidiary of Central television, Cosgrove Hall was a subsidiary of Thames television (1993: 64) creating shows for ITV. These shows included *Chorlton and the Wheelies* (1976), a stop motion puppet show about a dragon and a cast of "wheelies" who travel around on wheels. This was done to avoid animating the character's legs as walk cycles can prove time consuming. Cosgrove Hall also created traditional 2D animated productions such as *Danger Mouse* (1981) and *Count Duckula* (1988). Cosgrove Hall created content for Thames Television and others until the 1990's when ownership of Thames, and therefore Cosgrove Hall was transferred to ITV. Cosgrove Hall ceased trading in 2008 (Graham 2010)

Animated television for children changed in the 1980's. Advertising legislation was altered to allow the import of television programmes made in the US with the express purpose of selling toys based on the series. Series such as *He-Man and the Masters of the Universe* (1983) and *Teenage Mutant Ninja Turtles* (1987) were imported to the UK from America for much the same reasons that the earlier Hollywood cartoons were. The import of television shows began a culture of co-production. Aside from the boisterous television shows of the age, wholesome shows for slightly younger audiences such as *Barbar the Elephant* (1989) and *Rupert* (1991) were produced abroad and sold to the UK. When addressing children's television content it is

important to consider that programming will be made for different ages. As well as the obvious differences between *He-Man* and *Barbar* there is a present difference in the tone of writing as they are aimed for different audiences. When addressing “children” it is important to consider the variety of programming available to cater for the divided age groups within and the vast differences between them. A preschooler will get a very different viewing experience watching television aimed at their age group than a pre-teen would do for theirs.

Today, children’s television is big business. From the humble beginnings of the Smallfilms barn Firmin and Postgate began in and the derelict French house that Ivor Wood worked from (1993: 66) the characters created by these animators such as *The Clangers*, *Postman Pat* and the work created by Cosgrove Hall are still in demand today. Ivor Wood sold the rights to *Postman Pat* for £5 million (Hattenstone 2001) and *The Clangers* has been remade for a new generation in 2015. Cosgrove Hall didn’t retain the rights to its creations (Graham 2010), however Freemantle Media, the company that purchased Thames Televisions assets including the Cosgrove Hall back catalogue, has commissioned a new series of *Danger Mouse*, that began airing in September 2015 and the Cosgrove Hall name continues as Cosgrove Hall Fitzpatrick, a company that is still creating content.

One pioneer in children’s television was puppeteer Jim Henson, founder of The Jim Henson Company. Famed for creating *The Muppets* (which began as *Sam and Friends* in 1955) and for his input in the television show *Sesame Street* (1969) he created a distribution arm for his company with Peter Orton in 1981 to sell shows such as *The Muppet Show* (1976) and *Fraggle Rock* (1983) abroad. In 1989, when the company was optioned to The Walt Disney Company, Orton set up HiT Entertainment, a TV sales company with colleagues from Henson’s whom he encouraged to “to hold hands and jump off the cliff.” to set up the new venture (Bulkley 2001). The death of Jim Henson meant that the sale of The Jim Henson Company didn’t go ahead in that year. HiT began operation by distributing existing television series such as *Postman Pat*. The company also handled the international distribution for *Barney and Friends* (1987). HIT Entertainment went public in 1996 and eventually began working on children’s animated television shows such as *Percy the Park Keeper* (1996), *Kipper the Dog* (1992) and *Brambly Hedge* (1996). *Brambly Hedge* was initially started by Cosgrove Hall Films between 1996 and 1997 but the production moved to the newly formed HOT Animation, a subsidiary of HiT Entertainment in 1997 when Cosgrove Hall Films closed down (Graham 2010). HiT would get HOT Animation to develop *Bob the Builder*, based on a property they had purchased from Keith Chapman. Bob the Builder would become a critical and commercial success, winning the BAFTA for Best Children’s Animation and earning £60 million in merchandise sales through the year 2000 (Pederson 2001).

Children's television animation is now an established industry in the UK. The establishment of children's television departments for television channels and the creation and distribution of programmes designed to cater for the audience present a clear distinction of the form that has evolved into a multi million pound industry. The industry itself has created a wide and varied culture of animation with distinct forms including British children's animated television series.

The audience that these films are being made for must now be considered.

Children and Television

Children's television has always been under scrutiny. A significant criticism happened in 1991 when the then Schools Minister Michael Fallon decried BBC children's television, labeling it as "wicked, brazen and sinister" (Home 1993: 9). His opinion was as a response to the channels screening *Superted* and *Teenage Mutant Hero Turtles* with Fallon presenting their inclusion in the schedule as proof that the channel only screened shows that were likely to sell merchandise (Dominic Strinati 2004). This protective attitude towards what is broadcast to children and the motives behind it has prevailed since television's earliest days and the research and monitoring of children's television still continues as a safety precaution. In the collection of production materials, there is nothing that could be considered evidence to back up the opinion that there is anything wicked, brazen or sinister afoot during the production of a children's animated television series and whilst merchandise is a key part in getting programming financed, producers are still bound by the pedagogical objectives required for their audiences (1993: 14). Television is also legally obligated to protect viewers. Whilst regulating the usage of a television set has been in place since the introduction of a television license in 1946, regulating what is on the television is a practice which began with the decision to create a second television channel in the UK and allow that commercial television channel to operate under regulation. This led to the creation of the Television Act 1954. The law created the Independent Television Authority (ITA) who were tasked with maintaining standards of what was broadcast which was set out in Section 3 "General provisions with respect to content of programmes" as

"...nothing which 'offends against good taste or decency or is likely to encourage or incite to crime or to lead to disorder or to be offensive to public feelings'" (Television Act 1954)

This new law covered both programming and advertisements. Television shares a relationship with its viewer and can be used to educate but also to influence so an apprehensive or protective attitude towards content is understandable and has been

addressed in the field of Television Studies where attention has been paid to the influences that violence may have on an audience. When violence on British children's programming was surveyed in *Children and Television* (Gunter & McAleer 1997) the majority of violent programmes were discovered to be cartoons. There is no specific cartoon mentioned and cartoons are not defined in the study so it is assumed that the word cartoon is placing multiple programmes that employ the process of animation as a method of production into their own genre. Before the study into violence is addressed the book outlines the relationship children share with cartoons. In an earlier chapter *Tom and Jerry* (1940) is given as an example used to explain how children, from an early age know the difference between reality and fantasy, explaining:

“... with a programme such as *Tom and Jerry* we all know that the characters are nothing more than animated drawings, and that when they hit each other nobody really gets hurt. This realisation develops quite early amongst children, or so it seems. Young viewers are able to enjoy such cartoons in a playful make believe way”

There is an interesting use of language in this paragraph, which sets out the position of animated programs within the context of the rest of television in this study, “animated drawings” clearly refers to the technique employed to create the “programme” which is later referred to as a “cartoon”. To the author it appears that cartoons are a genre and not a separate form worthy of study independently from its live action counterparts. This is rather contradictory. If children identify cartoons as different to live action why are they combined in this study? As with live action, the genres of action, drama, comedy, thrillers and others can all be genres under the form of animation. As they are perceived differently by the audience, understood as “make believe” they should be studied separately.

When investigating violence in television programmes, it is revealed via a research survey that violence was rare in children's programming only when cartoons are dropped from the equation. The survey referred to cannot be found to pinpoint which cartoons were studied but stating that cartoons were the exception gives the impression that all the cartoons included were classified as violent, even though the survey states that it studied *all* television programmes. It seems absurd that all animated programmes broadcast between May and September 1986 included some form of violence, however the survey defined violence as:

“Any physical force with or without a weapon against oneself or another person, animal or inanimate object, whether carried through or merely attempted and whether the action caused injury or not”

This seems like an almost impossible regulation to adhere to, under these conditions something as simple as kicking a football would fit the criteria to be considered violent as it employs *physical force* against an *inanimate object*. Whilst we do not have any documentation of the shows actually surveyed, the first episode of *Pingu* was broadcast in 1986 and could well have been a part of the programmes considered as cartoons that were surveyed. In the episode a pair of bullies steal a football from Pingu and one slaps him on the back of the head in a slapstick manner. The episode was censored in the UK due to the violence of the slap (REF) but even if the slap had been removed for broadcast the simple act of kicking a football would have met the requirements set by this survey to conclude that this episode was violent²³.

Doctoring the results by removing cartoons from the survey leads the authors to confirm that violence is rare in children's programs with cartoons being the exception. They do go on to address the problem that cartoons present.

"Cartoons are another and more difficult matter, especially since there is some argument over whether cartoon violence should be actually regarded as different from or comparable with, other forms of portrayed violence on television"

This appears to be the reason to excuse cartoons from violence surveys leading the author to conclude that when cartoons are disregarded what remains of the surveyed British children's television programming isn't violent. This is a rare instance that cartoons are discussed in the book and in excluding them from this conclusion about violence in children's television presents the idea that animated programming doesn't adhere to the same conclusions drawn from the study of its live action counterparts. Furthermore the lack of further investigation into violence in children's animated programming demonstrate a gap in the knowledge as this line of thought isn't pursued and "cartoons" remain a genre that can be removed from the conclusion.

In *Children's Views About Television* (Gunter et al. 1991), children themselves are asked directly about television and the thoughts of those interviewed are dissected. The authors have divided television into eight program types, including soap operas, sport, situation comedy and popular drama series. Despite animated programmes being able to deliver drama, comedy and anything in between animation is placed in the genre of cartoons (the word animation isn't even mentioned) and placed, quite bizarrely as a sub section where

²³ A later series of *Pingu*, which was produced in the UK by HOT Animation is represented in the LAAC. Although this isn't the original Swiss series that included the above-mentioned episode, it presents a research opportunity to see if any alterations were made when production was transferred to the UK to meet with any censorship regulations.

children are questioned about “Music, Variety and Chat”. Children questioned are asked about various shows and how they react to the story and the mechanics of cartoons. The authors admit that the appeal of cartoons is difficult to determine but attribute fantasy to be central to the appeal of the shows.

“The appeal of cartoons is difficult to pin down precisely... Cartoon characters can do fantastic things and are not bound by the normal laws of physics or nature. This strong fantasy element is also undoubtedly a central feature underlying their inherent appeal”

The interviewees are questioned further on cartoons and what is appealing and unappealing about them, it is confirmed that children do not appreciate “simplistic, cheap gimmicks” this is a statement that isn’t really addressing the cartoon form the program takes but the writing. The study of children’s television covers animation (defined as cartoons) and live action. As they share an audience it becomes difficult to separate the two forms entirely leading to a confused handling academically. This confusion leads to an over simplification where animation, though worthy of its own study, on its own terms, is classed as a genre in order to be studied alongside the rest of children’s programming.

We have already established the parameters of a cartoon using the Television Genre Book (Boddy et al. 2008) and it is clear that using the terminology cartoon when describing a variety of animation programming limits the understanding of what is actually being described. The inclusion of the word cartoon demonstrates a real problem for animation as a form. Given the fact that children can differentiate between live action and animation whilst still at an age where the confusion of whether the live action story they see is real or not doesn’t exist in the distinctly make believe world of animation, one may think the distinction between the two mediums would be better recognised in academic reports and when used statistically by bodies such as Ofcom when analyzing television. Yet the case remains that industrially and academically animation is merged with live action when assessed in reports even though there is an obvious difference in the forms from both a visual point of view, identifiable by preschoolers and within the productions themselves and the different materials and distinctive production process and practices that are executed to produce animation. Animation can be used to create drama, comedies, thrillers and all genres of television programming in between without being reduced to the singular title of “cartoon” and the separate genres of animation should be considered when animation is being studied.

Further evidence for the need to clearly separate and define live action television from animated television productions is presented by Gunter & McAleer (1997). In considering the reception of television programming by children it is concluded that they themselves are capable of differentiating the difference between live action and animation from an early age:

“Even before they have started school, children can make certain distinctions between which of their favourite programs are “real” or “make-believe” children can identify cartoons as make-believe and news as real, but they may be confused about certain other shows”

If children can notice the difference early on in their development then any subsequent effect that the viewing of animated television programs may have will be separate from programs that do not use animation as a production method. This means that whilst the study of children’s development with television in general is plentiful, there is still a gap when looking at the role that animated television programmes play with children’s development. Animated violence, drama, comedy and any other genre of television applied to animation should be studied separately.

Returning to television as a whole, Messenger Davies examines the way that television is often made a villain during childhood development. The case is put forward that television is actually an educationally nourishing medium for children to enjoy depending on how it is used.

Far from being mindless, television actually poses problem-solving tasks for children which are not found in other media. It is a particularly rich source of information about stories, and how stories ought to be structured. (Messenger Davies 1989)

The relationship that children have with stories as they grow up and develop is a key theme of the book as children’s attitudes and reactions towards television are put into context. One of the areas of development explored is the way children react to what they see and preferences to what they view. It is detailed that different age groups have preferences towards different television shows based on their stages of development. As a child grows from infancy and gradually understands how television works, the young viewer will gradually understand, for example, that when a shot of a character talking suddenly cuts to another camera position, perhaps to a second character they are talking to does not mean that the first character has disappeared, the viewer is just watching a conversation unfold between two people. The language of television is something that a child gradually becomes used to and tastes develop as a familiarity and understanding of filming and storytelling techniques develop, the juxtaposition of a flashback scene used in some stories may confuse a young viewer.

The flashy fast movement of an action TV series would only be entertaining to a children of a certain age whilst a still camera is preferential to children at two years old. Davies discovers

“...A NHK Broadcasting Culture Research Institute Report²⁴, found that children of this age preferred to look at characters moving rather than the camera moving” whilst using this example to differentiate between preferred styles for different age groups Davies misses the relationship this information shares with animation. Any camera moves beyond a simple pan or a tilt are expensive to produce in animation, the complexity of moving the camera tiny amounts repeatedly and supplying the necessary 24 frames per second of character motion would require extra work, time and money that would inflate a budget and timeframe of a series with a set delivery date. The nature of having to use a static camera in stop motion productions could be a small part of the reason a shows such as *Bob the Builder* are a success. We see this evidenced in animated programming and the way in which stories are communicated to different audiences. The still camera found in *Bob the Builder* created for a preschool audience contrasts with the rapid camera moves and action of *The Powerpuff Girls* (1998). Though these two examples are both children’s animated television programmes, they cater for vastly different audiences and are written with specific ages in mind.

In its efforts to examine the effect that television has on children the field of Television Studies has pointed out distinctive characteristics that a viewer encounters when watching animation. However, this is not followed through by any consideration that animation exists as a separate form to live action even condensing animation to the point at which it is described as a genre labeled “cartoon” with no effort going into further identification of the different variations of the form. By simplifying animation to the genre of cartoons Television Studies avoids the need to interrogate the further differences that would define animation as separate from live action. Animation is different from live action, this is evidenced not only by audience reception, but in the production of animated television and the considerations and limitations that the form of animation has. These considerations are evidences in the production material, itself a demonstration of the distinct production practices that define the animated form.

²⁴ Japanese broadcaster-operated research center <http://www.nhk.or.jp/bunken/english/>

A Call for Distinction.

When described within the wider context of children's television, animation is mainly regarded as a genre in service of children's television alongside live action genres such as preschool, drama or comedy and not as a distinct form that serves children's television alongside live action capable of delivering the same genres. It is simply not the case that animation is a genre, and it's continued description as such demonstrates a detrimental disregard for the form and perpetuates the poor classification of animation. This is important when we consider the audience. The audience of children's television is children, and so it seems a backward step for the various forms of children's animation to be categorised as a singular genre not to be distinguished as differently as live action genres such as preschool, drama and comedy are. The differences between genres are not found in the methods of production themselves but in the writing. This is recognised by Messenger Davies:

“Virtually all stories, from Postman Pat to Middlesmarch have the same basic structure: an introductory setting of the scene and an introduction of the main character(s); the posing of a problem or conflict for the main character(s); and the resolution of the conflict (Messenger Davies 1989).”

Whilst a basic story structure is apparent for storytelling it is the genre that alters the tone of the story and not the form. Whilst they are barely touched upon in the field of Television Studies, in the field of Animation Studies the differences between animation and live action are recognised by many through defining animation with a notable example being Solomon who condenses animation to “...the illusion of motion is created, rather than recorded” (Solomon 1987a). This distinction can be further investigated through the means of production that are evidenced in the production of animated programmes.

In using the word cartoons to describe animation in the context of children's television there are many factors that are lost within the homogeneity of the description. As animation can be used as a technique in the service of all genres one may enquire as to the style, being used or the age group a “cartoon” is aimed at. This isn't solved by changing the word cartoon for the word animation, but by further division to give a better understanding as to what exactly is being described. This is particularly important when delivering results in a study. When Violence is considered and cartoons are identified as violent it incorporates all animated programming, however if it were to be labelled as “pre-teen animation” or “action drama animation” which could be used to describe *Teenage Mutant Hero Turtles* or *He Man and the Masters of the Universe*, the persons reading the study understand that preschool animation such as *Bob the Builder* or *Postman Pat* should not be considered violent.

The solution is a better understanding of the various forms that animation can take. This can be done by categorising animated programming properly and highlighting the distinctions of the form. Categorisation can be achieved by looking at the form itself using a collection of animation materials to distinguish, through the production materials, the process and practice of making an animated series. Given the volume of material available in the LAAC it is decided that an effort will be made towards defining British children's animated television series using HOT Animation's production material used during the production of a single example. As the best represented production in the collection, *Bob the Builder* has been selected as the primary research material.

HOT Animation

HOT Animation opened in March 1998 by former Cosgrove Hall employees Jackie Cockle, Brian Little and Joe Dembinsk as a subsidiary company of HiT Entertainment, the company founded by Peter Orton in 1989 (Pederson 2001). HiT Entertainment has a legacy in children's entertainment but was primarily set up as a distribution company for television series such as *Barney and Friends* (1992). HOT Animation produced primarily stop motion television series including *Bob the Builder*, *Brambly Hedge*, *Rubberdubbers* (2002) and a recreation of the *Pingu*, a series originally created by Otmar Gutman in Switzerland in 1986. In 2010 when the studio closed, objects from the studio that would have been discarded became a part of the LAAC (Wells 2016). HiT Entertainments still own the rights to the characters which are now animated overseas with properties such as *Bob the Builder* being remade in CGI.

Bob the Builder

Narratively the original *Bob the Builder* centres around the adventures of Bob, a builder who operates in the town of Bobsville with his business partner Wendy, his cat Pilchard and his team of anthropomorphic machines. The Machines in the show have a mind and voice of their own and consist of Scoop the digger, Muck the dumper truck, Roley the steamroller, Lofty the crane and Dizzy the cement mixer. Joining in on most of Bob's adventures is Farmer Pickles who lives on a farm with his tractor Travis and the often seen Spud, the naughty scarecrow. Being made for a young audience the 10 minute long episodes mix the juvenile excitement of trucks and machines with lessons about teamwork and friendship run throughout the episodes.

The combined cast of characters in *Bob the Builder* form an archetypal family unit with Bob portraying the father alongside the matriarchal Wendy and the machines in the role of the eager to assist "children" helping their "parents". Episodes typically work around a job that the characters are tasked with and which forms the basis of lessons often found in children's

programing such as teamwork, honesty and friendship.

The adventures that the crew have often involve Spud the scarecrow, a mischievous figure who often gets himself into trouble and suffers the consequences of his naughty actions. Not only does a character like Spud offer antagonism to the series (albeit softly) but he also presents behavior that can be laughed at and enjoyed by children but due to their consequences of his actions children should be discouraged from copying him.

The show premiered on the 28th November 1998 on BBC One. It would soon become a huge success with both parents and children alike with merchandise sales topping £60 million within the first 6 months of its release (2003: 133) Bob's familiar cry of "Can we fix it?" became a widely used phrase as the show's success grew and because it achieved success with a song which became a much-coveted Christmas number one single with follow up singles and albums. The song sold over a million copies making it the biggest selling single in 2000

Who Fixed it? The Authorship of Bob the Builder.

As with most success stories there is often contention surrounding the authorship of a show. Efforts sometimes get overlooked and the wrong people can be acknowledged for achievements undeservingly. In researching the true authorship of *Bob the Builder* it is not the aim to settle arguments or to fuel them, but to demonstrate the key figures and the decisions made in the production of a British children's animated television series to gather an understanding of, and to define the process. With a collection of animation production materials names, dates and decisions are present on the materials themselves and so evidence can be found that addresses the question of authorship and collaboration with the potential to interesting results, crediting those who may not have been credited publically demonstrating a way of using the collection for research.

Bob the Builder was commissioned by the BBC and created, developed and made by HOT Animation. The concept of the series was devised by HiT's Keith Chapman. He is credited at the end of every episode first as "Originated by Keith Chapman". There is no comprehensive history of the show written in any texts. Using what is available through the collection we can piece together an accurate historiographical detailing of the show.

The show itself was produced by HOT Animation an animation company set up by HiT Entertainment. HiT was created in 1983 as Henson's International Television as a distribution company for the work of Jim Henson Television, a part of the wider Jim Henson Company that produced television. Jim Henson was primarily labelled as a puppeteer and creator of

television series such as *The Muppets* and was responsible for developing characters for *Sesame Street* and through the years his profile increased to incorporate roles as a producer, director and screenwriter for advertisements, television and film. By the time *Bob the Builder* was commissioned, HiT was being run by Peter Orton who is credited with the creation of *Bob* by Inglis (2003). According to Inglis the stories originated as bedtime tales told by Orton to his children (Inglis 2003: 132). This contradicts the idea that the notion originated with Keith Chapman who has a similar claim to have designed the characters before the birth of his children in the 1980s (Davies 2012). It would seem that the subsequent popularity of the show has lead to ambiguity as to who gains credit as the creator of the show, either that or Inglis is mistaken. Regardless, by using the collection of animation pre-production materials we have a clearer idea as to how *Bob* came to be.

Although the show we know is synonymous with Keith Chapman anecdotal evidence suggests that his involvement is rather minimal. By looking at the collection a key figure who appears in many of the documents is designer Curtis Jobling. In an interview he relayed his version of the origin of the show²⁵. The show was based on an original concept by Keith Chapman that was redesigned by Jobling under the supervision of producer Jackie Cackle when the show was commissioned to HOT! Animation by parent company HiT Entertainment. Jobling initially worked on Cackle's kitchen table "surrounded by cats" as there was no studio at the time. Jobling's style would become linked with the show as he was consulted with every design aspect during the production of the show and the post-production of the show through merchandise and promotional material. Before HOT's involvement a pilot version of the show had already been created by Ealing Films and rejected by the BBC which wasn't seen by HOT until after they designed Bob from a blank canvas using only the name they had been given by HiT.

As a collaborative process an animated programme will naturally accrue a team of people, each with a different anecdotal origin of the story. Jobling's interpretation of the origins are supported by items in the collection which are recognisably his. The distinct lack of any records that can be linked to Keith Chapman besides two drawings that bare little resemblance to the final, commissioned *Bob the Builder* support the idea that the show was indeed the creation of Cackle and Jobling with the show's alliterative title being Chapman's sole contribution. This demonstrates the use of an archive in practice, in this instance the collection has been used to "substantiate the claims" (Millar 2010: 20) of Jobling.

Using the materials in the LAAC it has been possible to evidence a claim about the creation and making of a television show. This demonstration has proven that an animation collection

²⁵ C. Jobling (personal communication with the author, June 12, 2015)

can be used as primary research material. This proof does not contribute to distinguishing the form and answering that research question but is a preliminary exercise in using the research method and the material. This research method can now be expanded with distinction in mind using the same resources.

Authorship of a television series relates not just to acknowledgement of the creators, in investigating the authorship of a television series an investigation into the process of authorship takes place and evidence presents itself in the form of documents and communications that reveal the decision making that takes place during the creation of a television series. It is this process that defines a series.

Summary

Though studied, outside of specific Animation Studies, the form of animation is not regarded as a form with any distinction. This disregard overlaps from Television Studies through to official bodies such as Ofcom and BARB not acknowledging the distinctions that the different forms of animation present. This has leads to animation not being studied properly, and studies into important areas such as violence not considering the different variety of animation and their effects. When studying for children, this provides incomplete results and a lack of understanding of how animation as a whole effects children. This isn't solved by retitling "cartoons" as children's animation, but by looking at the different areas of children's animation, specifying the location of origin, age range and medium they was created for. In doing this, *Bob the Builder* is no longer classified as a "cartoon" and becomes a "British children's preschool television animation". Using a similar classification *Tom and Jerry* might be described as an "American cinema cartoon" differentiating genres of animated filmmaking will create a more thorough basis for the research of animation. This also displays a difference that might be present the construction methods of these shows. If studies into violence on television were to be conducted with similar classifications they would offer more accurate results, demonstrating the need for distinction when describing animated productions. This has been established by examining literature and policies and identifying the indifference that in shown towards animation created for children. This presents an intrinsic need for better classification of animated television shows when studied.

To address the lack of clarity that is currently used when addressing animated television shows the essence of a British children's preschool television animation will be explored and clarified using the collection to investigate the authorship of a British children's preschool television animation. The construction of the show will reveal the mechanical configuration of the show and reveal what makes it specifically preschool, television animation produced in the UK. Within the LAAC there are materials that display the communication process behind the making of these shows. By accessing the materials in the LAAC and using them as primary research material it is possible to evidence these communications. Accessing he material, identifying and assessing the communications will be conducted under a constructed system of collection management that serves as the prototype to subsequent systems that will develop from this research. As well as a data system, consideration into the establishment of a philosophy of archiving and handling animation materials will be considered as the work is continued. The establishment of a system of collection management and the development and use of a philosophy of animation archiving is the practice that will be employed to interpret the authorship of some of the material in the collection, in this case the original series of *Bob the Builder* (1998).

Practice and Visual Methodology

Introduction

This thesis considers three areas. Animation, Children's TV and Archiving. It also understands that these areas overlap one another to represent the overall thesis question. The three areas and their overlaps are best represented in a Venn diagram.

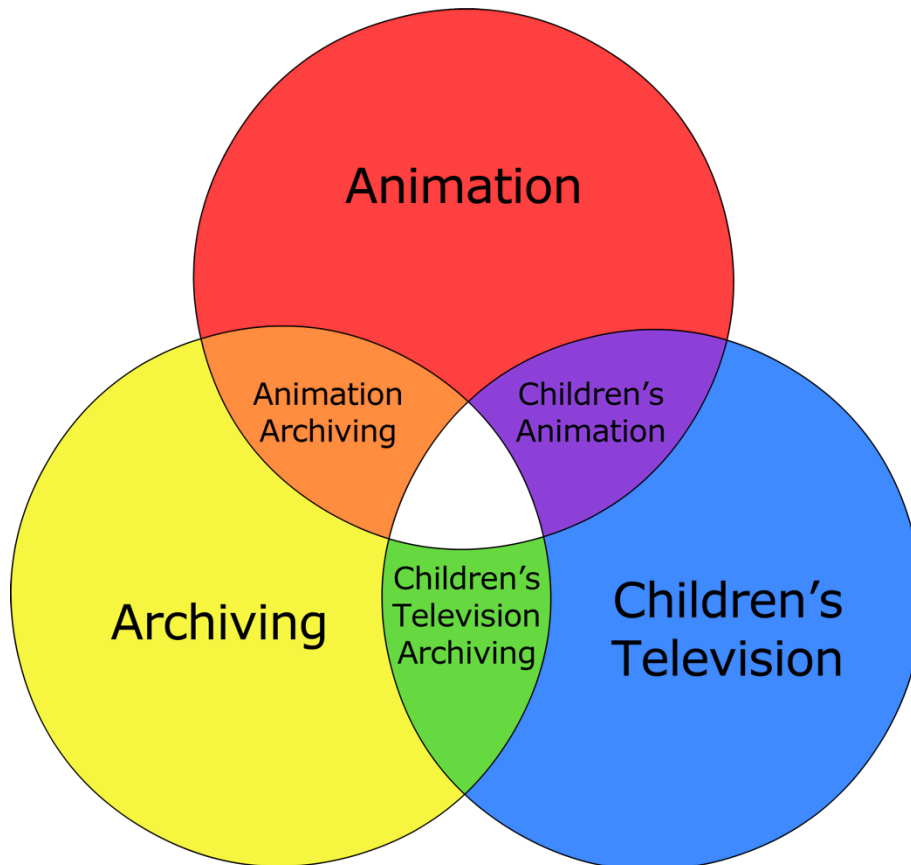


Figure 7: Venn Diagram (Steve Henderson 2016)

This diagram presents the three main areas under investigation, animation, children's television and archiving. There is a large body of work on each of these areas and that body of work informs the literature review of this thesis. However when the three areas are overlapped we are presented with areas that the current literature review under-represents. Children's Animation, Animation Archiving and Children's Television Archiving. The centre of this diagram represents the practice of this study which is Children's animated television archiving and research. When we look at an item in the collection we must consider how the item relates to these areas and how that will inform a taxonomy.

Assessing Documents

The enormous task of creating a data record based on every item in the collection would always have been a significant task. The volume of material identified on visits to the collection (see: Appendix A) confirmed that the task of going through each box individually hoping to identify primary research material at the same time of creating a detailed recording

of the data would not be possible if conducted by a single person. This discovery was uncovered by applying an existing method of animation archiving to a box picked at random.

The method of archiving was taken from the UCA Farnham and used by researchers Aaron Wood and Katie Steed to catalogue the work in that collection. Their method (which we will call the Farnham system) required every item in the collection to be inspected before detailed notes could be taken. The notes related to the input process, such as the name of the person inputting the information and the date the information was inputted, as well as collection references such as what collection the item belongs to (company/artists name), the series title, episode title and series. The pieces were then assessed by recording the type of artwork they consisted of, the medium they were created in and size, colour and description. Recordings of the annotations and conditions of the items were also recorded (Steed 2007).

Though software is available to record the information created during the process of documenting using the Farnham system, the information was put into a standard spread sheet and not a data management system or collections management system.

Handling the Documents

In identifying a sample of material from the collection the first step is to open the unidentified and uncatalogued boxes and begin looking at the material with the view of creating a provisional taxonomy of the materials that responds to the collection itself which is recognised as evidence of the animation production process in action, and to general archiving principles. In order to assess documents, before the information can be taken from them there is a certain amount of handling involved. Though it is mainly the case that documents can be picked up, looked at and then put aside once used, there needs to be care and consideration placed in the care of the items at all times to ensure longevity.

Accessing items in any collection can sometimes present specific needs based on the individual items, depending on their composition and condition, even when the items are catalogued and stored correctly. Some items may have specific care needs or in a collection where there are millions of similar items finding the specific item may be a time consuming task. Animation is not only a material heavy process, but also a repetitive process and so for a traditional hand drawn animation there may be hundreds of animation cels which were used in production with a hand painted background. Both of these items are composed differently and will have to be handled with different considerations in mind. Animation cels may be brittle and fragile depending on their age (Lémerige 2012) whilst a painted background may be water damaged. The fragility of the item must always be considered, unfettered access to it may increase the wear and tear, damaging the object further. Digitisation of a collection

seems to be the perfect response to both of these dilemmas, if a collection can be stored digitally researchers will have access to a digital copy of the document they require through a database meaning that items can be quickly sourced without having to physically locate the item. This works particularly well with paper based items as the majority of the information can be recorded when photographed and then used by the researcher almost instantly.

Digitising a collection has different requirements depending on the item being digitised, for example photographing a paper sheet from the LAAC is a simple enough task and the information can be taken from the document just as well as a photocopy, negating the need for locating the original item. Some paper based items such as fax machine copies are hardly accepted by archives due to their tendency to fade or become brittle and it is recommended that they are photographed before being destroyed (University College Cork 2013: 4.1). Other items that the LAAC has in storage include videotapes that perhaps have the most limited shelf life of anything in the collection. Whilst film stock and paper can last a long time, the magnetic tape that videotapes are comprised of do not. "Magnetic tape begins to degrade chemically in anything from a few years to a few decades" (Evert 2013: 45) and it is estimated that 70 per cent of content recorded onto magnetic tapes will be lost a decade from now (2013:47). This is down to a number of factors including the chemical degradation mentioned previously and the variety of videotapes available created on now obsolete formats that may never be able to be screened again. In the Loughborough collection there are tapes that include important items relevant to the rest of the collection such as pilot episodes of television series, test footage and other items of significance that run the risk of disappearing if they are not preserved or copied digitally. Copying item digitally has its own risks that will be discussed later. At the time of writing VCRs are still available to purchase so rigging together a solution to digitise the tapes would be a relatively easy task to perform. The largest collection of audio visual material in the LAAC consists of 35mm film canisters. This collection is a demonstration of a working collection as the films are not all finished items, some are clips, audio recordings and daily rushes in different formats and sizes of film.

The collection at Loughborough also holds hundreds of boxes of acetate animation cels. Acetate cels are the product of a process known as "clean up" where an animators drawing is taken and traced in ink onto a transparent cel, once the outline is traced and the ink is dry the cel is turned over so the back of the cel can be coloured in so once the entire cel is dry the side with the inked outline on will show the colour underneath as a clear flat colour ready to be filmed without the worry of brush strokes showing. Animation cels found their continued use in the history of animation as the remaining transparency surrounding the image drawn on the cel allows a background painting to show, eliminating the need to draw the same background on every cel. Preserving animation cels is not something that is often written about, although it has been covered in this thesis (Mason 1998; Cookney 2013; L  merige

2012; The J. Paul Getty Trust 2014a) the need to restore film cels has found its place in the film memorabilia market as original and replica animation cels can be sold to collectors.

As they are made from acetate it is possible for film cels to be subject to vinegar syndrome too (see: 35mm film) as well as the paint drying out until it is so brittle it falls off the cel. Over time film cels are liable to become brittle or to warp and buckle if not stored correctly. It is recommended that film cels are stored at 18°C and within a RH (relative Humidity) of 40-50%²⁶

The many factors involved in handling records or accessing the information in them should always be considered when handling documents to access the information on them.

This brief summary of the possible factors that should be considered when handling the documents highlights the different items that an animation collection can be comprised of and the items that make up an animated production. Various stages of production produce different artefacts, with paper being an artefact likely to be seen through production and film and video artefacts being predominantly used during and after production. The fluidity of animation as a form and its ability to be comprised of any filmable material presents the possibility of an animation collection being host to many possible items and a sample of materials demonstrating a production could be represented by a configuration of a variety of different items.

Assessing a Document

Through the course of this investigation the majority of the boxes opened have contained pre-production material. These records contain information that needs to be deciphered in order to place the records in the right point in the production process. This has been proposed in order to conduct a case study of the production process.

A document may contain more than one kind of information pertaining to its lifespan. The information may have been added at different points of its existence that place it within the timeline. For this example we will use the notes on the second draft of the script (figure 5). We know we have notes in front of us, and we can read these notes and understand how, as a document it would have functioned as an instructional document to the writer in the production process. However, other data added in the handwritten notes present an additional layer of information which does not relate to the instructions on the notes

²⁶ <http://www.cinematheque.fr/fr/musee-collections/actualite-collections/restauration-numerisatio/collection-dessins-anima.html> (translated by Google)

themselves, but how the document was used, reacted to and importantly - how these actions influenced the authorship of the script. Notes, scribbles, and other additions to the document will be referred to as markers, as these pieces of information are important in deciphering how the document was used.

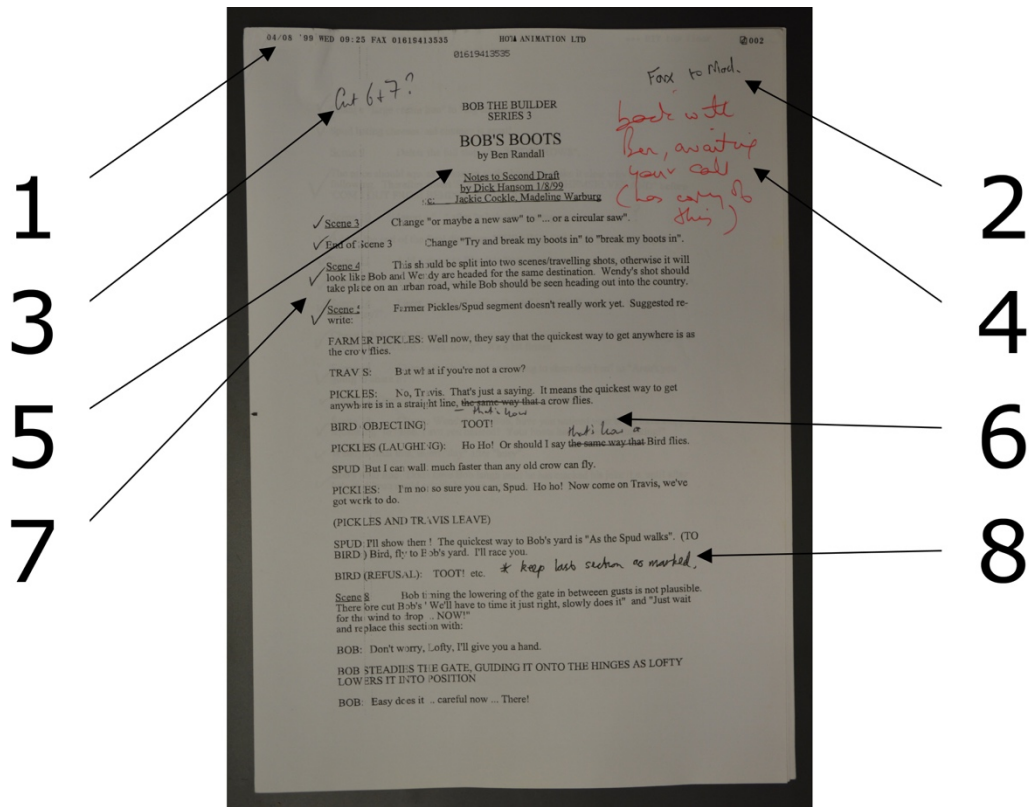


Figure 7: Assessing a Document - Bob's Boots, Notes to Second Draft (Source: LAAC)

Each item out of the box poses challenges in regard to identification, purpose, use and value; there is a good chance that the last person to access the item was the person using it during production. As such the document must be read in order to place it in the production timeline. The numbered "markers" allow for an interrogative visual annotation of the document. An initial look at the document may tell us what we need "Bob the Builder Series 3" tells the reader that this document is from *Bob the Builder* series three, and a closer look at the writing tells us that these are notes on a script, a separate document that may or may not be within the collection. Other markers give us a deeper look into the ownership and use of this document which will be evaluated in numerical order.

1. This marker shows this document to be a fax, a reproduction of the original that was sent to someone during production. The information we can gain from this is the time it was sent which conveniently dates the document. We know from this that the document was sent on the 4th of August 1999 at 9:25am.

2. "Fax to Mad" - This handwriting is a reproduction, an original instruction written on the document before sending. This could be the fax that was sent to Mad. It may be safely assumed that "Mad" doesn't denote anger but is likely the nickname given to Madeline Warburg who is mentioned at the head of the document (See: 5) to be cc'd alongside Jackie Cockle.

3. "Cut 6+7?" By looking at the ink we can tell that this was written after the document was faxed as it has not been printed on a fax, rather hand written. 6 and 7 are scene numbers which do not appear on this document. The writing could be a question in two styles "*Have 6+7 been cut?*" or "*Shall we cut 6+7?*"

4. "Back with Ben, awaiting your call (he's aware (?) of this)" Notably this writing is in a different pen to the black ink on the document. "Ben" is likely to be Ben Randall, the writer. The writing is also a different hand writing.

Above all other markers, this demonstrates the lifespan of the document. The document exists to transfer information through the production and the paper and ink is just used as a vessel for it. The vessel may also pick up additional information as it is transferred between people on the production who influence the production based on the information this document carries. Decisions have been added to this working document and the information added will go on to influence and shape the writing process as they are presented back to the writer.

5. These markers tell us what the document is. "Notes to Second Draft" have been written by Dick Hansom, the script editor of the show on the 1st August 1999 and then sent on to Jackie Cockle and Madeline Warburg for approval. As we have already deciphered from the first marker (see: 1) this document is a fax of this original document created on the 1st August that was sent to Jackie and Madeline for approval. As the title suggests this document was created as a response to the second draft of the script. If we see the second draft of the script and compare it to the third draft of the script we will see a difference, but it is this document that denotes why those changes were made, and by analysing it carefully it is possible to see who influenced those decisions.

6. Changes to the dialogue in the script written in the same pen as the person who questioned cutting 6+7 (see: 3)

7. These ticks were added to the original document before the fax was sent possibly at the same time "Fax to Mad" (see: 2) was added.

8. “ * keep last section as marked” this may be the answer to the “Cut 6+7” question (see: 3) as the writing is not original like “Cut 6+7”, it would have come through before “Cut 6+7” was written. This now looks like a misunderstanding, as the person sending the fax has not presented the notes on scenes 6 and 7 and the person receiving the fax has questioned why they are missing. The fax sender is asking for those scenes to be kept as they were marked before.

By looking at this document and the notes it has been possible to chart its position within the production timeline and how the document was used during production. This has also been possible due to a provisional knowledge of the animation production process which has been used to contextualise the material and place it within the production timeline alongside other objects that have been identified. Annotations such as the ones on this annotated script assist in identifying the documents place in a production timeline and the influential changes that took place whilst the document was at the forefront of the production process: i.e. before it was finalised and handed over to the storyboard artist.

Creating a timeline requires multiple documents, we would need to see the subsequent and preceding documents that can be placed either side to this one. There is a communicative connection between the objects that is shown by the titles and annotations of the documents. If the document is the second draft of a script then it stands to reason that it follows on from a first draft, and it is a viable use of time to seek out that document as placing them together can begin a formative study into the changes made between drafts. With thousands of documents in the collection, the system of data management needs to relate to the animation production process to maintain these connections between the objects.

The Document on a Macro, Meso and Micro Scale

As we investigate items in the collection it is important to understand the connection they share with the respective associations they hold. When we find a script it can be viewed through different eyes and for the purposes of this thesis the eyes are those of someone within a children’s television context, an animator and an archivist. These three groups span the lifetime of the object. As a piece of children’s television, the object was commissioned with that audience in mind, it was created by animators who viewed the creation in a different, more practical point of view as an instructional document and finally we see the object in its current stage of existence, in the hands of an archivist who can preserve the information on it for study and interpretation.

The object we have chosen is a script. The script means different things to the different people who come into contact with it. To those in children’s television (imagine them as the

commissioners) they see a script as the vessel of the story, to the animators (the creators) they will see the script as an instruction to create the animation. And the archivist will view the script as an item as a vessel for the data that it contains.

To identify the context that this script holds at each level will give a greater understanding of the differences of each group and the similarities that bind them by association to the object and their uses of the object. This is presented through micro, meso and macro analysis. Analysing the scripts begins when the question is posed “what is this?” and the three scales present a different level of detail and a different outlook. Investigating the item from a macro point of view, we view the script from a figurative distance. The details of the script are of no use to us at this level and we simply assign what the script is by immediate association. From a macro point of view the script isn’t identified as the script yet, the commissioner would see the item as a vessel of the show itself and the item represents the show. The animator would see production material, an item that would contribute towards the making of the show and the archivist would see an object.

Table 3: Macro, Meso, Micro – Archives, Animation, Children’s TV

	Archives	Animation	Children’s TV
Macro	Object	Production Material	Show
Meso	Record/Document	Writing for Production	Story
Micro	Bob the Builder Script	Bob the Builder Script	Bob the Builder Script

As we look at the item in more detail we begin to place different values on the object. At the meso level the commissioner would see a story before them and will read it to gain an understanding of what to expect. The animator sees the item as a piece of writing for production and can begin to identify it as an instructional document to be used to create the show. An archivist would begin to identify data from the document and identify information as a record.

The final level identifies the object exactly, though exactly is not quite the same in every group as the contexts and uses still vary. On a micro level the documents become a script by name for all of the groups but their uses are still very different. A script for the commissioner is a document that demonstrates what will, or has the potential to be broadcast, it has been created by the animator to adhere to the instructions given by the commissioner to reflect its role as a piece of children’s television. The animator will have created the script to suit the needs of the commissioner and the specific needs and obstructions that an animation

production presents. The archivist can use the script and see it as a reflection of the needs of the animator and the needs of the commissioner and identify the relationship between the two and see how the script was created and for what purpose. The archivist also gathers other information from the script and it can be used as either quantitative or qualitative assessment purposes. The role of archivist is on that this research finds itself with more of an affinity with, however the ability to contextualise the material in order to understand the life of the object is a key skill in the practice of a researcher aligned towards archiving.

Overlay

When we overlay the three components of this thesis we see that the three areas combine to create subsections. When Animation and Archives combine, you get Animation Archives, when Animation and Children's TV combine you get Children's Animation and when Archives and Children's TV combine you get Children's TV archiving. The three original areas operate separately, though by combining them we create subsections that require the attention of both areas. For example, a piece of children's animation differs from children's TV in general and an animation archive has specific set of obligations that define it as such. In the middle is the core area under investigation within this thesis, namely considering archives and using them to understand a children's animated television series.

When we apply the micro, meso and macro formula to these new subsections to see if they offer different descriptions and attitudes we find that they are very similar. A script would be regarded in any archive as a object from a macro point of view, though the heavier influence on children's television is considered when looking at children's television.

Table 4: Macro, Meso, Micro - Animation Archiving, Children's Animation, Children's TV Archiving

	Animation Archiving	Children's Animation	Children's TV Archiving
Macro	Object	Show	Object
Meso	Record/Document	Story	Record/Document
Micro	Bob the Builder Script	Bob the Builder Script	Bob the Builder Script

Using this framework we soon see that there is no originality within the subsections. The subsections have the same micro, meso and macro descriptions as their neighbouring counterparts. To discover the differences we must expand this layout even further to uncover any distinguishing details or similarities.

Table 5: Zachman Framework - Example

	What does it represent?	How is it used?	Where is it used?	Who uses it?	What time is it used?	Why is it used?
Animation						
Children's Animation						
Children's TV						
Children's Archiving						
Archiving						
Animation Archiving						

The table above has been expanded to resemble the Zachman Framework. This framework is used in software architecture to determine what part of a computer programme is relevant to which type of user. If we transfer this to our scenario and aim to discover what relevance the document (Bob the Builder Script) has to each user, we will find greater detail. The Zachman framework will be adapted to exchange the contextual, conceptual, logical, physical, as built and functioning rows with rows representing professions associated with the document. These are animation, children's animation, children's TV, children's archiving, archiving and animation archiving. The top row determining the what, how, where, who, when and why remain the same in this scenario but the questions are posed differently and directed to the professional using them. What does the object represent? How is it used? Where is it used? Who uses it? What time is it used? And why is it used? The professionals using the object within its lifetime are imagined as follows

Animation – The animator, storyboard artist, writer or director

Children's Animation – The director or producer

Children's TV – The producer or commissioner

Children's Archiving – The archivist or researcher

Archiving – The archivist or researcher

Animation Archiving – The archivist or researcher.

The professions listed above are similarly titled but they will undertake different perspectives on each task depending on what they specialise in.

Before completing the form a scale must be placed on the script to determine what level of complexity it will be scrutinised under. The scale we are going to use is the micro, meso and macro scale. We will investigate starting from a macro scale and work our way towards micro.

Macro Scale

Table 6: Zachman Framework - Macro

Macro	What does it represent?	How is it used?	Where is it used?	Who uses it?	What time is it used?	Why is it used?
Animation	Production material	in production	Working Studio	Writer	Pre-Production	Storytelling
Children's Animation			Studio	Commisioner		
Children's TV	Show					
Children's Archiving	Object/data	Documented	Archive/Collection	Archivist	Post Production	As a source of primary data
Archiving						
Animation Archiving						

At this level we see that the professions overlap with one another. For example the script is used as a storytelling tool for Animation, Children's Animation and for Children's TV, whilst the remaining three categories use it as a source of primary data. There is a clear distinction between the top three categories and the bottom three which is best identified through the time column as they represent the pre-production and post-production uses of the document. When used by the first three the object is a working document for a production, whilst the remaining three are handling the object after it has served its initial purpose as an animation, children's animation and children's TV object.

A clear understanding of the material is important for a researcher. It enables the contextualisation of items in the collection and how they would have been created, viewed and used during its existence. Examining the different ways a single object and the information that object holds can be accounted for assists in research when considering the information that has to be recorded in a collections management or data management system

Meso Scale

Table 7: Zachman Framework - Meso

Meso	What does it represent?	How is it used?	Where is it used?	Who uses it?	What time is it used?	Why is it used?
Animation	Writing for Production	Production Document	Working Studio	Production Staff	Pre-Production	Storytelling
Children's Animation			Studio	Commisioner		
Children's TV	Story					
Children's Archiving	Record/Document	Documented	Archive/Collection	Archivist	Post Production	As a source of primary data
Archiving						
Animation Archiving						

As we take a closer look at the document there isn't much change in the division of the rows, though we regard the items with more detail. We consider that more than just the writer would have used the script at some point and begin to think that perhaps the production staff which

includes artists, animators, storyboard artists and managers were involved in the use of the document whereas before we considered only the initial writer.

Micro Scale

Table 8: Zachman Framework - Micro

Micro	What does it represent?	How is it used?	Where is it used?	Who uses it?	What time is it used?	Why is it used?
Animation	Animated TV script	Production document	Animation Studio	Production Staff	Pre-Production	To guide the animation
Children's Animation	Children's animated TV Script	children's animation production document				
Children's TV	Children's TV Script	To review for approval	Production Office	Commissioner		
Children's Archiving	Information on Children's TV	To gather information about Children's TV	Archive/Collection	Archivist/Researcher	Post Production	As a source of primary data
Archiving	Information	To gather information				
Animation Archiving	Information on Animation	To gather information about Animation				

On a micro scale we can see that the sections for what the script represents and how it is used are all distinct from one another. It is no coincidence that this change appears at the same time that the term researcher appears with the 'who uses it' section. A researcher needs to clarify both what the item represents and how it is used in order to use it as a source of primary data.

The detail occurs when we start to consider the documents uses in different disciplines. The script will always be a script, though from the perspective of each user it will offer different information to the user.

Animation

In animation the script will be used as a tool to create the show. It will have been created by writers and then used by artists and animators as a reference and producers as guidance. Writers would have to acknowledge that the script will be used by an animator and so as a piece of animation there will be limitations to the writing that reflect the ability of the form.

Children's Animation

This script would have been written or used as someone delivering animated content to children. The difference between this and delivering just animated content is that the story needs to be written with a children's audience in mind. The design of the show will also need to be considered.

Children's TV

The commissioner of the TV programme is looking for content from the animators. They will liaise with the producer from the animation company to ensure that the show meets

regulations and standards set by the channel both aesthetically and legally, ensuring the show is suitable for the age group intended. The script is used as a guideline in the process and will allow the commissioner to make decisions about the production based on it.

Children's Archiving

The role imagined here is that of a researcher. The researcher would take particular interest in the children's aspect of this script and use it to identify the influences present from Children's TV.

Archiving

The role of an archivist is to preserve, protect and to catalogue the piece. They would also decide at what level of information is necessary to include during the cataloguing process and what items are required to preserve.

Animation Archiving

A researcher in animation would be interested in how the item reflects animation as a form and should be able to understand the limitations and restrictions inherent in animation and identify them with ease. An animation researcher should also be able to identify other influences on the script such as policy, budget and artistic expression and compromise.

The six corresponding areas are divided by a factor of time. The first three deal with the object as a working document which would have been created and used by the individuals in the animation, children's animation and children's TV sectors, and the second three deal with the object after it has served its purpose and becomes part of a collection. As a part of a collection it is no longer in use as part of the series and is looked upon in hindsight.

When the information is taken from the Zachman tables and applied back to the Venn diagram we get a detailed display of the interpretations that the script can have and the different areas it belong to.

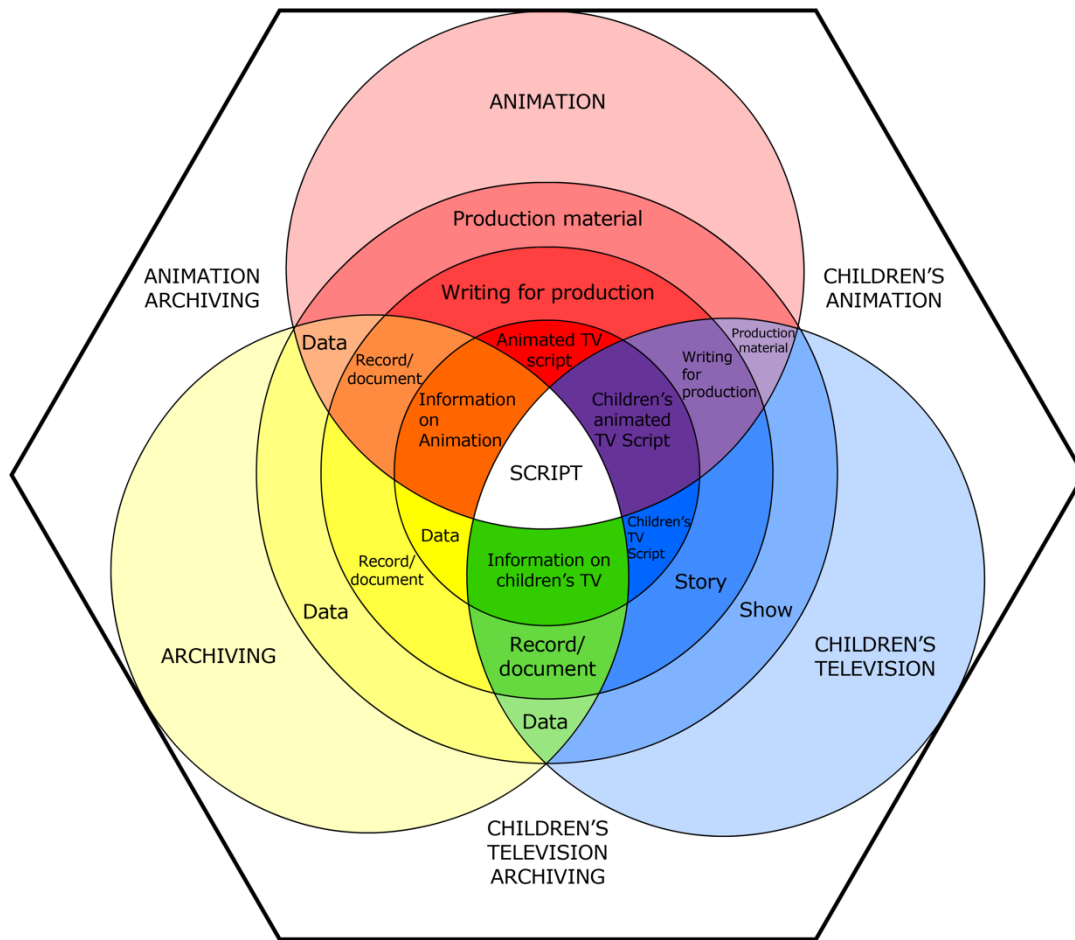


Figure 8: The Possibilities of a Record (Steve Henderson 2016)

The above diagram shows the many iteration as to what the script can be. The researcher must consider all of these areas when handling an object.

The above figure demonstrates how the script can be viewed by different sectors, though the script itself belongs to a chain of production, it will have been informed by items prior to it, such as meeting minutes and earlier drafts of the script and it will have informed items after it such as storyboards.

A full understanding of the material contributes to the development of the taxonomy that understands how each and every object relates to the animation process and to other items used in that process.

Making Records: Order Out of Chaos

Now that the minutia of the items are understood individually it is important to further contextualise them by placing them alongside other items in a timeline to understand the influence each document had on the other and how the information on each item came to be. In order to create a timeline these records will need to be lined up in a proper order. If one were to conduct this study using a pre-organised collection in an archive or a library, the task would be easy, but this study does not have the luxury of such commodities. This presents the opportunity to create a database that responds to the needs of the collection. Items from the collection can then be sourced from the database and used as primary research material.

A system of data management that responds to the needs of an animation collection is the ultimate objective. This will be constructed through prior knowledge of the animation production process which afford an understanding of the order in which items should be considered. As there is no unified system of data management for animation collections previously used models of data collection have been investigated. The original UCA Farnham system was applied to the collection at Loughborough to see if it suited the needs of the LAAC.

To assess if the Farnham system would work a box was selected at random from the collection and the work of cataloguing the items in the box began. The box selected was filled with individual card folders consisting of recording scripts and storyboards. The scripts and storyboards corresponded to one another and so were from the same episode and the entire box was what would appear to be from series two of *Bob the Builder*. This box was selected randomly and so could have contained anything.

The Farnham system is based on an instructional sheet created by Katie Steed who worked on the collection in 2007. The sheet has been created so the collection can be catalogued onto a spread sheet on Microsoft excel. It serves as a technical guide for gathering data.

The sheet is split into three parts. Firstly an introduction to the process of collecting the information “Technical Guide for Data Collection in the ARC Archive”. This is done using a sheet which the information is then transferred into the digital spread sheet. It’s important to note that applying the data to a physical sheet, a “Data Capture Form”, before replicating it digitally creates a safeguard against the digital counterpart or the physical counterpart being lost or destroyed. The instructions outline the importance of putting as much detail as possible into the recording. The destined use of this recorded information is public consumption via the ARC web site. Public accessibility corroborates the ARC using the terminology “archive” to describe itself.

The second section of the instructions outline “General Rules” that outlines the pragmatic instructions of handling the boxes and ensuring a uniformity to locations for boxes. The third and final section isn’t titled but is a list of the sections of information that need filling in on each column of the spread sheet including an in depth section called “Artwork type” which details a list of codes that the artwork catalogued can be, for example “BG=Background” and so forth. As an instructional document the sheet works very well to pragmatically populate a database created from a collection of animation material.

The sheet was used with a sample box from the LAAC. Following the Farnham system of archiving there was an almost immediate issue with the way the data from the items was to be recorded in each category. The first category for this was “Film Title”. This label works perfectly well for material used in the production of a standalone film such as the short films held at Farnham made by Bob Godfrey, but if one were to use the film title of the episode in this category there would be no way of distinguishing the episode title to whatever series it is from and titles such as “Stranded” or “Formula Fun” do not distinguish what series the episode is from. Likewise if all the films were all labelled as “Bob the Builder” then there would be no way of knowing or locating specific episodes. For this the decision was made to fill in the series title instead of the “film title” as the next category “episode title” would consist of the title of the episode (see Figure 9). By responding to the gaps present in the Farnham system when applied to an outside collection has presented the need to develop the Farnham system as a response to the taxonomy based on the materials present in the LAAC.

The category “Artwork type” is filled in using an accompanying list of 61 shortened codes for production material, such as “SCR” standing for Script and “STB” standing for storyboard. The Bob the Builder collection contains many types of script such as the standard working scripts and their associated drafts as well as Recording Scripts and Post-Production scripts. These scripts serve different functions, a recording script is present when the actors record their lines were as the post-production script serves a similar purpose but the script is changed for overseas audiences such as America where a different cast will read out a slightly altered script where a “pavement” becomes a “sidewalk” to fit the American vocabulary. Due to the simplistic expectations of the Farnham system extra codes were added to this system in order to accommodate its use in a different production.

1	Name	Date	Collection	Box ref	Film Title	Episode title	Series	Box Reference	Page No	Artwork Type	Artwork Type	Scene No	Ref No	Medium	Description	Annotations	Colour	Condition	Size
2	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Wendys Busy I	1	1	1	1	SCR					Photocopy	Orange folder Script Correct	B&W	Good	A4
3	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Wendys Busy I	1	1	1	1	STB					Photocopy	Orange folder None	B&W	Good	A4
4	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb W/A	2	1	1	1	LS					Print	Transparent if None	B&W	Good, some	A4
5	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Web Site Weni	2	1	1	1	RS					Print	Pink folder co Sarah Recordi	B&W	Good	A4
6	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Pichard Goes I	2	1	1	1	RS					Print	Pink folder co Pencil, red per	B&W	Good	A4
7	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Pichard Goes I	2	1	1	1	STB					Print	Pink folder co some photoc	B&W	Good	A4
8	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Runaway Role	2	1	1	1	RS					Print	Pink folder co Red pen notes	B&W	Good, some	A4
9	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Runaway Role	2	1	1	1	STB					Print	Pink folder co None	B&W	Good	A4
10	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Wendy's Tenni	2	1	1	1	RS					Print	Pink folder w/ Red pen mark	B&W	Good	A4
11	Steve Henderson	28th August 2013	HOT	1	Bob the Bulb Wendy's Tenni	2	1	1	1	STB					Print	Pink folder w/ Pen marks on	B&W	Good, folding	A4
12	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wendy's Big M	2	1	1	1	RS					Print	Pink folder w/ Blue pen mark	B&W	Good, some	A4
13	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wendy's Big M	2	1	1	1	STB					Print	Pink folder w/ Big red letters	B&W	Good, folding	A4
14	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Tea Set Travis	2	1	1	1	RS					Print	Pink folder co "1 minute und	B&W	Good, some	A4
15	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Tea Set Travis	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
16	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Dizzy's Statues	2	1	1	1	RS					Print	Pink folder co Various throug	B&W	Good apart f	A4
17	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Dizzy's Statues	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
18	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wallpaper Wei	2	1	1	1	RS					Print	Pink folder co "117" in orang	B&W	Good	A4
19	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wallpaper Wei	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
20	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Dizzy's Birdwal	2	1	1	1	RS					Print	Pink folder co Various throug	B&W	Good	A4
21	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Tea Set Travis	2	1	1	1	RS					Print	Pink folder co None	B&W	Good	A4
22	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Dizzy's Birdwal	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
23	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Lofty to the Re	2	1	1	1	RS					Print	Pink folder co "Read, Take 1	B&W	Good	A4
24	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Lofty to the Re	2	1	1	1	STB					Print	Pink folder co "MIX OF 40% /	B&W	Good, some	A4
25	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Lofty to the Re	2	1	1	1	??					Print	Pink folder co Title "Lofty to	B&W	Good, folding	A4
26	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb White Christm	2	1	1	1	RS					Print	Pink folder co "Take One 1"	B&W	Good	A4
27	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb White Christm	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
28	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Spud The Span	2	1	1	1	RS					Print	Pink Folder co "1 Take One"	B&W	Good	A4
29	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Spud The Span	2	1	1	1	STB					Print	Pink Folder co On page 19 th	B&W	Good, some	A4
30	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wendy Come I	2	1	1	1	RS					Print	Pink folder co "Recording sci	B&W	Good, some	A4
31	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Wendy Come I	2	1	1	1	STB					Print	Pink folder co None addition	B&W	Good, some	A4
32	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Buffalo Bob	1	1	1	1	RS					Photocopy	Orange folder Some recordi	B&W	Good	A4
33	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Buffalo Bob	1	1	1	1	STB					Print	Orange folder None addition	B&W	Good, some	A4
34	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Scary Spud	1	1	1	1	RS					Print	Orange folder Various notes	B&W	Good	A4
35	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Scary Spud	1	1	1	1	STB					Print	Orange folder None addition	B&W	Good, some	A4
36	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Travis Paints Tl	1	1	1	1	RS					Print	Orange folder Minor correct	B&W	Good, folding	A4
37	Steve Henderson	12th September 2013	HOT	1	Bob the Bulb Travis Paints Tl	1	1	1	1	STB					Print	Orange folder containing Res	B&W	Good	A4
38	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Formula Fun	1	1	1	1	RS					Print	Orange folder Notes on the c	B&W	Good	A4
39	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Formula Fun	1	1	1	1	STB					Print	Orange folder None addition	B&W	Good	A4
40	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Harvest Time	1	1	1	1	RS					Print	Orange folder "Channel 4 ha	B&W	Good	A4
41	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Harvest Time	1	1	1	1	STB					Print	Orange folder None addition	B&W	Good, some	A4
42	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Stranded	1	1	1	1	RS					Print	Orange folder Notes on cove	B&W	Good	A4
43	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Stranded	1	1	1	1	STB					Print	Orange folder Red "RE." on p	B&W	Good, some	A4
44	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Save the Hedge	1	1	1	1	RS					Print	Orange folder Notes on cove	B&W	Good, some	A4
45	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Save the Hedge	1	1	1	1	STB					Photocopy	Orange folder None addition	B&W	Good	A4
46	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Bob's Birthday	1	1	1	1	STB					Photocopy	Orange folder None addition	B&W	Good	A4
47	Steve Henderson	13th September 2012	HOT	1	Bob the Bulb Bob's Bugle	1	1	1	1	STB					Photocopy	Orange folder None addition	B&W	Good	A4
48	Steve Henderson	19th September 2013	LOFT	1	Bob the Bulb Dreamhouse	1	1	1	1	CTB					Photocopy	Orange folder Ext Time. Fill	B&W	Good	A4

Figure 9: The Farnham System in Action

Filling in the “description” section is a simple enough task, however when it comes to writing down “annotations” things become a little more complicated and time consuming. With each folder containing a script and storyboard each one consisting of hundreds of pages one must pay careful attention to detail to make sure all additions to scripts, notes, and scribbles on the storyboards are detailed in case they are of use to anyone. I believe that a producers role is defined through these notes made on documents and their involvement in the production and the changes they make to adhere to regulations and preferences can be evidenced through note making either independent (through emails, faxes, paper notes) or annotated on the items themselves, giving a detailed look at the decision making process which could identify in great detail the authorship and definition of a British children’s animated television series

Using the Farnham system and the sample box, thousands of pieces of paper had to be assessed individually, a process which took twelve hours to process fifty two items. It was plain to see where the Farnham system could easily work for the work of a short film maker such as Bob Godfrey, but for a collection such as the one at Loughborough a more detailed, but less time consuming approach needed to be devised to increase productivity and gather the essential information needed to advance research into British children’s animated television programs. The Loughborough collection contains items not present in the Farnham collection such as invoices, floor plans and the essential materials and correspondences used in the running of a large studio. Instead of looking into creating a system that would solely serve an animated series, consideration needed to be taken into the types of artefacts present in the collection, identifying episode titles for every entry would not apply to items

such as invoices or staff memos, nor would it apply to items such as animation desks, editing equipment and rostrum cameras setups that the LAAC also holds.

From an accessibility point of view a long and data heavy spread sheet (Figure 9) does not offer the most friendly user interface and it may be difficult to understand what it is you are looking at when searching for documents. To combat this the information was linked to a table that condensed the information so the user could scroll through the data whilst searching for the records. The Farnham paperwork I was working from did not have any recommendations or instruction as to how to do this so I had to improvise its construction whilst remaining true to the information in the sheet. The idea being to create an accessible data point where information can be search for and referenced. There are currently no funding resources to apply the data to a website and at the point that this research was undertaken the taxonomy was still evolving so it was considered a waste to apply the data to a publically accessible website. The accessible data point was created as a way to visualise the data succinctly.

		PREVIOUS		18	NEXT	
Collection	HOT Collection	Box ref	1	Box Reference	1	
Film Title	Bob the Builder	Episode title	Wallpaper Wendy	Series	1	
Artwork Type	Script	Medium	Photocopy	Colour	Black and White	
Size	A4	Condition	Good	Name (entered by)	Steve Henderson	
Annotations	Script Corrections, Reminders for additional sound recording	Description	Orange folder containing Photocopies of the script and storyboard from Wendy's Busy Day		Date Entered	12th September 2013

Figure 10: The Farnham System Assessable Data Point (Steve Henderson 2016)

The table displays the items in the collection with clarity, we know by looking at it that we have a black and white photocopy of a script that is in good condition, as well as other data such as the size, annotation and description. Also present the name of the person inputting the information and the date that it was inputted. In creating this I tried to remain as close to the Farnham system as possible. I did not transfer some of the columns into the table as they were not used. I did have to add a number to the top of the table as reference numbers had not been generated using the Farnham system.

Reference numbers mark individual records out and make them unique so they are important in a collection such as this. As I continued using the Farnham collection I decided that

authoring individual reference numbers would be a waste of time as the system didn't suit the needs of the collection and so a simple numbering system was adopted.

The Farnham system works perfectly well for its needs in cataloguing the work of a short film maker, but if animation archiving is to consider the entire spectrum of animation production evidenced through production materials and items then systems like the one used at Farnham must be adapted in order to allow for this. Considering animation production as a whole, as opposed to specific animation practices of short film makers would be a key component in development of the new system created as a response to the one used at Farnham.

Towards a Taxonomy: The Inventory

Having practiced using the Farnham system I could begin to design a system that would work for the collection at Loughborough and have the potential to develop further. The main flaws of the Farnham system were as follows

- Information specific to animated shorts and series
- Limited production material accounted for
- Lengthy input process

The Farnham process was used and evolved to work with the films in that collection. Perhaps the collection only consisted of production material used during the production process and not other items created before, after or during the production process such as emails and other items that may not be as closely linked or credited to the actual production of a show. As the boxes were opened and the contents inspected it became clear that there would be items that were not on a conventional list such as the one populated at Farnham and so a new system would have to be easily evolved and reshaped as further boxes were opening and explored and further records and documents influenced the data necessary for documenting animation production materials.

Framing the cataloguing process around the production is an idea that would be at the centre of this taxonomy. To create a system that takes the production process into account would make the collection more accessible and easier for people familiar with the technique of animation to understand and use. Creating the system would rely on a simple division of the production processes in an animation production, for example pre-production, production and post-production.

This basic understanding of an animation timeline is documented in *Prepare to Board!* (Beiman 2007: 22) and presented in diagram form as “The Anatomy of Animation” which neatly places a succinct view of the process in the mind’s eye of the reader, with Storyboarding, Final Script and Dialogue recording all cemented into the Pre-Production frame with a clear line denoting that the production ends when the production process begins.

The Anatomy of Animation

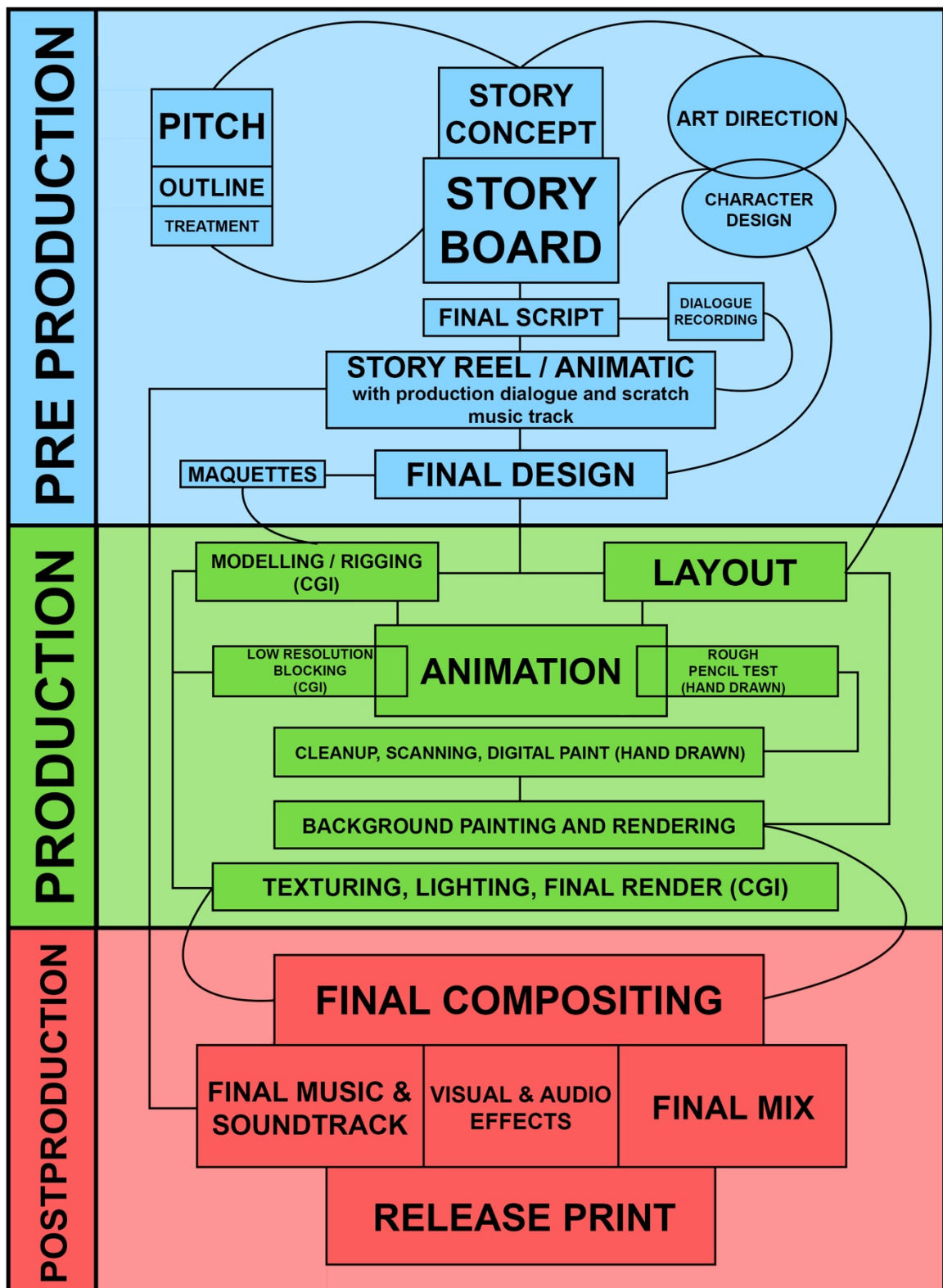


Figure 11: The Anatomy of Animation (Steve Henderson 2016 based on Beiman 2007)

In actuality the process is never as clearly defined and scripts can be edited throughout the process and in the case of a production like *Bob the Builder* post-production scripts are required to translate the show to an overseas market. There are also items that do not directly affect production in a way which they can be positioned in such clearly defined categories such as meetings from minutes, inter office communications, travel documentation and discussions outside of projects. An animation collection needn't consist of the items created and used in a production but also items that were used in the running of the studio that give us a broader picture of how a production is run as well as how an animated production is made. The understanding that the items that fall within the jurisdiction of an animation archive have to tie in with a philosophy on animation archiving, just as there is a philosophy that is agreed upon, and indeed developed in other fields such as AV archiving (Edmondson 2004). Animation archives have to include items that respond to the process of animation which includes both the art and the structural processes that are linked with the form. This includes items that relate to the administration of running a studio or something removed from animation itself like the design of promotional materials.

With the knowledge that items that do not fit into the basic infrastructure of the production process would be encountered and would still need categorising. It was decided that using excel would be the best software to use for this second attempt at categorisation. Before this decision was made a closer look at systems used by collections was made. A collection in a similar situation to the one at Loughborough is the Cosgrove Hall Collection based in Media City Salford. Cosgrove Hall was an animation company founded in 1976 by Brian Cosgrove and Mark Hall. The company created children's television shows such as *Chorlton and the Wheelies* (1976) *Danger Mouse* (1981) *The Wind in the Willows* (1983) and *Count Duckula* (1988). When the studio began there were no other animation studios established in Manchester. The studio hired hundreds of staff members who would go on to establish their own companies in the region (including HiT), so the studio is the genesis of animation in the north west of England and plays an important role in the animation story of the UK (Saunders 2015). The collection differs due to the amount of puppets in the collection but categorising the items is still underway in much the same way it would be in Loughborough. The high number of puppets is due to the fact that the collection comprises of roughly half of the studios collection, that being the items belonging to Mark Hall who took charge of the stop motion productions. At the time of writing Brian Cosgrove still retains his own private collection of artwork²⁷. The Cosgrove Hall collection uses the Condition Assessment Tool (CAT) a free piece of software developed by the Scottish Conservation Studio for the Scottish Museums Council. The software is heavily aligned for the use of physical 3D objects, perhaps

²⁷ B. Cosgrove (personal communication with the author, November 6 2015)

decorative or functional as opposed to the paper based work found in Loughborough. For a collection such as the Cosgrove Hall one the CAT is ideal for categorising the puppets. This is a piece of software that focuses on the care of items in a collection as stated in the user guideline.

“By providing the means of recording condition information in a systematic way and storing this information as data to compute simple statistics, the CAT can help people in museums to make better-informed decisions about collections care.” (Pearlstein & Marincola 2005: 5)

Using the software, the items can be assessed by following a straight forward process of filling in a series of boxes and adding a photograph of the item assessed, the tool makes it possible, and encourages a secondary person alongside the person inputting the data to make decisions about the future care needed for such items. It is intended that the initial assessment would be overlooked by a professional conservator who can create full conditional reports (2005: 6) There are few items in the Loughborough collection that would require this specific treatment although digitizing the collection is an important process that helps with the preservation of material and creates easy to access visual evidence. The CAT tool creates a database from the information inputted of which reports can be generated if the user requires a closer look at specific items from a certain category.

This style of categorisation is something that some of the items in the Loughborough collection would require, there are editing desks, writing desk and camera rostrum setups in need of restoration if they are ever to be exhibited, but that is not necessary within the timeframe or current goals of this thesis. The CAT tool brings to light the fact that consideration needs to be taken into the preservation of such items and so a simpler method needs to be devised before a more in depth, and qualified assessment can take place.

The CAT system has many benefits that mainly aim towards the goal of conservation instead of categorization. Whilst both are important it is the primary aim of any practical activity to place categorisation at the forefront of this practice but still regard and consider conservation when handling the items.

The knowledge that the boxes consisted of items from a company that produced television shows meant that the process could begin with a base understanding of what to expect and whilst it was a certainty that the majority of items would be based around a TV series the label of “production” seemed a better fit and would enable its use to apply to short films and productions outside of film too. The first assumption was that productions may be split into production stages pre –production, production and post – production but as we have already

discussed this restricts the process to an unrealistic limit excluding the broader picture. So a production can encompass aspects that include many practices created by a studio.

It was decided to develop a spread sheet model which effectively worked as an evolving 'inventory' of the materials discovered from a sample of boxes. The use of a spread sheet was a simple, cost effective way of gathering data. With the correct funding the data in the spread sheet could be transferred to data, or collections management software. The software itself would have to be able to embrace the need to categorise the material in a way that compliments the developing taxonomy of this investigation and develop as necessary.

Although the financial structure was not in place to apply any commercially available collections management software the sector was investigated and practicing archivists were consulted on the choices of their software systems. The Collections Trust is a charity that concerns itself with the management and use of collections in the UK, promoting education, standards and development within collections²⁸. The trust have published SPECTRUM, a guide to good practice for museum collections management, a model of the descriptive information the trust recommend recording as procedural standard (Dawson & Hillhouse 2011).

Though software producers were not approached to assist with the LAAC, individuals with experience in selecting the right software for their needs were approached. Connor Heaney is the collections manager of the Ray and Diana Harryhausen Foundation Collection (see: British Animation Collections) upon starting the job and assessing the size and scope of the collection he decided that the foundation needed to invest in collections management software. Selecting the software is not as simple as purchasing something from a shelf and after initially consulting The Collections Trusts online comparison tool the process then involved direct communication with the developers to ensure the right decisions were made based on the needs of the collection. Heaney notes that whilst he approached a number of suppliers, their response wasn't given in the interest of sales, rather advice was given based on the needs and wellbeing of the collection with Axiell's Calm, kEMU and Mimsy XG providers recommending their competitor Adlib²⁹. Collections Management Software on this level offers the ability to host information on their server as well as offering to make the information captured available on a website allowing the public access to the records. The software allows for any number of factors to be considered and to cater for any items allowing categories and sub categories to be applied to each item as well as images.

²⁸ <http://www.collectionstrust.org.uk/about-collections-trust>

²⁹ C. Heaney (personal communication with the author, September 1, 2016)

Knowing that software is available that can be used to populate a database of animation materials means continuing the growing taxonomy that is being developed from using the collection so that one day it may be applied to a commercially available piece of software. The work on the LAAC was continued through use of a spread sheet. The spread sheet is simple in comparison to the software used by a collection such as the Ray Harryhausen collection which can afford the resources to invest the time and money into creating an archive, but the simplicity of the spread sheet does not hinder the development of a taxonomy that responds to the needs of an animation collection. It was never the intent of this research to end with a working archive.

The spread sheet was named Inventory. Inventory was initially set up like the Farnham system with the tables set up horizontally but instead of discovering the maximum amount of information about the items it was decided a basic knowledge of what was inside the boxes was required first so broader assessments could be made with regards to storage, and organisation. This spread sheet would primarily concern itself with numbers and the amount of items stored in any one box. The spread sheet reads from left to right with each line representing the contents of a single box. Starting with the box number. The box number is a series of digits after a code, the code relates to the studio the box belongs to or Fonds. The code at the beginning of this collection was HOT standing for HOT animation, other codes considered for use in the collection would be TRI for Triffic Films, HIB for Hibbert Ralph and PEO for Animation People, these are just examples of the codes which would all be followed by the number of the box so the first box opened was HOT0001, the second HOT0002 and so on. To identify the boxes notes on the original box markings were made. This has a dual purpose, some information on the boxes helps the process, for example it may say “Bob Series 2” and we will assume that the boxes contain items regarding the second series of Bob the Builder, sometime the boxes have markings that don’t correspond with what is inside, this information may be of use in piecing together a pattern of the history of the boxes themselves and the items within. A box that says “workshop” and contains invoices and specifications may give an indication of the practices involved in the workshop of the studio.

Whilst the boxes focused primarily on the numerical value of the items in the boxes the next section “contents” is in place to identify the title of the work within the boxes. This means that one can search for boxes containing a certain show and know which boxes do and do not have that show in them. The next section is the contents section which is split into production levels. Drawing for production is a broad topic which contains concept drawings, storyboards, animation tests, prop sheets and technical drawings. If any of the boxes contain any of those then a number is added under the category. If a box contains 25 scripts, then the number 25 is written under scripts. Next to each number is an indicator of the quality of the items. In order to avoid writing a lengthy conditional assessment for each one a “traffic light system”

has been devised with Green indicating good quality, orange indicating that some care is required or the item is worn and red indicates that, when the opportunity arises, the item requires immediate attention to ensure conservation. It's important to consider that the process of inputting the data is just the initial use of this spread sheet, once inputted the data will be accessed and when accessed the persons using it will be able to instantly tell the condition of the item. The top line of categories for production continues, alongside Drawing for production, there is Writing for production, planning for production, Admin for production and so on. As new items are discovered in each box a new column is created for it. There is no need to go back on previous boxes as this would have been the first time it is encountered otherwise the column would already exist.

Box Numb	Note	Box Mar	Contents	Storyboard	Concept Drawings	Drawing for Production Animation Tests	Technical Drawings	Prop Sheet
HOT 0001			Bob the Builder					
HOT 0002			Bob the Builder, Pingu, Rory the Racecar	3	25			1
HOT 0003			Bob the Builder, Various		1			
HOT 0004			Bob the Builder (Built to be Wild)	11	3			
HOT 0005			Bob the Builder					
HOT 0006			Bob the Builder	3				
HOT 0007			Bob the Builder, Pingu			2	1	
HOT 0008	ts handwritten, note		Bob the Builder	1				
HOT 0009	Master B: BAR SHEE		Bob the Builder					
HOT 0010	of purchaE ORDERS		HOT Animation					
HOT 0011	s clippings and broad		HOT Animation					
HOT 0012	p do with LDER, PINK		Bob the Builder, Pingu, Rubberdubbers,					
HOT 0013	awings are002/ BO		Bob the Builder Rubberdubbers Life on Ma	15	16		1	

Figure 12: Inventory (Steve Henderson 2016)

Using this system it is easy to tell what each box contains and the exact amount within each box. It is also possible to tell which series each box contains and the condition of the items within. Inventory is still very basic, but it allows the boxes to be ordered in an accessible system meaning that it is easy to locate specific production items from each show. It still requires further details such as the series number and episode titles but those are requirements, for now, are filled in the “notes” section. Making it easy and quicker to input this information comes at the sacrifice of a certain amount of information, but that information can be gathered when this initial archiving technique is complete and a more in depth approach to categorization is devised. This will allow for further action to be taken on the issues of storage and conservation.

In some respects this system is a step back from the Farnham system as it only addresses the volume of materials in the collection. However the inputting speed has been improved and it was possible to go through many boxes in a day instead of slowly working through a single box over the course of a few days. This is important because as a single researcher it is vital that my time is managed efficiently to get the best out of the collection. The Inventory delivers an easy to use idea as to what is in each box and so when I wish to research particular items I can easily locate them from each box. By categorising the items into production level at the user point a person accessing the material would instantly be able to understand an items place within the animation process.

With Inventory it was possible to take a broad overview of the collection, and the speedy process of looking through the boxes gave me the opportunity to identify the best boxes to use for research. Using inventory I had uncovered a box that had a box that contained scripts. The scripts held in this box appeared to demonstrate a timeline of the scriptwriting process and so the box was selected as a candidate for the new and improved version of inventory.

Inventory MK2 – The Loughborough Animation Academy System

Instead of representing the contents of a box with numbers and a simple description of what was in the boxes Inventory MK2 would look at each object in each respect:

Collection Name

What Collection is the item from? For example, the HOT Animation collection.

Box Number

What is the box number? This helps locate the item.

Production Level

What is the level of production? Options include pre-production, production, post-production administration, promotional and non-production. These areas cover both the production of a film or series as well as items in the collection that may demonstrate the day to day running of the studio and studio life outside of production. This level of categorisation was added to the data input process during practice. It defines areas of the animation process that items in the collection will be a part of.

Production Type

What part of the production does the document represent? Writing, drawing, planning? This production type compliments the production level above. Once the item has been identified as being a part of a specific production level, identifying the type of production helps identify its place within the production pipeline.

Medium

What is the document made out of?

Item

More detail on what the document actually is, is it a script, meeting minutes, storyboard, sketch, notes – the list goes on.

Title of Document

The title that appears on the document, taken from the title of a script, the header in an email or a description.

Pages/Sheets

How many pages the document consists of.

Number

The sequential number of times that this item has appeared in the box. This helps generate a unique code for each item. For example, if we go back to the items column and see scripts, each one is sequentially numbered. The first one gets given a number 1, the second a number 2 and so on.

Description

A description of what the item is.

Notes

Further details on the document including handwritten notes that might be found on the item.

Year

The year in which the item was created

Date

The specific date on the item, if there is one.

Author

The author of the document, if it is an email it is usually easy to identify, if it is a storyboard a little more investigation is required.

Photo Number

Whilst going through the collection everything was photographed, this reference helps locate the images.

Photo reference file/Image

This takes the number of the photo above and adds the box number to it, giving it a unique number.

For ease of use a simple code is entered into once column which then automatically generates more detail in the next, using the Excel function VLOOKUP. So instead of writing "HOT Animation Collection" every time, simply writing the short code "HOT" avoids the need to type in the detail and speeds the process of data entry up. The form also generates unique reference numbers based on the rest of the information added, these are automatically generated using code based on the data entered in the other columns. Taking information such as date Author, Year, Title, Medium, Collection and the unique reference number it has also been possible to automatically generate a Harvard reference for each document that has been entered into the spread sheet.

Harvard Reference																

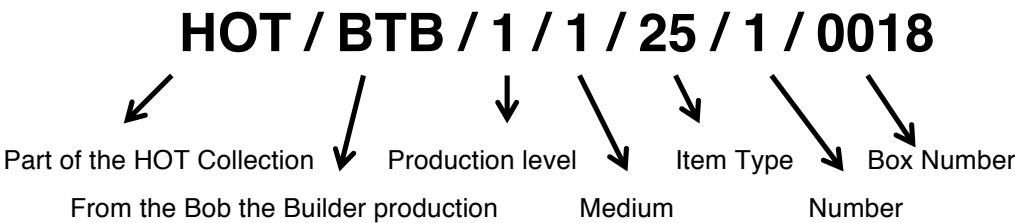
Figure 13: Inventory MK 2 (Steve Henderson 2016)

Figure 13 shows the spread sheet with all the data on it. As with the Farnham system there needs to be a quick way to access the data, and so a data access point table was devised to display the information from the sheets more efficiently (Figure 14 below).

	<		>
Ref Number	HOT/BTB/1/1/25/1/0018		
Collection	Hot Animation Collection		
Production	Bob The Builder		
Year	1999		
Date	01/02/1999		
Production Level	Pre Production		
Author	Warburg, M		
Document Type	Email Printout		
Title on Document	Bob 2/Spud the Spanner 3rd dr		
Image Ref	HOT0018/DSC_0001		
Description	Email from Madaline Warburg to Jackie Cockle		
Notes	Discussing Ben Randals lack of email and problems with the title "Spud the Spanner", "Let's see if the Beeb have a problem with it."		
Harvard Ref	Warburg, M, 1999. Bob 2/Spud the Spanner 3rd dr. [Paper] Hot Animation Collection. HOT/BTB/1/1/25/1/0018. Loughborough: Animation Academy Collection		

Figure 14: Inventory MK 2 Data Access Point (Steve Henderson 2016)

This scrollable table allows the user to go through the items in the collection. It does not have all of the information that the full spread sheet has because it does not require it. The unique code that has been generated by the spread sheet tells the researcher all they need to locate the item. As demonstrated below.



The scrollable table helps with research as it adds details from the notes and a description for those not versed in the code. After the laborious task of going through the boxes and inputting all of the information we now have a condensed and accessible entry point for the LAAC. This is a significant step, and now the collection can now be used for the purposes of research.

Case Study – Writing An Episode of Bob the Builder

Taking items from the collection and placing them in an order that increases the understanding of how the production materials would be stored as data, to be accessed as an archive, has until this point being the practical nature of this investigation. Developing this taxonomy that reflects the unique aspects of an animation production and acknowledging production levels and types have assisted in the management of material which can now be contextualised and ordered for the purposes of research. With items in the collection now managed correctly and accessible via a data management system as well as photographed for ease of use and practicality, the records themselves can now be interrogated to focus on the investigation into the authorship of a British children's animated television series.

The accumulation of the data gathered in Inventory MK2 and the photographs taken of each item are presented in the appendices, see Appendix B for the materials used in this case study.

For this case study we will be investigating the writing process for the episode *Bob's Boots*, written by Ben Randal, one of the episodes from the third series of the show. This episode has many records associated with it and by placing these documents in the order in which they were created they can be arranged so a clear demonstration of the scriptwriting process and the influences of both the scriptwriter and the production team have on the final outcome can be seen. Whilst this study uses the episode as the primary example in this case study, there will also be references to other scripts that were involved in the same script editing process and mentioned in the same documents as *Bob's Boots*. These scripts were created at the time and were often reviewed alongside one another in notes and emails.

Placing the items in order can only be accomplished using the understanding of the documents brought about by the practice developed during this research. The items have been documented and understood (see: Assessing a document) using information gleaned from the documents themselves such as dates and prior knowledge of the animation process. With this understanding, and with items categorised using the taxonomy that has been developed a case study into the writing process can take place using the items.

Scriptwriters meeting

The concept of *Bob's Boots* and other episodes from the series can be traced back to a scriptwriters meeting held at HOT Animation on the 2nd of July 1999. The date of this meeting, the attendees and what happened and was said in the meeting has been recorded in the minutes (Anon 1999b). Not every word has been recorded in these minutes but we must assume that the words recorded are important to the scriptwriting process. The minutes for

this meeting evidence how the writers were introduced to the series and set the task of writing their episodes. As part of the communication the writers were told how to handle each individual character and how the characters needed to be portrayed in the series. The writers were instructed to include more of Bird in the series as he was a “very marketable character that isn’t being fully utilised at the moment” and Wendy’s role within the series has been visibly altered as she has become Bobs business partner instead of the “office girl” as described earlier in the production (see: fig 1: introduction) and so “She should no longer be seen packing Bob’s sandwiches or bringing him cups of tea etc”. The notes on Bird’s inclusion in storylines were incorporated by Randal as a significant proportion of the story of *Bob’s Boots* features Bird whilst Wendy is seen clearing up after installing a new kitchen for a client instead of using one to make tea for the thirsty builder. The changing use of these characters within this storyline can be traced back to these suggestions put forward at this meeting (1999: 2-3). There is a present understanding here of the influential power that these characters have on their young audience. Showing Wendy to be a subservient tea girl³⁰ would set a bad example to the audience and as the only one of the main characters recognisable as a female Wendy can be utilised in a more socially conscientious manner that promotes equality for its young audience.

Writers for the series must also consider the physical limitations that a stop motion animation show presents. Prior to this meeting it is noted in the minutes that the writers were given a tour of the studio. This allowed them to see the sets and animators at work. Not only were the writers encouraged to use the sets shown on the tour but also what can and cannot happen on each set. One example of such a limitation is that none of the machine characters can physically (through animation) turn around on the town hall set, and that only Dizzy can enter the interior sets due to her size. Other limitations that animation offers to writers at this stage are also noted in the same minutes, such as the use of fire which “Would be very difficult to animate – costs lots when done in CGI” limiting any writers ideas about a fire safety episode being done on set. One stop motion television show that did show fire in an age before CG would have been considered is *Fireman Sam* (1987). The fire in this show was created using reflective material (such as tinfoil) and lights to give the effect³¹. The show didn’t feature fire all of the time, with episodes focusing on rescues and the consequences of Norman Price’s (the young resident of Sam’s hometown of Pontypandy) misbehaviour. The reason for extinguishing the idea of featuring fire in *Bob the Builder* is recorded that it is “not relevant for a building show” by the producer of the show Jackie Cockle. Water is another limitation and so any episodes involving swimming or vast amounts of water are discouraged, although

³⁰ Wendy was originally intended to be the “Office Girl”, this is evidenced in the original sketch (see: figure 2)

³¹ Special effects techniques without the use of CG such as fire are commonly known throughout the stop motion industry see: (Shaw 2004:147)

tears and a “few splashes” are possible (1999: 2). Additional or “generic” characters are another issue that the writers have to consider. A cast of hundreds cannot be accommodated on a stop motion show without incurring huge expense and background characters are only usually seen in larger stop motion productions such as feature films. The same point is reinforced in a later document when a fairground episode is suggested “We’ve avoided this sort of story because we can’t show a fair in action with people” (Warburg 1999).

The expense of having an extra attachment for Lofty is even listed as one of the “Budget Items” that need to be made by Mackinnon and Saunders³², so an entire puppet would incur a greater expense still. The costumes alone for generic characters are listed as costing £500 in the same notes whilst on a separate document the “generic male puppet” is listed as costing £4,800 with additional costs of £420 for wig sculpts (Anon 1999a). As additional puppets are so expensive additional characters are allowed but only if they can be used for more than one storyline and so the Mayor, a Policeman and a building inspector are all suggested (1999: 2). Given the cost, it becomes clear why a wide and varied cast of background characters wouldn’t be possible in the series. As with the majority of British children’s preschool television series the central cast guide the stories as their expensive puppets are readily available, this is more out of economic restriction rather than artistic restrictions as evidenced by the collection. This is not a restriction exclusive to stop motion and can be the case with other television series created in CG and hand drawn.

Addressing an audience of children is also a primary concern during this initial stage of the writing process. When the prospect for adding small animals to the series it was noted that “These work particularly well - children have loved the hedgehogs, moles etc from previous ep’s (sic)”. It was also noted that spiders should not be considered as they are too small, producer Jackie Cockle noted “I don’t think spiders are practical because they’d have to be massive to be seen! – ARACHNAPHOBIA!” the large letters highlighting the danger of small children being scared by spiders (1999: 3). Within the literature about children’s views on television there is little on their phobias when it comes to television, though some discuss fears. Using television drama as an example it is noted that:

“... although children may be upset by certain programmes during their early years, once they learn to recognise the fictional or fantasy character of television drama, they develop their own immunity to such effects. Among some, perhaps most, children, this

³² Mackinnon and Saunders are a model making company based in Altrincham, Greater Manchester that specialize in creating the models for stop motion productions for television (*Bob the Builder*), feature films (*Fantastic Mr Fox*, *Corpse Bride*) and shorts (*Next*). They also 2D create digital television shows such as *Frankensteins Cat* and *Wanda and the Alien*.

would appear to happen by the time they are in their mid-primary school years” (Gunter et al. 1991:23)

Safety is another highlighted concern with the use of power tools and the correct procedures being of paramount importance so that Bob and the gang set a good example. Under the heading of Safety we see that it has become “more and more of a concern - Bob now has a safety jacket and everyone should always be aware of the appropriate safety procedures etc, with any building jobs e.g. safety goggles, hard hat, scaffolding etc.” (1999: 4) These are important changes and developments not only in production practice but cultural norms – the rise of ‘health and safety’ issues in the UK and its subsequent legislation helps define the show as ‘British’ in that these factors are not necessarily taken into account elsewhere. Health and safety is noted when ideas for episodes are being pitched. In a possible episode titled “Scaffold Bob” concerns are raised by the lack of health and safety implemented in the script (Warburg 1999). The same notes are also a reminder of the way that the characters consistency had to be maintained so Bob is not portrayed as “a bumbling idiot” and the style of the show is taken into account not allowing for buildings with gargoyles on them. The writer is also chastised for not doing his research into buildings, a reminder that although this is a children’s show, attention must be paid to the details (see: Figure 15 below).

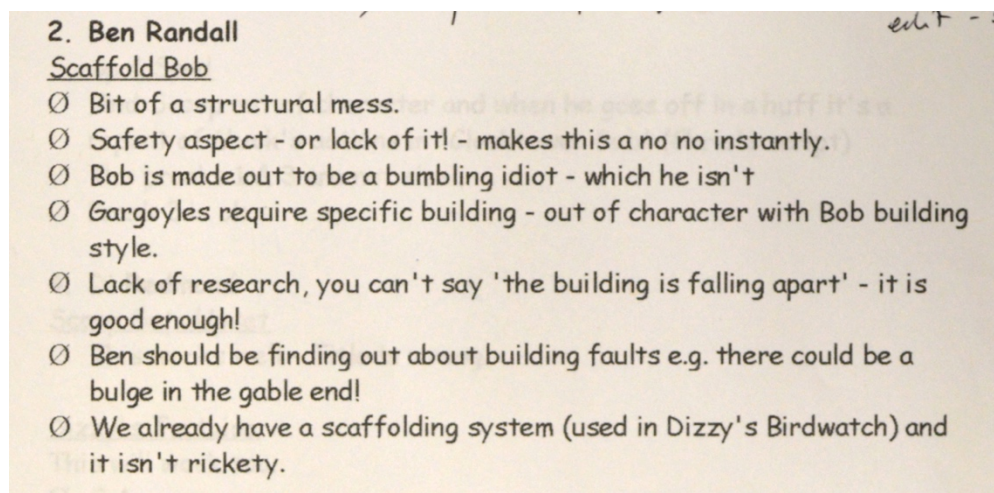


Figure 15: Scaffold Bob Notes (Source: LAAC)

The show itself has to ensure that characters and situations do not seem out of place in the universe that the characters inhabit with all of the rules that the characters and the viewer expects. One such rule is that the machines in the show do not eat food. As the script process continues an episode proposed in the meeting under “Possible new storyline ideas” as “A Picnic – day off for the machines” later becomes named as *Bob’s Picnic* before ultimately being rejected. Whilst the picnic element for the story was rejected one element of the story described as “crying wolf”, which would have seen Spud annoying the picnickers by

pretending Farmer Pickles is caught in a ditch, is suggested that it is saved for a later episode. As well as the scariness of having the Farmer caught in a ditch, another concern raised is that all of the characters would not be able to inhabit the set at the same time to gather around the picnic blanket. This can be seen in a document that followed the meeting when writers handed in their concepts for episodes (Hansom 1999c)

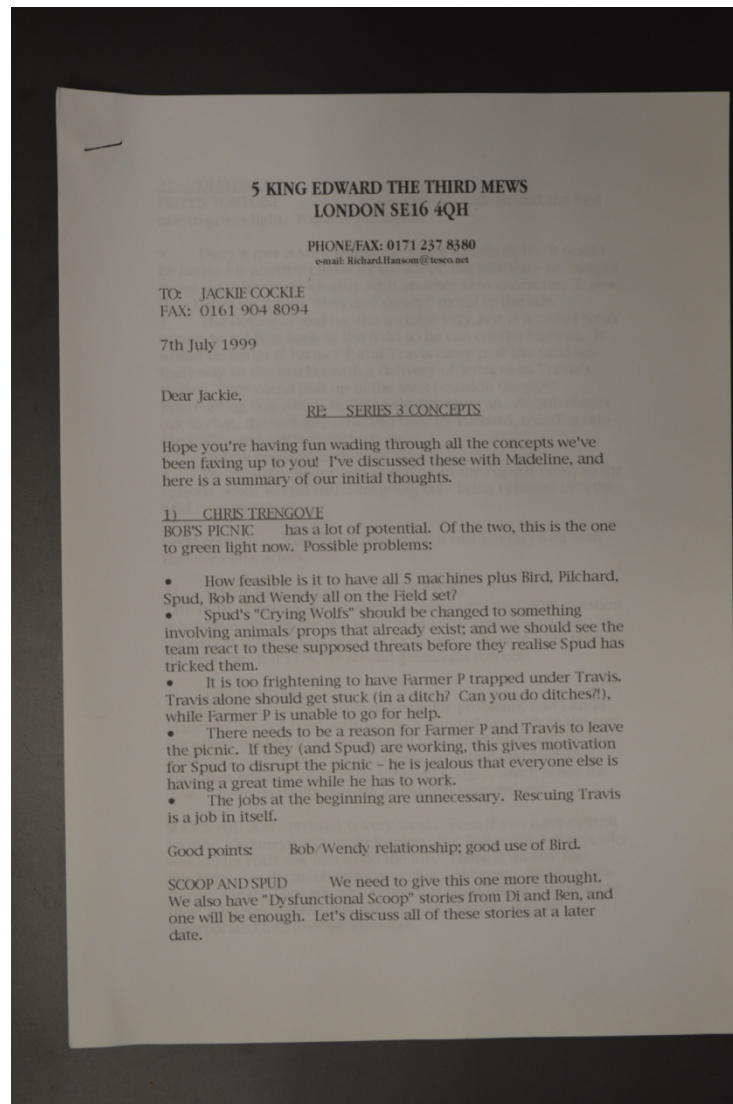


Figure 16: Notes for Concepts (Source: LAAC)

Writers meetings ensure that the entire writing team is working towards the same goal and writing in the same voice. The message of the show as well as the characters and world they inhabit must be unified by their own rules so that they are accepted by the audience. Another useful tool in this process that helps to unify the stories is the writer's bible.

Writers Bible

Bob's Boots, the episode under study here is from series three which was created in 1999. By 2003 a writer's bible had become a document that writers could refer to regularly. A writer's bible is a document that helps shape the voice of the show. Rules are listed that writers have to adhere to and previous episodes and storylines are documented to avoid duplication. This vital referencing tool is used by the writer to answer questions and queries they may have and guide them through the writing process. For example, if a writer wishes to include a pizza shop they will find that there is already a pizza shop and pizza shop owner character that has been used in previous series and can be used again on the series. If a writer wishes to set an episode in the zoo they will find that there are no animal characters or sets that could populate a zoo and so must write about something else to avoid the cost of creating such items.

A copy of a writers bible from 2005 documents episodes from the first series up to series nine (Farnworth 2005). From the start of this document there is a defining instruction to appeal to the audience as a children's show. This is detailed from the outset in the introduction.

"Bob the Builder is a stop frame animated series aimed at a preschool audience (2-5 years) Each 10 minute episode centres around Bob and his team of machines...because when you're small there's nothing more exciting than machines which are very big." (2005: 2)

Writers on the show are also encouraged to treat the machines as children as they "act more like a gang of lively kids than a collection of machines" This is reiterated later on the same page when the reader is told that the machines are to be "easy for the audience to identify with" placing the machines in the role of children in any storylines for the show (2005: 2).. Bob's role is described as that of an equal who addresses his machines with encouragement and affection. The storylines that this dynamic have to fit into must also be "classic and timeless" with friendship and problem solving being key issues that stories must address. This really is the narrative backbone of the show with the characters in the show acting like a family. This is further discussed in the character descriptions (2005: 9-20). Bob is described as kind, friendly and helpful but also as a bit forgetful and disorganised, "in fact if it wasn't for Wendy, Scoop and the team, it's pretty certain that Bob's Building Yard would soon be in a state of chaos" Bob cannot function without the other members of his gang who could be identified as a family unit, with Bob as the bumbling father and the capable and organised Wendy taking the role of the mother. The machines, take the role of the children as explicitly stated earlier in the writers bible. The machines are also described and encouraged to be imagined through the writing process with children's characteristics with Muck, the

digger/dumper truck being described as “like the kid in the playground with one sock down and one sock up, tie missing and cap back to front”. The over simplified family dynamic should be comfortably recognisable for the young audience the show is aimed at to appreciate and even recognise as something prevalent in television with the male often taking the main job whilst women deal with organisational and personal matters (1991: 81-82).

With the character dynamic established finding the right scenarios that the characters will fit into is something that also needs to be carefully shaped with the viewers in mind.

“Episodes can be triggered by all kinds of incidents, but will always be characterised by strong storylines involving the kind of simple, easily recognisable situations and incidents with which the viewers can identify. Each episode should have an A plot and a B plot, at least one of these should deal with a building job in some detail.” (2005: 3)

The emphasis on a profession is something rooted in children’s stop motion television, with characters often sharing an alliterative bond with their profession, *Postman Pat*, *Fireman Sam*, *Bob the Builder* all of these stop motion shows centre around the profession of the main character and the adventure that surrounds it. It is perhaps surprising that with this precedent set that when originally pitched to the BBC *Bob the Builder* it was rejected numerous times (Inglis 2003: 132). The collection at Loughborough also houses an original image from the initial pitch of *Bob the Builder* drawn by Keith Chapman, showing the character to be have a more stereotypical form, sporting curly hair and a beer belly, with a more stereotypical builder friend alongside what looks like Scoop. a look that children could hardly relate to and a stark contrast from the ageless look that the final version of the character would have. It isn’t clear whether the original look of the show and the characters was the reason that the show was rejected so many times.

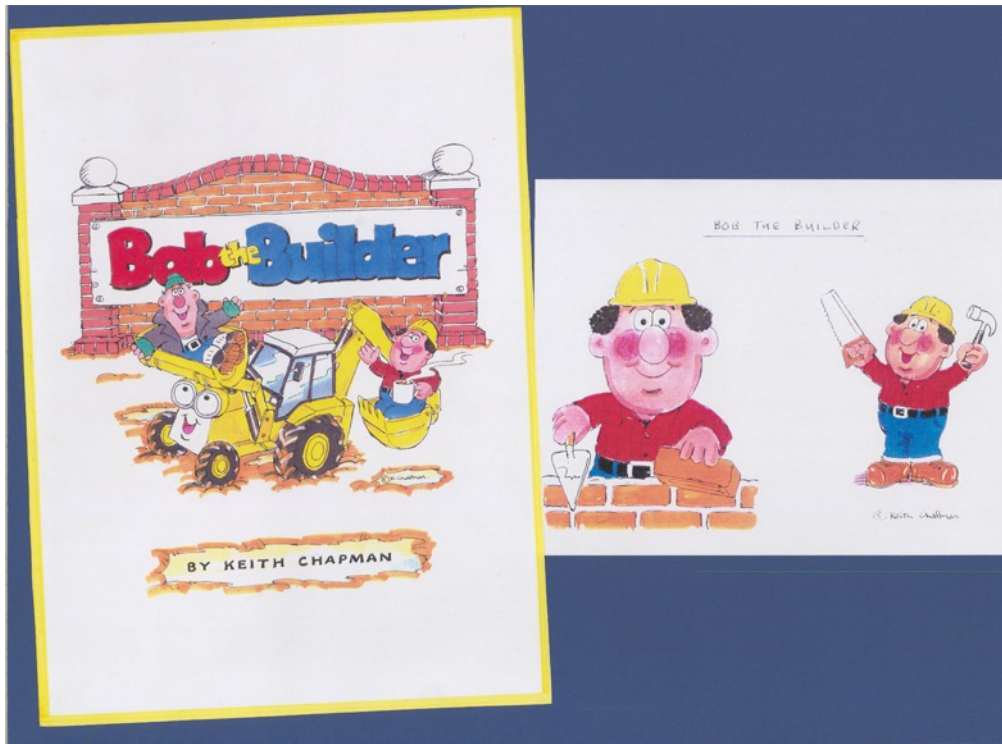


Figure 17: Keith Chapman's Original Bob the Builder (Source: LAAC)

A list of jobs undertaken in previous episodes is included in the writers bible to avoid repetition. Though the importance of having an A plot and a B plot cannot be understated. Having two stories running at the same time the viewer is kept engaged with each and will remain interested. A poor writer would presume that an audience of children would mean that the quality of storytelling need not be on par with writing for any other audience. Children are a discerning audience that enjoy watching stories unfold and can grow wise to any writing short cut within storylines or laziness used at the writer's peril.

"Put simply, children learn to recognise story structures and know what to expect each week. They are intrigued to see if their hypotheses about what will happen are correct and they are also curious to see how the expected storyline will, on this occasion, be played out." (1991: 113 - 114)

This drive for quality which may be instigated by children is led by the producer, as we see time and again in the documents in the collection, the producer leads a team of others to ensure that the quality of the storytelling is at its best.

Further in the document the writers guidelines section spells out the way characters should speak to one another. With the audience in mind it is said that the characters mustn't use monologues, figures of speech or anything else that the young audience would not be familiar with. If there are any "adult" ideas in the show Bob or Wendy have to describe them "in words

that a 3-4 year old would understand” affirming the paternal and maternal nature of the characters.

“The Look of Bob the Builder” is a section that describes the camera layout of the show which is essential when communicating the audience. The author of the page Angela Poschet, was the cinematographer for the show and so communicated her ideas to the writing team. This page describes both the restrictions of shooting on a stop motion set in great detail detailing the types of lenses used and the shots that should be used for the human characters. This information is of use to the animators as it states that white reflectors are required for both Lofty and Bob when wearing a hard hat to tone down the bright colour and to avoid shadows on faces respectively. This information would not be of particular relevance to a writer as there is no technical difficulty or suggestion to avoid shots of Bob or Lofty close up, just a suggestion to anyone lighting the shot to do so with care. This information is authored by Poschet and there is no suggestion that she knew she was writing it for a writers bible as additional information such as the lighting requirements for animators are not especially needed for a writer. However, information about the camera layout is necessary for writers to avoid complicated shots or something that would go against the look of the show. The camera is suggested to be at eye level with the characters. One suggestion that is not added to this is if the camera should remain static or not. On stop motion sets the camera often remains static to avoid the over complicated and time consuming process of moving the camera and animating one frame at a time. Without acknowledgement in the document, keeping the camera static is actually more appealing to a younger audience than having a moving camera (Messenger Davies 1989: 14). In this instance it would seem that the visual language of a children’s animated television show is just as important as the verbal language and the restrictions of stop motion animation are beneficial to the audience and in turn to the show’s popularity.

Within this document it is shown that the additional characters that were limited due to financial restrictions in the earlier series have become established with names and back stories that writers can work with outside of the original cast with twenty eight additional characters, including machine characters that have joined the cast list. Amongst them we see the suggested Building Inspector from the season three meetings has been implemented and named as Mr Bentley. Here we see as the series and additional characters were added in each series the puppets become permanent residents of the town of “Bobsville” and can be called back for subsequent episodes. As the cast list grows the types of stories that can be done grows too. For example, once Mr Bentley the building inspector has been introduced each series may have an episode with Mr Bentley in it. Likewise, once Mr Sabitoni and his Pizzeria are introduced Bob may return to decorate the restaurant, add an extension or install a new pizza oven over multiple episodes. These characters never form part of the core team

that the episodes must centre around but they remain in the writers bible as extra tools at the writer's disposal.

As well as a list of characters at the writer's disposal this document also gives writers images to work with. Props are also listed. These items have been accumulated through the series run and so are available if they are needed to be used again. Bob's Ear Defenders, Clipboard and Mobile phone are items that can be used for multiple episodes and so are listed for use again. Images of the characters and the sets give the writers an idea of the environments the characters can inhabit. In order to reiterate the capability of the puppets a section on page 121 is dedicated to just that reminding the writers to: "Remember these are not real people – The human characters and Spud will always need metal magnetic base to walk on. Please avoid climbing ladders." The metal magnetic base referred to here is used to secure puppets to the set when animating, magnets in the soles of the feet of puppets and secured to the metallic floor of the set by another magnet under it making tasks such as climbing a ladder, jumping up in the air or playing hopscotch a difficult thing to animate without the use of a armature rig³³ that would hold the character in place whilst animating and be removed digitally after the shoot, at expense to the production. Another reminder in this section is that the characters cannot fit through any of the doors on the set, so any shots that writers may plan of the characters entering through doorways is limited by the use of puppets³⁴. The size of the puppets is also mentioned as writers are encouraged to keep only three puppets on a set at once, noting that the roles of Muck and Scoop are similar and so only one need be used where necessary (2005: 121).

This writers meeting and writers bible, documented in the collection, evidences the start of the writing process for these stories. The writers have been equipped with information about the show and presented with some of the limitations that the stop motion process and writing for the intended audience may present. Whilst limitations may continue to present themselves the role of script editor and producer are set to become a dominating factor in the scriptwriting process from this point onwards.

³³ Rigs are jointed arms that can be animated which attach to puppets in order to balance the puppet where one or more of it's feet leave the ground (such animating the character running) where it may fall over between shots. Rigs can either be hidden from the view of the camera as support or removed digitally in post-production if they are filmed. For more details please refer to (Shaw 2004: 67)

³⁴ More work on the same bible can be found in the chapter 'Sorry Blondie, I don't do backstory': Script Editing; The Invisible Craft (Wells 2014) in Screenwriters and Screenwriting: Putting Practice into Context (Batty 2014)

Drafting

The writer's bible from 2005 is an extension of the writers meeting that writer Ben Randall attended in 1999 (1999: 1). Many of the points noted in the minutes from that meeting find their way into the writer's bible. Asserting that Wendy's capable role as Bob's organiser and business partner as both documents stress that she shouldn't make Bob's lunch or make him cups of tea. There is no evidence that there was a writers bible to hand when Ben Randall began writing *Bob's Boots* and the inclusion of similar (updated) information displays evidence that as the series developed and began to gather more characters, sets, props and a list of expended jobs and storylines, a bible was required and then created to contain all of the information a tour around the studio and a scriptwriters meeting would have contained and more.

After being introduced to the requirements the series has, writers are then invited to create concepts for their stories. Before writing an entire script an outline of the story would be delivered by the writer for approval from the production team. The outline itself is three pages long and consists of the entire story laid out in sentences (Randall 1999). These sentences describe the dialogue, movement and location of the characters which enables the script editor to decide if the concept of the story has any immediate errors in it. If the writer at this stage would have contradicted the writers meeting and added multiple new characters or a setting that wasn't already available to animate on or couldn't be created the outline could easily be changed or rejected completely.

Given the lack of dialogue and stage directions there is little difference in the basic story of *Bob's Boots* between the concept stage and the final edit of the script. As the production develops we shall see the narrative and dialogue created and shaped towards a children's audience. The story itself focuses on Bob, who receives a new pair of boots that squeak. Meanwhile Spud the Scarecrow challenges Bird to a race to town to see who can get to Bob's Yard the quickest, by foot or "as the crow flies". Spud steals Bob's cream bun along the way but ends up paying the consequences when he gets to the yard and finds the mice that have been following Bob decide to follow Spud for his bun and chase him into the night. The original outline offers three ending possibilities, where Spud realises he is being followed by Mice and where he does not.

Two days later a document is created by script editor Dick Hansom titled Notes to Concept (Hansom 1999b). This document lists the changes needed to the initial story. The first thing mentioned is that although the story is about wearing a brand new pair of shoes, the puppet cannot be seen putting them on due to the fact that the puppets do not have removable footwear. In order to make the idea that Bob is indeed wearing new boots believable to the

audience a prop of the shoes and shoebox will be made and so when Bob opens his box and then turns up to work in the next scene with squeaky boots, the audience will not have a problem in believing that he is wearing new boots.

One large aspect of the storyline is removed. A third plot involves Dizzy and Roley listening to music on headphones in the yard whilst Pilchard is trying to get some sleep. This is suggested to be removed from the story because it doesn't fit into the episode, also "Bobs ear muffs do not fit on Pilchard" a reference to one of Pilchard the cats attempts to block out the noise and another restriction that the props present to the writing. Another prop error was that Scoop and Muck were employed with Wendy to clear up leaves, a job which is difficult to animate, so an alternate job is requested for Wendy's team. This is also mentioned by Jackie Cockle in a separate email dictated to Bella Reekie about the outline from the storyline point of view "a bit of a weak occupation for the machines at Wendy's site" (Cockle 1999) and a practical point of view, as props (the prop making department) would have difficulty creating the tiny, individual leaves for the set.

The next step in this process is to draft the first version of the script, however, so far a copy of the first draft of this script has not been located within the collection. Without this first draft of the script it is difficult to tell what has actually been created and what, if any, of the suggested changes from the script supervisor and producer have been implemented to the first draft. To fill in this gap, there are emails and support documents such as script reports to be important and necessary to fill in some of the blanks between the initial concept, which is part of the collection, and the second draft of the script, which follows the missing first draft.

Using the collection we can search through these subsequent documents to see which direction the story took. These documents are written from the point of view of someone who has seen the first draft of the script and so any comments are made in regard to that script. From these comments we know which parts of the draft were acceptable to the production team and which parts were not. The first document that refers to the script is written by Script Supervisor Dick Hansom. The document is Notes on the 1st Draft, a five page document with corrections that was possibly faxed to the writer (Hansom 1999a). Although typing errors are a large part of the documents function there are also suggestions to aid the storytelling within the script. Without the first draft of this script to hand we do not know what was written but by viewing subsequent drafts and the finished animation we know that the story starts with Bob opening a parcel containing a new pair of boots. Establishing this element is important as the story centres around the new boots that he cannot actually be seen putting on his feet. Hansom states that the parcel needs to be announced to set up the scene "we need something to show how the parcel gets there, Bob coming in and saying "Look what the postman brought, Pilchard" Would be okay. A short opening scene on the doorstep is

probably too time-consuming and complicated.” We have no evidence of this opening scene on the doorstep that Hansom refers to as it does not appear in subsequent scripts but according to the script supervisor it wasn’t required. Whilst it is unfortunate that this draft was missing from the collection and couldn’t form part of the investigation, it is rare to have a collection as complete or as well annotated as the LAAC. Many researchers would have to infer from what little materials are available.

By examining the evolution of the script we begin to see the hierarchy of production during the writing process. Whilst it is the job of the writer to create the story, they do so under the influence of both the script supervisor and the people above them. Through the documents we can see which names are mentioned and it is possible to gain an understanding as to the hierarchy that influences the script. The names are extracted from these documents as either the authors of those documents (such as email signatures) or they are listed within the documents in some other way such as being cc’d within the email or mentioned in the text. As the majority of the documents are communicative in nature we get explicit access to the process. The box we use to examine the hierarchy is a box which belonged to script supervisor Dick Hansom. As script supervisor Hansom instructs the writers but he in turn is subject to instruction from Jackie Cockle who is in turn subject to instruction from HiT Entertainment who were commissioned by the BBC (see: Figure 18)

Writing Hierarchy: Bob the Builder

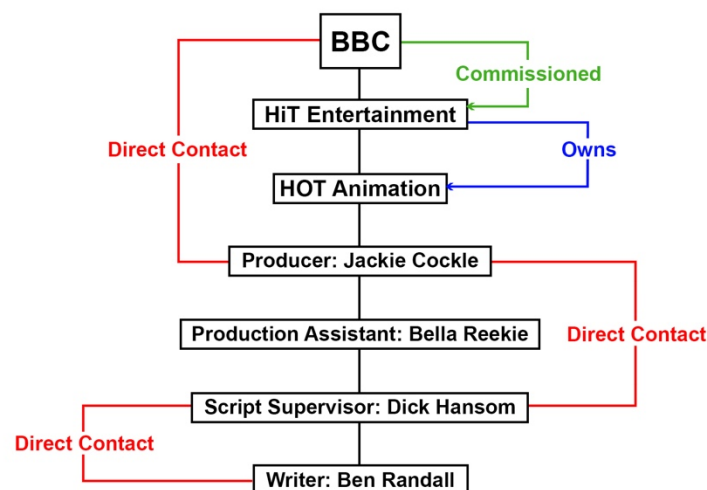


Figure 18: Writers Hierarchy (Steve Henderson 2016)

If we look at figure 7 we see that's there is a chain of command. At the top of the chain there is the BBC who commissioned the series from HiT Entertainment who in turn got HOT Animation to create and produce the show.

There is a level of guidance that permeates the creation and development of a script. In the case of *Bob's Boots* by Ben Randall we find a writer who is initially shaped by the restrictions of the art form itself and by the requirements of writing for the age group as guided by a producer (Jackie Cockle) and a script editor (Dick Hansom) who are under the obligations of their commissioners. To this end, Cockle and Hansom shape the scripts and have a structure which they try to maintain through the writers meetings, and later through the instructional manual style writers bible, a document that outlines the rules of the show set by Cockle.

Thoughts on Authorship based on Bob's Boots study

As evidenced by the items held in LAAC in a box designated HOT0018 (see: Appendix B) the television series *Bob the Builder* is scripted by a number of people. These individuals attend writers meetings or are presented with a writer bible that instructs them in the style that they must conduct their work. That instruction is written by the producer of the show and maintained as the show continues allowing for new additions such as sets and characters to be included at the discretion of the production team. Ultimately, in this context the writer has little authority over the finished version of their script as it must adhere to the instructions written for them, if they do not then their ideas are simply dismissed. The restrictions are outlined in the writers bible by way of introduction "Bob the Builder is a stop frame animated series aimed at a preschool audience" (Farnworth 2005). Within this sentence any prospective writer is introduced to the idea that they will be writing for a stop motion show and a preschool show. As a stop motion show there will be restrictions of the form and budgetary restrictions and as a preschool show there will be pedagogical elements that must be adhered to when addressing their young audience. These are explicitly demonstrated within the items in the collection.

These instructions, shaped by limitations of the form or pedagogical requirements preserve a uniformity to the show that is reminiscent of the earliest stop motion shows produced in the UK. The town that Bob the Builder inhabits and the character led adventures he partakes in bear a resemblance to the characters and towns of *Trumpton*, *Chigley* and *Camberwick Green* or even Greendale, the home of *Postman Pat* echoing the work of Murray and Wood. The stop motion construction of these shows deliver restrictions, but those restrictions present the opportunity to be creative, to explore different aspects of characters personalities to explore the "foibles and follies of character and situation rather than the open vocabulary of the cartoon idiom" (Wells 2008). As with the shows of Murray and Wood, the shows are

driven by a single figure who ensures that the parameters of the show are adopted. In the case of *Bob the Builder* that figure is one who is present throughout the entire process. The items in box HOT0018 demonstrate that communication is always directed at the producer Jackie Cockle or her assistants, and the decisions made by her end up being adopted.

Conclusions and Recommendations.

Defining British Children's Preschool Animated Television Series

It has been noted within this investigation that outside of Animation Studies, animation is not regarded as anything more than a genre (see: Atwal, Millwood-Hargrave, Sancho, Agyeman, & Karet, 2003; Gunter, McAleer, & Clifford, 1991).

Using the materials in the collection to it has been possible to road test the system of archive management and use the items to define the distinction and genre of British children's preschool television series. It is established within Animation Studies that animation is not a genre of film (Wells, 2002), though this has yet to present itself within the mainstream as an accepted belief used in studies or by way of changing the classification system on television (such as BARB). Within the field of Animation Studies, though these ideas have been introduced it will take many studies to define the various genres, sub genres and styles of animation. *Bob the Builder* has been used as an example of a British children's preschool television animation, a variation of animation that has been practiced since the early days of British television, but until now not clearly outlined as a distinct genre. The description may seem long but each descriptor has a purpose that has been identified as being essential to the makeup of these shows during this investigation.

British

Created on what can be defined as the United Kingdom³⁵. More comprehensively evidenced by the way the programme is funded. The BFI cultural test (BFI, 2015) is a good way of assessing qualification as cultural traditions and sensibilities play a bigger role in a films identification than the location it was made. British programmes may be produced in the UK but the finished animation work can be completed overseas.

Children's

The programme would have been commissioned for and created for children with the intention of having them as the audience on a channel dedicated to that age group (for example CBeebies) or at a time designated in the schedule for children. The audience is constantly kept in mind throughout the production.

Preschool

The specific age range that the show is made for. Children's age ranges between this age and teenagers in the eyes of television commissioners and so very different programmes are tailored towards these distinct age groups. Preschool television programming will be constructed to a different pace to programming made for older children to cater for that age groups understanding of the world (Messenger Davies, 1989).

³⁵ The "British Isles" includes Ireland which has a separate identity and history.

Animated

The work is animated. It differs from live action because the movement seen during the programme has been created one frame at a time. Because of this the creators have greater control over the design of the show, though the form itself may present limitations due to budgetary restraints or restraints inherent in the medium used (for example stop motion).

Television Series

Television has its own formatting distinctions. As a television programme the work may be split into a series.

The makeup of a British children's preschool animated television series comprises of all of the above factors and is not exclusive to one particular show. From this identification patterns emerge and other television series can fall into the same category *Bob the Builder*.

Now that British children's preschool animated television series have been identified it is hoped that further classifications are made for other sub genres of animated television. A more comprehensive understanding as to what "cartoons" or "animation" are being assessed in studies will avoid the semantic failings of previous studies and the disregard for the animated form and its particularities. Viewing animated programming as an international form capable of creating diverse content that can cater for different audiences of all ages can open a forum for greater debate, investigation and appreciation of the animated form.

Refining the Taxonomy

Through the practice of developing a system of data management that responds to the structure of an animation production and then applying that model to an animation collection, using records generated from that practice, this investigation has had success in establishing new thinking in regards to the study of animation.

A taxonomy has been developed that acknowledges the process of animation, identifying the production pipeline as a basis for managing animation collections. In doing so items that are categorised can be examined against one another, to present a clear understanding of the production process and whatever can be evidenced from that process. By adding "production level" such as pre-production enables users to chart ideas as they progress through the production pipeline, providing clear evidence of objectives or methodologies in the film making process.

This investigation has also identified a lack of effort within academic (Television Studies) and governmental (Ofcom) circles to acknowledge the different variations of animation created for television, demonstrated by the copious use of the word "cartoon" or "animation" as all broad brush descriptors to a field that, in the case of children's television offers at the very least

forms of animated comedy, drama and light entertainment for different age groups identified as British by their cultural inclusions. In identifying and then demonstrating the process adopted in the creation of a British children's preschool television series using the LAAC, it is hoped that further distinctions can be made. The lack of a distinction is a historic problem, however in using a collection these definitions can be expanded upon and the broad brush description can be corrected.

Over the course of this investigation the taxonomy that has been developed for an animation collection has served the purpose of investigating British children's animated television. It has to be noted that the taxonomy is not exclusive to television animation (children's or otherwise) and relates directly to animation itself, malleable enough to be used on anything animated. The taxonomy can also be transferred to other collections and is not exclusive to the LAAC. It is hoped that the lack of exclusivity will encourage the further development of this taxonomy encompassing more communication between fledgling collections and established ones that currently do not adopt a taxonomy that acknowledges the animation production process.

In surveying the current state of archives that are exclusive to animation production or contain animation production materials within them and by looking at the terminology of archives and collecting it has become apparent that "animation archives" as a whole do not exist in a way that is regulated by an official or self-appointed body. As animation materials and production are specific to the art form of animation, there is a need for standards to be applied to the systems that are specific to animation. The obvious benefits of such practices are the sharing of knowledge and information as well as the ease of communication and the sharing of ideas between collections. This would encourage the further development and growth of taxonomies that recognise animation archiving to be conducted to a philosophy and understanding of the form. This suggested pattern fits a "community of practice" model of thinking put forward by Wenger (1998).

Wegner puts forward a social theory of learning, comprising of meaning, practice, community and identity. This is how it could be applied to the practice of animation archives.

"Meaning: a way of talking about our (changing) ability – individually and collectively – to experience out life and the world as meaningful." (1998)

Taking the experience of learning as an experiential best comes into effect during the handling of a document and the care and consideration that must be taken when contextualising its nature and its place within animation history and its future potential. As this research calls for a better understanding of animation, through the use of a collection, ways of contextualising documents and applying the research would be beneficial to the community.

“Practice: a way of talking about the shared historical and social resources, frameworks and perspectives that can sustain engagement in action.”

When conducted in isolation the practice of archiving and collection management can be developed by the individual, though it does not benefit from the process of a peer review, this is complimented further by the notion of community.

“Community: a way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognisable as competence”

The importance of community can't be over stated. As revealed ABAC represents animation collections in the UK. It is this community that can act as forum of debate, marshal the standards of care for animation materials and drive the growth and development of animation research using collections.

“Identity: a way of talking about how learning changes who we are and creates personal histories of becoming in the context of communities.”

The need to develop an identity for animation collections in the UK is a necessity. As animation materials are viewed as disposable they become discarded without a second thought to their usefulness as primary research material. The fact that the final films often continue to exist on various formats is some comfort, but using a film and using materials from a film deliver different contexts to an investigation.

These four communities of practice cornerstones could be housed within the ABAC framework. Building a network of archives that share information on the practice of archiving will lead to improvements to the practice of archiving animation materials, developing a taxonomy and a philosophy for animation archiving.

Towards a Philosophy for Animation Archives

Using the system of archive management devised within this research we can assess what actually constitutes as an animation archive, and in doing begin building a philosophy of animation archiving. In this instance, and in any instance using similar collections of animation production material the understanding of what animation “is” comes from the practical evidence within the archive. Central to a philosophy is the belief that animation is the creation of movement, the opposite of the interpretation of live action as the recording of movement as vastly supported in the field of Animation Studies (see: Furniss, 1998; Solomon,

1987; Wells, 1998). All materials in an animation archive are involved in the production of the creation of movement.

Within this taxonomy work is categorised by level of production (Pre-production, Production, Post-Production) demonstrating that the materials in the collection represent a part of the animation process. Also included are non-production items. These still form a part of the animation process and in some cases contextualise the events and processes. One such example is a poster for the *Bob the Builder* wrap party, a tongue in cheek, employees only invite, adorned with an image of Bob and Farmer Pickles inebriated after an evening of celebration. Urination, cigarettes, empty booze bottles and vomit help paint a picture of excess that parody the restrictive and controlled style and mannerisms that the invitees would have had to have upheld for Bob's character during production.

The item and items like it contextualise what life was like on production and although not used in the production of a film, they are products of the production process delivering information on an event that happened during production, delivered with a knowing humour.



Figure 20: Bob the Builder Wrap Party Poster (Source: LAAC)

Although elements have been suggested within this research, the philosophy for an animation archive and the belief of what animation is should be formed around a mutual consensus, assembled and agreed upon by peers and reviewed with regularity. In this instance, the beginning of a philosophy, it is understood that animation is the creation of movement, created by materials, some of which are housed within an animation collection and when properly catalogued and made accessible for the public to use in research they may be referred to as Animation Archives.

Over the course of this research an assessment of British children's preschool television animation has been made possible by the use of animation production materials via a devised taxonomy of collection management tailored towards animation production materials. Using animation production documents as primary research material has demonstrated the potential for research to be carried out in this way, with empirical evidence providing qualitative data. Going forward a peer reviewed and evolving philosophy and the practice of cataloguing, organising, preserving and managing a collection of animation production materials alongside it will open up new opportunities in the field of animation research.

During this investigation ABAC has not held a meeting. This has been noted due to the fact that the recession and efforts in preserving the LAAC have been the primary focus of the cause. Whilst this investigation has been ongoing communication between representatives of collections and the industry itself has led to the preservation of some pertinent items. In 2014 distribution company Blue Dolphin revealed their intention to discard their 35mm prints of *Animal Farm* (1954) having transferred the prints to digital format. The 35mm versions of the film have the potential to outlive the digitally reproduced versions of the film as modern formats are aging and becoming obsolete at an alarming rate (Evert, 2013). By intervening and transferring the reels from Blue Dolphin to the National Media Museum, the prints are now in a safe place, should they be required again. Without that intervention the prints of the UK's first commercially produced animated feature would have been thrown away. In the same year Tandem Films, co-founded by Academy Award winner³⁶ Daniel Greaves closed. Before I could personally intervene and suggest that the studio's history be preserved it was revealed that the majority of the artwork had been put in a skip and removed. Upon contacting Greaves it was revealed that he had his original reels of his personal films that he was looking to place in safe keeping somewhere. Working with UCA Farnham (Greaves Alumni University, who house other work by Tandem donated prior to the closure of the studio) it was arranged that Greaves deliver his collection of reels to the UCA.

³⁶ *Manipulation* (1991)

The activity demonstrates the fragility of that the material found itself in. The work of Greaves and the *Animal Farm* prints have been saved due to communication that demonstrates the need for wider networks of animation collections to communicate with regularity. With this investigation concluded the next recommended stage would be to start another meeting to gather custodians and representatives of animation collections to discuss the philosophy of animation collections and to instigate further research with the goal of developing a peer reviewed philosophy and the development of animation collections.

In an idealised world the following would be required to sustain the future of animation collections in the UK.

1. A peer reviewed philosophy for animation archiving needs establishing.
Including a code of ethics, and understanding of principles and values, established terminology and concepts, a worldview and paradigm a written codification of its philosophy and skills, methods, standards best codes of practice. This investigation has begun this work through its practice, but this needs further development and can be enhanced through forums of discussion, training and accreditation standards.
2. Animation collections need peer review to uncover the best way to develop the system of collection management and the handling and preserving materials.
Animation archiving is being practiced internationally and the international community needs addressing.
3. To begin it is recommended that ABAC launch an initial conference, with views to a continued dialogue and regular events. A public face that includes social media and email newsletters will ensure that those wishing to deposit material will have a point of contact.
4. Investment both of time and money is required for this to become a reality.

The taxonomy categorises the animation material allowing for research. The possibilities of research that can be conducted using this taxonomy to produce primary research material are plentiful. Within this instance the taxonomy as it stands in its original form was used to identify the production process of a British children's preschool animated television series, however a correctly catalogued and understood collection opens up the possibility to study the animated form and the ability to contextualise the data in that collection. A study of the Bob Godfrey Collection in Farnham offers researchers not only the opportunity to study the technique of animation, but to explore themes of sexism and Thatcherism present within his work. Other collections may be contextualised in a similar way allowing the material to "speak for itself" uncovering aspects of the production process that might not otherwise have been discovered.

The use of animation production collections as primary research materials, and the development of a taxonomy and philosophy that can be identified and practiced as Animation Archiving is an essential development that must be advanced in order to safeguard the heritage of, and preserve the practice and perception of animation as a distinct, original art form.

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Appendices

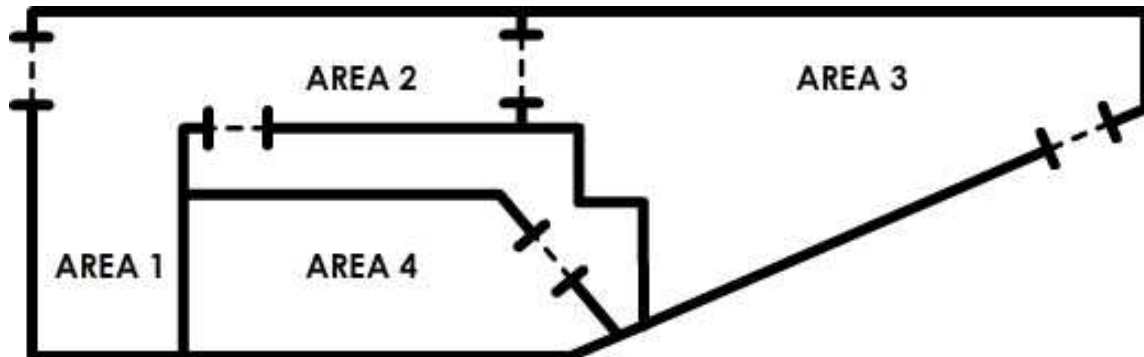
Appendix A: The Animation Academy Animation Archive

An inventory of the items discovered on the initial visit to the Loughborough Animation Academy Collection on January 10 2013.

A complimentary videolog of the first visit is available at <http://youtu.be/CduTOLwXris>

Frederick Street, University of Loughborough

Floorplan



Approximate archive overview

449 Animation boxes – Contents vary
157 Storage boxes – Contents vary
13 Large Animation boxes – Contents vary
41 Film canisters with film and negatives
6 Small boxes with film negatives and audio tracks
4 Clip edge picture frames
3 Boxes labelled “Glass” Presumably picture frames
1 loose picture frame
Assorted machinery

This is an approximate overview, what follows is each area in more detail. The description on each box does not indicate separate productions nor does it indicate quantity. Some boxes (Williams Wish Wellingtons, Angelmouse) took up more than the single box listed; some boxes have little or no markings on them.

Area 1

Assorted machinery
3 Boxes labelled “Glass” Presumably picture frames
1 loose picture frame
1 Box labelled “Chaucer’s Canterbury Tales press clippings”
16 Animation boxes labelled “Silver Fox Films” and “The Animation People Ltd”

- German Clearasil
- Angelmouse episode #23
- Toyboy

-BBC Notes and queries

Area 2

4 Clip edge picture frames

13 Large Animation boxes

46 Animation boxes labelled "Silver Fox Films" and "The Animation People Ltd"

- Angel Mouse
- Noel Edmunds Crinkly Bottom
- Williams Wish Wellingtons
- Captain Butler
- Roald Dahls revolting recipes
- Noels House Party
- Badger
- Children's Royal Variety Show
- Spider

Area 3

41 Film canisters with film and negatives

6 Small boxes with film negatives and audio tracks

6 Boxes of VHS tapes

118 Animation boxes labelled "Silver Fox Films", "The Animation People Ltd" and "Hibbert Ralph"

- Williams Wish Wellingtons
- Angel Mouse
- Teddy in Love
- First Snow of Winter
- Toys on Trial
- Toy Shop
- Homebase
- Bell Atlantic
- Springtime
- The Forgotten Toys
- Hindu Stories 1996
- Toyboy
- East Midlands
- Disney Channel
- Citylife
- Bitesize Fish
- Lie Back and Think of England

- Wimbledon 1999
- Fawlty Towers
- Flying Pigs
- BBC Hand Job
- Zeus hes junk
- Making of mankind
- Bee
- Yugoslavia
- Jekyll/Hyde
- Storytime 1994/1993
- BBC B, Larkin
- Googlewatch
- History Hunters 1998
- Various 1999
- Navy Lark
- Dame Edna
- The Raven
- Tom Binns
- Disney Channel
- Bath Toys

Area 4

141 Storage boxes with files and production material

- Bella
- Bob the Builder (various)
- Rubbadubbers
- Brambly Hedge
- Hot Orders
- Tapes and DVDs
- Showreels
- Pingu

121 Animation boxes labelled "Silver Fox Films"

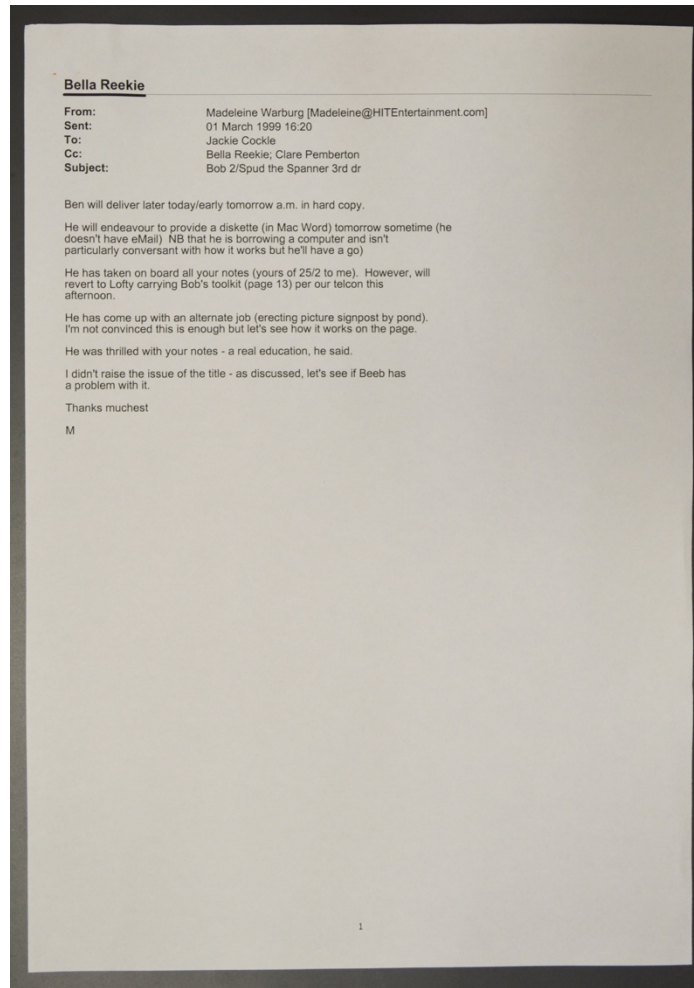
- Hagar (Eveready)
- SMTV
- Williams Wish Wellingtons
- Castaways
- Forgotten Toys

- Toyboy
- Toyswap
- Teddy in Love
- Points of view 1986/87
- World Cup Mexico 1996
- 5,4,3,1 EATA PKOT 1986
- Family Man
- Summer Arts Festival
- The Royal Wedding Andy and Fergie 1986
- Draw it. Paint it.
- Saturday Night Affairs
- “Duck” Cricket
- Angel Mouse.

Appendix B: Contents of Box HOT0018

The following represents the collated information taken from the taxonomy named Inventory MK2 alongside the documents photographed. It gives a visual representation of the collection and the items held in a single box. Though numerous boxes were catalogued during this practice HOT0018 has been chosen to deliver a case study into the making of *Bob's Boots* and episode written by Ben Randall. The following pages represent the items used in the case study.

The layout could also represent a way of delivering the information in future on the users level, whether that be an online catalogue or another system of access.



Ref Number	HOT/BTB/1/1/25/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	1/2/1999
Production Level	Pre Production
Author	Warburg, M
Document Type	Email Printout
Title on Document	Bob 2/Spud the Spanner 3rd dr
Pages	1
Image Ref	HOT0018/DSC_0001
Description	Email from Madeleine Warburg to Jackie Cockle
Notes	Discussing Ben Randals lack of email and problems with the title "Spud the Spanner", "Let's see if the Beeb have a problem with it."
Harvard Ref	Warburg, M, 1999. Bob 2/Spud the Spanner 3rd dr. [Paper] Hot Animation Collection. HOT/BTB/1/1/25/1/0018. Loughborough: Animation Academy Collection

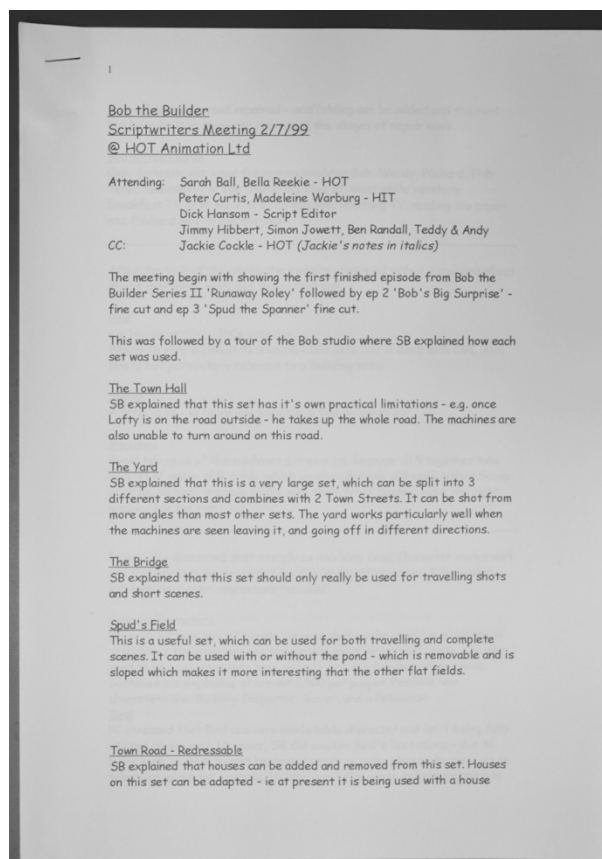
BOB THE BUILDER III
Jackie Cockle 28/6/99

Expenditure Approval Required for:

	No.	Unit Price	Cost
Mackinnon & Saunders - Puppets			
New Wendy Leg/Boot Armitures - 2 pairs	2	£ 125.00	£ 250.00
Wendy Hard Hair - 4 systems	4	£ 220.00	£ 880.00
Wendy Hard Hat Sculpt & mould	1	£ 200.00	£ 200.00
Wendy Hat Casts	4	£ 60.00	£ 240.00
Bob Hard Hair - 5 systems	5	£ 220.00	£ 1,100.00
Lofty Grabber Attachments	2	£ 300.00	£ 600.00
		TOTAL	£ 3,270.00
Corrigan & Betty - Costumes			
Bob - Shirt, Dungarees, Tool Belt	1	650	£ 650.00
Wendy - T-Shirt, Jeans, Tool Belt	1	650	£ 650.00
Flourescent Safety Jackets	4	120	£ 480.00
		TOTAL	£ 1,780.00
As & When Men - Sets			
1. Yard - Set Dressing (Skip etc.)	1	400	£ 400.00
2. Bob's Shed Dressing (Bandsaw etc.)	1	500	£ 500.00
3. Post Box, Parking Meter	1	170	£ 170.00
4. Hills 4 in a line, trees, bushes (already approved)	2	£	-
5. Hills 2 moveable & trees, bushes	2	150	£ 300.00
6. Houses 2D line of 6	1	350	£ 350.00
7. Houses 3D free standing	4	250	£ 1,000.00
8. Rock with Flowers	4	25	£ 100.00
9. Bushes - large x 2, medium x 2, small x 2	6	£ 91.67	£ 550.00
		TOTAL	£ 3,370.00
Barbara Biddulph - Art Director	Hours		
To work alongside Curtis providing the link and follow up practically between set build, studio, and dressing sets for studio.			
At the moment Props have done set dressing but the Prop workload is now too heavy.			
(allows for Bob II remaining ep's and Bob III Duplicate Build)			
	150	10	£ 1,500.00
		TOTAL	£ 1,500.00
Mackinnon & Saunders - Puppets			
Duplicate of Bob's Machines bringing us up to 4 Sets (2 per studio)			
		TOTAL	£ 19,030.00
Studio			
Lens for Bolex's			
(Wide Angle Lens - 2nd Hand)			
Wide Angle Lens x 3			
		TOTAL	£ 2,000.00
		GRAND TOTAL	£ 30,950.00

*** Please Note - There will be some more duplicate set quotes to follow (anticipate £12,000 approx)**

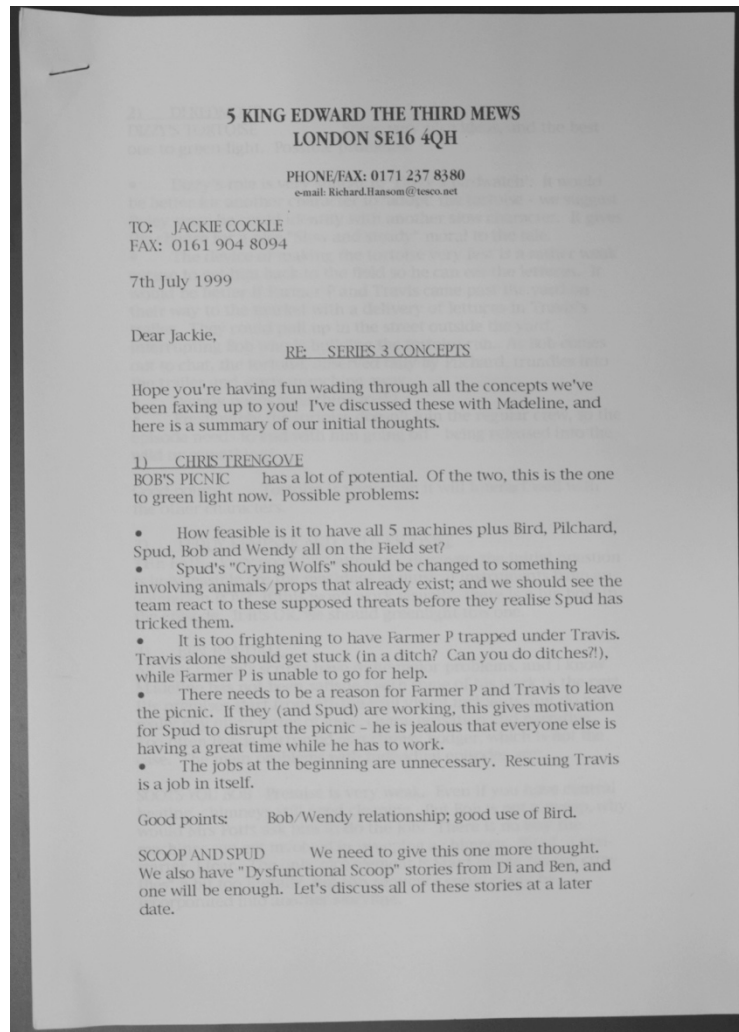
Ref Number	HOT/BTB/1/1/27/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	28/6/1999
Production Level	Pre Production
Author	Cockle, J
Document Type	Finance Admin Document
Title on Document	Bob the Builder III Expenditure Approval Required for:
Pages	2
Image Ref	HOT0018/DSC_0002
Description	List of costs of puppets, costumes, sets props and lenses
Notes	Mackinnon and Saunders, Corrigan and Betty, As & When Men, Barbara Biddulph (Art Director) all listed as external manufacturers for the series
Harvard Ref	Cockle, J, 1999. Bob the Builder III Expenditure Approval Required for:. [Paper] Hot Animation Collection. HOT/BTB/1/1/27/1/0018. Loughborough: Animation Academy Collection



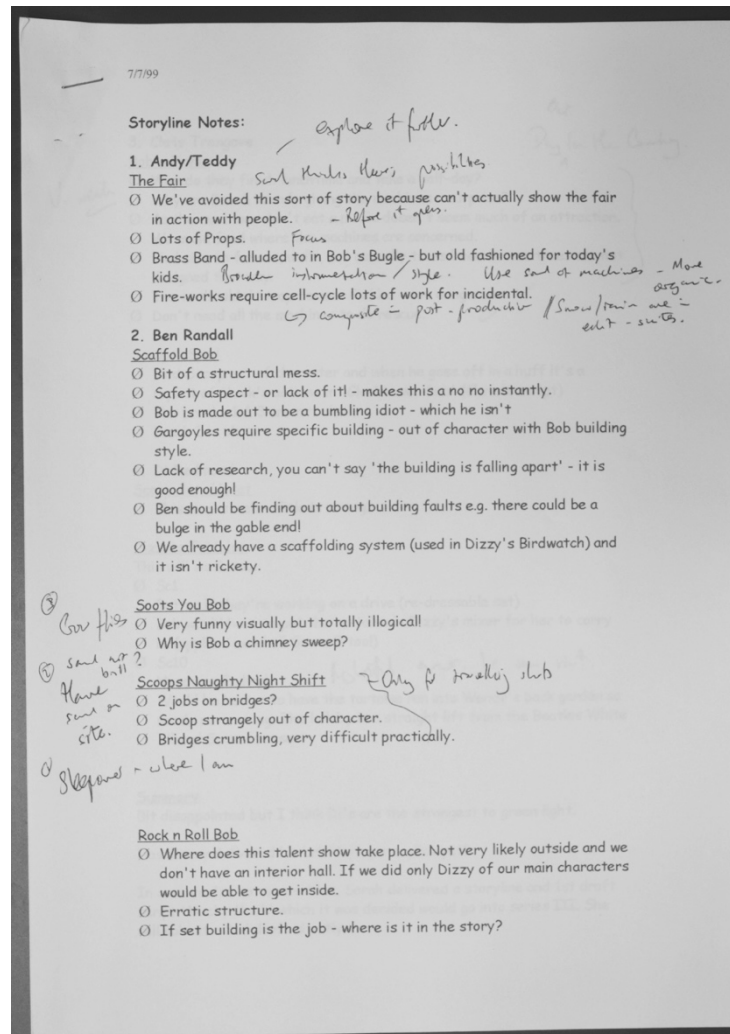
Ref Number	HOT/BTB/1/1/22/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	2/7/1999
Production Level	Pre Production
Author	Unknown
Document Type	Meeting Minutes
Title on Document	Scriptwriters Meeting
Pages	5
Image Ref	HOT0018/DSC_0003
Description	Minutes from a writers meeting
Notes	Detail on the series including the sets and puppets that can and cannot be used in the series, also which characters need marketing better. Wendy is promoted to business partner in the show instead of assistant to Bob.
Harvard Ref	Unknown, 1999. Scriptwriters Meeting. [Paper] Hot Animation Collection. HOT/BTB/1/1/22/1/0018. Loughborough: Animation Academy Collection

From: Madeleine Warburg <Madeleine@HITEntertainment.com>
Subject: Bob 3 script approvals process

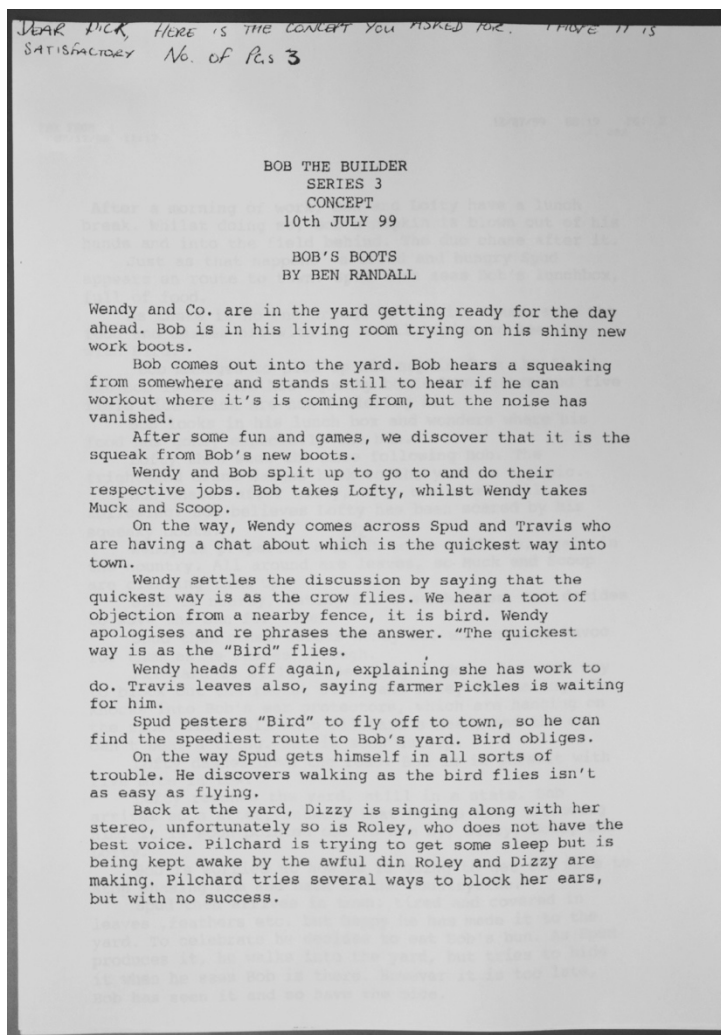
Ref Number	HOT/BTB/1/1/25/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	3/7/1999
Production Level	Pre Production
Author	Warburg, M
Document Type	Email Printout
Title on Document	Bob 3 script approvals process
Pages	3
Image Ref	HOT0018/DSC_0004
Description	from MW to DH - A detailing of the script approval process JC Cc'd
Notes	Includes a list of writers working on series 3, Jackie Cockles notes are in italics
Harvard Ref	Warburg, M, 1999. Bob 3 script approvals process. [Paper] Hot Animation Collection. HOT/BTB/1/1/25/2/0018. Loughborough: Animation Academy Collection



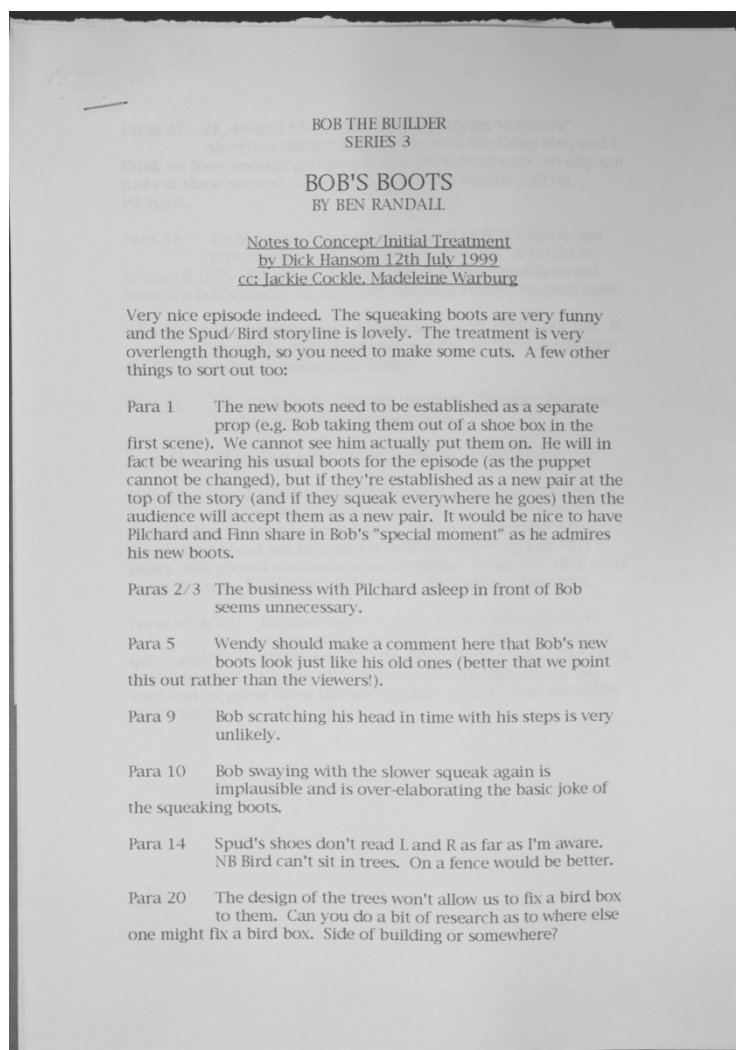
Ref Number	HOT/BTB/1/1/6/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	7/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Concepts Document
Title on Document	Series 3 Concepts
Pages	3
Image Ref	HOT0018/DSC_0005
Description	Message from DH to JC regarding Concepts from series 3
Notes	Details on episodes Bobs Picnic/Scoop and Spud/Dizzys Tortoise/The Fair/Soots You Bob/Scaffold Bar bob/Rock N Roll Bob/Scoops Naughty Night Shift
Harvard Ref	Hansom, D, 1999. Series 3 Concepts. [Paper] Hot Animation Collection. HOT/BTB/1/1/6/1/0018. Loughborough: Animation Academy Collection



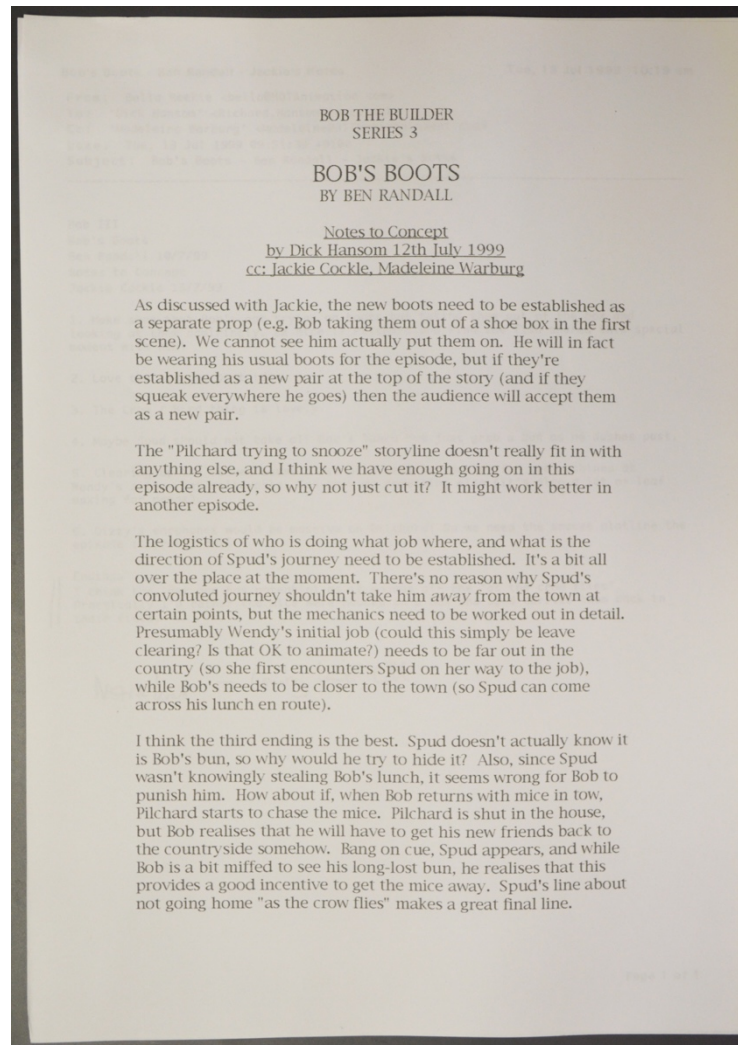
Ref Number	HOT/BTB/1/1/11/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	7/7/1999
Production Level	Pre Production
Author	Unknown
Document Type	Notes
Title on Document	Storyline Notes
Pages	2
Image Ref	HOT0018/DSC_0006
Description	Notes from Unknown (MW?) to DH with JC's handwritten notes on it.
Notes	Details on episodes The Fair/Scaffold Bob/Soots You Bob/Scoops Naughty Night Shift/Rock N' Roll Bob/Bobs Picnic/Scoop & Spud/Scoop Gets Upset/Dizzy's Tortoise
Harvard Ref	Unknown, 1999. Storyline Notes. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/1/0018. Loughborough: Animation Academy Collection



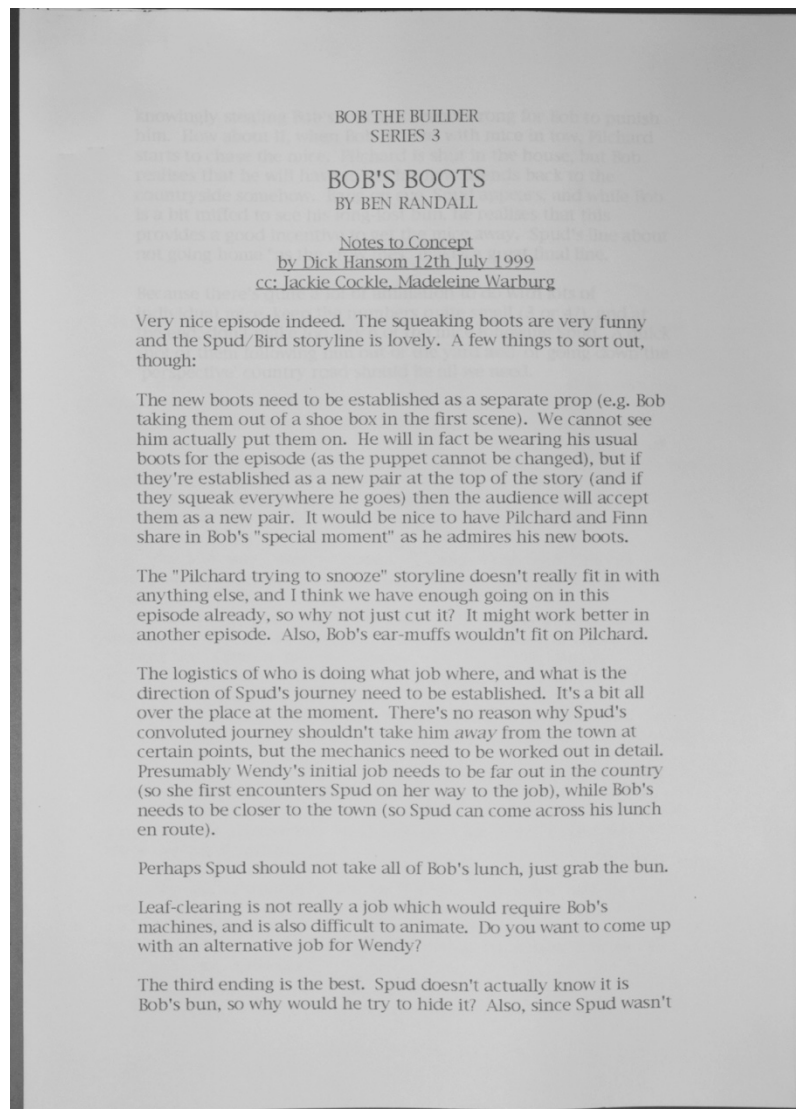
Ref Number	HOT/BTB/1/1/6/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	12/7/1999
Production Level	Pre Production
Author	Randall, B
Document Type	Concepts Document
Title on Document	Concept for Bobs Boots
Pages	3
Image Ref	HOT0018/DSC_0007
Description	Fax of BR's Bobs Boots script with hand written inscription on the top.
Notes	Concept dated 10/7/1999 but sent on the 12/7/1999
Harvard Ref	Randall, B, 1999. Concept for Bobs Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/6/2/0018. Loughborough: Animation Academy Collection



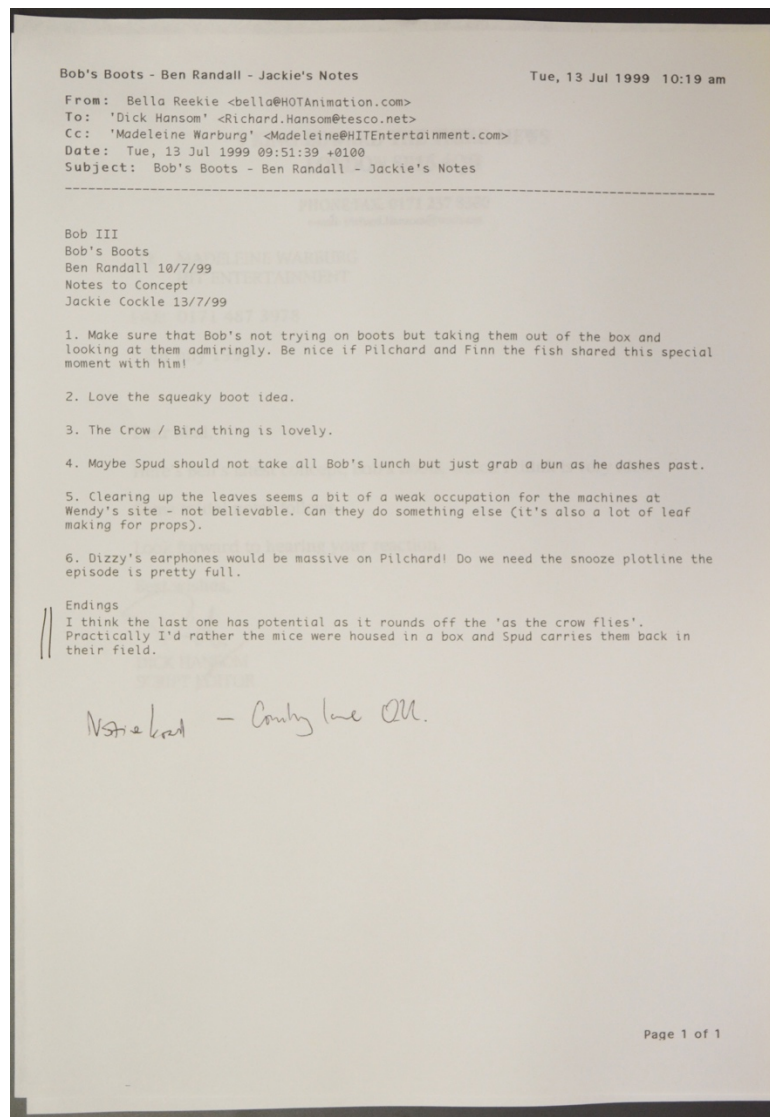
Ref Number	HOT/BTB/1/1/11/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	12/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Notes to Concept/Initial Treatment
Pages	2
Image Ref	HOT0018/DSC_0008
Description	Notes to concept of Bobs Boots from DH to BenR
Notes	Detail on each paragraph shaping the story
Harvard Ref	Hansom, D, 1999. Notes to Concept/Initial Treatment. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/2/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/3/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	12/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Notes to Concept Bob's Boots
Pages	1
Image Ref	HOT0018/DSC_0009
Description	More concept notes for Bob's Boots by DH
Notes	Part of the storyline is discarded, leave clearing (sp) is discussed as difficult to animate
Harvard Ref	Hansom, D, 1999. Notes to Concept Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/3/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/4/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	12/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Notes to Concept Bob's Boots
Pages	2
Image Ref	HOT0018/DSC_0010
Description	More concept notes for Bob's Boots by DH
Notes	More notes on the same episode, similar document to HOT/BTB/1/6/5/0018 but with additional stuff about pilchards ear muffs not fitting. The Pilchard storyline was discarded in HOT/BTB/1/6/5/0018 so perhaps this document was created before.
Harvard Ref	Hansom, D, 1999. Notes to Concept Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/4/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/25/3/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	13/7/1999
Production Level	Pre Production
Author	Cockle, J
Document Type	Email Printout
Title on Document	Bob's Boots - Ben Randall - Jackie's Notes
Pages	1
Image Ref	HOT0018/DSC_0011
Description	JC's notes on Bob's Boots
Notes	Hand written note at the bottom, illegible.
Harvard Ref	Cockle, J, 1999. Bob's Boots - Ben Randall - Jackie's Notes. [Paper] Hot Animation Collection. HOT/BTB/1/1/25/3/0018. Loughborough: Animation Academy Collection

5 KING EDWARD THE THIRD MEWS
LONDON SE16 4QH

PHONE/FAX: 0171 237 8380
e-mail: Richard.Hansom@tesco.net

TO: kate fawkes

FAX: 0181 458 2489

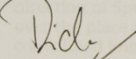
16th July 1999

Dear Kate,

Here's a copy of BOB'S BOOTS plus our notes. Sorry to have to fax it, but Ben isn't on the internet and we have to do all his stuff by hard copy.

Anyhow, hope you enjoy and look forward to hearing from you.

Best wishes,


DICK HANSOM
SCRIPT EDITOR

TOTAL PAGES (inc this): 6

Ref Number	HOT/BTB/1/1/47/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	16/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Fax
Title on Document	Covering Fax to Kate Fawkes RE: Bob's Boots
Pages	1
Image Ref	HOT0018/DSC_0012
Description	Fax to KF from DH regarding Bob's Boots
Notes	Notes: Ben (Randall, writer) isn't on the internet so we have to do everything hard copy
Harvard Ref	Hansom, D, 1999. Covering Fax to Kate Fawkes RE: Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/47/1/0018. Loughborough: Animation Academy Collection

5 KING EDWARD THE THIRD MEWS
LONDON SE16 4QH

PHONE/FAX: 0171 237 8380
e-mail: Richard.Hansom@tesco.net

TO: BEN RANDALL

FAX :0171 387 8315

20th July 1999

Re-sent 22/7.

Dear Ben,

Many thanks for the Treatment for BOB'S BOOTS. Everyone thinks the story is great, and loves the idea of the squeaking boots.

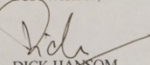
Sorry I didn't get back to you with notes last week, but in fact I was still waiting for approvals on the Concept from Peter Curtis and Kate Fawkes, which I didn't receive until yesterday. However, they are basically happy with it, so I'm sending you an official letter to commission the Treatment in the post.

There were in fact a few notes that people had regarding the Concept, which I was holding off sending you until I'd heard from everyone. What I think would be best in the situation is if you can incorporate these notes into a Revised Treatment (together with any other cuts you might think appropriate, as it's quite over-length). If you get this back to me ASAP, I'll send it through to Jackie for her comments and/or approval. Until we've got the Treatment approved, we won't be in a position to proceed to script, but hopefully this should only take a day or two to turn around.

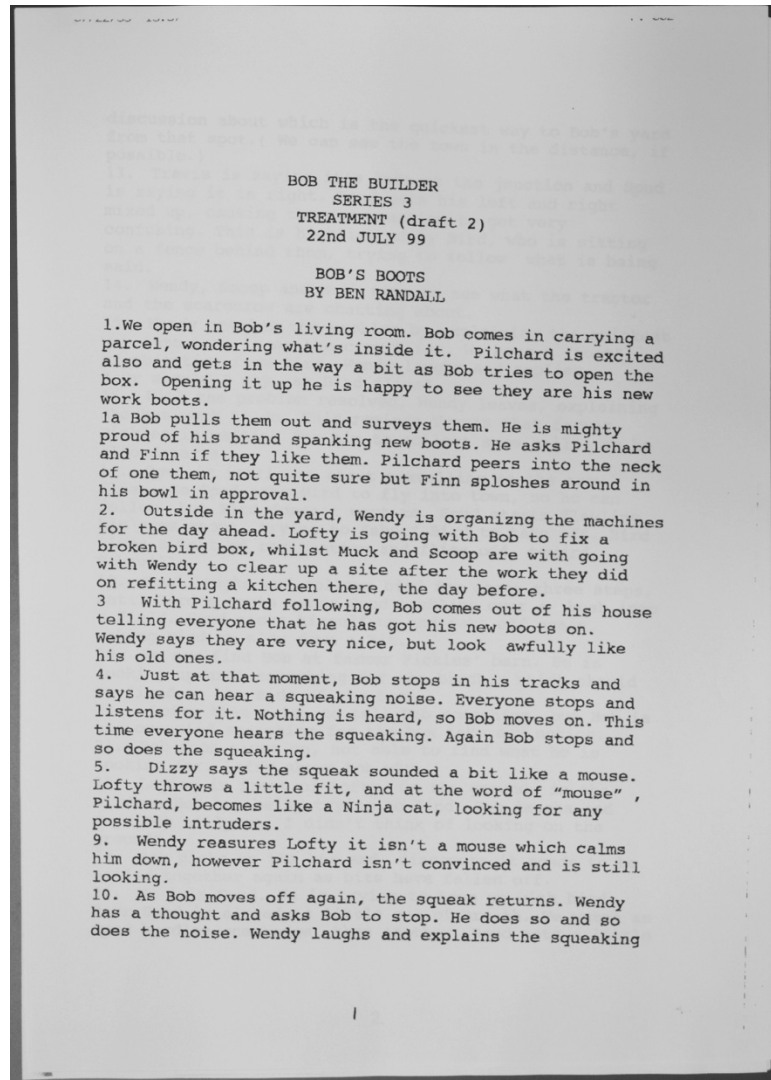
We'd still like to aim for 30th July as deadline for a final script.

Give me a bell if you've got questions on any of this.

Best wishes,


DICK HANSOM
SCRIPT EDITOR

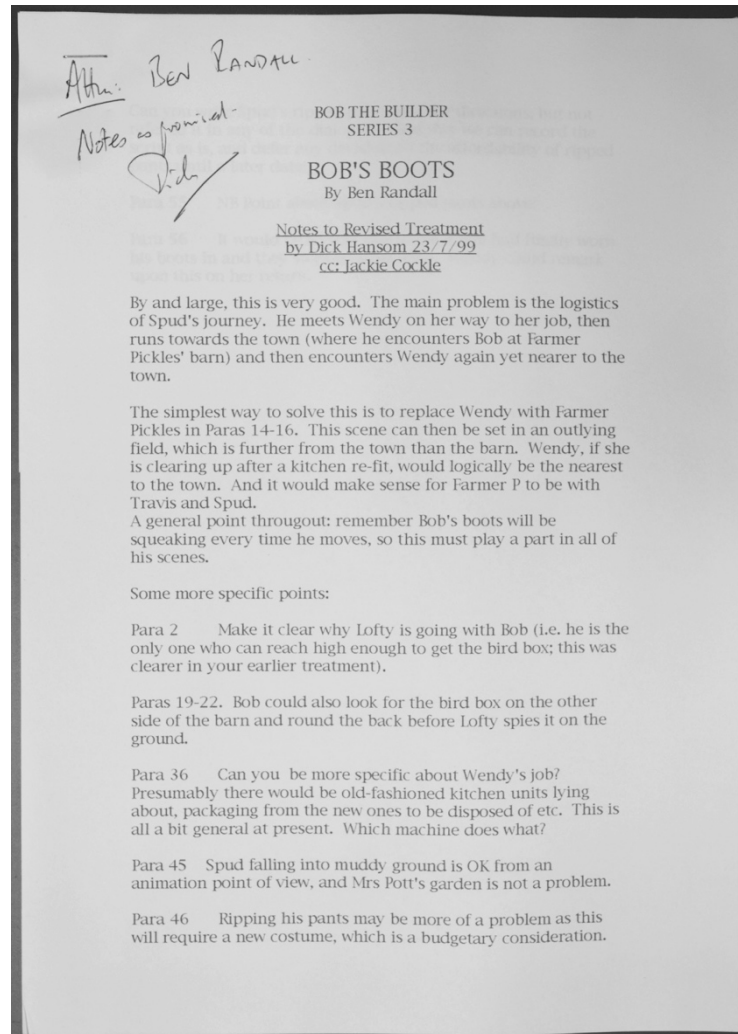
Ref Number	HOT/BTB/1/1/47/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	20/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Fax
Title on Document	Covering Fax to Ben Randall from Dick Hansom RE: Bob's Boots
Pages	1
Image Ref	HOT0018/DSC_0013
Description	Covering fax to BenR from DH accepting the commission for Bob's Boots
Notes	"Re-sent 22/7" written by hand on the top
Harvard Ref	Hansom, D, 1999. Covering Fax to Ben Randall from Dick Hansom RE: Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/47/2/0018. Loughborough: Animation Academy Collection



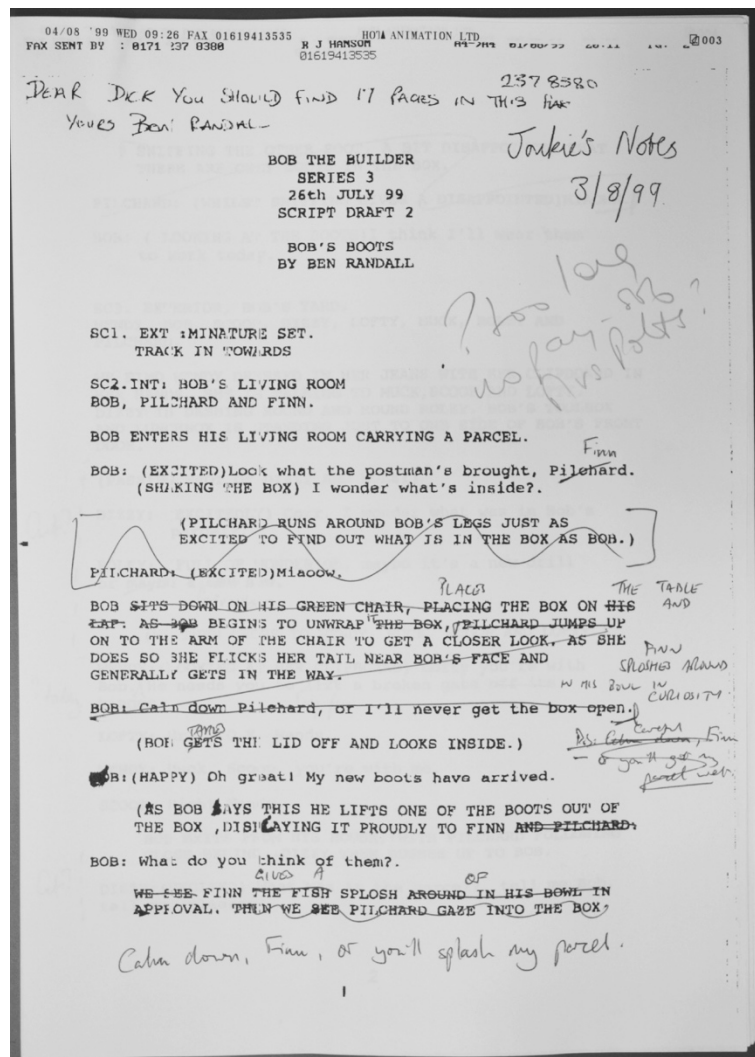
Ref Number	HOT/BTB/1/1/7/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	22/7/1999
Production Level	Pre Production
Author	Randall, B
Document Type	Outline/Treatment
Title on Document	Bob's Boot Treatment (draft 2)
Pages	5
Image Ref	HOT0018/DSC_0014
Description	The 2nd draft treatment for Bobs Boots
Notes	56 sentences describing the story, hand written page number
Harvard Ref	Randall, B, 1999. Bob's Boot Treatment (draft 2). [Paper] Hot Animation Collection. HOT/BTB/1/1/7/1/0018. Loughborough: Animation Academy Collection

BOB THE BUILDER SERIES 3		
CONCEPTS STATUS REPORT AS OF 23/7/99		
Writer	Title	Status
Di Redmond	ROLEY'S TORTOISE	Concept accepted. Treatment and script commissioned. Di is moving straight to script since she is on holiday until 26/7. She will deliver first draft then, and final draft by 30/7.
Chris Trengove	MAGNETIC LOFTY	Treatment accepted. Script commissioned, Draft 1 due 26/7, final draft by 30/7.
Teddy Kempner/ Andy Secombe	BOB'S BACKYARD BAND aka RHYTHMIC ROLEY	Treatment accepted. Script commissioned, Draft 1 due 26/7, final draft by 30/7.
Jimmy Hibbert	PILCHARD'S BREAKFAST	Treatment accepted. Script commissioned, Draft 1 received. Jimmy is on holiday from 19/7 until 9/8. We will prepare notes for him on his return and aim for a final draft by 11/8 for BBC approval by 13/8.
Ben Randall	BOB'S BOOTS	Treatment accepted. Script commissioned. Draft 1 due 27/7, final draft by 30/7.
Simon Jowett	INSPECTOR SPUD	Concept submitted 22/7. Awaiting approvals from JC/DH.
Ian Carney	SPUD'S PHONE MISCHIEF BOB'S DAY OFF	Concept rejected. Currently working on this new concept.

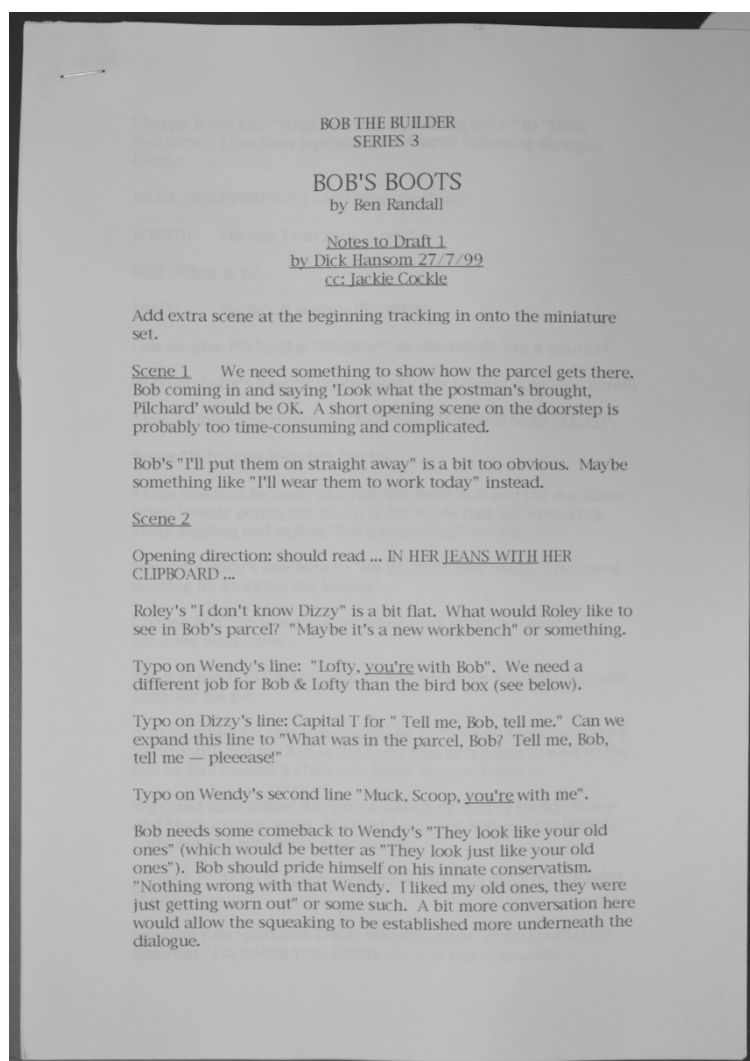
Ref Number	HOT/BTB/1/1/6/3/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	23/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Concepts Document
Title on Document	Concepts Status Report as of 23/7/1999
Pages	2
Image Ref	HOT0018/DSC_0015
Description	Staus of the scripts in series three as of the 23/7/1999
Notes	Stories include: Roleys Tortoise/Magnetic Lofty/Bob's bacyard band/aka rythmic roley/Pilchards Breakfast/Bob't Boots/Inspector Spud/Spud's Phone Mischief/Bob's Day Off/Scoop Gets Upset/Farmer Pickles Plums/Bob's Picnic/Scoop and Spud/Birds Hawaiian Holiday/scaffold bar bob/Soots You Bob/Scoops Naughty Night Shift/ Rock n Roll Bob. Numerous scripts rejectedo ther decisions noted. No author stated but found in Dick Hansoms box so assumed it to be his.
Harvard Ref	Hansom, D, 1999. Concepts Status Report as of 23/7/1999. [Paper] Hot Animation Collection. HOT/BTB/1/1/6/3/0018. Loughborough: Animation Academy Collection



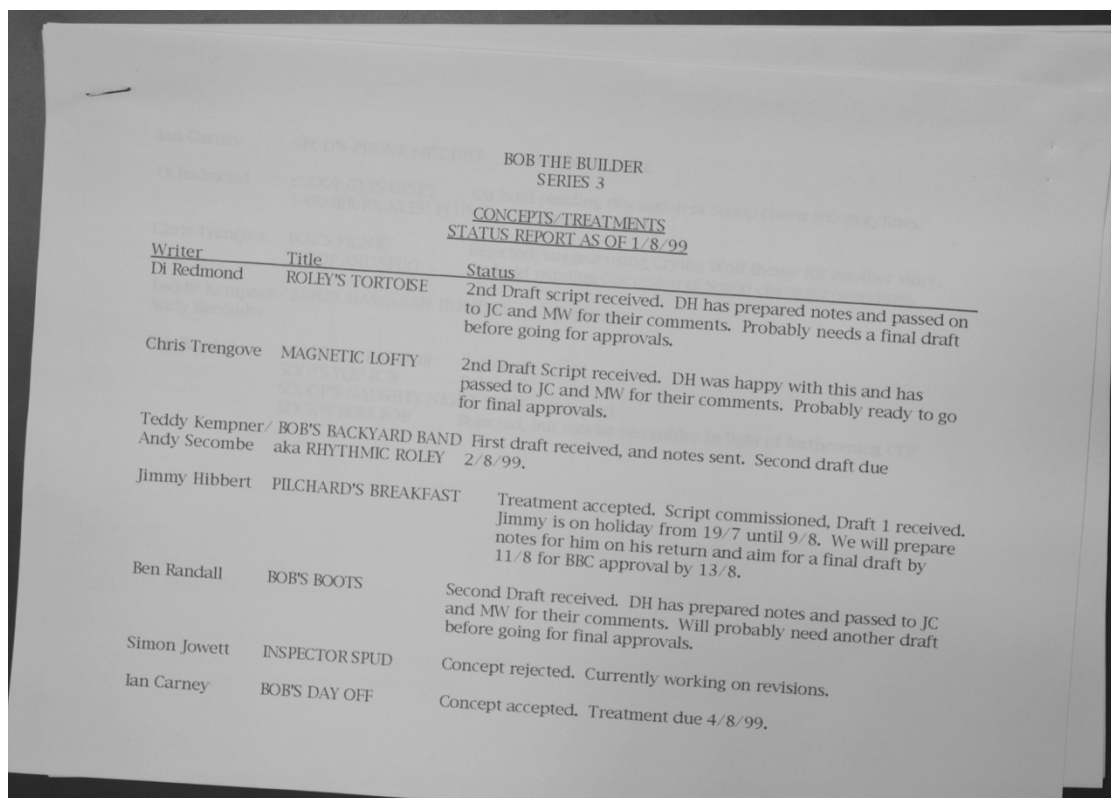
Ref Number	HOT/BTB/1/1/7/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	23/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Outline/Treatment
Title on Document	Notes to Revised Treatment Bob's Boots
Pages	5
Image Ref	HOT0018/DSC_0016
Description	Notes on the treatment of Bob's Boots by Dick Hansom to Ben Randall
Notes	Wendy and Farmer Pickles swapped around
Harvard Ref	Hansom, D, 1999. Notes to Revised Treatment Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/7/2/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/8/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	4/8/1999
Production Level	Pre Production
Author	Randall, B
Document Type	Script
Title on Document	Bob's Boots Draft 2
Pages	16
Image Ref	HOT0018/DSC_0017
Description	2nd draft of Bob's Boots
Notes	Heavily annotated with page 9 missing. This is a fax of the script which is dated for the 23/7/1999 but was sent on the 4/8/1999 with JC's notes created on the 3/8/1999
Harvard Ref	Randall, B, 1999. Bob's Boots Draft 2. [Paper] Hot Animation Collection. HOT/BTB/1/1/8/1/0018. Loughborough: Animation Academy Collection



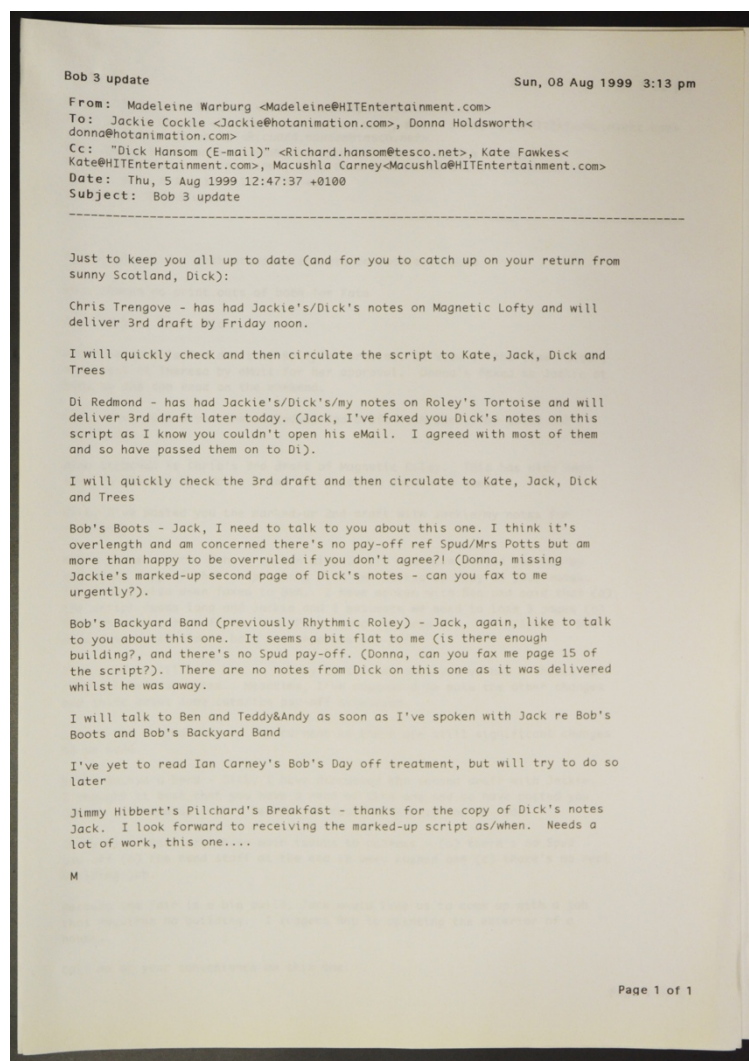
Ref Number	HOT/BTB/1/1/11/5/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	27/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Notes on Draft 1 Bob's Boots
Pages	7
Image Ref	HOT0018/DSC_0018
Description	Notes for the first draft of Bob's Boots
Notes	Typed up notes possibly send as a fax
Harvard Ref	Hansom, D, 1999. Notes on Draft 1 Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/5/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/7/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	1/8/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Concepts Status Report as of 1/8/1999
Pages	2
Image Ref	HOT0018/DSC_0020
Description	Status of the scripts in series three as of 1/8/99
Notes	Stories include: Roleys Tortoise/Magnetic Lofty/Bob's backyard band/aka rhythmic roley/Pilchards Breakfast/Bob't Boots/Inspector Spud/Spud's Phone Mischief/Bob's Day Off/Scoop Gets Upset/Farmer Pickles Plums/Bob's Picnic/Scoop and Spud/Birds Hawaiian Holiday/scaffold bar bob/Soots You Bob/Scoops Naughty Night Shift/ Rock n Roll Bob. Numerous scripts rejected, other decisions noted. No author stated but found in Dick Hansoms box so assumed it to be his.
Harvard Ref	Hansom, D, 1999. Concepts Status Report as of 1/8/1999. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/7/0018. Loughborough: Animation Academy Collection

4. AUG. 1999 16:15		HIT ENTERTAINMENT		NO. 712		P. 2/3	
DRAFT PRODUCTION BUDGET		BOB THE BUILDER SERIES III		13 X 10		04/08/99	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE	REMARKS		
1	Development/Rights						
1.1	Development Costs						
1.2	Rights and Option						
2	Scripts						
2.1	Scripts - Buyout		£28,000		£2,000 per episode x 13 plus £2,000 for re-writes		
2.2	Script Editor		£8,450		Richard Hansom @ £50/ep		
3	Production Team						
3.1	Executive Producer						
3.2	Supervising Producer (JC)						
3.3	Director (SB)		£11,500		new rate 3000/month for series II (up 250/mth)		
3.4	Production Co-ordinator (BR)						
3.5	Production Assistant (DH)						
3.6	Studio Accounts						
3.7	Runner (DB)						
4	Voice/Voice Studio						
4.1	Audition/Tests						
4.2	Voice Talent (includes Title song)		£37,900		NM £19,500 & 660 track / RR £1,400 / KH £7,800		
4.3	Voice Studio		£7,000		£140 per hr x 38hrs (4 days) plus stock		
4.4	Tape Transfers		£350		£26.90 per ep x 13 DAT to 16mm for bar sheets		
5	Music						
5.1	Music Package		24,700		£1,900 per ep - Increase of £200 per ep		
6	Editing (Voice Fine Cuts / Barsheets / Off-line Post Production)						
6.1	Editing Service Package (ZM)						
6.2	Assistant Editor (BM)						
6.3	VHS/Audio/Dat Tapes		£400		In house use and approvals		
7	Production						
7.1	Design for Series - sets & props		£2,160		Curtis Jobling @ £18/hr		
7.2	Storyboard Artist		£13,000		£1,000 per ep, drawing up storyboards		
7.3	Puppets (MacKinnon & Saunders)		£98,530				
7.4	Puppet Maintenance (MacKinnon & Saunders)		£8,440		13,520 (new figure)		
7.5	Puppet Refurbishment (MacKinnon & Saunders)		£10,000				
7.6	Sets (The As & When Men)		£41,095		Inc episodic set build from new storylines		
7.7	Set Refurbishment (The As & When Men)		£1,500		re-paint, repair		
7.8	Costume/maintenance		£18,750		7150 - new costumes, 6000 - repair		
7.9	Prop Maker (JF)						
7.10	Assistant Prop Maker (LB)						
7.11	Props Materials						
7.12	Camera (AP)						
7.13	Assistant Camera (SF)						
7.14	Lighting Stuck						
7.15	Film Stock						
7.16	Set Dressing & Art Direction						
7.17	Props Assistant						
	Sub Total						

Ref Number	HOT/BTB/1/1/27/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	4/8/1999
Production Level	Pre Production
Author	Unknown
Document Type	Finance Admin Document
Title on Document	Draft Production Budget Bob the Builder Series III
Pages	2
Image Ref	HOT0018/DSC_0021
Description	Budget for thr series including wages and cost of materials etc
Notes	Hand written notes and post stick note attached regarding puppet maintenance
Harvard Ref	Unknown, 1999. Draft Production Budget Bob the Builder Series III. [Paper] Hot Animation Collection. HOT/BTB/1/1/27/2/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/8/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	5/8/1999
Production Level	Pre Production
Author	Warburg, M
Document Type	Notes
Title on Document	Bob 3 Update
Pages	1
Image Ref	HOT0018/DSC_0022
Description	Comments on episodes from MW to JC
Notes	Magnetic Lofty/Roleys Tortoise/Bob's Boots/Bob's Backyard Band/Bob's Day off/Pilchards Breakfast all mentioned
Harvard Ref	Warburg, M, 1999. Bob 3 Update. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/8/0018. Loughborough: Animation Academy Collection

Bob 3/update

Sun, 08 Aug 1999 3:32 pm

From: Madeleine Warburg <Madeleine@HITEntertainment.com>
To: Jackie Cockle <Jackie@Photanimation.com>, Kate Fawkes <Kate@HITEntertainment.com>
, "Dick Hanson (E-mail)" <Richard.hanson@tesco.net>
Cc: Donna Holdsworth <donna@Photanimation.com>, Macushla Carney <Macushla@HITEntertainment.com>, Mark Casarotto <Mark@HITEntertainment.com>
Date: Fri, 6 Aug 1999 17:15:26 +0100
Subject: Bob 3/update

Donna, please fax both attached scripts to Jackie at home

Mac, please do print outs of both for Kate

Dear Jackie, Kate, Dick

Attached is Di's 3rd draft of Roley's Tortoise. In view of the time-factor, I've sent it Theresa by eMail for her approval. Donna's faxed to Jackie at home so she can read on the weekend.

Dick, I've posted you the marked-up 2nd draft with Jackie/my notes for reference.

Also attached is Chris's 3rd draft of Magnetic Roley. This has also been sent to Theresa by eMail. Donna has faxed to Jackie at home.

Dick, I've posted you the marked-up 2nd draft with Jackie/my notes for reference.

Bob's Boots - Dick, I have spoken with Jackie and have posted you her/my marked-up copy of the script along with her marked-up copy of your notes. These have also been faxed to Ben. I have spoken with Ben and said that (a) the script reads long and Jackie and I estimate we need to lose 3 pages (b) that we need a pay-off for Mrs. Potts/Spud (or drop Mrs. Potts/Spud) - but of course we shouldn't have two separate pay-offs.

I've said you'll call him on Monday to discuss once you've had a chance to read Jackie's/my notes. Meantime, I've suggested he make the other changes and think about some cuts/the pay-off situation.

I have NOT copied Kate on the current as there are still significant changes to be made.

Bob's Backyard Band - Dick, I have discussed the second draft with Jackie. I thought it best that you have a read of this one and so have posted you Jackie's marked-up copy. Perhaps we could talk once you've read.

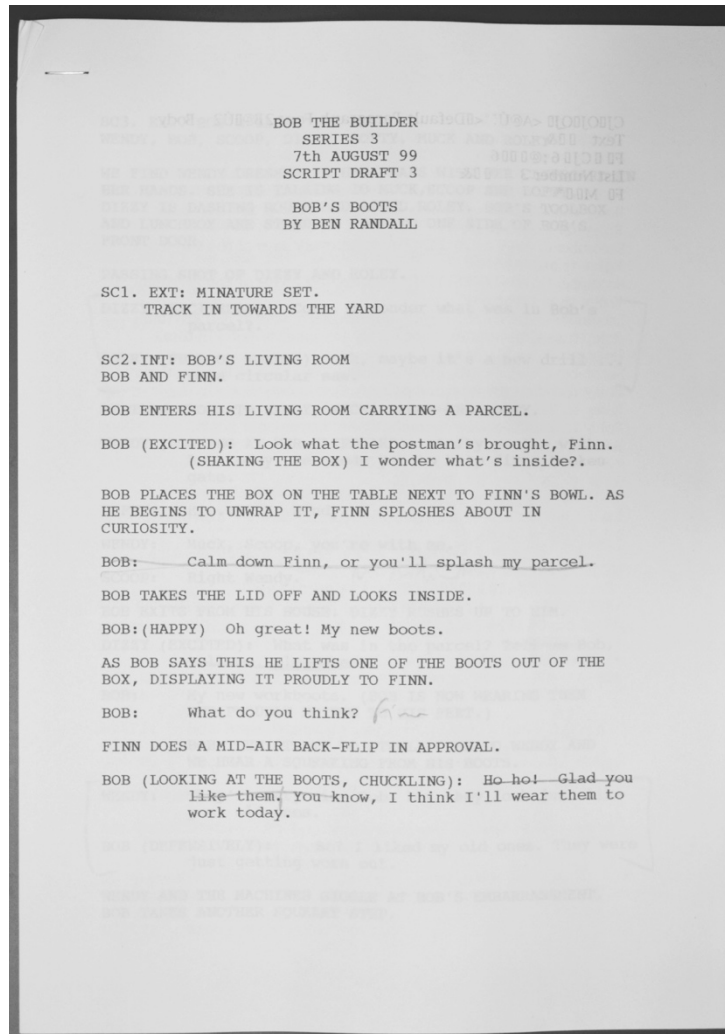
In my view there are three main issues to address - (a) there's no Spud pay-off (b) the band stuff at the end is very rushed and (c) there's no real building job.

Because the fair is a big build, Jack would like us to come up with a job that requires no building. I suggest Bob is painting the exterior of a house.

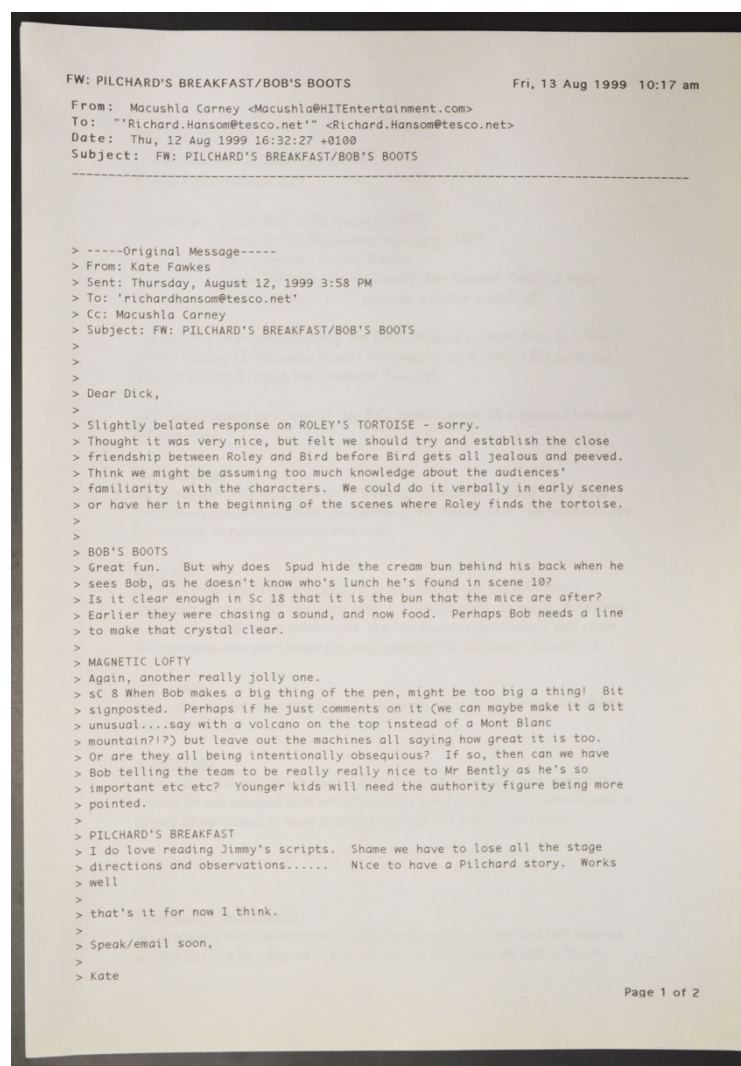
Call me at your convenience on this one.

Page 1 of 2

Ref Number	HOT/BTB/1/1/11/9/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	6/8/1999
Production Level	Pre Production
Author	Warburg, M
Document Type	Notes
Title on Document	Bob 3/Update
Pages	2
Image Ref	HOT0018/DSC_0023
Description	Comments on episodes from MW to JC, DH, KF
Notes	Addressed to JC KF and DH
Harvard Ref	Warburg, M, 1999. Bob 3/Update. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/9/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/8/2/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	7/8/1999
Production Level	Pre Production
Author	Randall, B
Document Type	Script
Title on Document	Bob's Boots Draft 3
Pages	15
Image Ref	HOT0018/DSC_0024
Description	Third draft of the episode Bob's Boots
Notes	Hadn written notes in pencil on most pages
Harvard Ref	Randall, B, 1999. Bob's Boots Draft 3. [Paper] Hot Animation Collection. HOT/BTB/1/1/8/2/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/10/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	12/8/1999
Production Level	Pre Production
Author	Carney, M
Document Type	Notes
Title on Document	FW: PILCHARDS BREAKFAST/BOB'S BOOTS
Pages	1
Image Ref	HOT0018/DSC_0025
Description	Email from MC to DH regarding Bob's Boots, Pilchards Breakfast and Magnetic Lofty episodes
Notes	Signed off as "Kate" which could either be a nickname or working on behalf of Kate Fawkes
Harvard Ref	Carney, M, 1999. FW: PILCHARDS BREAKFAST/BOB'S BOOTS. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/10/0018. Loughborough: Animation Academy Collection

<p> <small> BOB THE BUILDER SERIES 3 CONCEPTS/TREATMENTS STATUS REPORT AS OF 16/8/99 </small> </p>		
Writer	Title	Status
Di Redmond	ROLEY'S TORTOISE	Approved by BBC 10/8/99, comments from KF incorporated into Recording Script.
Chris Trengove	MAGNETIC LOFTY	Approved by BBC 10/8/99, comments from KF incorporated into Recording Script.
Teddy Kempner/ Andy Secombe	BOB'S BACKYARD BAND aka RHYTHMIC ROLEY	Notes to second draft sent 13/8. Kajor revisions required. Deadline for Draft 3 TBD.
Jimmy Hibbert	PILCHARD'S BREAKFAST	Approved by BBC 12/8. Approved by KF 13/8.
Ben Randall	BOB'S BOOTS	Approved by BBC 12/8/99, comments from KF incorporated into Recording Script.
Sarah Ball	MUCKY MUCK	Final draft sent to KF, MW and BBC for their comments approval 16/8.
Simon Jowett	POSTMAN SPUD CARNIVAL QUEEN DIZZY	Concept submitted 4/8. Awaiting response. Concept submitted 4/8. Awaiting response.
Ian Carney Ian Carney	BOB'S DAY OFF SPUD'S PHONE MISCHIEF	Treatment accepted. Deadline for Draft 1 TBD. Concept rejected.
Di Redmond	SCOOP GETS UPSET FARMER PICKLES' PLUMS	On hold pending discussion of Scoop character/storylines. No decision made
Chris Trengove	BOB'S PICNIC SCOOP AND SPUD	Rejected; suggest using Crying Wolf theme for another story. On hold pending discussion of Scoop character/storylines.

Ref Number	HOT/BTB/1/1/11/11/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	16/8/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Concepts Status Report as of 16/8/1999
Pages	2
Image Ref	HOT0018/DSC_0026
Description	Status of the scripts in series three as of 16/8/99
Notes	Includes notes that the BBC have started to approve of scripts
Harvard Ref	Hansom, D, 1999. Concepts Status Report as of 16/8/1999. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/11/0018. Loughborough: Animation Academy Collection



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17 September, 1999

Dear Kate, Peter & Madeleine

"BOB THE BUILDER" SERIES III - 'Bob's Boots'

Please find enclosed the storyboard for "Bob's Boots" for your comments and approval.

Look forward to hearing from you.

Best wishes

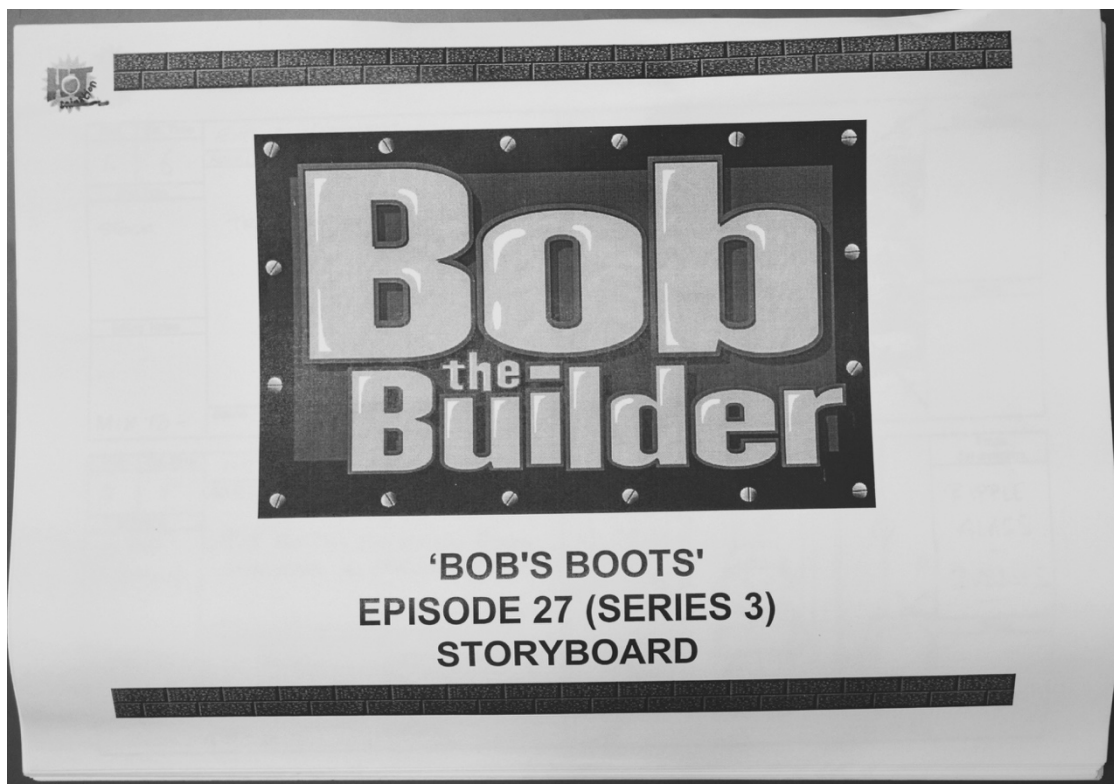
Jackie Cockle

→ To Dick
for your review
best wishes
Mac

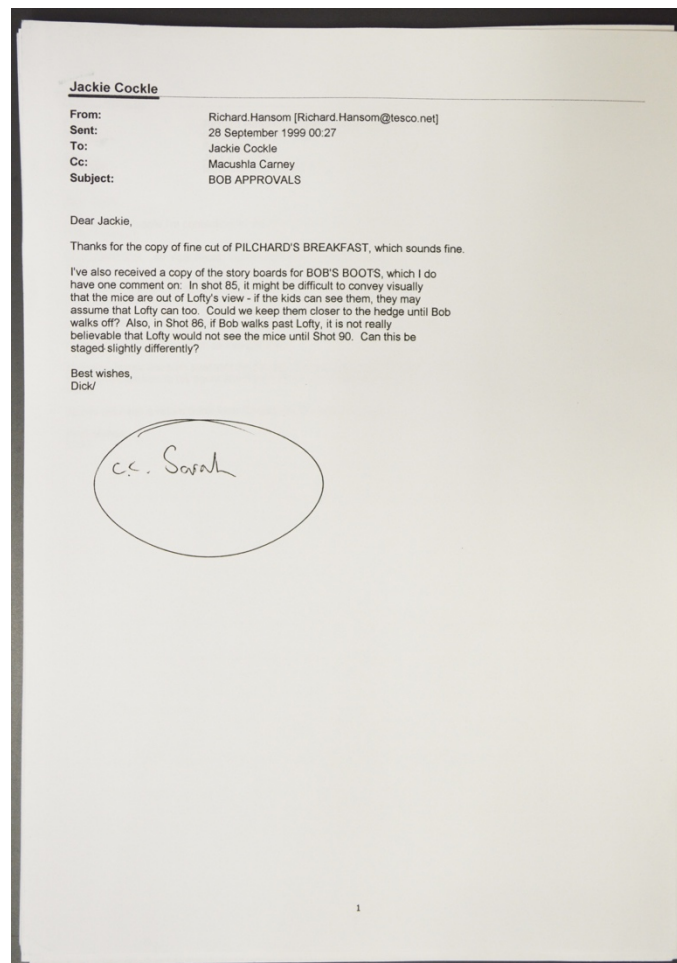
HOT ANIMATION LIMITED

Registered number 343 7019 Registered in England Registered Office The Pump House 13-16 Jacob's Well Mews London W1H 5PD United Kingdom

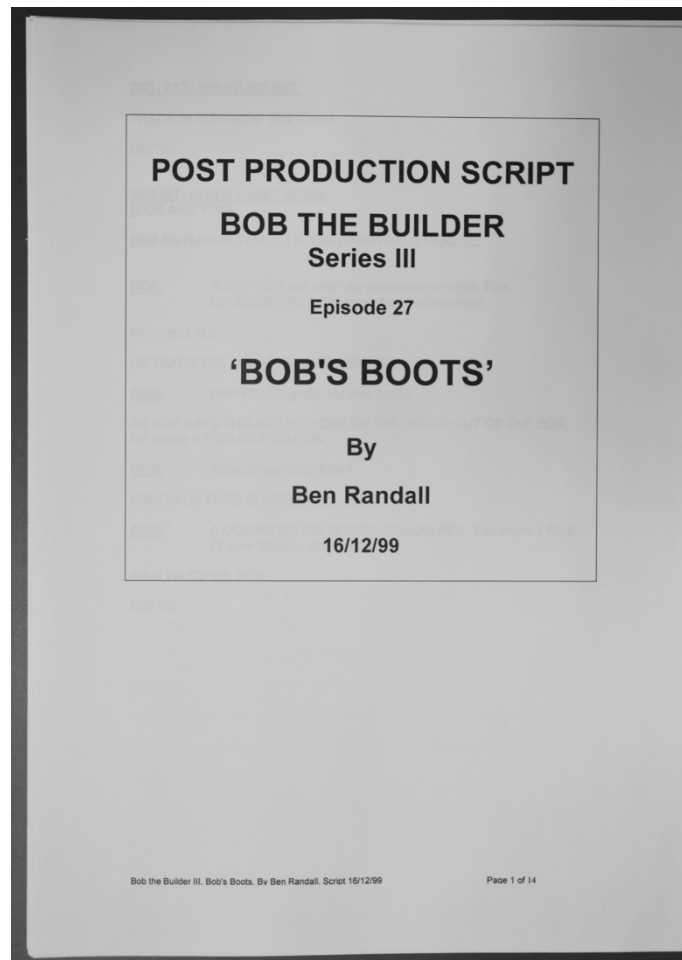
Ref Number	HOT/BTB/1/1/24/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	17/9/1999
Production Level	Pre Production
Author	Cockle, J
Document Type	Admin Communication
Title on Document	Bob's Boots Storyboard Cover Letter
Pages	1
Image Ref	HOT0018/DSC_0027
Description	Storyboard cover letter from JC to KF, PC and MW
Notes	pp Bella Reekie, handwritten note "To Dick for your review best wishes Mac"
Harvard Ref	Cockle, J, 1999. Bob's Boots Storyboard Cover Letter. [Paper] Hot Animation Collection. HOT/BTB/1/1/24/1/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	17/9/1999
Production Level	Pre Production
Author	Unknown
Document Type	Storyboard
Title on Document	Bob's Boots Storyboard
Pages	72
Image Ref	HOT0018/DSC_0028
Description	Storyboard for Bob's Boots
Notes	Fax version not original
Harvard Ref	Unknown, 1999. Bob's Boots Storyboard. [Paper] Hot Animation Collection. HOT/BTB/1/1/1/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/12/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	28/9/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Bob Approvals
Pages	1
Image Ref	HOT0018/DSC_0029
Description	Message from DH to JC regarding the storyboards from Bob's Boots and Pilchards Breakfast
Notes	"CC Sarah" written on the bottom in hand writing
Harvard Ref	Hansom, D, 1999. Bob Approvals. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/12/0018. Loughborough: Animation Academy Collection

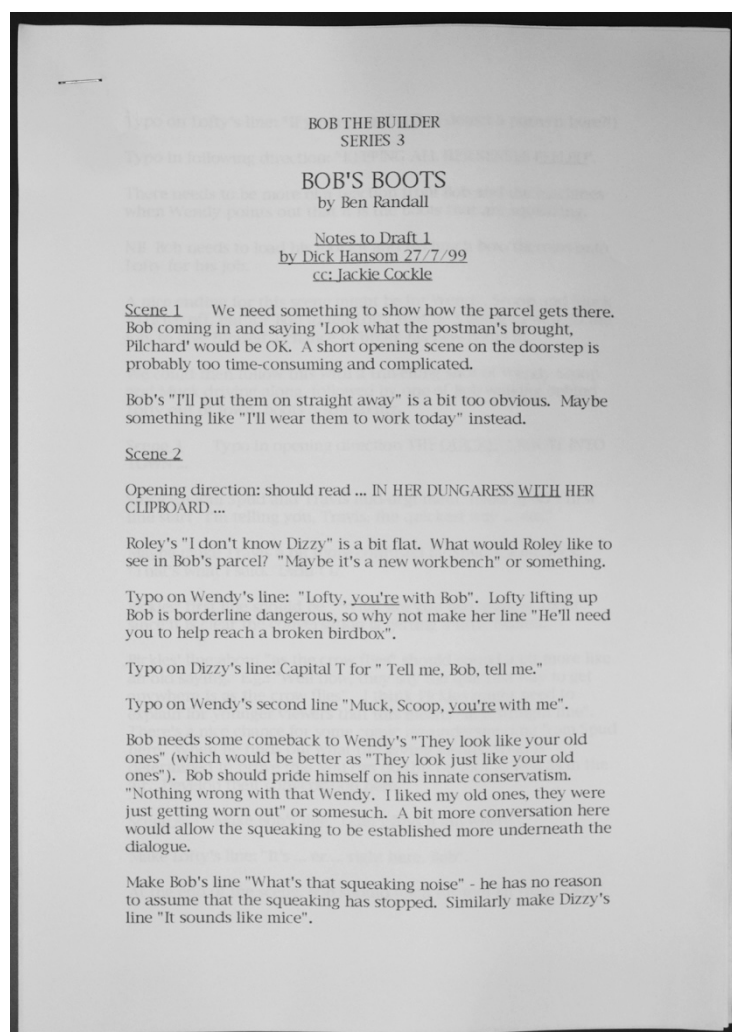


Ref Number	HOT/BTB/3/1/8/3/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	16/12/1999
Production Level	Post Production
Author	Randall, B
Document Type	Script
Title on Document	Bob's Boots Post Production Script
Pages	14
Image Ref	HOT0018/DSC_0030
Description	Post Production Script for Bob's Boots
Notes	
Harvard Ref	Randall, B, 1999. Bob's Boots Post Production Script. [Paper] Hot Animation Collection. HOT/BTB/3/1/8/3/0018. Loughborough: Animation Academy Collection

Shot Scene record Bob's Boots					
Final Draft					
PRODUCTION: Bob the Builder III					
EPISODE: 27 Bob's Boots					
SHOT	CHARACTERS	Minutes	Seconds	Frames	PROPS / NOTES
Sc.1.					
1	Miniature		6		150
TOTAL		0	6	0	150
Sc.2. INT. Bob's Living Room					
2	Bob		3		75 Parcel
3	Finn		2		50
4	Bob, Finn		4	16	116 Parcel
5	Finn		2		50
6	Bob, Finn		2	18	68 Parcel
7	Bob		1	21	46 New Boots
8	Bob		1	13	38 New Boots
9	Finn		2		50
10	Bob		3	13	88 New Boots
TOTAL		0	23	6	581
Sc.3. EXT. Bob's Yard					
11	Wendy, Scoop, Muck, Dizzy, Lofty, Roley		5	13	138 Tool box
12	Lofty		1	14	39
13	Wendy		1	5	30 Clipboard
14	Scoop		1	13	38
15	Muck		1	16	41
16	Bob, Dizzy, Roley		3	18	93
17	Bob, Roley		4	16	116
18	Bob		4	12	112
19	Muck		3	16	91
20	Bob, Dizzy, Wendy		2	12	62 Clipboard
21	Wendy		2	5	55 Clipboard
22	Bob, Dizzy, Wendy		3	6	81
23	Lofty		4	8	108
24	Wendy		2	9	59
25	Lofty		4	9	109
26	Bob, Dizzy, Wendy		5	12	137
27	Bob		2	1	51
28	Bob, Dizzy, Wendy		5	11	136
29	Scoop		3	11	86
30	Bob, Wendy, Machines		4	17	117
31	Roley		1	7	32
32	Bob		2	24	74
33	Lofty		2		50
34	Bob		2	8	58
34A	Bob		1	12	37
35	Scoop		2	4	54
36	Bob, Wendy, Machines		2	6	56
37	Lofty		1	12	37
38	Wendy, Scoop, Muck		4		100
TOTAL		1	27	22	2197
Sc.4. EXT. Town Road					
39	Wendy, Scoop, Muck		4		100
TOTAL		0	4	0	100

Page 1

Ref Number	HOT/BTB/1/1/10/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	n.d
Production Level	Pre Production
Author	Unknown
Document Type	Scene Planning Document
Title on Document	Shot Scene Record Bob's Boots
Pages	4
Image Ref	HOT0018/DSC_0031
Description	A breakdown of the prop and animation requirements needed in each scene of Bob's Boots
Notes	Highlighted in different colours, minutes, seconds and even frames accounted for
Harvard Ref	Unknown, 1999. Shot Scene Record Bob's Boots. [Paper] Hot Animation Collection. HOT/BTB/1/1/10/1/0018. Loughborough: Animation Academy Collection



Ref Number	HOT/BTB/1/1/11/13/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	1999
Date	27/7/1999
Production Level	Pre Production
Author	Hansom, D
Document Type	Notes
Title on Document	Notes on Draft 1 Bob's Boots first pass
Pages	5
Image Ref	HOT0018/DSC_0032
Description	Notes for the first draft of Bob's Boots, possibly the first pass
Notes	Notes for the first draft of Bob's Boots, possibly the first pass as it reads similar to a similar one with further corrections (still dungarees here whereas in the other dungarees on page one is changed to jeans)
Harvard Ref	Hansom, D, 1999. Notes on Draft 1 Bob's Boots first pass. [Paper] Hot Animation Collection. HOT/BTB/1/1/11/13/0018. Loughborough: Animation Academy Collection

Ref Number	HOT/BTB/1/1/48/1/0018
Collection	Hot Animation Collection
Production	Bob The Builder
Year	2005
Date	1/2/2005
Production Level	Pre Production
Author	Farnworth, A
Document Type	Writers Bible
Title on Document	Writers Bible
Pages	133
Image Ref	HOT0018/DSC_
Description	Writers bible for series 10 of Bob the Builder
Notes	Full writers bible for series 10. Copyrighted 2003 but updated for 2005
Harvard Ref	Farnworth, A, 2005. Writers Bible. [Paper] Hot Animation Collection. HOT/BTB/1/1/48/1/0018. Loughborough: Animation Academy Collection

Appendix C: Moving the Collection

The biggest challenge of managing the collection so far has come in the shape of the logistical issues of moving the archive to and from various locations throughout the lifetime of this investigation. In order to get a sense of the scale of the space the collection commands these images have been photographed for reference. An external company moved the collection to its new location but organising the collection into the space allocated was assisted by facilities management, Rachael Jermyn (School Technical Officer), Steven Warren (Operations Manager) and Emma Nadin (Research Administrator)

Fig.1



This image represents the space allocated for the collection; the space is only allocated up to between the nearest two blue pillars to allow access to the overhanging pipes. Once work was completed a cage was built around the collection with a lock and key.

Fig. 2



Image taken shortly after deliver of the first part of the collection. The collection overlaps the allocated space as you can see the pipes in the top right hand side of this image. The collection was delivered on pallets that were kept in order to keep the collection from the ground avoiding possible flood risk.

Fig. 3



We were also allocated the shelving against the walls seen here and in Fig. 4

Fig. 4



The shelving was already at the location and proved perfect for our needs.

Fig. 5



Some of the items in the archive will require assembly such as the light table and Steenbeck st1400 4 plate 35mm editing machine (screen shown to the left)

Fig. 6



By the second and final delivery of the collection the allocated space was too full to accommodate more. All the boxes seen here were in violation of the agreement and had to be moved into the space agreed.

Fig. 7



By emptying some of the pallets and putting them on shelves space became free and the entire collection could fit into the agreed space. Two shelves take up the same amount of floor space as one pallet but can fit nearly two pallets worth of boxes on them. Unfortunately this restricts access to the collection however I have allocated that these items will not form part of my study. They will need to be made accessible as soon as possible to aid others.

Fig. 8



Eventually the space provided was the perfect fit for the entire collection. In future the pallets will need to be emptied and suitable shelving will need to be arranged so access to the entire collection may be available.

Fig. 9



Some of the items are loose and will require additional shelving but they are not in violation of any agreement on space.

Fig. 10



The collection fits with enough space to avoid the overhanging pipes as agreed (see Fig. 3)

Fig. 11



The completed cage.

Fig. 12



The cage.

Fig. 13



In 2016 it was arranged that the LAAC would receive more items from The Halas and Batchelor Collection. After picking up the material personally it now resides in the collection ready for cataloguing.

Fig. 14



Turnaround view of the collection in 2016.

