Realist Collage: Non-fiction Film Practice Addressing the History and Identity of 'Welsh Wales' through Critical Realism, Found Footage and Animation

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ABSTRACT

In the early 20th century, the techniques of collage and film montage were linked with the cultural production of political radicalism. The assemblage of new wholes from existing parts established a critical method for negotiating the social world. Driven by technological and cultural developments, the practice of combining separate images is now applied within a broad range of art and media forms. Through its assimilation and concealment within the popular and commercial, collage has been detached from its political origins.

This practice led project lies at the intersection of documentary, archive film, animation and history. It's philosophical framework is critical realism, a position that sees reality as a plurality of interdependent structures and mechanisms operating in stratified systems. The research deploys collage as a practical form of critical realism to explore the history of 'Welsh Wales' (Balsom, 1985), along with the region's political, cultural and social identity. The investigation is conducted through engagement with film collection of the National Screen and Sound Archive of Wales. Theories of Welsh history and identity are used in the analysis, interpretation and composition of the archive materials as evidence of a complex and layered culture.

In the creative mediation of factual material, realist collage addresses the non-physical levels of reality that are not directly visible in the archive film. This is done through using temporal and spatial juxtaposition as a method of realist inference to represent the causally generative domain that determines actual events. An imaginative sense of a non-empirical, complex whole is inferred through the temporal and spatial composition of image parts.

The originality of the research is in development of collage as a visual and practical research method that offers a novel form of critical realist inquiry. The thesis will reflect on the political implications of the practice, advance critical theory of collage, and provide new insights into the function of collage processes in non-fiction film.

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Document that records the observation and thematic analysis of the archive footage

PRACTICE FOLDER

The folder containing the practical work can be found at this link: https://unimailderbyac-my.sharepoint.com/:fi/g/personal/sadt049_derby_ac_uk/ElBc2JDKT-ZJkZWYf-_u6H0BqXGWJc8yJUrY_acbhSe7pA?e=PY44cx

GENERAL INTRODUCTION

The aim of research informed by critical realism is to reveal the non-empirical structures and causal mechanisms that that generate events at the surface, empirical level. This thesis presents a new approach to archive film collage as a practical form of critical realism.

The archive materials used have been gathered from the National Film and Sound archive of Wales, and records events that took place in the 'Welsh Wales' region (Balsom, 1985). The history and identity of 'Welsh Wales' is the non-empirical object addressed through the research. A key principle of the work is that the complexity of reality can be better understood through the dialectic between facts and creative mediation. Archive film is the factual material used in the project, the intervention of collage is the site of creative mediation.

The context of the practice is within the intersection of photomontage, archive film collage, animated documentary and visual effects. Realist collage draws from these areas and integrates them in relation to its form, methods of production and its theoretical aspects. A principal feature of realist collage is its juxtaposition of film elements in spatial relationships, achieved through the use of animation and visual effects techniques.

The abstraction and combination of archive film elements generates new connotations and inferences that are emergent from the juxtaposition, located at the interstitial contact points between concurrent image components. The premise of the argument pursued in the thesis is that these inferences address the non-empirical levels of reality. In non-fictional contexts, the inferences produced are in relation to the real causes of events that can only be known theoretically and conceptually. The referents of realist collage are the mechanisms within the causally generative domain, rather than the factual, physical phenomena recorded in archive film. As a device for modelling causality, film collage achieves what critical realists refer to as ontological depth.

Critical realism establishes the philosophical foundations of the project and provides the concepts that drive the research process. This includes the adaptation of three key stages of critical realist research:

- Abduction; the interpretation of single events as particular instances of more general phenomena.
- Abstraction; the disaggregation of events to their constituent elements.

• Retroduction; the combination of abstractions to infer the non-empirical causes of events.

These stages are aligned with the three main stages of the practical collage process:

- Abduction is practiced in the analysis and selection of archive film elements.
- Abstraction is practiced in the spatial extraction of elements from within film clips.
- Retroduction is practiced in the spatial and temporal combination of abstracted film elements in collage composites.

The form of realist collage pursued uses methods and ideas that interrogate and develop the principles of montage within documentary and archive film production. This aims to present an original approach that provides new insights into the use of collage techniques and processes in non-fiction film.

The research questions are:

- How can realist collage address the causally generative domain of reality?
- How can realist collage negotiate and represent the complexities of history and identity?
- How can the practice of realist collage extend the vocabulary of non-fiction film? And what are the political implications of this?

Here is a brief outline of the structure of the thesis and the focus of each chapter:

Chapter I - Research Context and Definition of Terms

The first Chapter describes the disciplinary fields that the project incorporates, articulating its position within a multidisciplinary context. The basis of the particular synthesis of fields that the project entails is described in relation to their relevance to the project. This establishes the location of the research in respect to existing practice and scholarship. Key terms and areas are defined and connected to collage and critical realism. The Chapter expresses how this project understands these terms, and serves as an introduction to the concepts and ideas explored.

Chapter 2 - Critical Realism

This Chapter will describe critical realism and the central ideas used to situate the ontological and epistemological position of the research. It will cover the core concepts of the intransitive and transitive dimensions, the three ontological domains, stratified reality and social structures. These concepts inform the practice of collage as a form of critical realist research. This provides the framework and context for the ideas and areas addressed throughout the thesis. The critical realist concepts described will be connected to collage and identity, as the foundation for the following chapters.

Chapter 3 – History, Identity and Archive Film

The chapter begins with a discussion of the formation of national and regional identities, defining the conditions that determine the composition of the 'Welsh Wales' identity as a non-empirical object. It then moves on to focusing on how non-empirical reality can be known in relation to the social production of knowledge, photographic evidence and the role of film within the construction of historical narratives. It entails a consideration of the politics of archive film practice in relation to the representation of historical events. The Chapter connects these ideas to the critical realist concepts introduced in Chapter 2.

Chapter 4 – The Construction of Realist Collage

The role of practice within multidisciplinary research is discussed at the start of the final Chapter. It then moves on to the role of hermeneutics and semiotics within critical realism. This establishes the grounding for the three main stages of the research process across abduction, abstraction and retroduction. The analysis and manipulation of the archive film is undertaken through these stages and is described, illustrated and evaluated for its capacity in modelling critical realist accounts of non-empirical reality.

CHAPTER I – RESEARCH CONTEXT AND DEFINITION OF TERMS

INTRODUCTION

The theoretical and practical background of this project is in a diverse range of scholarship and film practice situated in specific but interconnected fields. Realist collage is comprised of features and properties that are rooted across these different areas. The chapter describes these areas to clarify the basis of this synthesis, and to illustrate the location and boundaries of the project. It begins with brief overviews of critical realism and Welsh identity and history, and then moves on to discussing the following areas:

- Collage and Spatial Montage
- Film Realism and Montage
- Documentary and Non-fiction
- Archive and Found Footage Film
- Animation
- Animated Documentary
- Experimental Film

The research has attempted to make productive connections across these fields in relation to the research question's focus on the use of realist collage as a critical realist tool, and its status as a non-fictional film form. The sections included will identify the key debates and define the terms relevant to the thesis, establishing which ideas and practices are most pertinent to the study. As a definition of terms, the chapter expresses how this project understands these fields and how this thesis engages with them. It also introduces the main concepts and ideas related to these fields explored in subsequent chapters. In describing the elements of realist collage, the chapter builds towards articulating a definition of its key aims and parameters. In general, it argues that realist collage is a device that balances the factual and the mediated in a novel form of nonfictional film. Potential gaps in the intersection of the fields dealt with will be identified as this argument is progressed. The philosophical underpinning is provided by the ontological and epistemological position of critical realism, a movement primarily associated with the philosophy of science and the social sciences. The key concepts of critical realism are used in addressing issues of Welsh culture and identity. Critical realism also provides the basis for how collage, and the adjacent fields, are analysed and theorised, arguing that realist collage is practically adequate as a form of critical realist inquiry.

CRITICAL REALISM

This section will briefly describe critical realism in order to ground the philosophical position of the project and to contextualise what follows.

Critical Realism (henceforth CR) is a broad movement within philosophy and social science. It engages a range of areas including ontology, epistemology, the philosophy of science, social structure and causation. Its basis is in the separation and distinction between epistemology (knowledge, theories, ideas) and ontology (independent reality, the objects of investigation). From this standpoint, critical realism offers an alternative paradigm to what it sees as the reductionism of empiricism and idealism. It is not a unified and entirely consistent set of ideas, rather it features a 'series of family resemblances' (Archer et all., 2016) that indicate a basis in a set of core principles. The foundation of CR is found in its commitment to ontological realism, epistemic relativism and judgemental rationality. Through these features, critical realists are united in the attempt to understand a complex; layered and heterogenous reality. It is these ideas that provide the philosophical basis for the practice of realist collage.

Empiricism holds that we can only have knowledge of what we can perceive, and that knowledge can directly capture and corresponds to reality free of human subjectivity, biases and values. This reduces reality to what is directly observable. In contrast, CR does not identify the real with what can be experienced, as reality is a stratified structure that consists of non-empirical levels that are not directly observable. Reality contains far more than what we can perceive, and knowledge production always happens within a context that means that degrees of theoretical mediation are inevitable. Our knowledge is always historically, socially, and culturally situated and determined. As opposed to empiricism, CR's epistemology is subjectivist, as it asserts that observation is theory dependent. This is epistemic relativism.

Idealism does accept that all knowledge claims are subjectively mediated, but its relativism asserts that we can't know reality outside of concepts, and all claims about reality must considered equal. This reduces reality to subjective mental constructions. Reality is conflated with knowledge in what critical realists call the epistemic fallacy. As opposed to idealism, CR's ontology is realist, as it asserts that an external reality exists and operates independently of our awareness or knowledge of it. This is ontological realism.

For CR, the fact that knowledge is contested, and that there is often dispute over the accuracy of competing accounts, tells us that knowledge does not just refer to itself. It refers to a common object, the external world. CR maintains that even though our knowledge is relative, we can

produce in particular contexts, strong arguments for preferring one set of beliefs about the world to another. For this to be possible, there must be criteria for judging and selecting from the theories or combination of theories that give us the best, most adequate accounts of reality. This is judgemental rationality.

CR divides reality into three domains that together comprise the whole of reality:

- The empirical domain: Events that are observed and experienced
- The actual domain: Events that observed or unobserved
- The real, or 'deep' domain: Causal mechanisms within structures that cause events to occur

The causal mechanisms in the real, causally generative domain interact to produce events in the actual level. Many events in the actual are unobserved, but observed events can be measured, recorded and interpreted in the empirical domain. The non-empirical underlying structures in the real domain can't be accessed through direct perception. Phenomena in the real domain are transfactual, as they exist outside of their establishment as empirically detectable facts. As it can't be known empirically, the real can only be known theoretically and conceptually. It is in responding to experience through theoretical mediation, and the combination of facts and concepts, that we can come to know the 'deep' ontological level of structures and mechanisms. Modelling knowledge of the real can achieve ontological depth that provides insight into what's really going on 'below' the empirical, visible surface. This is a core premise, and aim, of CR.

The thesis advances realist collage as a form of 'communicative interaction' (Sayer, 1992) that uses archive film to model the structures and mechanism of Welsh culture and identity. It does so within the CR process of causal inference carried out through abduction, abstraction and retroduction. Consistent with the non-dual, anti-reductionist stance of CR, the practice negotiates the dialectic between evidence of empirical reality on one hand, and the creative intervention that recontextualises and mediates facts on the other. This is a central idea that supports the engagement with the various fields addressed in this Chapter. CR is described more fully in Chapter 2, and underpins the arguments and ideas pursued in this Chapter and throughout the thesis.

WELSH IDENTITY AND HISTORY

This section offers a short overview of the issues of Welsh history and identity addressed in the project.

Classified according to regional differences attached to geographic areas, Denis Balsom's (1985) '3 Wales Model' identified three sub-groups that form the internal divisions of Welsh identity. The two dominant identities with regards to their more clearly expressed 'Welshness', were 'Y Fro Gymraeg' (literally 'The Welsh Language Area') of the rural West and North, and the 'Welsh Wales' of the formerly industrialised valleys. Both these areas had populations that predominately identified as Welsh. Writing before Balsom, Raymond Williams saw these dominant cultures as the two 'truths' projecting competing, alternate images of a Welsh heartland. The Anglo-Welsh culture of the 'Welsh Wales' region is characterised by its history of socialist politics and the associated community relations born out its industrial (and now post-industrial) past.

Balsom's model is useful for recognising the general, broad composition of identity within Wales. However, although the 'Welsh Wales' division may capture the dominant cultural structure of the region, it is at risk of obscuring the other mechanisms that are part of its make up. A more complex image of overlapping cultures, informed by CR, recognises the interdependence of causal powers rooted in competing historical forces. The intersection of the dominant strains within 'Welsh Wales' with the presence of underlying 'residual cultures' (Raymond Williams, 1997), comprise a layered formation of component parts.

In interrogating the component parts of the whole identity, the project aims to reveal the underlying complexity that has generated the culture of 'Welsh Wales'. Pointing to the casual forces behind historical change, this works to unpack the identity as a changing, relatively enduring 'structured but composite formation' (Wayne, 2018). Key CR concepts entailing social ontology and causal structures are applied to the conceptualisation of collective identity as a socially reproduced structure: a real, but non-empirical phenomena within the causally generative deep domain. Through the balance of the empirical and the intersubjective, CR asks that representations of identity are theoretically constructed to reflect its plural and laminated condition. The thesis argues that realist collage is a form that is practically adequate to this task.

Issues of Welsh identity will be more fully explored in Chapter 3.

COLLAGE AND SPATIAL MONTAGE

This section locates collage in its historical and contemporary context, with a focus on its status as a language of social and political engagement. The realism and philosophy of collage will be addressed, and how this has been influenced by developments in technology and culture. Dealing with these issues will lay the initial groundwork for the pursuit of the research questions regarding the capacity of non-fictional collage to negotiate and represent the complexities of reality. The French word collage, from the verb, coller, means 'pasting, sticking, or gluing' different layers onto a surface (Hoffman, 1989). Collage originates in the experiments of George Braque and Pablo Picasso¹. From 1911, they began to combine found materials with painted and drawn elements. They both applied the ephemera of daily life (newspaper scraps, theatre tickets, beer mats and so on) to the painted surface of the canvas. This has been recognised as part of modernism's efforts to destabilise formerly held notions of realism and the autonomy of the work of art. As William Wees puts it, 'by incorporating disparate materials found, rather than made, by the artist, and by dispensing with long-respected principles of coherence and organic unity in art, collage changed the basic rules of artistic representation' (1993, p. 46). In the aftermath of the First World War, the development of collage in emergent radical art movements ran parallel with a growing scepticism of authoritarian and institutional representations of the social world. The collage practice of artists like John Heartfield and Hannah Höch was dynamised by this movement, and sought to undercut images and narratives promulgated by power and authority (Hoffman, 1989). Part of their strategy was the deliberate foregrounding of the composite's fabrication. The combination of fragments with their own original identities that pre-exist the composition is meant to be noticed (Perloff, 1998). By highlighting its own construction, an aesthetic of discontinuity and fragmentation had a specifically political aim; interrupting and unmasking the deceptive surface of appearances by provoking a more active engagement with the constructed form of the artwork (Leslie, 2015).

This points to the recognition of collage as a specific philosophical principle, with a particular position in respect of realism and politics, and not only or simply a particular craft or practical method. It is 'an important mode of theorizing and model building as well as art-making' (Perloff, 1998, p. 387). This is indicated by the presence of collage across multiple fields. The principles of collage have been applied in literature, music, architecture and film making. The characteristics that identify a text as operating according to collage are the mixture of contrasting elements, as well as the integration of previously formed, extant materials. This includes images and print materials, sound recordings, pieces of writing or three-dimensional objects. Budd Hopkins has sought to describe collage as not just 'a physical technique, a marriage of contrasting materials, but rather as a philosophical attitude, an aesthetic position that can suffuse virtually any expressive medium' (1997, p. 5). Similarly, Harold Rosenburg, describes collage as a 'philosophy of put-togethers', this transcends any specific art form or style, he says 'this idea of collage as a

¹ The pasting, assembling and layering of various materials in art practice predates Braque and Picasso. Marjorie Perloff (1986) offers twelfth-century Japanese pasted papers and Russian icons decorated with gems, pearls, and gold leaf as examples. What distinguishes cubist collage from these earlier forms is the reuse of materials that have their own pre-existing identities, 'it always involves the transfer of materials from one context to another, even as the original context cannot be erased' (Perloff, 1986, p. 46).

mixture of realities belonging to different orders identifies modem assembled art with a metaphysical principle beyond mere technique' (1989, p. 60).

As an idea, as well as a medium, collage resists the binary dualism and reductions of empiricism and subjectivism, along with their associated forms of realism. As it functions across the intermediate positions that can be 'seen when one searches for realities on a continuum between (...) polarities' (Hoffman, 1989, p. 17), it has no homogenous or totalised ontological ground. This heterogeneity situates collage practice as a process that generates multivalent artefacts that eschew unitary notions of reality. As Donald Kuspit puts it, 'there is no clear-cut, single ground of art in the collage: art is no longer either representational (an imitation of nature issuing in an illusion of life) or abstract (a formal construction issuing in a style)' (1989, p. 44). In compositions that include photographic and indexical materials, an ontological realism is present in the status of the photograph as evidence of factual existence. Creative manipulation is practised through the subjective modification and combination of juxtaposed layers. In this way, the collage aesthetic negotiates a dialectic between the factual and the mediated. The mediation of the materials imposes a construction and relativity that the realism of materials themselves resists. It is this tension that Perloff ascribes to the role of the collage fragment, she says 'each element in the collage has a dual function: it refers to an external reality even as its compositional thrust is to undercut the very referentiality it seems to assert' (1986, p. 49). The factual force of the fragment pushes against the iconicity of the fabricated juxtapositions.

In his discussion of experimental found footage film, William Wees argues that:

...invaded by 'reality fragments', the collage work cannot offer a haven for purely aesthetic appreciation, nor can it present itself as self-sufficient and bound only by its own rules of representation and signification. Its fragments do not blend into a seamless, illusory whole, and its significance cannot be enclosed within the borders of the work itself (1993, p. 50)

This 'invasion' provides the collage work with fragments that disrupt the unity of an entirely iconic world that exists separate from lived experience. The world of the collage is not a sealed-off, hermetic, enclosed space. Its borders are porous, 'there is always something more that can be added to or taken away from its constitution' (Kuspit, 1989, p. 43). This is how collage can function as a method 'in which real things can be discovered in their objective meaningfulness, as well as one in which artistic things can be invented for the purpose of achieving meaningfulness' (ibid., p. 51). Real, objective things and artistic things are simultaneous and fused within the collage. The properties of concurrence and layering are the key operative principles in the juxtapositions that can contain both the real and the fabricated. There is no material that can be excluded from the collage aesthetic, from the mimetic to the fully abstract. It is a

'supremely multiple and mutable device capable of operating on several semiotic strata simultaneously' (Holmes, 1989, p. 210). This is a form that can address the conditions that Hopkins describes as a:

...disturbingly pluralistic world in which we deal with infinitely more information, more contradictory social roles, more diverse 'realities' than in any previous century. The smooth, continuous, unruffled space of older representational art is not appropriate to the disjunctions of our typical life experience (1997, p. 6)

The possibilities of collage have been extended through digital image editing. With the capacity for dynamic layering and compositing,² the collage is no longer physically 'fixed'. Digital cutting and pasting allows for constant alteration and revision. This mobility is further enhanced through software that animates moving film components in the temporal, as well as the spatial dimension. These developments have determined the course of visual effects as a particular application of the collage process. Historically, visual effects are used extensively in the sci-fi, fantasy and horror genres to generate illusory and imaginary phenomena. They are now also deployed across a wider range of productions to generate shots that are too expensive or impractical to photograph. Many films now include some use of visual effects, and their presence in film images is more difficult to detect. The goal of visual effects in most productions is the integration of film and computer-generated elements to render convincingly realistic, 'lifelike' images. Digital compositing usually aims to erase the independence and separateness of image components produced at different locations, at different times and using different methods. The borders of the components are obscured as they are subsumed into the new whole. Any inconsistencies in tone and lighting can be hidden in a compositing process that privileges the matching and synthesis of components so that their surface qualities perfectly 'fit' the whole. A 'smooth, continuous, unruffled space' is the explicit, aim of this sort of practice. The suppression of construction presents images that fail to provoke the active, critical engagement sought by the early pioneers of collage. Johnny Hardstaff has argued that this has driven the erasure of the political dimension within moving image cultures:

Whereas John Heartfield and other Dadaist graphic pioneers first used emergent graphic technologies in stylized, clearly metaphorical compositions that facilitated and enabled political debate, CGI technologists have, in chasing the 'Cinefex goal'³ (...) of mastering absolute and impenetrable realism, nullified the political within the visual (2007, p. 200)

In line with this argument, Nea Ehrlich has more recently written:

² Compositing is the process of combining visual elements from separate sources into single images.

³ Cinefex was a bimonthly journal covering visual effects in films. The publication focused on the technical process of visual effects shots.

Once the aesthetics of representation are no longer perceived as aesthetics, they become transparent because the representation is read as if it were reality itself. This has important political outcomes since once representation is no longer seen as such, what is represented can be viewed as 'real' rather than cultural and constructed, thus making it 'invisible' and complicit with existing ideology (2021, p. 26-27)

Under conditions that promote the homogenisation of reality, the critical, questioning operation of collage is extinguished as its dialectical capacities are suppressed. With its incorporation into the orthodoxies and determinism of corporate image making cultures, 'what was once a revolutionary technique is now the staple of advertising and greeting cards' (Perloff, 1998, p. 387). Against this, the mode of practice presented by this thesis seeks an explicitly political form of collage aesthetics. As Hardstaff suggests, collage must employ metaphor and other expressive devices rooted in its explicitly constructed nature in order to operate on a critical and political level. Esther Leslie distinguishes the political potency of photomontage from unmediated images that render a shallow, superficial reality, 'no single photograph can disclose the peculiar process of the extraction of surplus value or the way in which relationships between people have transformed into relations between things' (2015, p. 26). A construction comprising of different parts and their interrelationships is needed to render a meaning that reveals a deeper reality: 'something artificial - an artwork, so to speak - needs to be built up, put together in parts, in order to render some of this complexity' (ibid.). In this sense, collage can cut against the reduction and simplification of the 'illusory whole' (Wees, 1993, p. 50) of appearance forms by configuring the more stratified and differentiated world that critical realism describes. Through locating and separating social phenomena in this way, 'the false appearance of totality is extinguished' (Walter Benjamin, 1928/1977, p. 176). This echoes Bertolt Brecht's techniques of 'defamiliarisation' or 'ostranenie'. According to Stephan Heath, Brecht's work presents 'not a totality, but a series of social, political and ideological disruptions' pursuing a form of art and representation that 'is a struggle in ideology by the distance it establishes in respect of the ideological homogenisation of reality' (1981, p. 35). According to these positions, the ideological interruption possible through collage techniques disrupt the totalising effects of corporate culture in media images, an effect that collapses the complexity of reality and nullifies the recognition of real social relations. Wees has made a crucial political distinction between collage film, with its modernist orientation, and what he calls postmodern 'appropriation':

...collage and appropriation have something in common, but as in the case of their responses to the equivocal nature of photographic representation, collage and appropriation part company over the way they respond to media-as-reality. Collage is critical; appropriation is accommodating. Collage probes, highlights, contrasts; appropriation accepts, levels, homogenizes. If both use montage to dislodge images from their original contexts and emphasize their 'image-ness' (that is, their constructed rather than 'natural' representations of reality), only collage actively promotes an analytical and

critical attitude toward those images and their uses within the institutions of cinema and television (1993, pp. 46-47)

This describes a critical use of collage that deploys images as evidence of an external reality within a strategy of mediation that interrogates that reality. In resistance to the postmodern collapse into relativism, creative intervention probes and highlights the complexity of a world that is independent of representation. Critical realism's recovery of ontological realism and the complexity of reality, along with its acceptance of the subjective construction of knowledge, provides a productive frame for pursuing and articulating practice of this kind.

Collage Animation

Collage animation is a practice that produces motion through the manipulation of still image fragments. It is a moving, temporal iteration of the collage principles described above. Layers are animated in space through controlling their position and rotation within the frame. Physical, predigital collage animation is achieved through a frame-by-frame stop motion technique that moves layered, overlapping paper cut-outs and other objects underneath a camera. As part of this process, paper elements may be cut-up, drawn over, torn or otherwise modified.



Jeff Keen, *Cineblatz* (1967). Keen's work in animated collage used found photographs and objects that are modified with drawing and painting. The components are also animated through tearing, cutting, burning and melting.

Digital collage animation achieves a similar effect through the movement of still layers within compositing software with animation functionality. Software allows for layers to increase or decrease in scale in addition to movement and rotation. 3D functionality allows for layers to be arranged in three dimensions. Virtual cameras can be added to navigate within 3D compositions. Layers can also be modified with a range of digital filters and effects. Through these tools, collage is invigorated with movement, transformation and spatial depth.

Practitioners within analogue and digital collage animation frequently exploit its capacity to recontextualise and juxtapose a wide range of images in simultaneous relationships. James Peterson has interrogated the language of collage animation in an analysis that recognises its plurality and complexity. In reference to the tension generated as disparate images are combined, he says:

...collage animations are complex instances of assemblage, because they exploit this tension on several levels: the construction of the individual images, the local juxtaposition of these images, and the overall structure of the film (...) The viewer must negotiate unity or disunity at each level, and at each level unity has several components (1994, p. 147)

Meaning is transmitted through individual image components and how they be modified, altered and animated; the spatial combination of these distinct components within the frame; and the temporal juxtaposition of the layered compositions across the sequential structure. Peterson also argues that the extent to which a collage connects outwards, or points outside of itself, is conditioned by the extent to which the identity of its individual components is foregrounded or obscured. He uses Larry Jordan's work as an example of the highly crafted approach. Jordon uses a sense of a coherent three-dimensional space, a uniformity in the stylistic qualities of the images he selects, and precision in the accuracy of the crafting of found materials to suppress our awareness that images 'have been ripped out of another context and provisionally grouped into a new composition' (ibid., p. 149). This absorbs and homogenises the fragments, creating a sense of space where images appear to 'belong' to the new context, rather than their original intended purpose. Within these spaces, images are anonymised as they lose connection to their original identities. In terms that emphasise the inward energy of a sealed off aesthetic, 'images whose sources are unrecognizable - might be considered "centripetal": the pull of the "centering" new composition is stronger than the pull of the diverse intertextual references' (ibid., p. 154). In this way, the homogenizing logic of conventional visual effects produces an extremely centripetal form of collage.



Larry Jordan's Hamfat Asar (1965) combines multiple images within the frame for a consistent, coherent sense of space.

In contrast, he cites Vanderbeek's films as examples of *bricolage*, an assemblage that deliberately maximises the sense of contrast and collision across its elements in order to amplify the tension generated. This maintains a strong sense of the original identity of the elements. Peterson summarises the effect of the more 'open' world of the bricolage approach:

Bricolage (...) tends to be 'centrifugal': the centering pull is weaker than the outward pull of the intertextual references (...) the point of the bricolage's collection of such diverse material is not so much to craft a coherent new whole as it is to analyze, reappraise or ridicule the sources of the interpolated material (lbid.)

This more critical, and political, approach to images is necessary condition for collage that is concerned with addressing the external, independent reality it negotiates. Realist collage must be centrifugal in its use of materials in order to analyse and reappraise the historical and social significance of its parts. Deliberately obscuring the boundary between layers would not generate the interstitial contact point that must be present for inference towards the transfactual and causal mechanisms. Also, the closed logic of the centripetal collage is not suitable for engagement with the open systems that CR describes. A more centripetal approach would not be adequate to addressing the domain of the real and pursuing the research questions.



Stan Vanderbeek 'What, Who, How' (1957). Vanderbeek's animations use cut out photographs that clash and collide through the discernibility of their original intended purpose.

Spatial Montage

Consistent with the collage animation described by Peterson, the research presented in this thesis places photographic images in simultaneous, spatial relationships within the same image frame. But whereas the components in collage animation are still images, with fixed, immobile edges; realist collage combines film fragments with their own internal motion. This is a mode of practice is related to what Lev Manovich (2001) terms 'spatial montage' in his analysis of digital compositing techniques. Spatial montage is differentiated by the simultaneous arrangement of shots within the dimensions of the screen, in contrast to the temporal film montage that arranges elements sequentially, one after another (see film realism and montage section later in this Chapter). Spatial montage can be approached in three principal ways. The simplest form, sometimes known as 'split screen', maintains the frame edges of each shot by placing each image in a separate window. Each individual image is unmodified, and they do not overlap.



Gance Abel's Napoléon (1927) employs spatial montage in the juxtaposition of multiple images in a split screen format. Each image is unmodified, and the content and edges of the images are unchanged.

The second form is superimposition. The separate film images are overlapped or layered, one on top of another. Each image is visible in the composition, as the opacity of layers is modified so that semi-transparent images reveal the layers underneath.



Dziga Vertov's Man With A Movie Camera (1929) uses spatial montage that superimposes multiple images. The transparency of images is modified to produce the layered composition.

The third form is achieved through compositing techniques that combine objects from separate shots into single images, often to produce the impression that they are part of the same scene. This the form of spatial montage deployed in visual effects. To facilitate compositing, individual elements from a shot are isolated before being combined.



Zbigniew Rybczynsk's short film *Tango* (1981). Each figure is on a separate layer generated by a physical travelling matte that removes the actor from the surrounding frame. This produces the illusion that the figures are occupying the same space.

Compositing uses green screen or rotoscoping⁴ methods to generate 'masks' or 'travelling mattes' to isolate moving objects from the rest of the frame. The matte must 'travel' and follow the contours of the object. This hides the space around the object, producing layers with moving, fluid edges that are then spatially overlaid and combined. In compositing, the overlaid layers are most often fully opaque rather than transparent. Pre-digital compositing was achieved through

⁴ Rotoscoping commonly refers the technique of tracing over live action footage to produce a drawn or painted outcome that has a realistic sense of movement. Within visual effects and compositing, rotoscoping is the technique of manually generating moving shapes so that live action elements can be composited over another background. I use the term in reference to its use in the context of compositing.

matte-painting or the physical manipulation of celluloid film. Modern compositing is now achieved digitally through software like Adobe After Effects and The Foundry's Nuke. Rotoscoping must be used to isolate elements from any piece of film that has not been photographed using a blue or green screen background. Digital rotoscoping is achieved by generating travelling mattes through a combination of motion tracking and manually animating 'roto' (short for rotoscoping) shapes with keyframes (this is discussed further in the animation section later in this chapter).



Vicki Bennett's film *The Remote Controller* (2003). Isolated found footage materials are juxtaposed in simultaneous relationships within the image frame. The edges of the footage components are animated to trace the contours of the object as it moves.

Marjorie Perloff has suggested that collage and temporal film montage have a common foundation:

It is customary to distinguish between collage and montage: the former refers, of course, to spatial relationships, the latter to temporal; the former to static objects, the latter, originally a film term, to things in motion. But it may be more useful to regard collage and montage as two sides of the same coin, in view of the fact that the mode of construction involved – the metonymic juxtaposition of objects (as in collage) or of narrative fragments (as in montage) – is essentially the same (1998, p. 384)

Perloff recognises the shared logic of spatial and temporal montage. Both construct meaning through the interstitial meeting point between the fragments they contain. As the term suggests, in spatial montage, the spatial juxtapositions of collage and the temporal relationships of film montage are fully synthesised. The metonymic objects it contains are in motion. As narrative fragments within spatial relationships, they are both synchronic and diachronic. This is a specific form that has its own properties and principles, most fully realised through the compositing method. Perloff is correct to argue that collage and montage have a shared 'mode of construction'. However, this thesis will present spatial montage as a separate practice that has a its own distinct mode of construction that can't be reduced to 'essentially the same thing' as static collage and temporal film montage.

Realist collage is a form of spatial montage achieved through the compositing method. Through a centrifugal approach, the technique can be used within and aesthetic that openly displays its constructedness and the distinction of the components combined. This is consistent with collage that clearly annunciates the separateness of its fragments, rendering an unambiguously mediated territory that foregrounds its deliberate discontinuities. Manovich recognises the value of this approach:

Although digital compositing is usually used to create a seamless virtual space, this does not have to be its only goal. Borders between different worlds do not have to be erased; different spaces do not have to be matched in perspective, scale, and lighting; individual layers can retain their separate identities rather than being merged into a single space, different worlds can clash (2001, p. 158)

Where 'the discrepancies occur at the level of the *image combination* of fragments' (Buchan, 2010, p. 190, my emphasis), the collision of layers has a rhetorical potential of its own. This is the fulcrum of the capacity of realist collage as 'communicative interaction' (Sayer, 1992) that addresses the non-empirical, causally generative levels of reality.

FILM REALISM AND MONTAGE

Following on from the discussion of the the simultaneous operation of the empirical and the mediated within collage, this section considers debates in film realism and how they are connected to philosophical issues that can be productively addressed through CR. It entails an outline of the historical background of the opposing standpoints in film realism across objectivist and subjectivist positions. Through presenting the properties of montage as a mode of causal inference, it develops the argument that film practice informed by CR can navigate a path between the empirical and subjective. This provides further support for the philosophical underpinning of the practice in pursuit of the research questions.

In her analysis of the development of realism in politics and aesthetics, Terry Lovell has said:

From the eighteenth century onwards there have been a number of movements in various arts - the novel, painting, film, etc. - which have styled themselves 'realist' and have seen themselves as making radical departures from existing practices under this title. Yet each of these 'realisms' has arisen in specific historical circumstances, and each takes its meaning as much from the practices to which it was opposed, as from practices common to all realisms. Realisms are plural (1981, p. 64)

This suggests that approaches to realism can be positioned on a spectrum, with different intermediate positions situated across a continuum. Lovell argues that realism in a particular field, like film, does not develop independently of developments in adjacent fields, or science, culture and philosophy more generally. Realisms are plural as they are influenced and conditioned by the cultural and social negotiation and renegotiation of what is considered truthful or authentic, what is considered to be 'realistic' at particular times and in specific contexts. Developments in paradigmatic movements in philosophy and cultural studies play a considerable role in this, as

well as constant developments in the audio-visual technologies of representation (Ehrlich, 2021). Despite their diversity, Lovell argues that all realisms share two common features. They claim to hold the capacity to represent reality truthfully, and they are premised on antecedent theories that establish ontological and epistemological grounds. She says:

All realisms share (...) firstly the claim that the business of art is to show things as they really are, and secondly, some theory of the nature of the reality to be shown and the methods which must be used to show it (1981, p. 65)

Similarly, Raymond Williams has said that in the pursuit of realism, 'inevitably, specific uses of method and technique are in the end inseparable from fundamental conscious or unconscious positions, viewpoints and intentions' (2002, p. 113). Lovell's arguments address theories of reality that have been determined by the dominance of the empiricism on the one hand, and conventionalism (and other variants of idealism or relativism) on the other. These movements have determined approaches to representation that follow the empiricist belief in an observable and measurable reality, against approaches that foreground the subjectivism and relativism of language and mental constructions. To understand how reality is rendered in particular texts, we must look beyond the text itself to its historical conditions, including the strong philosophical currents also influencing science, social science and critical theory. As Lapsley and Westlake suggest, 'an analysis of realism entails making reference to a beyond-the-text. Thus any complete account of the functioning of realism would have to consider not just its textual practices but the social practices within which these are situated' (2006, p. 157).

As social practices are contingent and dynamic, new realisms are developed and modified to reflect the constant change in reality itself. Changes in media technologies accelerate and complicate changes to socially negotiated standards of what is realistic or truthful, particularly in reference to non-fictional representation. Current developments in digital imaging and their presence in mass communication have the potential to destabilise the reliability and trustworthiness of representations of the world. This in turn shapes the debates that attempt to negotiate issues of truth, and how reality can be accessed or 'seen', particularly with regards to the social and political implications of 'visibility'. As Ohad Landesman puts it; 'the question of realism naturally remains intertwined with a complex set of discourses, conventions and cultural changes, which safeguard or suspend the trust we are willing to invest in a given form of representation' (2008, p. 42). The recent crisis in representation has been fuelled by the emergence of technologies that exacerbate the anxieties of a 'post-truth' politics. For example, the use of artificial intelligence and the production of 'deep fake' videos ruptures faith in the existential bond between photograph and referent. Under these conditions, issues of realism are far more slippery and opaque (Buchan, 2013).

Returning to Brecht's disruptive technique of 'ostranenie', he argued that realism could not be confined to a narrow or fixed approach, as modes of representation should reflect the continuous change of the social world (Brecht, 1964). This is not the realism of neutrality and objectivism, 'but rather as a form of defamiliarization that makes viewers see realities anew through innovative representation that breaks with conventions' (Ehrlich, 2021, p. 27). Informed by contrasting philosophical standpoints, there are competing viewpoints in film theory with regards to what constitutes film realism and the most adequate approaches to representing 'the real world' through the medium of film. The debate has been characterized by a split between positions that argue for the capacity of the film camera to objectively represent the external world, and opposing ideas that foreground the subjective process of actively shaping and constructing film material in order to reveal reality. The French film scholar André Bazin is a key thinker in advocating the 'integral realism' that is mechanically produced by the film apparatus, independent of human intervention. At the other end of the argument, are the thinkers and practitioners (primarily Sergei Eisenstein, Vsevolod Pudovkin, Dziga Vertov and Lev Kuleshov) associated with developed Soviet montage theory. Derived from the French for 'mounting' and 'assembling' (Kukulin, 2015; cited in Blackledge, 2017), the word montage emerged at around the same time in Germany and Russia between 1916 and 1918. Montage theorists asserted that film material had to be creatively assembled through the post production method of editing and construction in order to intervene in reality, revealing its social and political complexity.

Bazin's theory ultimately rests on the argument that the photographic image has the capacity to directly capture reality (Bazin, 1967; Wayne, 1997; Winston, 1995). In its status as an objective record, its presentation of reality is independent of the mediating influence of the photographer's or filmmaker's subjectivity. The connection between representation and the real that this argument stresses is consistent with the mimetic tradition in art and aesthetics. This emphasizes the naturalistic mirroring or copying of the world that the photograph achieves, free of human interference (ibid). Bazin says:

The photographic image is the object itself, the object freed from the conditions of space and time that govern it. No matter how fuzzy, distorted, or discoloured, no matter how lacking in documentary value the image may be, it shares, by virtue of the very process of its becoming, the being of the model of which it is the reproduction; it is the model (1960, p. 8, emphasis in original)

For Bazin, the photographic process, in its artificial replication of human sight, means that the image and the object photographed have a direct and correspondent relationship. The contention that 'the photographic image is the object itself' implies a strong ontological equivalence between object and the representation. Bazin's view privileges the camera's capacity

as an empirical recording device. In keeping with ontological realism, CR would also acknowledge value of the photographic image as evidence of an empirical event. It tells us that something definitely occurred in the external world, independent of human perception. Also, the particular potency of the photographic image as having a causal relationship with reality is integral to the language of collage and how it 'calls forth' reality (the question of photographic evidence is taken up in more detail in Chapter 3). However, there are strong implications in Bazin's claim that are antithetical to CR and the metaphysical features of collage. He suggests a level of direct correspondence between reality and images that obscures the operation of theory and context in how images are produced and understood. As the photograph is conditioned by human processes, the intention and choices of the photographer can't be 'bracketed off' and separated from the indexical trace. Indexicality is never 'pure' and unfiltered by contextual factors in the way that Bazin implies. The photograph can't be freed 'from the conditions of space and time that govern it'. This is in line with the aspect of epistemic relativism that recognises that all empirical facts and events are contextualised, interpreted and made meaningful through existing conditions. As experience, events and reality are not identical, it is the contextualisation of facts, and photographs, within existing ideas and theories that generate our perceptions of reality. For realist Andrew Sayer, both observation and theoretical statements 'have in common the feature of being conceptually mediated' (1992, p. 54). Given the interdependence of the conceptual and the empirical, 'they cannot be treated as entirely separate (...) our judgements (...) will always be made through practical relations and conceptualizations' (ibid, p. 58). In short, what we see, experience and choose to record is conditioned by what we already believe (Collier, 1994). Also, Bazin's faith in the 'unfiltered' image suggests a confidence in the capacity of the photograph to deliver unmediated truth. For a critical realist, the photograph, like empirical experience, does not have a direct correspondence with reality. Reality sits at many levels; its depth is not visible to human perception or the camera lens. The level that the photograph records does not render this complexity, only its surface appearance in events that happen to be witnessed and captured.

The views of the Russian formalists are more consistent with both CR and the principles of collage aesthetics. For them, film images obtain meaning through their contextualisation within an edited sequence. According to this principle, a single film image can mean different things, and imply different truths, according to its contextual framing within the constructed work. The image alone is no guarantee of any particular truth or secure relationship with the world, but the shaping of images through montage could cumulatively attain a closer proximity to a complex reality. Unlike Bazin, this is premised on the assumption that human perception, and also the camera as a substitute of human perception, has only a limited capacity to perceive the complexity of the world at 'first hand'. Dziga Vertov's concept and technique of the kino-eye (the film-eye) recognises the objective recording capacity of the camera, but holds that this

objective material must be creatively manipulated if a more truthful representation of reality is to be achieved. This allows for capturing a reality that he believed was not available to the human senses, or its mechanical proxy. For Vertov, it isn't enough just to record reality, the reality of the film image must be worked on and manipulated in order to transcend the surface of the visible world. As Michael Chanan notes:

The film-eye, according to Vertov, is a machine which surpasses the limitations of unaided human observation, but the concept, as befits a Leninist, is a dialectical one: the film that is shot is raw material for production, which acquires significance through the process of editing. The kinok records 'life-facts' which the camera turns into 'film-facts', which are combined through montage into 'film-truth' (2007, p. 70)

In this view, only through the combining photographic production and editing can a functional filmic truth be achieved. A film truth that recognises the interrelationship between objectivity and the unavoidable subjectivity that receives and interprets facts. This circumvents the dominant dualisms (individual/society, knowledge/practice, thought/action, subjective/objective) that are 'beset with misconceptions which generate problems in our understanding of the world and of ourselves' (Sayer, 1992, p. 23). From this standpoint, subjectivism does not entail the relativism that collapses ontology to the conceptual, and objectivism does not reduce reality to surface level of events and experiences. Through contextual shaping, the primary property of collage, elements of reality can describe a multidimensional world through inferring the causal mechanisms and structures generating events.

In placing documentary film in a philosophical context, consistent with Lovell, Mike Wayne's analysis of documentary as a critical practice has suggested that the dominant philosophical positions aligned with empiricism (or positivism) and conventionalism (or subjectivism) have been the principal forces shaping our understanding of realism in non-fictional contexts:

In relation to film, positivism grounds itself in the *iconic* nature of the visual sign (the image resembles that which it represents) and the *indexical* relationship implied (at least before digital technology) that the reality captured by the image must once have been there, present before the camera (itself often conceived as an objective, mechanical recording instrument) (2008, p. 83, emphasis in original)

Broadly speaking, this can be paralleled with the objectivist theory posited by Bazin in its commitment to the unalloyed reality of the photographic image. This commitment has been the basis of the observational ethos of documentary film, particularly the traditional journalistic, semi-scientific status of documentary, expressed most pointedly in the direct cinema movement and its claim to deliver an unmediated reality (Winston, 1995). Alternatively, 'the interpretive paradigm' by contrast places emphasis on qualitative analysis. Its focus is on the variability of meanings, which are understood to be context-dependent rather than universal and

standardized' (Wayne, 2008, p. 84). This paradigm is reflected in the attitudes of the Soviet formalists in their strong emphasis on the context-dependence of meaning put forward in their theories of montage. In his article, Wayne goes on to say that while some documentaries (particularly within direct cinema) have a philosophical basis in the dogmas of empiricism, the overall thrust of knowledge produced by documentary film is qualitative and interpretive. This acknowledges the inherent subjectivism at work in the production of texts that are shaped through a selective, creative process. As Lovell has described, the tendency towards the interpretive has been taken further towards a strong idealism in the postmodernist argument that reality can only be known through language and concepts. To the postmodernists, as our representations are subjective and relative, we can't make judgments about the adequacy of those representations in accurately reflecting reality. As we can only know reality through representations, we can only judge them against each other, and never reality itself (in contrast to judgmental rationality, this is a species of relativism that a critical realist would call judgmental relativism, wherein all knowledge claims are incommensurable). Lovell challenges this by pointing out the contradiction in asserting the truth of this premise, which presupposes a truth external to the subject, whist denying that any truth is possible:

Even the most extreme version of conventionalism, which claims that theories are literally incommensurable, paradoxically pays testimony to the existence of a common reality. It only makes sense to speak of theories as incommensurable if they are in some sense 'about' the same thing (1981, p. 21)

All theories must be about something that they refer to, they can't just be about themselves. The common object of theory, the 'same thing', is the independent, external world. Just because representations are relative doesn't mean that it follows that we can't know reality at all, or worse, that an independent reality does not exist.

In response to these issues, CR offers an intermediate position that reconciles the binary extremes of objectivism and subjectivism, challenging the 'false choice' (Lovell, 1981, p. 42) between empiricist and subjectivist ontologies. The research process theorised and described in this thesis is aligned with the assertion that reality is not captured directly or unproblematically by the camera. This will be framed by the *epistemological relativism* of CR, the view that propositions, descriptions and representations are not identical with reality. Description belongs to the transitive world of knowledge, not the intransitive world of external things (Bhaskar, 1975). According to *ontological realism*, critical realists believe that reality and truth have to be thought of in ontological terms. Truth is not located in our methods or representations; truth is located 'in reality itself', reality is the 'truth maker' (Porpora, 2015). As Kieran Cashel says, the 'veracity of competing epistemological regimes cannot be established by measuring them against each other but rather according to how closely they respect the transcendental delimiting conditions

of their ontological embedding (in the intransitive dimension)' (2009, p. 143). In other words, the *judgemental rationality* of CR insists that the degree of truth achieved in representations is not only determined with their relationship with other representations. It is a matter of relative correspondence with reality, in the match between what we represent and the reality itself. As knowledge is theoretically determined and fallible, this match can't be completely equivalent and secure, but that doesn't mean that there is no truth available. We can obtain a better match and a more adequate representation of reality through interpreting empirical events through models of 'communicative interaction' (Sayer, 1992, p. 19) that embrace ontological depth and complexity.

In further situating the CR position on realism that the project adopts, it is necessary to touch on the Marxist perspectives that informed Vertov and his contemporaries. Marxists are committed to the existence of an independent reality and uncovering the material relations that determine the social world and history. Because of the particular form which these relations take under capitalism, this is a world that is relatively independent of human perception and our means of representation (Lovell, 1981). For Marxists, reality is greater and more complex than the surface appearance of the physical world that can be captured by the camera. However, Marxists also believe that this underlying reality can be revealed through dialectical investigation. Dialectics emphasises the concealed relations and processes that generate the visible effects and phenomena that we experience. Bertell Ollman defines dialectics as 'a way of thinking which brings into focus the full range of changes and interactions that occur in the world (...) Dialectics restructures our thinking about reality by replacing the common sense notion of "things" (...) with notions of "process" (Ollman, 1986, p. 42). Marxist film makers and critics have seen the camera as a tool for exploring dialectical thinking through extending our ways of seeing and perceiving. In the dialectical view, the world is not comprised of immobile objects, as a static, non-dialectical impression of appearances would suggest. The relations that lie behind events are dynamic and constantly changing. As expressed by Walter Benjamin, the film camera's capacity for describing movement and manipulating time has the potential to disrupt a fixed, inert reality. In this way, the camera fuses the scientific objectivity of its mechanical process with creative interventions that can produce new ways of seeing the world. On the spectrum of film realisms, this tradition offers an alternative intermediate position to the empirical view that film is a direct copy of reality, and the postmodern or idealist view that film is a purely subjective projection. Through this approach, photographic images can be used 'to penetrate the laws governing objective reality and to uncover the deeper, hidden, mediated, not immediately perceptible network of relationships that go to make up society' (Lukács, 1980, p. 38).

Esfir Shub's archive film work operates according to this logic. Her filmic collage used existing images as factual material to pursue a transfactual argument through editing and juxtaposition. The causal relationships linking the events recorded in film fragments are inferred by recontextualization and construction. Esther Leslie describes this in terms that echo CR's assertion of the need to model and shape reality, 'connections between events and their interpretation were expressed through juxtapositions (...) The whole builds up (...) To watch a film by Shub was to watch reality pass by, moulded, made into concept and argument, a comprehensible concept and argument' (2015, p. 11). Shub's films recognize that the facts contained within recordings of historical events can't offer access to an absolute or unitary truth. But they also work, through montage, to reveal the network of relationships behind the events through the structure that she imposed (Winston, 1995).

From a CR perspective, the 'connections between events' are the invisible, non-empirical mechanisms that cause things to occur in the world. A construction that addresses the causally generative levels of reality can render 'the whole' that 'builds up', providing a fuller picture that gets beneath the surface of facts. The negotiation of invisible phenomena requires a method that is not solely located in the visible content of the film shots themselves, but in the interstitial 'connection' between shots. As Olga Blackledge notes in reference Kuleshov's montage experiments, 'cinematic meaning is created not in one frame or shot, but rather through editing a sequence of shots' (2017, p. 117). Sergei Eistenstein asserted the universality and dominance of montage principles when he says that 'two film pieces of any kind, placed together, inevitably combine into a new concept, a new quality, arising out of that juxtaposition' (1986, p.14). The nature and purpose of the new concepts and qualities produced are suggested by Mike Wayne's description of Eisenstein's 'intellectual montage'. He contends that the editing process 'attempts to make concrete an idea or set of thought processes which are not already evident within the shots themselves but exist only in the juxtaposition of the shots' (1997, p. 132). A key claim of this thesis is that non-empirical causes that generate events are the primary object and referent of montage. The inference that montage employs is a causal inference, and its aim is contact with the deep domain of reality. The work presented here seeks to use CR to shed light on how this happens in a form of montage that works across the temporal and spatial dimensions. In this form, the interstitial connections are within shots, as components are spatially juxtaposed, as well as between shots in the temporal cuts. In Chapter 4, this will be explicated through as a system of CR research that employs the inferential process of abduction, abstraction and retroduction through collage film.

DOCUMENTARY AND NON-FICTION

In further addressing issues of film realism, this section will develop the claim that non-fiction film uses montage and inference to address the non-empirical causes of events, and that this capacity can be enhanced through greater levels of creative intervention. This considers non-fiction film from the perspective of CR, in relation to the mediation of facts and the integration of the objective and the subjective. This provides the basis for the research question pertaining to the vocabulary of non-fiction film.

The term non-fiction is used to describe film and video texts that can be distinguished from fiction as they depict events that occurred in the real-world of lived experience. Documentary film sits within the non-fiction category, but there are non-fiction films that are not documentaries (Ward, 2005). Non-fiction films that fall outside of the sphere of documentary includes newsreels, home movies, news reports, recorded lectures, training videos and public information films. However, documentary films can and frequently do include these non-fiction items within their content. The distinction between a documentary and a non-fictional item can be made on the basis of the purpose and context of the film. Philip Rosen (2001), referencing the inherent presence of narrative in the writing of history, has argued that a non-fictional document and a documentary are distinguished by the arrangement of parts to form a whole sequence and a story. If we describe discreet film materials as 'documents', it is the bringing together and sequencing of documents that produces the 'documentary'. Within the process of construction and assemblage, documents are arranged to produce a historical narrative of the events and people depicted. Following Rosen, Jaimie Baron says that; 'documents, with their fragmentary status, are distinct from documentary in that documentary, in order to narrate history, must provide both sequence and meaning' (2014, p. 10). The documentary logic described by Rosen and Baron has a clear relationship with the collage process of bringing together parts to form new wholes that generate new meanings.

With regards to the distinct territory of documentary, as fictional film also uses sequence in order produce meaning, this property alone does not distinguish documentary from fiction. John Grierson provided an early definition when he described documentary film as 'the creative treatment of actuality' (1926). This phrase contains an assertion that the subject matter is actuality, the real, or real life, whilst acknowledging that the process of filmmaking conditions reality through the mediations of creative shaping. In more recent commentary, film theorist Michael Renov's definition lists the intent and purpose of a documentary film as the aim to 'record, reveal or preserve, to persuade or promote, to analyse or interrogate and to express' (1993, p. 21). This definition puts emphasis on the objectives of the filmmaker as expressed

through the features of the film. A perspective that puts greater emphasis on audience and reception is Noël Carroll's (1997) identification of documentary as 'films of presumptive assertion'. Films present themselves as addressing reality, with the presumption that the audience will take them up and understand them in that way. An emphasis on audience response acknowledges that fiction and documentary can't be distinguished purely at the level of form, as they share a common vocabulary of formal features. Documentary and fiction filmmaking cross over and overlap to a large extent, as does documentary and found footage film. There are also hybrid areas that mix documentary with other fields, interactive documentary and animated documentary are prominent examples. Scholars agree that the boundaries between documentary film and its adjacent fields are not fixed and easily defined. The application of the term is necessary fluid and context dependent. In relation to the boundary between fiction and documentary, Paul Ward says:

...one cannot point to so-called 'fictional' devices (narrative trajectory, cross-cutting) in a documentary and state that these devices, in and of themselves, invalidate that film's documentary status. Likewise, one cannot point to handheld camerawork or certain types of voiceover in a fiction film and state that these devices alter the film's fictional status (2005, p. 11)

As such, stylistic and formal characteristics conventionally attached to either fiction or documentary can't be the sole means of determining the status of a film. Dirk Eitzen states the case emphatically when he says that 'there is no such thing as a text that is intrinsically and necessarily a documentary' (1995, p. 98). If there is nothing intrinsic to the properties of films themselves that serve as an adequate marker of documentary status, then this status must be established by the film, *plus* the extratextual elements that relate to its contexts of production and reception. Following Carroll, Eitzen asks the question 'When is a Documentary?'. The emphasis on 'when' rather than 'what' reframes a possible definition in terms of an event that is witnessed, rather than in terms of an artifact itself. This posits reception as the point at which a film fully 'becomes' a documentary, when it is received and taken up as such by the audience. Reception is partly provoked by the features of the film itself, and partly based on the extratextual elements that make up the 'discursive context' that surrounds it (Eitzen, 1995). This includes how the film is labelled and described in the press, in promotional materials or in interviews.

In relation to production and the intentions of filmmakers, Michael Chanan separates documentary from fiction as it 'represents a world that is continuous with the one we live in, it invokes a space which is isomorphic with the physical reality in which we live our everyday lives, at least in principle, and sometimes quite palpably' (2007, p. 79). Unlike fiction, Documentary can't be entirely fabricated, the people it refers to must exist, and the events it depicts must have

happened. Although the process of editing and construction might complicate the link to concrete reality; 'when you film a documentary, what you capture in the camera is a moment grabbed from the day and time given by the calendar and the clock' (ibid., p. 4). This means that a documentary functions according to maintaining some form of fidelity to the historical world of things outside of the film. Despite the causal existential bond between the film and the real, the presence of construction and the necessity for selection and omission inherent to narrative rule out the possibility of a simple correspondence between object and text.

For Bill Nichols (1991), although documentary is a selective construct, it can still be identified on the basis of its appeal to truthfulness. Based on its use of evidence and the pursuit of arguments, it is 'claiming the real' (Winston, 1995). As William Guynn holds; 'narrative is never absent in documentary films, even if its presence is more or less marked' (1990, p. 154). But this does not diminish a films status as documentary, or make its truth claims suspect by default. The journalistic expectation that documentary delivers an objective and unmediated truth is premised in the tenets of empiricism, allied to the apparent scientific status of the camera as a neutral recording device. The implication is that truth can be preserved from its source through the production process and finally delivered intact to the viewer. As Brian Winston says, 'the pretension to a superior representation of the real is deeply encoded in the dominant documentary style' (1995, p. 254). This sustains the belief that a film can and should be 'objective' and 'balanced' in its treatment of reality. Despite the widespread acceptance of this view as a component of 'common sense' thinking, it is neither desirable or possible for any representation to achieve this aim within human affairs. Consistent with the epistemological relativism of critical realism, no person is capable of removing themselves entirely from the social and cultural conditions that determine and situate all perspectives and viewpoints. As Ward says 'there is no such thing as "an objective position" in the sense that it is often meant; that is, as a position that is somehow magically "outside" the socio-historical context that it is depicting (2005, p. 60). Also, the notion of an ostensible adherence to 'neutrality' and 'balance' achieved through objectivity is equally flawed. Given that almost all social relations are characterised by imbalances of power, 'to remain stubbornly "impartial" and "balanced" in the face of clear imbalances in the real world is to actually misrepresent that world' (ibid, p. 61).

More accurate accounts of documentary acknowledge that its production entails a dialogic relationship between facts and evidence on the one hand, and the inevitable presence of subjectivity that mediates all representations. This is consistent with the CR view of knowledge production as social, historically situated, perspectival and fallible. In truth, the co-present empirical and subjective tendencies at work in negotiating and understanding events are not antithetical or at odds. Rather they are both engaged in a 'perpetual negotiation between the

real event and its representation (...) the two remain distinct but interactive' (Bruzzi, 2000, p. 9). The balance and interplay of fact and construction is reflected in the semiotics of the film image itself. Within film form 'the indexical and the iconic are always present together, opening out the image to connotation – associations, nuances and undertones, often themselves iconic - beyond the immediate denotation' (Chanan, 2007, p. 60). As argued in the last section, the nature of these connotations is in causal inference, and their location is within the interstitial spaces of assemblage. Although the presence of construction does not prevent the possibility of evidence or truth, 'it does mean that documentary can only develop through learning to exploit the inflection of the denotative image by the connotations it summons up, and this lies in the discovery of the properties of montage' (ibid.)

From the perspective of the CR position pursued in this project, the creative shaping of empirical events is the focal point for collage film's potential to reveal levels of reality not available to the photographic image alone. This is the basis of the realist pursuit of modelling a multidimensional reality that transcends the level of experiences and events. The role of imagination is key to this process, in this regard the research subscribes to Eitzen's view that documentary is 'not the representation of an imaginary reality; it is an imaginative representation of an actual historical reality' (1995, p. 84). There are numerous examples of recent films that can be aligned to this position; including *Dreams of a Life* (2011) by Carol Morley; *Stories We Tell* (2012) by Sarah Polley; *The Act of Killing* (2012) by Joshua Oppenheimer; *Cameraperson* (2016) by Kirsten Johnson and *Casting Jon Benet* (2017) by Kitty Green. These films deviate from the codes of objectivity and balance in favour of self-reflexive approaches that avoid fully unitary or closed meanings. This is in line with a realism that is sensitive to the impossibility of absolute knowledge of the world, as the total sum of mechanisms and structures producing events can never be known empirically and can only be imagined. Writing in 2000, Stella Bruzzi has said:

What has emerged in recent documentary practice is a new definition of authenticity, one that eschews the traditional adherence to observation (...) (or to the) notion of the transparency of film and replaces this with a multi-layered, performative exchange between subjects, film-makers/apparatus and spectators (p.10)

In the same period, critical realist Gary Maclennan argued that the understanding of documentary within academic debates was encumbered by an anthropocentric suppression of ontology. He points out that CR balances the empirical and the theoretical, and that the subjectivism of epistemic relativism is not incompatible with the realism of judgmental rationality. In this way, 'many of the confusions and aporia that have plagued documentary studies, particularly with reference to truth, objectivity, and realism, have either been solved or at least substantially clarified within the paradigm of critical realism' (1999). Maclannen makes an explicit call for the deployment of CR in the study and practice of documentary. His challenge indicates the

philosophical context of realist collage as a form that can extend the vocabulary of non-fiction film. Chanan's emphasis on the development of the connotative properties of montage points to how this can be practiced, and extended, through spatial montage.

Documentary theorists have emphasized the role of montage in the production of meaning in non-fiction film (Chanan, 2007; Wayne, 2008, Coover, 2001; Gaines, 1999). With regards to the 'common sense' basis of stratification and how documentary film is constructed and interpreted, I would argue that the montage principle functions according to an ontology and epistemology described by critical realism. The materials of documentary film are structured in the editing process in order to 'bring out' and reveal the mechanisms that determined the events depicted in a film. The experience of critical engagement with a documentary is that of perceiving the forces shaping the events that may not be explicitly referred to, but are *inferred* by the interrelationship between the shots and scenes selected. The location of this inference, where mechanisms are revealed, is in the interstitial meeting point between shots and scenes. By placing elements within the same frame, film collage that operates spatially and temporally expands the epistemic potential of this form of communicative interaction.

ARCHIVE AND FOUND FOOTAGE FILM

The practice articulated through this thesis makes exclusive use of archive film materials. This section will deal with the ways that the practice of archive and found footage filmmaking has been described and understood. It will address archive film in relation to its implications for film realism, collage and history. Realist collage will be situated within existing definitions of the archive film practice, understood from a CR perspective.

Archive Film is a film or video item that is held in a private or public collection of some kind. The definition of what constitutes an 'archive' is broad and has been renegotiated and modified in recent debates. Traditionally, the term archive film has been associated with contexts wherein film collections are curated and organised in institutional settings like museums, libraries and universities. Writing in 2003, Michael Zryd makes a distinction between archive and found footage film items based on the 'official' status of the institutional archive. For him, 'archive' footage must be managed through an institutional context that selects footage items for their historical value according to formalised criteria. This is a process that 'separates historical record from the outtake' (p. 41). 'Found' footage is not subject to these conditions, he says 'the material used in experimental found footage films is not archived but from private collections, commercial stock shot agencies, junk stores, and garbage bins, or has literally been found in the street' (ibid, p. 41). More recently, Jaimie Baron has suggested that the diversity, overlap and diffusion of

archival practice means that a clear distinction between 'archive' or 'found' footage is destabilised and can't be securely established. Given the major changes in technology and media cultures, she contends that:

...the line between archival and found footage has become increasingly blurred both by the changing notion of what constitutes an archive and its 'proper' contents and by the myriad uses to which even the most 'official' documents are being put (2014, p. 17)

Baron acknowledges that there are still power structures that control and regulate what is included in the 'official' archives, thereby determining what is considered to be historically valuable and worthy of preservation. However, she argues that when applied to film material, the common understanding of the term 'archive' has been expanded to encompass materials sourced from outside of institutional boundaries, including personal collections, online platforms like YouTube and other items that 'might once have been referred to only as ''found'' documents' (ibid., p. 16).

Despite the ambiguities of the term, it is generally agreed that archive and found footage film is a practice where pre-existing pieces of film or video footage from different sources are combined and edited to produce new sequences and new meanings. Found footage film has also been called compilation film, appropriation film and collage film (Wees, 1993; Baron, 20014; Russel, 2018). All these terms refer to the same sphere of practice. The diversity of terms reflects the broad range of practice from conventional documentaries to experimental and non-narrative films aligned with the avant-garde. In his 1964 historical survey of the field, *Films Beget Films*, Jay Layda emphasises spectatorship when he says that found footage film practice is united by the:

...means by which the spectator is compelled to look at familiar shots as if he had not seen them before, or by which the spectator's mind is made more alert to the broader meanings of old materials - this is the aim of the correct compilation (p. 45)

Since the late 1980s, William Wees has produced a body of work interrogating the found footage film. He says that 'all found footage films have one thing in common: images that were originally used by someone else for some other purpose' (Wees, 1992, p. 37). In his book *Recycled Images* (1993), he clarifies his definition through indicating the relative volume of the found materials that a film should contain in order to qualify as a found footage work, as well as the common features uniting the intention and purpose of the practice. According to his criteria, there are a range of films that make significant use of found footage but should not be described as a found footage film overall.⁵ These films '*as a whole* are not based on found footage, nor are

⁵ Examples cited by Wees are Kenneth Anger's *Scorpio Rising* (1963), Bruce Baillie's *Quixote* (1965), Robert Nelson's *Bleu Shut* (1971), and Yvonne Rainer's *The Man Who Envied Women* (1985).

they "about" found footage' (Wees, 1993, p. 4, emphasis in original). For Wees, unambiguous examples of found footage films not only contain found footage, but 'highlight that fact and make it one of the film's principle [sic] points of interest' (ibid.). ⁶ The films that are 'based on' or 'about' found footage use the material as the principle and central tool in how they generate meaning. As Wees argues, it is a question of emphasis. Found footage films, in reference to Leyda's definition, place emphasis on the recontextualization of found footage to provoke a critical response triggered by what is integral to and 'in' the footage itself. Under these conditions, found footage asks the viewer to think about where it came from and why it is being recontextualised. The 'voice' of the film is located in the cumulative effect of the multiple fragments and their interrelationships. Synonymous with centrifugal collage, the 'foundness' of the footage is foregrounded, it is not subsumed by the language of another more dominant mode of address (that might use the footage purely for its illustrative, graphic or rhythmic qualities, for example). Approaches that sit outside of the found footage genre tend to suppress the historical resonance of the footage in the service of another 'voice' that comes from elsewhere, unambiguously 'outside' the footage. For the voice of the footage to be foregrounded, the images must retain the properties and features that identify them as belonging to a previous period, context and purpose. In that way:

...viewers know that while they are seeing images that were made at another time, for other purposes and by someone other than the maker of the film they are presently seeing, they are also aware of the discrepancy between the original and the present contexts of presentation and reception (Wees, 2000, p. 71)

In general terms, found footage is aligned with collage principles on the basis of the process of building a theme or argument through the decontextualization and recontextualization of materials taken from different sources. The process of extracting film elements that are removed from context and restructured according to an agenda independent of the original production equates found footage film with 'cinematic versions of collage' (Wees, 1993, p. 39).⁷ In distinguishing what he calls collage film from other forms of non-fictional media that include archive materials, Wees suggests that in general, the collage film is not produced in order to inform, educate or persuade. This separates it from what he calls 'documentary' or 'conventional'

⁶ Examples cited by Wees are Bruce Conner's A Movie (1958), Joseph Cornell's Rose Hobart (1936), Ken Jacobs' Tom, Tom, The Piper's Son (1969), Abigail Child's Mercy (1989), and Craig Baldwin's RocketKitKongoKit (1986) and Tribulation 99 (1992).

⁷ It should be pointed out that some films considered to be within the found footage category are not constructed from multiple found parts. For example, Ken Jacob's *Perfect Film* (1986) is a reel of footage that the filmmaker found in a bin and displayed entirely unedited and unmodified. The film was shown as a 'new work' by Jacob. Another example is William E. Jones's *Tearoom* (2007), a found film that consists of footage shot by the police in the course of a crackdown on public sex in the American Midwest. The unedited film was presented with a minimum of intervention. Only a title was added to the untouched original film (Baron, 2013). These films are given the status of new works of found footage filmmaking due to their display in a new context that generates new readings and meanings.

compilation films. Practice aligned with the orthodoxies of documentary might deploy found materials from archival sources, but the intent of the film maker and effect on the viewer is different. He argues that the conventional documentary uses the framing devices of 'titles, voice-over, contemporary interviews and talking heads' (Wees, 2000, p. 71) to anchor footage in relation to a fixed historical interpretation that stabilises and closes its meaning. In contrast, more experimental approaches suspend the guiding devices of documentary to amplify the open-ended, multiple meanings of the footage, to 'exploit the instability of archival footage in order to open gaps, create ambiguities, challenge conventional readings of visual records of the past and undercut the usual narratives constructed to keep the meaning of archival footage in check' (ibid., p. 71).

Wees (1993) separates Found Footage Film into three categories according to variations in the relationship between the film and what it signifies, the main mode of production (or genre) and affinities with dominant aesthetic principles and practices in arts and culture. Wees undertakes this distinction in order to identify the different kinds of films that have different aims, intentions and illicit a different range of responses from an audience. The practice and impact of found footage is far from uniform and homogenous. The intention of found footage is not always critical. As he says; 'these paradigmatic relationships help to explain why a montage of found footage does not *automatically* raise politically charged questions about the origin of the images and the ways they have been used in the mass media' (p. 34, my emphasis). The properties of a film and the way it produces meaning, and the related cultural contexts that determine a film's reception, will provoke different readings and effects.

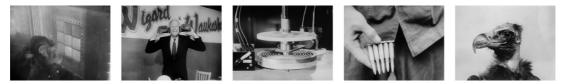
METHODOLOGY	SIGNIFICATION	EXEMPLARY	AESTHETIC BIAS
		GENRE	
Compilation	Reality	Documentary film	Realism
Collage	Image	Avant-garde film	Modernism
Appropriation	Simulacrum	Music Video	Postmodernism

Source: Wees, 1993, p. 34.8

Compilation films within the documentary genre function with the assumption of a direct correspondence between the archival images and the reality they refer to. As they don't self-consciously foreground their own production through the editing process, they tend not to question or disrupt the 'representational nature of the images themselves' (Ibid, p. 36). They are

⁸ It should be noted the terms compilation, collage, and appropriation have been used to describe different kinds of practice by different scholars, for example, Jaimie Baron (2014) uses the term 'appropriation film' to refer to both 'collage' and 'compilation' as they are defined by Wees, as she challenges a clear distinction between them.

organised according to the principles of continuity editing, in logically progressing, cause and effect-based structures. Given the usually ordered and linear pattern of these films, and the presence of the 'anchoring' documentary devices referred to above, their mode of address doesn't explicitly use the language of collage as a vehicle for meaning production through inference. In fact, as Jay Leyda has said, the production 'usually tries to hide itself so that the spectator sees only "reality" - that is, the especially arranged reality that suits the filmmaker's purpose' (Leyda quoted in Wees, 1993, p. 36). By contrast, collage aims to challenge and subvert the linear arrangement and implied cause and effect relationships of conventional editing. This method announces its construction through the overt use of contrast and juxtaposition in the montage technique. Wees allies this with Eisenstein's 'intellectual montage', wherein the editing and the connections between shots are meant to be noticed and designed to illicit a response. In relation to found footage, this provokes a critical viewing that incites the viewer to recognise that shots were originally produced for use in another context and 'were *originally* intended to be seen as unmediated signifiers of reality' (Wees, 1993, p. 40, my emphasis).



Arthur Lippett's film Fluxes (1968) employs the collage approach to juxtapose contrasting images.

The third category of appropriation is similar to the collage film in its use of juxtaposition and the contrast of images, but it is differentiated by its intent and reception. Aligned with the aesthetic and philosophical bias of postmodernism, appropriation uses images only for their superficial, ahistorical and apolitical properties. Images are used without regard for their concrete historical specificity or their status as evidence. The signified of the appropriation film is not reality, but the world of representation itself, the 'representations of other representations produced and preserved by the mass media' (ibid., p. 45). Using Jean Baudrillard's term, Wees goes on to say that 'the simulacra produced by postmodernist ''superficiality'' occupy the opposite end of the spectrum from the representations of reality that are essential to compilation films and their aesthetic bias toward realism' (ibid). Wees positions appropriation within the sphere of the relativism that collapses reality and representation, and denies the possibility of addressing the external world.

Jaimie Baron's ideas challenge the separation of documentary practice and experimental practice that Wees demarcates. She points out the high level of overlap and crossover between experimental found footage practice and documentary films. This also challenges Zryd's clear distinction between 'archive' items, which he claims are normally associated documentary presentations of 'reality', and 'found' items, normally associated with experimental practices that 'problematize the construction of "facts" through a reflexive interrogation of media images' (Baron, 2014, p. 8). Although Wees is correct to identify the different ways that found footage can function, it is wrong to imply that these ways are mutually exclusive and unitary within any given film. As Vivian Sobchack has pointed out, images and sounds are subjectively received in variety of ways that are often provoked by a single film, operating on multiple different registers of realism at different times, within the same text. In describing found footage in relation to audience and reception, Baron follows Sobchack's recognition of documentary film as defined by a 'subjective relation to an objective cinematic or televisual text' (Sobchack, 1999, p. 214, emphasis in original). Baron emphasises the properties of found footage film as 'less a thing than an experience' (ibid, emphasis in original). She argues that documentary and experimental practice are united in their negotiation of the quality of 'foundness'. For Baron, the practice can't be so easily separated according to the properties of the film itself, as the 'foundness' of the film cannot be located only in the formal aspects integral to the film, or how it materials has been collected and stored, but must also be understood according to the experience and response of the viewer. Rather than opposing documentary and the experimental, she suggests that 'we regard "foundness" as a constituent element of all archival documents as they are perceived in appropriation films, whether they were "found" in an archive or "found" on the street' (Baron, 2014, p. 17) (the property of 'foundness' is returned to in chapter 3).

In her recent book Catherine Russel describes found footage film as Archiveology (2018), the reference to archaeology in the term indicates her interrogation of practice in relation to its status as a historiographical strategy. Inspired by Walter Benjamin's theories of allegory explored in his unfinished work Arcades Project (1999), she places emphasis on the capacity of found footage film in engaging with collective memories and history. Russel sees found footage filmmaking primarily as a way of 'returning to the images of the past (...) and reviewing them for new ways of making history come alive in new forms' (2018, p. 5). She points out that the materials of the archive are socially produced in a collective process, also, a great number of archive films record public events and shared social phenomena. Consequently, the practice is less concerned with personal histories, but is about the negotiation of collective memory and a plurality of pasts in a multivocal history. This shifts the emphasis from the subjective to the intersubjective, and from the internal to the external. These films attempt to address the reality of historical events, whilst acknowledging the ambiguity and contingency of all historical accounts. This area of practice is both realist and experimental in its philosophy and formal features. In common with Baron, she contends found footage films can't easily be divided and categorised as documentary or experimental film, as they are factual and mediated, at the same time, they 'tend to straddle the lines between' the two (ibid., p. 21).

In positioning realist collage according to the definitions and analysis outlined above, a CR perspective on found footage filmmaking would agree with Russell's assertion that experimental and documentary approaches are not mutually exclusive. In relation to Wees' taxonomy, compilation and collage are not fully separable, both are compatible with an approach that simultaneously deploys evidence and creative intervention. Practice can occupy an intermediate position that sits between these points on the scale. CR's ontology would embrace the status of footage as evidence of external reality, whilst maintaining epistemic relativism in how photographic evidence is mediated and understood. This is consistent with the reconciliation of objectivism and subjectivism. Accordingly, this project uses archive footage for its evidentiary values, but will explore the potential for producing meaning by substantially modifying and manipulating footage in an experimental process. This would position a CR approach to found footage film across the compilation and collage categories. It would not entail the features of the appropriation category. CR would resist the ahistorical and apolitical ontological relativism of appropriation and its postmodernist bias.

The scholarship referenced in this section pertains to films constructed across the temporal dimension in sequential montage. The work presented in this thesis is constructed in the spatial dimension as well as the temporal dimension. Informed by CR, an original contribution is advanced through the practice and analysis of spatial montage within found footage film.

ANIMATION

Through reference to historical definitions and developments, this section will further contextualise realist collage in relation to animation. This will argue that the nature of the creative work undertaken in realist collage situates it as a form of animation, despite the dominance of the indexical archive film in its aesthetic. Also, the defining features of animation within realist collage are important to its function as a mode of inference that represents non-empirical phenomena. The points presented here are connected to the research questions with regards to animation's role in addressing the causally generative domain of reality, and the political implications of this.

Animation is an exceptionally diverse field that incorporates a wide range of methods, materials and approaches. As all forms of image making, film and sound production could be deployed in an animated film, it is difficult to identify an art making or media practice that is clearly and unambiguously excluded from its territory. As it subsumes all other art and media, a clear definition of its location and parameters is difficult to establish. Also, the conditions determining the production and recognition of an animated film are continually redefined and contested, destabilising any fixed classification (Denslow, 1997; Beckman, 2014). The heterogeneity of animation has been described by Annabelle Honess Roe (2013), she says 'animation production techniques range from computer-generated photorealism to painting on glass, from traditional hand-drawn cell animation to stop motion. The range is so large that it is almost impossible to talk of 'animation' in any cohesive way' (p. 37).

Despite the plural and expansive range of practice, there are criteria that have been applied in previous attempts to define animated films. Firstly, that the motion of animation is produced frame-by-frame, as opposed to the continuous, 'real time' capture of live action recording. This assumes that the movement is generated through the drawing (or painting, modelling or other techniques) of one frame after another. Secondly, in contrast to the capture of photographic images, the animated frame is entirely fabricated. According to this, animation does not carry an indexical correspondence to the world:

There is no physical causal link between animated image and the reality it might depict, so animation cannot evidence or witness things as we might have done with our own eyes. What we see in an animated image did not exist in front of the camera in that form (ibid.)

Animation production includes a wide (and expanding) array of techniques. Common processes like digital keyframe animation⁹ and motion tracking¹⁰ complicate the clear identification of frame by frame as the sole method of producing motion. The movement generated by these methods is not recorded, but it is not produced entirely frame by frame either. Also, the frequent hybridisation of indexical and constructed components disrupts a definition that rests on the assumption of a clear boundary between animation and live action. Catalysed by the widespread use of compositing software, films and programmes that are uncontroversial examples of animation frequently make use of live action material, along with fabricated elements, often to a considerable degree. Like collage, animation resists the polarisation of a binary realism. This is reflected in the continuum proposed by Maureen Furniss that offers a framework for understanding the diverse range of approaches that incorporate a juxtaposition of indexical, iconic and abstract elements. At opposite ends of this spectrum, she says that "mimesis" represents a desire to reproduce natural reality (more like live-action work) while the term "abstraction" describes the use of pure form - a suggestion of a concept rather than an attempt to explicate it in real life terms (more like animation)' (1998, p. 5). In response, Paul Ward has

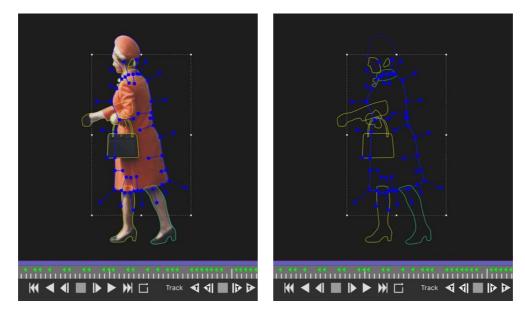
⁹ Digital keyframe animation refers to the widely used process whereby software automatically generates motion in between keyframes set by the user.

¹⁰ Motion tracking is the method of capturing the movement of an element in digital video footage. It uses algorithms that lock on to and follow an element across multiple frames.

described the potential for modes of practice to address the range of possible intermediate positions between mimesis and abstraction. He states that 'the two opposing tendencies of mimesis and abstraction offer a multitude of intermediate positions where a specific text can be placed and thereby understood' (2008). In addition, a text may not exclusively occupy any single 'intermediate position'. Many animated films adopt a collage based language that dynamically hybridizes the photographic and drawn, occupying multiple intermediate positions on the spectrum simultaneously. Given this, animation can't be fixed to a definition that is reliant on the exclusion of indexical materials.¹¹ As Eric Herhuth has argued in a corrective to animation's clear separation from indexicality, the distinction serves to 'obfuscate animation's photographic, indexical, and realist forms. Even articulating the problem this way perpetuates the tenuous, imprecise usage of the term "animation" to refer to a unified minor form of visual media defined in contrast to live-action film' (2016, p. 7). Against the reductionism of a narrow definition, scholars have framed animation as an 'expanded' moving image form that is pervasively present across, and within, many other practices and disciplines (Buchan, 2013). Realist collage is itself a form that works across visual effects, archive film, documentary and animation. Its status as animation is within a broad definition that incorporates all film works that construct their images rather than exclusively recording them. This definition encompasses all moving images that are not only live action, including the visual effects sequences that are reliant on animation technologies and processes.

Realist collage makes exclusive use of live action archive film. At all points, the image frame is occupied entirely by photographic fragments that are extracted and spatially juxtaposed in constructed compositions. However, given the degree of intervention and manipulation applied, the resulting images can't be regarded as live action, despite the dominance of the indexical. The live action components within the frame have clearly been layered in a construction that could not have been directly photographed. The status of animation is founded in the construction and layering of moving images, not in the exclusive presence of frame-by-frame methods or non-indexical fabrication. As described in the collage section above, the disparity of layers is not suppressed, it is meant to be noticed. It is the explicit construction that is the source of the indexical is returned to in Chapters 3 and 4). If live action captures the empirical surface of reality, the constructed embodiments of animation are of a different, defamiliarizing ontological order. It is this that designates spatial film collage as clearly distinct and 'other', announcing a different form of address that locates the practice within the loose boundaries of animation.

¹¹ The practice of fully indexical film that is institutionally recognized as animation predates the digital era. Zbigniew Rybczyński's short film *Tango* (1981) won the best animated short category at the 1982 academy awards. The film is comprised entirely from live action components modified through the physical manipulation of the celluloid film.



Multiple 'roto' shapes (the coloured outlines in the image), or travelling mattes, are tracked and animated to follow the movement of specific parts of the footage. The yellow triangles above the time controls show where keyframes have been added for the selected shape.

The images above are screen shots from compositing software used during the process of motion tracking and rotoscoping to extract moving elements from archive footage. Multiple 'roto' shapes must be digitally 'drawn' and animated to follow each part of the moving object (the image on the left shows the element of the footage that is being extracted from the frame, and for the purpose of illustration, the image on the right has the footage hidden so that the shapes are more clearly visible). The animation is aided by the automatic function of motion tracking that generates a large portion of the roto shape movement. But as motion tracking is imperfect, most movements require manual keyframing to correct the shapes where necessary. According to the nature and extent of the object's movement, manual keyframing is sometimes (but never exclusively) conducted on a frame-by-frame basis. In the outcome of this process in the fully photographic composited image, the outline of roto shapes is automatically removed. Consistent with the homogenizing logic of visual effects, no trace of the animation technique is left visible.

As previously argued, as a form of animation that is typically used to produce the illusion of a seamless realism, visual effects drive the de-politicization of images. Contemporary visual effects work is produced digitally within 3D modelling and composting software. Tarleton Gillespie has claimed that as a product of corporate cultures, creative software is tainted by built-in ideological biases. The market for creative software is dominated by a handful of international corporations. These companies contribute to a culture that conditions how these tools are used. This is done on several levels, including marketing and branding that assume software will be used in particular ways according to particular imperatives. If we visit the software's website, or use its instruction

manual and its affiliated tutorials, we encounter images and suggestions that encourage conformity to narrow conventions that define the natural, 'sensible', ways of working that 'make sense'. Also, the internal functions and tools within an application can structure and condition its use by positioning users in specific roles. Tarleton Gillespie suggests how we can resist these biases:

Once we can see artifacts as crystallized forms of human labor, communication, and value, the importance of how they shape activity becomes clearer. And it requires a subtle understanding of how a technology can have distinct political valences, picking and choosing among human practices according to a veiled agenda (2003, p. 109)¹²

As such, we must not perceive technologies as neutral tools that 'hold out the promise of attaining progressive social goals, and of doing so effectively and without discrimination - a promise built upon the persistent belief that technologies exist outside the frailty and selfishness of human politics' (ibid., p. 108). As Hardstaff and Wells state:

...corporate agendas can lie at the very heart of even the tools that we use to design, develop and deliver our work. Corporate culture provides, refines and sells tools, and it is crucial that animators and artists (...) filter out corporate political doctrine from the visual (2008, p. 78)

Esther Leslie has identified an early catalyst of animation's convergence with the imperatives of commerce. She has described how the Disney studio's early short films expressed a restless, anarchic energy that signalled the radical potential of the malleable cartoon world. As theorised by Walter Benjamin, the plastic and elastic language of metamorphosis and distortion offered a transformative language that destabilised and penetrated capitalism's concealments. But as Disney's commercial ambitions expanded to feature films, Fordist production regimes were adopted and industrial rationalisations prioritised. With this shift, the dynamism of the early shorts was abandoned in favour of a conservative realism that conformed to physical laws and mimicked the conventions of Hollywood. The feature films 'no longer appear to explode the world with the surrealistic and analytical cinematic dynamite of the optical unconscious' (2002, p. 121). The industrially produced realism 'offers a false appearance of integration and wholeness, and that magically conceals the labour which went into its production' (ibid.).

In contrast to compositing that converges on an impenetrable realism, realist collage offers animation as a language of layering that is consistent with the explicit constructions of montage. As is typical in most animated forms, the animation techniques used are not overtly visible within

¹² Recently, software used in the US critical justice system to assess the risk of reoffending has found to be systematically biased against black people. Also, in 2018, Amazon has scrapped software developed to automatically scan job applications when it led to female applicants being downgraded.

the image. The constructions are visible in the part and whole relationships that are the primary location of its voice.

In contrast to live action, the collage aesthetic announces its 'otherness'. This is 'a different model of interpretation which is abstracted from material existence and offers up the transparency of "ideas'" (Wells, 2002, p. 31). Although the laminated mode of animation has been accelerated and proliferated by digital technology, it has an older provenance in analogue production methods in the layering of multiple animation cells and backgrounds. Olga Blackledge has illuminated the connection between the production of soviet montage and animation as a model of layering. She parallels the temporal assemblage of montage with the spatial juxtapositions synonymous with collage:

...montage in a sense of mounting and assembling parts to produce a whole image is exactly what happens in animation before the digital (...) Thus, the process of creating the animated image is an act of mounting and assembling, with the animated image being an entity that comes into being through montage of its fragments (2017, pp. 117-118)

Although Wells' focus on the abstracted and ideas might suggest a bias towards the internal and subjective, he also makes clear that animation responds to and negotiates the empirical reality of lived experience. It is a form that provides a way of relating 'directly to the terms and conditions of human experience' whilst simultaneously providing 'more complex mediations on socio-cultural and aesthetic epistemologies (...) and offers new and alternative perspectives and knowledge to its audiences' (Wells, 2002, p. 11). From the perspective of the realist ontology and subjectivist epistemology of CR, the non-dual language of collage offers a mediation that is rooted in material relations. It provides a method of abstraction that is not relativised, it is derived from and attached to the factual (the concept of abstraction in CR is further explored in chapter 4). In this way, the 'transparency of ideas' sought by collage is the illumination of real non-empirical mechanisms driving material events.

In common with Leslie's appeal to the 'optical unconscious', Wells uses the term 'penetration' in reference to animation's capacity to describe phenomena and processes that can't be directly perceived or photographed:

Penetration is essentially a revelatory tool, used to reveal conditions or principles which are hidden or beyond the comprehension of the viewer (...) penetration enables animation to operate beyond the confines of the dominant modes of representation to characterise a condition or principle in itself (...) It becomes the very method which defines or illustrates particular kinds of experience which do not find adequate expression in other forms (1998, p. 122)

Through the archive film, realist collage is indexically connected to material events. It is in the constructions of layering and juxtaposition that the penetrative capacity of animation is activated. This aims to move beyond the material surface to the transfactual conditions producing the socio-historical world. The recognition of penetration as an essential characteristic suggests it is animation's metaphysical properties that distinguish its status, not the specificities of production or a totalised aesthetic. Against the homogenising force of visual effects and Disney's industrialisation, animation's capacity for engagement with the non-empirical is the site of its political potential. Within an aesthetics of the material and mediated, 'animation can be the realm in which such graphic rendition might make social forms available to knowledge' (Leslie, 2014, p. 34).

The issues highlighted here are further explored in Chapter 4 in relation to collage as a form or CR research that entails abduction, abstraction and retroduction.

ANIMATED DOCUMENTARY

As argued above, realist collage is a non-fictional form located within animation. Building on the arguments presented in connection to film realism, documentary and animation's capacity for penetration, this section will discuss these issues in relation to animated non-fiction. This entails applying CR to debates about the limits of objectivity and the potential of animation to address the invisible structures of reality. The section pursues arguments that are reflected in the research question that pertains to non-fiction film.

Animated documentary is a film practice that addresses the factual world through animated representations. Despite the non-indexical nature of images within much of non-fictional animation, documentary status is claimed through a film's engagement with 'the' (factual) world as opposed 'a' (fictional) world (Nichols, 1991). Consistent with David Bordwell's (2009) view that 'no particular sort of images guarantees a film to be a doc' and Vivian Sobchack's (1999) assertion that documentary is more of an *experience* than a *thing*, debates within animated documentary have asserted the legitimacy of animation within non-fictional contexts. A range of scholars have argued that animation offers tools that can capture the subtle complexities of reality in ways not possible in live action production (Ward, 2005, 2008; Wells, 1997; Honess Roe, 2013; Torre, 2017). Arguments have highlighted animation's capacity to negotiate multiple levels of reality across the psychological, sexual, emotional, social, physical, cultural and political realms. Paul Wells has claimed that animated documentary operates 'not as ''film of recognition'', revealing the underlying value systems and relationships beneath rationalized, supposedly civilized, naturalized cultures' (1997, p. 44).

There have been counter arguments that seek to separate animation and documentary. This has been based on the claim that animation, as opposed to photographic film, fails to present an '*exact* account of what occurred' (Formenti, 2014, p. 112, my emphasis). Whilst acknowledging the evidentiary value of the indexical image (Rozenkrantz, 2011) (see chapter 3), according to the CR position of this project, this argument suffers from the essentialism and reductionism of the ontic fallacy. It assumes an empirical 'purity' in documentary representation that can't be supported (Eitzen, 1995; Winston, 1995), it does not acknowledge that reality and images have an indirect relationship mediated by human practice (Wayne, 1997), and it fails to recognise the role of the non-empirical factors in how we interpret and understand reality (Bendor and Landesman, 2011).

To the critical realist, and 'exact account' of the kind that insisted on by Formenti can't be achieved empirically, regardless of the methods and technologies involved. If reality was transparent enough so that 'exact accounts' were easily apprehended, there would be no need for any form of inquiry within science or any other field. If "'everything that is'' were in the open, if reality were transparent, there would be no need for science as we know it' (Danermark, Ekstrom and Karlsson, 2019, p. 24). This follows Marx's assertion that 'all science would be superfluous if the outward appearance and the essence of things directly coincided' (1966, p. 817, cited in Buch-Hansen and Nielson, 2020, p. 31). The belief that our perceptions can be identical to reality has no credible basis in experience and knowledge. The 'solipsistic exclusion of a nonempirical real world also generates a whole range of problems, one of the most obvious of which is that of understanding how we ever come to discover anything new' (Sayer, 1981, p. 12). A primary property of reality is that it is not transparent to observation. Phenomena must be 'hidden' beneath the empirical surface if they are ever to be discovered. Reality contains mechanisms that can't be observed, but we can come to know indirectly through their effects in certain contexts.

Given that observation is never 'pure' and wholly independent of theory, no absolute 'distinction between what can be observed and what can be inferred on the basis of observation can be sustained (...) we must acknowledge that the boundaries of 'the empirical'' are both fuzzy and changeable' (ibid., p. 12). The boundaries of the empirical change according to what we already know, prior to our observations. Also, Sayer makes a crucial distinction between the empirical and the concrete, external world. The empirical is embedded within our existing knowledge and within the limits of our sensory powers, both natural and technological. The concrete does not depend on our senses, as it is independent of perception. Given this, the empirical is not a mirror providing a point-to-point correspondence between representations and the real. As 'no

knowledge can rise above the circumstances under which it has been produced' (Buch-Hansen and Nielson and Hansen, 2020, p. 147), the role of animation within documentary is in its capacity to make truth claims about the real, at the same time as acknowledging the inevitability of subjectivism and mediation. Consistent with this argument, Jeffrey Skoller has called for the acceptance of mediated aesthetics within documentary. In terms that echo CR, he says that alternatives to photographic media may be more suited to capturing the forces that generate the events we experience. In response to the complexities and ambiguities of reality, traditional 'documentary evidence is not always possible, revealing or clarifying' (2011, p. 207). In the absence of certainty derived from observation and facts, theoretical speculation and imagination is an:

...integral part of what it is to document any issue or event in all its complexity. An openness to interconnections between empirical, speculative and virtual modes of awareness is finally – albeit slowly – becoming an integral part of our experience of coming to know the world around us (ibid.)

Skoller does not explicitly refer to causality, but a critical realist would argue that causality is the object of an inquiry based on the combination of the empirical and the speculative. When we come to know the world around us, we perceive the forces determining the events we can experience. This can happen through representational strategies that reject objectivism in favour of disrupting the surface appearance of reality. Active forms of construction can negotiate the principles of defamiliarization, refusing to take the world on the 'face value' level that the over-extensions of objectivism encourage. Nea Ehrlich has argued that 'animation can be included in this category since it can create multi-layered representations that require active engagement and viewer interpretation' (2021, p. 24). Roy Bhaskar argues that through empiricism:

...the world, which ought to be viewed as a multi-dimensional structure independent of man, came to be squashed into a flat surface whose characteristics, such as being constituted by atomistic facts, were determined by the needs of a particular concept of knowledge (1975, pp. 44-45)

The language of the animated and constructed works against a collapse to a unitary, flat surface that can be unproblematically captured. A more complex, defamiliarizing aesthetic provokes awareness that the surface is produced by something else, something imperceptible. This can work towards "giving face" to what otherwise would not be photographically representable' (Ehrlich, 2021, p. 34). In this sense, defamiliarization can be thought of a as critical realist tool. In forcing us to see with 'fresh eyes', it provokes questions about why something is the way it is, or why something happened. These are questions that engage with the causality that can only be inferred.

Much of the debate around animated documentary focuses on its capacity to engage with the 'internal' and the subjective. Recently, this has been expressed by Annabelle Honess Roe:

...the 'world in here' of subjective experience is represented via animation. In fact, rather than the type of things that are physically visible, such as events that could be witnessed by others, or the 'world out there' that is typically represented in conventional, live-action documentaries, animation has been shown to lend itself well to conveying realities that are subjective and internal (2021, p. 127-128)

A CR position would argue that addressing the complexity of reality is an inherently social process. It is not possible to be reflexive and critically engaged from a purely autonomous standpoint, as individual experience must be situated in the causal complexity of the external social world. We don't develop our politics or our subjectivity autonomously, and it is not possible to speak from a vacuum outside of our own social situatedness. In writing about what CR can offer intersectional theory, Martinez, Martin & Marlow have warned against over emphasizing the personal in the analysis of the social world; 'a focus on interpretation (...) carries the risk that such research will be "drained of causal import" as it attends primarily to individual interpretations of reality' (2014, p. 433). They go on to say that the 'implication of this line of thinking (...) is that structural issues tend to be analyzed primarily in terms of individual experiences and related understanding of them, to the detriment of the analysis of unrecognized structural factors' (ibid, pp. 453-454) that offers access to the generative domain. For CR, the psychology and subjectivity of individuals is emergent from the social level. As it has its own emergent properties, the psychological level is irreducible to the social, but it can't be divorced from the social structures that are always its activating, causal context. Individual, personal experience must be thought of in terms of a collective process. As the interpretation of phenomena is activated by socialization, the reading of facts is a function of human agency that is mediated by social structures.

In line with this, realist collage is concerned with addressing the mind-independent world of critical realist ontology. This must assert that the object of representation is external to subjectivity. Honess Roe goes on to say that non-fictional animations 'demonstrate the potential for animation to expand the epistemological scope of documentary by enabling films about the reality of the ''world in here'' instead of just the ''world out there''' (2021, p. 138). From a CR perspective, this is at risk of constraining the referents of creative construction within the subjectivity develops independent of the concrete, and the real structures that are part of the generative domain. But the 'world in here' is not separate from the 'world out there'. There is only one, interconnected reality that we access from different positions and contexts. Individual

subjectivity is forged through contact with the external world, the common object of perception in the production of our social, intersubjective knowledge.

Arguably, there are no subjective and internal realities, or 'worlds in here'. The assumption of internal worlds risks falling into the epistemic fallacy, relegating animated documentary to the subjective. If premised on a flawed subject/object dualism, this tacitly supports the view that animated documentary can't engage with the real world. The epistemological scope of animated documentary is contracted, not expanded. Enlarging its scope should be driven by the aim to point outwards to the 'systems and relationships' beneath the surface appearance of reality.

EXPERIMENTAL FILM

In this section, realist collage will be related to the field of experimental film. Consistent with the historical definitions and positions offered here, realist collage adopts alternate, non-linear narrative strategies that eschew conventional approaches to non-fiction film. This argues that formal experimentation through collage provides the conditions for an open, explorative approach to addressing the stratification of reality.

Experimental film (also often referred to as avant-garde film) sits outside of the industrial and commercial contexts of mainstream media production and consumption. Practice within the field is extremely varied, and has a long history that dates back to the earliest period of film production at the beginning of the 20th century. As A.L. Rees says, 'this diverse body of work, almost coextensive with the beginning of cinema and the birth of modernism, makes up a tradition of a complex and often contradictory kind' (2001, p. xi). Despite this plurality, the scholarship in the field has suggested several general properties that experimental films share in common. In contrast to experimental practice, mainstream film production employs methods and strategies that generate an illusionist cinematic space. In the more passive audience reception that this solicits, awareness of the film's constructed form is usually suppressed.¹³ Conversely, experimental film aims 'to challenge the primacy and authority of illusionist imaging in cinematic space' (Rees, 2001, p. vii) through production methods that refuse or subvert the conventions of story, character and plot. Either these conventions are abandoned altogether, or they are used reflexively to elicit a more critical engagement. In many cases, this filmmaking entails a

¹³ On the strength of research into the cognitive processes that underlie perception, James Peterson (1994) argues that the entirely 'passive' spectator of the Hollywood film is a myth. He says 'If the viewer of any film must make and test hypotheses just to understand what the images represent, comprehending the narrative of even the most formulaic Hollywood film involves very sophisticated mental processes. The question we must ask about the viewers is not whether they are active, because they always are. We must ask instead: what is the nature of their activity? (p. 15). Accordingly, it is reasonable to contend that the consumption of the typical mainstream film is 'more passive', but not passive in an absolute, total sense.

critique and comment on mainstream entertainment cinema that is inherent in its rejection of familiar orthodoxies. The broad political agenda of experimental film can be characterised by its attempt to disrupt the realism of the typical Hollywood aesthetic. In challenging 'the major codes of dramatic realism which determine meaning and response in the commercial fiction film' (ibid., p. 1), experimental films open up a space for an alternate politics of production and reception. From the perspective of audience reception, this aim is located in experimental film's frequent demand that the viewer is challenged to interpret a film at different levels and registers of understanding. These levels include those addressed by the non-narrative, formal properties that trigger a variety of perceptual and cognitive responses, encouraging different 'ways of seeing'. As James Peterson says, 'just about any avant-garde film requires multiple and overlapping strategies of comprehension' (1994, p. 10).

Experimental film practice is conducted outside of the sphere of large studio cultures and is predominately based on small scale, low-budget production pursued by individual artists or small groups. Given that experimental film is predominately produced by independent artists, it is historically more aligned with the visual arts rather than the history of cinema. Many experimental films have an affinity with visual and modern art practice across painting, drawing and sculpture (Rees, 2001). This is particularly evident in animation that falls within the territory of experimental film. The material and conceptual values within animation aesthetics have offered powerful tools for working against the grain of the mainstream. One of the aesthetic strategies available through animation is collage. The layered composite of collage animation contains the collision of graphic elements, drawings, photographs, text and sound. In its more political and centrifugal forms, it openly announces and foregrounds the disparity of elements taken from different sources. These different levels of realism eschew any unitary and seamless illusionism, demonstrating Peterson's identification of 'multiple and overlapping strategies of comprehension'.

Much of the work within found footage film practice intersects with experimental film. For example, Peter Tscherkassky's method deploys archive film materials within a collage aesthetic in an analogue, non-digital approach to spatial montage. In addition to the techniques of sequential, temporal montage, the found film fragments are juxtaposed in the spatial dimension within the image frame.



Peter Tscherkassky's The Exquisite Corpus (2015). Found footage is spatially juxtaposed in the image frame.

This synthesis of collage and found footage is a conceptual as well as a formal strategy. This sets the practice apart from the mode of experimental film championed by Stan Brakhage, a leading artist of the American avant-garde. Brakhage called for film abstraction to engage audiences through a sensory experience that would produce an unprejudiced, unmediated 'pure' perception (Peterson, 1994). But as Peterson makes clear in an assertion consistent with critical realist positions on perception and knowledge:

...the overwhelming tide of evidence suggests that perception cannot be so severed from cognition (...) And in practice, film viewers, even of the avant-garde cinema, generally do not view films without trying to figure out how they are structured and what they mean (Peterson, 1994, p. 5)

The reception of film can't be reduced to the level of sensory perception alone, it always includes the co-construction of meaning in the dialogue between viewer and text. In its use of indexical components along with its absorption of links to social world and lived experience, collage makes no attempt to short circuit the cognition and interpretation of the viewer. It actively provokes an engagement that asks audiences to piece together meaning in response to the interrelationship of the materials combined (particularly in the absence of 'anchoring' devices that proscribe meaning). In response to the collage aesthetic, viewers will try to figure out why the images, and the events that the images represent, have been connected and juxtaposed. From a critical realist perspective, viewers are negotiating the complex of causal connections that are implied by the inferences emergent from the interrelationship of images. As the provocation, and potential answer, to the causal questions is located in the juxtaposition of images, rather than 'in' the factual content of the images themselves, the interrelationships are transfactual and centred on the non-empirical complexity of the world.

CONCLUSION - REALIST COLLAGE

The practice and theory of realist collage is built through the integration of the core features referred to in this chapter, and is developed across the remainder of the thesis. This conclusion will briefly summarise the arguments made to clarify the location of realist collage and to reiterate the key points that will be pursued further.

CR resists the dualism of the subjective and objective. As a philosophical principal, and not only a method or technique, realist collage occupies this non-dual position through the interrelationship of the factual and mediated. Its explicitly constructed, mediated aesthetic disrupts the homogenising effects of compositing that suppresses the differences between components. This drives a politicised form of juxtaposition that can address the complexities of the world. The collision of fragments generates tensions and conflicts that can provoke a critical apprehension of the forces at work in the production of events.

As reality is not transparent to observation, there is no straightforward identity between photographic film and the reality that it records, and all photographic images are creatively mediated. However, the critical combination of the factual and mediated has the capacity to transcend the visible surface of reality. This can achieve ontological depth, giving access to the non-empirical causes of events. In film practice, the location of this capacity is in the properties of collage and montage.

In relation to the operation of collage within non-fictional contexts, construction and strategies of defamiliarization work against the unproblematic capture of reality. As all forms of representation are mediated through subjectivity, unalloyed objectivism and neutrality are not possible. But rather than collapse into relativism, construction can mediate facts to activate an imaginative engagement with the real causes of events. Imagination is central to understanding the non-empirical levels of the world, as we can only imagine what can't be empirically perceived. In this context, as a form of animated documentary, realist collage aims to point outwards to the systems and relationships beneath the surface appearance of reality.

Although realist collage is entirely comprised of indexical elements, its status as animation is founded in its constructed aesthetic. In realist collage, animation's capacity for penetration and political revelation is in its mediation of the indexical image to address the reality of the external world.

Experimental films subvert an illusionist cinematic space and conventional narrative to trigger a more active and critical spectatorship. As an experimental form, realist collage provokes a critical engagement that asks viewers to negotiate the complex of causal connections that are inferred through the juxtaposition of its images.

CHAPTER 2 – CRITICAL REALISM

INTRODUCTION – THE FOUNDATIONS OF CRITICAL REALISM

Critical Realism is a broad movement within philosophy and social science. It engages a range of areas including ontology, epistemology, the philosophy of science, social structures and causation. It was originally founded by Roy Bhaskar in Britain during the 1970s, and has since been developed by many scholars across a variety of disciplines and topics, such as Andrew Sayer (1992), Margaret Archer (1995), Andrew Collier (1994), and Tony Lawson (1997).

In his first book, A *Realist Theory of Science* (1975) Bhasker asserts the importance of ontology and the study of being. Predicated on the assumption that reality is independent of knowledge, the book outlines a philosophy of science called *transcendental realism*. Its central question is: What must the world be like for science to be possible?

Bhaskar claims that science would not be necessary or possible if the world was transparent to our perception. As it is differentiated and stratified across ontological levels that are not directly perceivable, reality is opaque to our observation. Some events happen without being experienced. Events are produced through mechanisms and powers that we are not always aware of. The causes of events are understood to be operating *transfactually*, that is outside of their identification through their manifestation in observable events and facts. The causal level of reality continues to operate whether or not it is empirically detected. If the world is not transparent, and perception and reality are not identical, the work of science is driven by the need to intervene in and discover reality beyond the empirical level.¹⁴

Transcendental realism also claims that experience is always mediated by our existing, socially produced concepts and theories. But we can come to a better understanding of reality through using theories to infer the operation of causal mechanisms. Bhaskar defines transcendental realism as a position that:

...regards the objects of knowledge as the structures and mechanisms that generate phenomena; and the knowledge as produced in the social activity of science. These objects are neither phenomena (empiricism) nor human constructs imposed upon the phenomena (idealism), but real structures which endure and operate independently of

¹⁴ Bhaskar argues that only the controlled conditions of the laboratory can produce the constant conjunction of events, where one event always following another. One event will not constantly follow another outside of artificially produced closed systems that exclude the influence of other causal forces. Most of reality is outside of closed systems. In open systems, events will always be caused by the changing context of multiple causal mechanisms working in unpredictable ways. Because of this, the concept of universal laws offers an inadequate account of causation.

our knowledge, our experience and the conditions which allow us access to them (1975, p. 25)

In response to the complexity of the independent world, 'the nature of the work we must do in order to find out about the world shows us both that the world is not transparent to us but needs to be discovered, and that it can be made to yield up its secrets' (Collier, 1994, p. 22).

In his second book, *The Possibility of Naturalism* (1979) Bhaskar applies transcendental realism to the field of social science, developing the position of *critical naturalism*. He modifies the central question of *A Realist Theory of Science* to ask: What must societies be like to be possible objects of knowledge? He argues that society has a real and independent existence that is distinct from the concepts we use to interpret its structure and effects. As social structure is the pre-existing context of human actions, it is *causally efficacious*, it is real and exists as it causes things to happen in the world. Because of this, we are able to apply the same general principles of science to both the natural and social worlds. Like that of science in relation to the natural world, the work of social science is to see beyond experience and events to address the operation of structures and mechanisms. Critical naturalism is *naturalistic*, in that it denies any absolute divide between the natural and social sciences. Both can be investigated and revealed. However, the social world is contingent and has properties that distinguish it from the natural. There are inevitable limiting conditions on our access to it that are relative to our historical and cultural positions. This means that social science should not model itself entirely on the natural sciences. Critical naturalism is *critical*, as it resists reducing the social to the natural.

In the early development of the movement, the terms *transcendental realism* and *critical naturalism* were combined in naming *critical realism* (Bhaskar with Hartwig, 2010).

CR establishes the separation and distinction between epistemology (knowledge, theories, ideas) and ontology (independent reality, the objects of investigation). The centrality of ontology supports addressing and explaining reality itself, and not just our knowledge or understanding of that reality. From this standpoint, CR offers an alternative paradigm to what it sees as the reductionism and inadequacies of both empiricism and idealism.¹⁵

¹⁵ I acknowledge that there are various distinct positions that have been associated with these broader terms. For example, both interpretivism and postmodernism are connected to idealism. But as Steve Fleetwood has pointed out, 'postmodernism (etc.) is not necessarily synonymous with idealism and one can be a postmodernist (etc.) without being an idealist' (2014, p. 185). George Steinmetz distinguishes the features of positivism and empiricism, 'even if the two positions have some common origins and have frequently appeared together' (Steinmetz, 2004, p. 377).

For empiricism, there can be no knowledge of reality beyond empirically verifiable facts and experience. Knowledge must be derived from sense perception and can directly capture and correspond to reality free of human subjectivity and values. Whatever can't be observed, can't be considered to exist, and discussion of it is meaningless (Mingers, 2006; Jagosh, 2020).

For idealism, we can only know the world through our language, concepts and mental constructions. In its more extreme forms, this denies that there is an independent, external world about which we can gain knowledge (Mingers, 2006).

For Bhaskar, both standpoints collapse reality (questions of ontology) to knowledge (questions of epistemology) and suppress the existence of an independent world. This is called the *epistemic fallacy*, the denial of the distinction between reality and knowledge. Bhaskar says the fallacy sustains 'the view that statements about being can be reduced to or analysed in terms of statements about knowledge; i.e., that ontological questions can always be transposed into epistemological terms' (1975, p 36). Within idealism, the epistemic fallacy is expressed in a relativism where reality is reduced to what people say, think or believe. Resulting from the dominance of the subjective, 'the objective becomes subjective' (Price, 2014, p. 58), and the reality of the independent world is overlooked.

Empiricism's variant of the epistemic fallacy is the *ontic fallacy*. Knowledge derived from observation directly corresponds to reality. In this view, reality 'speaks for itself' and 'can be interpreted as an open book' (Høyer, 2010, p. 168). Reality is fully equated with what can be experienced, 'it says what you are experiencing is real, given, certain' (Price, 2014, p. 58). Resulting from the dominance of the objective, subjectivity is denied and 'the subjective is made objective' (ibid.). Critical realists have challenged the anthropocentrism and reductionism of this position. Andrew Collier has said that nature 'does not produce people spontaneously capable of perceiving and interpreting' (1994, p. 50) the levels of reality that are beyond the observable world. In relation to the invariable intersubjectivity of knowledge production, Bhaskar asserts that 'knowledge is a social product and cannot be conceived as a purely individual acquisition' (2008, p. 178).¹⁶

With an ontology that is realist and an epistemology that is subjectivist (Fryer, 2020), CR has been developed to challenge the shallow, surface analysis of empiricism and idealism. CR allows

¹⁶ As Steinmetz has said, 'it is important not to conflate empirical research with empiricism; critical realism strongly favors empirical research but without reducing (social) science to the empirical, strictly observational level' (2004, p. 375)

us to interpret the real through concepts and theories that infer the non-empirical, causal levels of reality, without the collapse into the relativism (Danermark et al., 2019; Fleetwood, 2014).

Transcendental realism and critical naturalism are known as foundational, or *basic CR*. For it, the goal of research is to develop deeper levels of understanding of the complex structures that constitute reality. Revealing the causal mechanisms that produce events is its fundamental task (Danermark, et al., 2019). This is the core of CR, the principle that informs research that applies and develops its central features across a range of disciplines (Buch-Hansen and Nielson, 2020).¹⁷ As Timothy Rutzou says, CR 'searches for a means of moving beyond the surface and getting at the structures, and with the structures, the causal mechanisms, powers, capacities and dispositions of social reality that account for the surface events' (2016, p. 334).

CR has been adopted as the philosophical framework for this project because of its suitability to both collage practice and the analysis of Welsh identity. The two key justifications for this are:

- As argued across Chapter I, collage is both a philosophical position and an art and media practice. Its language operates through the conjunction of the mediated and the factual. Through this, it has the capacity to transcend the visible surface of reality. With its realist ontology and subjectivist epistemology, CR offers a suitable foundation for the development of collage as a critical device used in the pursuit of transcendental realism. In articulating collage practice as a realist form, the features of CR research have been aligned and integrated with the practical stages of collage (see Chapter 4). This has synthesised collage and CR, establishing collage as a mode of CR research within the visual field.
- From the perspective of CR, collective identity is a composite structure within the nonempirical levels of the social world. It is formed and reproduced through the interaction of overlapping and competing historical forces. CR contains a range of concepts that can provide insight into the formation and reproduction of identity that is adequate to its complexity and internal tensions. CR offers a way of negotiating identity that can be addressed through the realist form of collage.

¹⁷ In addition to basic CR, there are two further 'phases' developed in Bhaskar's later work. They are *Dialectical Critical Realism* and the philosophy of *MetaReality*. The earlier, foundational work is recognised as far more influential than these later phases. The dialectical phase has been criticised from within CR itself, principally for what is seen as its turn away from basic CR's materialist, ontological focus. It has not been widely adopted by critical realists. MetaReality has been widely rejected on similar grounds (Buch-Hansen and Nielson, 2020; Elder-Vass, 2021). Although these phases have not been adopted in general, there are aspects of Bhaskar's later work that have been drawn on in the development of a CR approach to semiotics (Nellhaus, 1998; Cashell, 2009), as reflected in Chapter 4.

This Chapter will cover the CR concepts that are drawn on in the thesis. Some of these have been briefly referred to in Chapter 1, here they will be described in more detail and linked to collage and identity. They are:

- The Transitive and Intransitive: The division of knowledge and reality.
- The Three Ontological Domains: The division of experience, events and causality.
- Stratified Reality: The causal structures and mechanisms in non-empirical reality.
- Ontological Realism: The focus on the external object addressed.
- Epistemic Relativism: The awareness that knowledge is relative to the position we occupy.
- Judgemental Rationality: The process of agreement on which theories are more accurate than others.

THE TRANSITIVE AND INTRANSITIVE

CR is predicated on the division of knowledge and the external reality. The ontological world that exists independent of thought is the *intransitive* dimension. The *transitive* dimension is the transient epistemological world constituted by our knowledge of the intransitive.

The transitive dimension contains the 'antecedently established' (Bhaskar, 1975) ideas, concept, theories and facts that exist at any given time. They are the *transitive objects of knowledge* that are 'within' the world of knowledge. The existing objects of knowledge within the transitive are the precondition and enabling context for the construction of new knowledge. As this is an inevitably social, collective process, CR sees 'knowledge as a social product which individuals must reproduce or transform, and which individuals must draw upon to use in their own critical explorations of nature' (Bhaskar, 2008, p. 240). As all new knowledge must draw on and build upon the transitive, 'new knowledge we produce belongs by definition to that dimension' (Collier, 1994, p. 51). Over time, knowledge of the intransitive is refined and improved as transitive objects are modified and extended. For example, present knowledge will draw upon and transform what we know now' (Buch-Hansen and Nielson, 2020, p. 29) (the social construction of knowledge is explored further in Chapter 3).

As knowledge is grounded in time and space and in particular contexts of production, it is historically and socially situated and contingent. This allows us to acknowledge the relativity of knowledge, without divorcing it from ontology altogether.

Knowledge is of something that is external to it. Concepts and theories address something that is independent of the concepts and theories themselves. This is the intransitive dimension, the independent objects of investigation across the natural and social worlds; such as ecosystems, political institutions, geological processes, gender relations and national identities. The aggregate of these objects is the whole reality that 'exists and acts quite independently of men and the conditions which allow men access to it' (Bhaskar, 1975, p. 17).¹⁸

Our concepts, theories and beliefs are formed in contact with the intransitive. Continuous interaction with the intransitive is what conditions the modification and extension of our knowledge (Elder Vass, 2021). But as the intransitive and transitive are not aligned, their relationship is not one of identity. Reality can change without anyone's knowledge, and knowledge does not determine the reality it reflects. Bhaskar has said that 'transitive knowledge and intransitive objects, beliefs and beings, thought and things, descriptions and referents, can each now change without a corresponding change (...) in the correlative term on the other side of the (transitive/intransitive) divide' (2009, p. 52). There will always be an 'ontological gap' between knowledge and reality (Danermark et al., 2019). In relation to time and the passage of history, changing knowledge of the past does not alter the reality itself. As an example, Douglas Porpora says 'we might finally discover (...) that William Shakespeare truly was Christopher Marlowe. If so, he always was. The intransitive past does not change with our transitive knowledge of it' (2015, p. 181).

Without the independence of reality and knowledge, we are not able to avoid the reduction of reality to thought, and we can saying nothing about the outside world (Bhaskar, 1979). The division instilled by CR moves past this problem:

...suggesting that the climate crisis can be reduced to what we know about it would be to commit the epistemic fallacy; suggesting that our knowledge of the climate crisis is a direct reflection of what this phenomenon is really like would be to commit the ontic fallacy. By operating with both an intransitive and a transitive dimension, critical realism avoids both fallacies (Buch-Hansen and Nielson, 2020, p. 29)

In applying the concepts of the transitive and intransitive to the research undertaken in this project:

¹⁸ Although CR divides the intransitive and the transitive, 'knowledge does not exist in a separate world: the transitive is differentiated from, but not exterior to, the intransitive' (Al-Amoudi and Willmott, 2011, p. 29). Also, as they are concept and activity dependent, objects in the social world (gender relations, national identities) are *relatively* independent of knowledge (see Social Reality section below).

- Realist collage is a new transitive object of knowledge generated through drawing on a range of existing knowledge objects. These are the antecedent theories and concepts covered throughout the thesis across documentary, collage, archive film, animation, semiotics, history and Welsh identity.
- The identity of 'Welsh Wales' is the intransitive object addressed through realist collage. As collective identity is a non-empirical object that can't be empirically detected or observed, it must be modelled through inference that engages with its structures and mechanisms. This is done within the process of abduction, abstraction and retroduction described in Chapter 4.

THE THREE ONTOLOGICAL DOMAINS

As the distinction of the intransitive and transitive suggests, there are events that happen independent of perception. Given the complexity of reality, only some events are perceived and become empirical experiences. Also, events should not be conflated with the causes that generate them.

In A *Realist Theory of Science*, Bhaskar argues that the closed conditions of the laboratory are required for identifying empirical regularities. The constant conjunction of cause and effect only occurs if the closed system of the experiment successfully excludes the interference of other forces. He says that:

...it lies within the power of every reasonably intelligent schoolboy or moderately clumsy research worker to upset the results of even the best designed experiment, but we do not thereby suppose they have the power to overturn the laws of nature (1975, p. 34)

If an experiment is upset and its results distorted, this is a disturbance in the operation of the closed system of the experiment, not the forces that it is attempting to test. This is because the laws and powers identified are external to the experiment, they are not created by it:

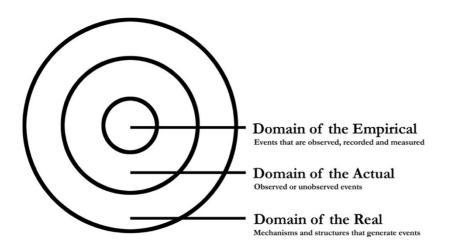
...the intelligibility of experimental activity presupposes the categorical independence of the causal laws discovered from the patterns of events produced (...) in an experiment we produce a pattern of events to identify a causal law, but we do not produce the causal law identified (ibid.)

Experimental activity demonstrates that causal mechanisms are different from the patterns of events they generate. The implication of this is that causal laws, or causal mechanisms, continue to operate in open systems whether they are identified or not. Also, the partial and limited scope

of perception demonstrates that events are separate from experience. This leads Bhaskar to identify the three overlapping domains of reality:

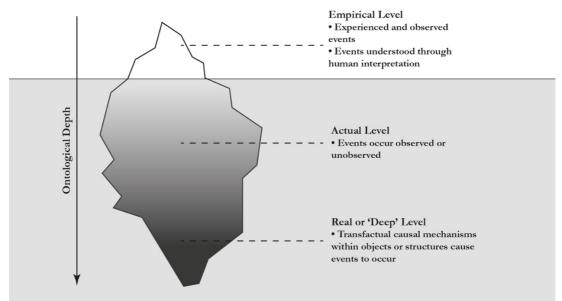
- The domain of the empirical is that of experiences
- The domain of the actual is that of events
- The domain real is that of the mechanisms and structures that generate events

In Bhaskar's definition, the real domain incorporates the actual and the empirical. The actual incorporates the empirical. Together, the three domains comprise the whole of reality.¹⁹ This is illustrated by this diagram:



Bhaskar argues for the ontological distinctiveness of the three domains, asserting that access to one domain does not provide uncomplicated or direct access to another. Amber Fletcher (2017) has provided a useful analogy for the domains, illustrating their interrelationship with the metaphor of an iceberg:

¹⁹ Bhaskar is keen to stress that he is not suggesting an ontological hierarchy across the domains. He says 'I am not saying that experiences are less real than events, or events less real than structures' (1975, p. 58).



(Adapted from: Fletcher, 2017, p. 183)

The visible tip of the iceberg is the empirical domain, or level, where observed events are recorded and interpreted. The water line indicates the limits of perception and observation. As observed phenomena are no more than the tip of the iceberg, 'observability cannot be the criterion of existence' (Danermark, et al. 2019, p. 24). Experiences at the empirical level don't provide access to how 'things "actually" and "really" are' (ibid.). Focus shifts from observable phenomena to underlying structures hidden 'underneath the water'. The actual is the level of events, many of which occur unobserved. The events of the actual are produced by the interaction of causal mechanisms at the real, or (metaphorically) 'deep' level. The underlying structures in the real domain can't be accessed through direct perception. Mechanisms are transfactual, existing beyond their manifestation as empirically detectable events and established facts.

For us to have a deeper and truer understanding of reality, we must use experience to best understand the domain of the real. To George Steinmetz, 'events are always and necessarily overdetermined by a plurality of conjuncturally interacting mechanisms' (2004, p. 383). Understanding reality must be grounded in sensitivity to the complexity and fluidity of 'overdetermined constellations' (ibid) that generate events and experiences. As it can't be known empirically, the real can only be known theoretically and conceptually. It is in responding to experience through theoretical mediation, and the combination of facts and theory, that we can arrive at ontological depth. Fletcher says that 'it is the primary goal of CR to explain social events through reference to these causal mechanisms and the effects they can have throughout the three-layered "iceberg" of reality' (2017, p.183). This is in contrast to what Collier (1994) describes as shallow realism and what Bhaskar (1975) describes as actualism. Actualism restricts

reality to the domain of the empirical and actual, seeing cause and effect only at the level of events, thus denying the existence of underlying, complex structures and mechanisms:

Theories which relegate mechanisms to a lower ontological league, as 'theoretical entities', 'logical constructs', etc., are refusing to allow causal criteria for reality - i.e. they will only let something through the ontological customs office if it is a possible object of experience (Collier, 1994, p. 44)

Events are not exhausted by our knowledge or experience of them, nor does knowledge exhaust the categories and possibilities of reality. Events go unperceived and may be unperceivable, but that does not mean they don't occur. There is a reality beyond experience and actual events. Given this, we can't rely exclusively on the empirical alone to answer research questions, for this would exclude most of reality. Collier argues that we continually surpass the empirical through the causal inferences we make:

...within the level of the Actual we are employing causal criteria all the time, and would never get out of the Empirical if we did not: when we find the garden muddy in the morning, we assume a real rainstorm, though we slept through it; a murder-victim implies a murderer, even though one might never be identified. Rainstorms and murderers are possible objects of experience, but their existence is in these cases asserted on causal criteria only, since they are not 'experienced' in the sense of perceived (ibid.)

As they are not experienced, the causes of the muddy garden and victim can only be inferred through theory, concepts and the imagination. As Björn Blom & Stefan Morén suggest:

By means of analytical work and the gradual building of theory that is firmly based on their manifestation empirically in events, it is possible to gain knowledge of underlying generative mechanisms (in the domain of the real) and conceptualize them (2011, p. 62)

Realist collage aims to conceptualise the generative mechanisms of the 'Welsh Wales' identity. Within the research, the concept of the three domains of reality is interpreted and applied in this way:

- The empirical level is observed through the historical occurrences recorded in the archive film. This provides empirical evidence of the activities and events that are interpreted as the outcome of causal mechanisms.
- The actual level can be seen in the events that are recorded, but also contains unobserved events. Through interpreting evidence at the level of the empirical, the occurrence and existence of unobserved events can be reasonably inferred.

• The real or 'deep' level contains the causal structures and mechanisms that have generated the history and identity of 'Welsh Wales'. This level is modelled through the mediation of the archive materials within collage.

The negotiation of the empirical, actual and the real is linked to the concepts of ontological realism, epistemological relativism and judgemental rationality dealt with later in this Chapter. The issue of photographic evidence and its mediation is explored in Chapter 3. The three domains concept provides the basis for the process of analysing and interpreting the footage described in Chapter 4.

STRATIFIED REALITY

The domains of the empirical, the actual and the real are the first level of ontological differentiation, or stratification, that Bhaskar described. Within the real domain, there is the next level of stratification across the structures and mechanisms that comprise the causally generative, 'deep' level.

A structure is a collection of mechanisms, a mechanism is a particular causal power, or tendency, that is exercised in the generation of an event in the actual domain. Although the term 'mechanism' suggests a physical thing, it is used in CR to refer to the 'powers or properties of an object' (Mingers, 2006, p. 22). For example, water has the power to extinguish fire, gunpowder has the power to cause an explosion, a market has the power to produce wealth or poverty, and people have the power to work and love (Mingers, 2006; Buch-Hansen and Nielson, 2020). However, an object's power may not always be exercised. Water may be drunk instead of thrown on fire, or unemployment may curtail a person's power to work.

Causal mechanisms are interdependent and co-determinate. It is this interdependence and the conjunction of forces emerging from different structures that produces the complexity of events. To understand events and our experiences of them, we must be sensitive to how these structures overlap, coexist and interact in producing what can be experienced at the empirical level. In its privileging of direct experience as the basis of knowledge production, Bhaskar asserts that empiricism's anthropocentric biases have generated a reductive, unitary worldview: 'The concept of the empirical world is anthropocentric (...) And this has the objectionable ideological consequence (...) that whatever men currently experience is unquestionably the world' (1975, p. 58). And:

In this way the world, which ought to be viewed as a multi-dimensional structure independent of man, came to be squashed into a flat surface whose characteristics, such as being constituted by atomistic facts, were determined by the needs of a particular concept of knowledge (1975, pp. 44-45)

Dave Elder-Vass suggests that complexity is collapsed through the limitations imposed by the partial and narrow scope of individual observation:

...we generally perceive reality as 'flat' in the sense that our experiences are interpreted as impressions of entities at a single level of stratification (...) our experiences are already, through the process of abstraction that is inherent to perception, and as a result of the limited slice of reality to which our senses give us access, level abstracted views of what is in actuality an inherently multi-levelled occurrence (2006, p. 166)

When we experience an event, the limitations of knowledge and perception forces a unity that reduces our understanding to a single-level cause. We tend to think of events, from the actions of single human being to multi-national corporations, as having either an 'economic' or 'psychological' or 'political' or 'emotional' or 'cultural' cause, when in reality each event is the result of the operation of multiple, simultaneous causal mechanisms. This is phenomena that we cannot directly see, experience or record. As William Outhwaite contends:

Here common sense and realism converge in the belief that an effect may in fact be brought about by a complex mixture of causal tendencies, located at different levels of reality (physiological, social, psychological). Thus when French people rush off to lunch at precisely 1200 hours, their action may be motivated, in varying degrees, by hunger, by social convention, by individual psychological obsessions about punctuality, and so forth (Outhwaite, 1987, p. 99)

Many mechanisms have no physical parts, and are manifest only in the events they cause. For example, a social convention is not a physical force, but it makes things happen in the world.

A focus on mechanisms shifts focus from events to the more fundamental powers at work. This is a shift from what Steve Fleetwood calls 'thin' causality to 'thicker' explanations. Thin causality is the understanding of an event based only its link to the event that preceded it. Thick causality considers the interaction of causal powers that have combined to trigger the event. Fleetwood gives this example:

The cause of the lamp's illumination (...) is the nature of the glass, the gas, the filament, the wire, the switch, the plug, the electricity, as well as the finger that flicked the switch. It is possible to 'map', as it were, thick causality on to thick explanation (2014, p. 209)

A mechanism is either activated or not based on its context within a confluence of other mechanisms and structures (Jagosh, 2020), 'there will always be a large number of active mechanisms in the deep domain, which can trigger, block or modify each other's effects' (Buch-

Hansen and Nielson, 2020, p. 32). Given that objects have powers whether exercised or not, and that their effects are contingent on context, we must say that objects have a *tendency* to exercise their powers. For example, the 'tendency to step aside to let someone pass may be frustrated if I am in a close-packed crowd that prevents me from doing so' (Elder-Vass, 2012 p. 15). Bhaskar says:

There is nothing mysterious about tendency ascriptions to people. We know what it is like to be in a situation where we tend to lose our patience or temper and we know what it is like keeping it. Tendencies exercised unfulfilled; shown, perhaps, but unrealized in virtue of our self-control (Bhaskar, 1975, pp. 99-100)

The criterion for existence is causal rather than empirical, 'for an empiricist only that which can be perceived can exist, whereas for a realist having a causal effect on the world implies existence, regardless of perceptibility' (Mingers, 2006, p. 22). As there is a separation between the operation of a mechanism and its actual and empirical outcome, statements about mechanisms are *transfactual*. As mechanisms are distinct from its realisation in factual events, they must be 'analysed as objects which exist and act independently of our access to them, including transfactually' (Bhaskar, 2010, p. 2).

In reference to the focus on causal inference within CR research, Danermark et al. say 'investigating how a mechanism works in a concrete situation involves tracing the causal power and describing the interaction between powers that produce a social phenomenon' (2019, p. 179). As the empirical alone can't offer an account of causality, investigation of them demands the use of imagination and creative modelling. This is 'something discursive rather than an equation', descriptions are 'more pictures that need to be painted than equations that need to be solved' (Porpora, 2015, p. 47).

In CR ontology, *emergence* occurs when the interaction of mechanisms produces powers that act on things in ways that were not previously active. The confluence of forces has properties or powers that are not possessed by separate mechanisms. New properties are:

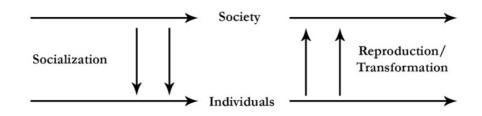
....emergent in the sense that they are powers that would not exist if the parts concerned were not organised into a certain type of whole. They are therefore a product of the particular organisation of the parts that is characteristic of wholes of this type (Elder-Vass, 2012 p. 10)

When the properties of overlapping structures and mechanisms are combined, then 'qualitatively new objects have come into existence, each with its own specific structures, forces, powers, and mechanisms' (Danermark et al., 2019, p. 51). An example of emergence is the power of water to extinguish fire. Water is comprised of hydrogen and oxygen, both of which tend to accelerate

fire. Water's fire extinguishing property is an emergent power of the combined structure of both hydrogen and oxygen (Gorski, 2013). An example from the social world is the property relation as emergent from the tenant/landlord relationship. The property relation is an emergent power that is distinct from the powers of either of the individuals in the relation (Decoteau, 2001). Theories that focus on emergence in the social world recognise the more complex features of social life are the outcome of the confluence of less complex elements. This also recognises that the emergent structures are irreducible, in that they can't be explained purely in terms of the less complex objects that comprise them (Collier, 1994).

As established above, CR denies any absolute divide between the natural and social sciences. Both the natural world and the social world can be investigated and known. But CR recognises that there are limits to our access to the social world. This is because, unlike natural structures, social structures are activity dependent, concept dependent and may only be relatively enduring (Bhaskar, 1979). Natural phenomena are independent of our concepts, but social structures can't exist independent of people's conceptions and beliefs. For example, the state is able to function only because there is a concept of government that is held by the majority of citizens. But there is a distinction between the beliefs that other people hold, and the individual's belief in the state. For the individual, the beliefs of other people are within the external intransitive dimension, where their own beliefs are in the transitive. Social structures depend on the beliefs that people hold, but are independent of the beliefs of any one person (Elder Vass, 2021). Unlike natural structures, that are generally universal and persistent, social structures exist in particular societies for finite periods of time.

The Transformational Model of Social Activity (TMSA) is Bhaskar's system of structure and agency described in *The Possibility of Naturalism* (1979). According to the model, society is both the cause and result of human agency. The TMSA says that societies can only exist as the result of human concepts and activity. But all human action happens within the context of an already existing social structure. This context determines the nature and possible outcome of actions (Collier, 1994). But human actions will 'work back' on society and change it. Therefore, in a cyclical process, individuals are continually reproducing and transforming society whilst socialization activates their actions; 'society is both the ever-present condition (material cause) and the continually reproduced outcome of human agency' (Bhaskar, 1979). The TMSA is illustrated in this diagram:



(Source: Bhaskar, 1979, p. 36)

This project views the identity of 'Welsh Wales' as a continually reproduced social structure, comprised of a plurality of distinct mechanisms. The whole identity is an emergent property of the confluence of the parts it contains. These parts are rooted in a variety of historical conditions, and intersect with the wider Welsh and British national identities (this issue is returned to in Chapter 3). The investigation is conducted through a collage process that analyses the archive film in the 'search' for mechanisms that are abstracted as parts. These component parts are then combined to form new wholes that attempt to grasp the 'concreteness' of the whole identity (as described in Chapter 4).

ONTOLOGICAL REALISM

As already established, reality is independent of our perception of it. As Bhaskar says, 'the intelligibility of sense-perception presupposes the intransitivity of the object perceived. For it is in the independent occurrence or existence of such objects that the meaning of "perception", and the epistemic significance of perception, lies' (1975, p. 31). Perception can only occur in response to what is already there, external to the perceiver. There would be no perception without something to perceive.

On these grounds, CR supports research that foregrounds ontology and the attempt to know the nature of things themselves, and not just how we know what we know. Knowledge and discourse are not ends in themselves; they interact with and mediate the world. In the occurrence of events, 'there is a state of the matter which is what it is, regardless of how we do view it, choose to view it or are somehow manipulated into viewing it' (Archer 2007, 195). While it is the case that all knowledge is mediated through theories and concepts, this does not determine reality itself.

As the meaning of perception presupposes something to perceive, concepts and language presuppose something to conceptualise and describe. Timothy Rutzou argues that ontology is a condition of language:

The descriptions and names we use of phenomena move beyond what is present and already commit us ontologically, whether we like it or not. To speak, to describe, let alone to interpret, has already committed us to saying something more than we can show, something beyond that which is manifest in the particularities we encounter (2016, p. 333)

The world is what it is whether perceived or not. Perception, concepts and language presuppose external reality.

As there is always a gap between the intransitive and the transitive, the sorting of reality through language and concepts is not identically matched in the reality itself. Reality 'swarms, flows and rushes' (Danermark et al., 2019), it can't be fully captured in our knowledge. But it is inherent to the ways in which concepts and language describe reality that divisions and closures are established. This is a closure that is not mirrored in the complexity of open systems. However, Garry Potter says that although reality 'exists as an unbounded continuum (...) it is a mistake to understand such closure as wholly arbitrary' (2001, p. 189). The ways in which reality is described responds to the features and properties of the intransitive object. Although the utility of language demands divisions and closures, our abstractions are not wholly divorced from the true complexity of their referents. Our conceptual schemes are a born from a 'combination of how the world is and how we are' (ibid.). They are simultaneously empirical and theoretical. This is the core of CR's challenge to the dualism of the subjective and objective. In response to the intransitive, the production of meaning 'is structurally framed within a wider context: the nature of reality and the reality of our nature' (ibid.). Given that it is derived from and embedded in reality, meaning can't be considered to be a product of pure subjectivity. For CR, the notion of a dislocated subjectivity that somehow floats above or beyond its context is flawed. Knowledge, and meaning, is generated in an intersubjective process that has its roots in responding to a common external object, the intransitive world.

In contrast to empiricism and idealism, the ontological realism of CR establishes what it describes as an *ontic*, or *alethic*, conception of truth. Although our conceptions of reality are produced within the context of our antecedent knowledge and the limitations of perception, the truth of our concepts is not relative to themselves. As Kevin Schilbrack states, 'that E. coli swims in your intestines or that the Cambrian explosion exponentially increased species are facts that biologists came to understand recently, but they are not facts that became true recently. *Truth does not depend on understanding*' (2014, p. 170, my emphasis). Douglas Porpora (2015) has argued that both empiricism and idealism both suffer from an epistemic conception of truth. Epistemic truths are premised on methodology or knowledge production as a process that arrives at a point of certainty and security. The 'producer' or location of truth is the process of conceptualisation

itself, 'the content of the certain knowledge attained is truth (...) truth, according to the epistemic conception, is knowledge content that is certain' (2015, p. 77). In other words, truth is equated with what is known. Empiricists hold an epistemic account of truth as they believe that observation provides certainty. Conversely, the idealist form of epistemic truth is in the rejection of the possibility of knowing the external world, restricting notions of truth within an enclosed subjectivity.

Accepting the ontological realism of an independent and stratified reality, we see that truth is not in our representations or knowledge. It is in reality itself, reality is the 'truth maker' (Porpora, 2015). With its alethic conception of truth, ontological realism expresses the objectivism of CR. As Nick Wilson says, 'this is a vitally important starting point and forms the basis for realist social ontology' (2019, p. 5).

The ontological realism of realist collage is premised on these points, that are explored further in Chapter 3:

- Realist collage is reliant on its use of archive film materials that have recorded factual events. As evidence of events in the intransitive domain, there is an indexical, causal link between the collage composite and the recorded events themselves. The materials of realist collage are of concrete reality and are external to the work. A grounding in ontological realism is established through the centrality of the archive materials used.
- As a form of 'communicative interaction' (Sayer, 1992), collage presupposes the reality that it refers to. The form and philosophy of collage presupposes a world that is complex, stratified and heterogenous; composed of material parts and non-empirical forces.
- As the referent of realist collage, the 'Welsh Wales' identity is a real object in the independent social world. Its nature is shaped intersubjectively in a social process independent of any individual's subjectivity.

EPISTEMIC RELATIVISM

Our knowledge of the intransitive world is formed within the context of our particular historical position and pre-existing knowledge. As the intransitive and the transitive are 'out of step', knowledge is continually revised and modified and can never fully 'keep up' with reality. Bhaskar advocates an epistemology that 'would unashamedly acknowledge as a corollary of its realism, the historicity, relativity and essential transformability of all our knowledge' (1989, p. 155). The acceptance of ontological realism means that we also accept that knowledge is contingent, it

never achieves a full and direct identity with reality. Reality's independence means that we can only ever know it through descriptions that are theoretically mediated, 'which are not neutral reflections of a given world' (Bhaskar, 1975, p. 249). There can be no gold standard of knowledge, or secure correspondence theory of truth. Bhaskar explains:

Epistemological relativism insists only upon the impossibility of knowing objects except under particular descriptions. And it entails the rejection of any correspondence theory of truth. A proposition is true if and only if the state of affairs that it expresses (describes) is real. But propositions cannot be compared with states of affairs; their relationship cannot be described as one of correspondence. Philosophers have wanted a theory of truth to provide a criterion or stamp of knowledge. But no such stamp is possible (ibid.)

In recognising the contingency of knowledge, CR holds that epistemic relativism must be accepted; and while CR 'entails a commitment to truth, there are no truth values or criteria of rationality that exist outside of historical time. Because of this, all of our representations and our particular perspectives, have limitations' (Archer et. all, 2016).

As our accounts and representations are contingent on context, 'no knowledge can rise above the circumstances under which it has been produced' (Buch-Hansen and Nielson, 2020, p. 147-148). Also, given the complexity of reality, 'it is never possible to identify all of the co-acting mechanisms at play in any event; therefore, theories are never completely verified' (Decoteau, 2016, p. 78). These factors are the boundaries placed on knowledge that ensure that it is fallible and subject to change. Human processes of knowledge production are limited, and human beings can be and are frequently mistaken (Lopez and Potter, 2001). Epistemic relativism acknowledges that regardless of expertise, existing knowledge and the sophistication of our methods and tools, our judgments can be wrong. But, implicit in the acceptance of fallibility is the presumption of an ontic truth against which accounts can be judged (Porpora, 2015) (this point is explored further in Chapter 4). What the fallibilism of CR establishes is that knowledge production should recognise its boundaries and maintain 'epistemic humility' (Porpora, 2015). Similarly, Paul Lewis (1996) has described CR as 'epistemically modest', it does not claim to achieve absolute and secure accounts, 'terms are seen to be representing reality without being representationally privileged' (1996, p. 491).

Fallibilism entails the persistent development of new ways of understanding reality through the continual transformation of knowledge within a collective, social process. A good example is given by David Moshman (2008) in reference to planetary science. Pluto lost its status as a planet in 2006 in response to a number of astrological discoveries and the formalisation of conditions that satisfy the criteria for the classification of an object as a 'planet'. What changed wasn't Pluto itself, but the transitive and relative knowledge that determines the definition of an intransitive

planetary body. Similarly, Porpora says that a convicted man does not suddenly become innocent if he is exonerated by new evidence. The ontic truth is that he was innocent all along. We don't change the world by viewing it differently, 'it is only the transitive content of knowledge that changes with altering interpretations, not the intransitive object of knowledge itself' (Porpora, 2015, p. 75).

Contingency and fallibilism don't deny the possibility of knowing the world, they don't 'imply that knowledge is hopeless or the possibility of realism is a futile quest' (Archer et all., 2016). Through judgemental rationality (see next section), we can and do judge between competing accounts to arrive at more productive and accurate explanations of reality. In contrast to idealism, CR does not follow strong relativism to the conclusion that because our knowledge is relative, there can be no way of knowing the world, and all accounts are equally valid (or worse, that an independent reality doesn't exist). For relativism, 'nothing can ever be wrong because nothing can ever be right' (Porpora, 2015, p. 77). Knowledge is contested, but this does not mean that some statements are not truer than others with regards to some particular reality.

With its 'weaker' or 'moderate' form of knowledge relativism (Elder-Vass, 2012), epistemic relativism expresses the subjectivism of CR.

The epistemic relativism of realist collage is premised on these key points, also explored further in Chapter 3:

- As an indexical record of concrete events, photographic film materials provide evidence of concrete events. But the information contained within the film, like all factual material, does not 'speak for itself' outside of a mediating context that is subject to epistemic relativism. Construction and juxtaposition is the mediating context of realist collage. The construction builds a model of the reality that does not claim an absolute or direct correspondence with its object.
- Epistemic relativism is a condition for engaging with non-empirical objects. Historical events can't be known empirically, as the past isn't available to observation. We can only know them through the reconstruction of available traces that is guided by theory. As a real object, the 'Welsh Wales' Identity isn't available to empirical observation either, it can only be known theoretically and qualitatively. It has to be imagined, as it can't be directly perceived. In knowledge production, the role of the imagined is rooted in epistemic relativism.

JUDGEMENTAL RATIONALITY

CR asserts that reality exists independent of knowledge and that our knowledge is relative. But it maintains the possibility of knowing the world under particular conditions. It holds that we can and do improve our knowledge of the structures and mechanisms generating events. Our capacity for examining those structures in new and more productive ways is continually enhanced and refined. For this to be possible, there must be criteria for judging and selecting from competing theories according to relatively objective reasons for preferring one theory (or theories) over others. This is judgemental rationality:

We can (and do!) rationally judge between competing theories on the basis of their intrinsic merits as explanations of reality. We do so both scientifically and in everyday life. If we could not, we would not be very frequently successful in even our most mundane activities (Lopez and Potter, 2001, p. 9)

For critical realists, knowledge is not found in facts, opinions or beliefs. A focus on facts reduces reality to experience, the predominance of beliefs reduces reality to the subjective. Judgemental rationality attempts a balance of the empirical and theoretical in accommodating a dialectical process of interpretation and description. As Philip Tew puts it, 'such attempts at understanding may always be hotly contested, because there is no definitive access to The Truth. But such attempts are more useful than dogmatic prescriptions, postmodern deconstructions and pragmatic relativism' (2001, p. 224).

If we reject the strong relativism that denies that accounts can be more or less truthful, we need to assess the relative value of competing perceptions and assertions. As it is interpreted within our existing concepts, evidence derived from contact with reality is 'theory laden' (Sayer, 1992). But evidence is not entirely determined by those theories and concepts. The relative independence of evidence can provide the basis for judging what is the best account of events (Elder Vass, 2021). As Andrew Sayer says, 'although the real object is quite separate from the thought object, this does not rule out the possibility that some sort of 'correspondence', or relation of ''practical adequacy'', can be achieved between the two' (1981, p. 8). CR does not assert that evidence is incorrigible and corresponds to the object. Neither does it assume that as evidence is theory laden, then there is no correspondence at all.

Within limits, the aim of knowledge construction is to produce the most accurate and useful model that explains events. We must ask if our explanations and representations are justified on the basis of existing knowledge and the nature of the events described. Judgemental rationality calls for a methodological pluralism, an openness to different accounts that hold the most explanatory power. Pluralism entails the social and intersubjective basis of knowledge production.

The complexity of reality can only be dealt with through collective investigation. Multiple perspectives offer extended reach in the apprehension of causal mechanisms:

Although we all may start from different, situated points of view, by research and by learning from each other's culturally limited perspectives and adjudicating among them, we can move from situated knowledge to what constructionists often deride as 'a view from nowhere', a truth that transcends the limits of our socio-historical situatedness (Porpora, 2015, p. 76)

Judgemental rationality is a form of 'practical wisdom' that engages a dialectical process that balances empirical facts and contextual concepts, acknowledging mediation whilst preventing the collapse into relativism (Rutzou, 2016).

Judgemental rationality is practiced through realist collage in balancing the empirical evidence of the film footage with the mediation of the collage process. This is where ontological realism and epistemic relativism are combined. Abduction, abstraction and retroduction, as the key phases of CR research, are exercised through collage in the practice of judgemental rationality (as described in Chapter 4). The development of the process, as a staged system, has drawn from a range of disciplinary areas.

CONCLUSION – GLOSSARY OF TERMS

To conclude, the following key concepts that the Chapter introduced are now briefly reiterated here:

Transcendental Realism

Against empiricism, transcendental realism argues that science is not a matter of recording observable events. It is concerned with the structures and mechanisms that generate events that continue to operate whether or not they are empirically detected. The work of science is driven by the need to intervene in and discover the reality beyond the empirical level.

The Transitive Dimension

The transitive dimension is the epistemological world of ideas, concept, theories and beliefs. Existing knowledge within the transitive is the precondition for the construction of new knowledge.

The Intransitive Dimension

The intransitive dimension is the world of the objects that exist independent of knowledge and perception. The intransitive is the object and referent of knowledge in the transitive.

The Epistemic Fallacy

The epistemic fallacy is the reduction of independent existence to our knowledge of existence. Statements of existence are interpreted as statements about knowledge. Reality is reduced to what people know or believe.

The Ontic Fallacy

For the ontic fallacy, knowledge derived from observation directly corresponds to reality, and reality is equated with what can be experienced.

The Empirical Domain

The level at which events are observed, recorded and interpreted.

The Actual Domain

The level at which events occur, whether or not they are observed or unobserved.

The Real Domain

The level of transfactual structures and mechanisms that generate events in the actual domain.

Causal Mechanisms

A mechanism is a particular causal power, or tendency, that is exercised in the generation of an event in the actual domain. Put simply, a mechanism is that which can cause something to happen.

Transfactual

As causal mechanisms operate as tendencies that exist whether or not they produce events, they are independent of facts and are transfactual.

Actualism

Actualism is the reduction of causal mechanisms to their manifestation in events. This restricts reality to the domain of the actual, seeing cause and effect only at the level of events, thus suppressing the existence of underlying structures and mechanisms.

Stratified Reality

In the domain of the real, many structures and mechanisms coexist as layers within the causally deep level. Most events are caused by the interaction of overlapping mechanisms.

Emergence

Emergence occurs when the interaction of mechanisms produces powers that were not previously active. For example, water's fire extinguishing property is an emergent power of the combined structure of both hydrogen and oxygen. The new power is irreducible i.e. it can't be explained purely in terms of its constituent parts.

The Causal Criterion of Existence

The causal criterion of existence holds that anything that causes events is real and exists, whether or not it is empirically detectable.

Ontological Realism

Ontological realism holds that the world exists independent of perception, and that perception, concepts and language presuppose external reality. Ontological realism expresses the objectivism of CR.

Epistemic Relativism

Epistemic relativism holds that as reality is independent of knowledge, knowledge is contingent and fallible. It can't achieve identity with reality. Epistemic relativism expresses the subjectivism of CR.

Judgemental Rationality

As knowledge is relative, but reality is still a possible object of knowledge, judgemental relativism holds that knowledge of the world is achieved through adjudicating between different theories to arrive at the most accurate and useful accounts.

CHAPTER 3 – HISTORY, IDENTITY AND ARCHIVE FILM

INTRODUCTION

So far in this thesis, the first two Chapters have established that the collage work will be pursued according to a critical realist conception of the complexity of reality, and that research should aim to disclose complexity through constructing models that address the causally generative structures of the world. The complex phenomena examined in this project is the identity and culture of the 'Welsh Wales' (Balsom, 1985) region and the plurality of historical causal mechanisms that have shaped it. The work does not deal with a specific event or particular location within the region. Rather, it addresses the regional identity as a possible object of knowledge. The investigation is being conducted through the use of the archive material as evidence of the identity formation of the people and communities that it documents. The span of time that the archive films cover is limited to the period between the early 20th century (following the development of photographic film) and the present day.

Although the literature drawn from in this section is not from writers who identify as critical realists, the common theme of the scholarship is that Welsh identity should be seen as complex, plural, contingent and socially reproduced. Theories that emphasise complexity and plurality are compatible with and can be integrated within a CR metatheoretical frame. In Chapter 4, the social theories established within this section are brought together within the framework of CR analysis. This work is predicated on the CR questions: What must exist for the 'Welsh Wales' identity to be what it is? And what causal mechanisms are related to the 'Welsh Welsh' identity? An assumption that a regional identity, as a social structure, is determined by a plurality of transfactual, interdependent mechanisms operating in the domain of the real underpins these questions.

The film archive has a dual role in the project. It is the site of the investigation; it is where information is gathered in response to the theoretical context (instead of interviews, questionnaires or other data gathering methods). This will happen through close evaluation and analysis of the footage and recordings. It is also the resource that will provide the material used in the production of the practice. The social theories of Welsh identity described in this Chapter will guide the process of looking for evidence of the structures and causal mechanisms at work in generating historical events. The combination of theories establishes the 'agenda' pursued in the viewing and selection of the films. The agenda defined by the theories 'looks' for particular powers at work. This agenda is concerned with how the social structure of 'Welsh Wales' has been determined within a stratified reality. The research considers the archive footage as

evidence of causal mechanisms and a source of CR data that can be used within a transfactual analysis. The Chapter will cover these topics:

- The contemporary consensus broadly agrees that there is no unitary Welsh history, but many interrelated histories; there is no homogenous Welsh identity, but multiple distinct and overlapping identities. By drawing from social theories of identity and Welsh history, the first section focuses on the plurality, internal division and social reproduction of national and regional identities. This will examine the specificity of the 'Welsh Wales' region's identity within the broader Welsh history and culture.
- The next section will build on Chapter 2 in relation to the social production and reproduction of knowledge. This will continue to argue that the factual and the mediated should be seen as operating simultaneously and dialectically in how we understand reality, and not in opposition across a dualist, binary distinction. Reflecting CR's effort to reconcile empiricist and idealist positions, this argues that a non-dualist, intersubjective approach to knowledge is needed in addressing complex, non-empirical objects like collective identities.
- Next, relevant critical theory concerned with the veracity of the indexical trace as evidence of pro-filmic existence will be discussed in relation to the representation of reality. From a CR perspective, this suggests that the evidentiary, indexical trace of found footage occupies the same 'space' and purpose as verifiable facts and known events. This will clarify why the project uses photographic materials in the production of realist collage, as opposed to exclusively drawn or otherwise fabricated, iconic elements.
- The Chapter also entails Hayden White's theories of narrativity in the production of historical knowledge, and the implications these ideas have for how film addresses and represents history and identity, from a political perspective.

THE IDENTITY AND HISTORY OF 'WELSH WALES'

This section addresses the issue of national and regional identity. The research engages the archive film to explore the history and identity of 'Welsh Wales' (Balsom, 1985) as a part of non-empirical reality. Informed by theories of Welsh social and cultural life, CR's view of causal mechanisms and social ontology is applied to the conceptualisation of Welsh collective identity as a socially reproduced structure

National and regional identities are formed by historical processes that establish relatively distinct cultures within recognised borders. Identities are predicated on the assumption of shared traits and characteristics that are common to members of a group. These traits are based in ethnic, cultural, social, linguistic and historical identifiers that distinguish members from other regions or nationalities. A sense of a collective, unifying cohesion and belonging constructs a shared selfimage (De Cillia et al, 1999). For Raymond Williams (1980) this self-image is based in the 'the elective tradition', that forms within the 'system of practices, meanings and values' that becomes 'the significant past' of a people. The tradition comes into being as symbolic meanings and images are transmitted through a plurality of practices, forming a relatively enduring structure. Following Benedict Anderson's (1983) exploration of national identity as an 'imagined community', Prasenjit Duara has said that when a discursive meaning:

...seeks to define and mobilize a community, it usually does so by privileging a particular symbolic meaning (or set of cultural practices) as the constitutive principle of the community - such as language, religion, or common historical experience - thereby heightening the self-consciousness of this community in relation to those around it. When this occurs, there is a hardening of boundaries (1996, pp. 168-9)

The hardening of boundaries is driven by the need to differentiate members within the group from those outside. Although the focus on 'hardening' suggests the perception of something fixed and concrete, the focus on symbolic meaning highlights the role of the non-empirical and imagination in the construction of identity. It is real and causally generative, but as a conceptdependent structure, it is an extrapersonal construction developed through cultural and social practice. Also, within the larger identity, distinct sub-groups determine the separation of internal division. At a more granular level than that, individual members of any group will hold a diversity of personal histories, values and perceptions. Mike Wayne says that:

...when we dig further into the component parts of an identity we often find that while they may be held together within the force field of a broader framework, there may be considerable tensions or even contradictions between the component parts and these tensions and contradictions are in turn historically mutable (2018, p. 5)

The production of a shared history and collective values generate unitary forms that obscure these differences. Fevre et al. have said that:

Reality is all about difference and lack of community whereas nation gives us a way of imagining the non-existent community (...) it seems that nationalism is particularly well-suited to the symbolic assertion of boundaries because it allows the appearance of unity where so many differences abound (1999, p. 136)

Constructed within the physical boundary of the nation or region, the imagined community is intersubjective. But it in order to function, it must be relatively identifiable and 'visible' to members if the hardening of boundaries is to produce a sense of stability and security. This serves to ameliorate the destabilising uncertainty precipitated by the plurality, fragmentation and complexity that we find within and underneath the 'appearance of unity'. Whereas the terms

used by Fevre et al. imply that the community does not exist, from a CR perspective, nonempirical phenomena are real if they are causally generative. The appearance of unity may be predominantly concept dependent, but it is a real social construction that activates the actions of agents within the group (Elder Vass, 2012). It can and does cause things to happen in the world. Also, as it consists of entities with material parts, social structure is neither entirely immaterial nor of a different ontological realm to the material. Identities are formed on the basis of relationships of similarity and the exclusion, or 'othering', of difference. As regional characteristics and patterns settle and persist, closure establishes where the identity is located and where it is not, who belongs to it and who does not. This is not a smooth and even process:

...identities are not simply being made and remade all the time but argued and even fought over. Although they are obviously influenced by socio-economic and political change, the outcomes of such processes are never predetermined. Sometimes identities seem to be imposed to the exclusion of others (Fevre and Thompson, 1999, p. 22)

The distinction of who is included and excluded is often drawn according to hierarchical divisions that position some as more 'authentic' as 'inside' and those who are least 'authentic' as 'outside'. For example, in a Welsh context, those excluded are seen by the 'purer' group as having an 'inferior' or lesser Welshness based on cultural and linguistic differences (Evans, 2019). With linguistic difference comes varying degrees of cultural capital and prestige. Degrees of authenticity assumes a core and an inferior periphery that entails ownership over the elective tradition. In general terms, the first language Welsh speakers of Balsom's 'Y Fro Gymraeg' (the Welsh speaking heartlands) are seen as the custodians of the cultural practice that is regarded as having a high value of historical authenticity, with a corresponding symbolic value that projects authentic Welshness according to the group's values. But many people in the excluded groups also claim a strong Welsh identity, despite their lack of participation in the 'authentic' core. In response to survey's conducted by Daniel Evans, in the 'peripheral' regions of Balsom's 'British Wales' (the more anglicised border regions and the southern coast), 'the ''un-Welshness'' of local place did not preclude claiming a strong sense of Welshness (...) locals simply had to work harder to place themselves in the nation. They claimed a Welsh identity in spite of where they were from and their own distance from "proper" Welshness' (Evans, 2019, p. 185). This implies that the closure of identity, and exclusion from its space, generates antipathies and resentments that fracture the unity of the national image. This can occur at different levels and within groups that form 'the component parts' themselves (Wayne, 2018). Charlotte Williams has highlighted the division within the Welsh language community itself:

...there are clear distinctions made between the status of 'Welsh-learner', 'mothertongue speaker' and 'native-born Welsh-speaker' (...) These boundaries therefore are variously raised and lowered with the potential for social closure and exclusion. It is difficult to conceive of a nation in which notions of who is 'proper Welsh' (...) are disputed so vociferously (1999, p. 87)

Given that identity formation is not a smooth process of agreement and consent, 'repertoires of national symbols do not arise painlessly from consensual reflection on a naturally homogeneous national experience; they are forged in conditions of contest between different political and social as well as cultural interests' (Cubitt, 1998, p. 6).

A shared identity is a reproduction that reworks the extant cultural materials available (see the Production of Knowledge later in this Chapter), it is 'remade', not invented out of nothing (Smith, 1991, cited in Thompson, 1999). National symbols and their meanings are part of the preexisting structures that condition and activate our actions, as the structure is then modified by those actions (see Chapter 2 on the transformational model of social activity). National symbols and narratives are embedded in 'the significant past' of a people and projected through the mobilisation of history that constructs images that form 'the narrative of the nation' (De Cillia et al., 1999). Historical narrative is a device that helps to smooth internal difference and promotes the cohesion of a whole unified, self-image. In this way, history is presented in 'literature, in the media, and in everyday culture and it creates connection between stories, landscapes, scenarios, historical events, national symbols and national rituals which represent shared experiences' (De Cillia et al., 1999, p. 24). Further, they 'primarily emphasise national uniqueness and intra-national uniformity but largely ignore intra-national differences. In imagining national singularity and homogeneity, members of a national community simultaneously construct the distinctions between themselves and other nations' (ibid., p. 4). The social reproduction of identity reworks materials within the pre-existing structures of our cultural inheritance, rather than inventing new practices, 'the task (...) of those who set out to forge modern nations is more one of reconstructing the traditions, customs and institutions of the ethnic community or communities which form the basis of the nation' (Smith, 1991, cited in Thompson, 1999). Some writers (Williams, 1985; Johnes, 2016) have stressed the reproduction of history as being particularly important to Wales and the idea of a Welsh people. The position of Wales as a subordinate part of the British state has put considerable pressure on the survival of a distinct Welsh cultural life. Gwyn Williams claims that if nineteenth century industrialisation had not happened, then the Welsh people and their identity would have been 'blown away by the winds of the world' (1985, p. 180). Given this precarity, the persistence of a Welsh culture is largely due to the 'repeated and sustained use of history' that has 'incrementally made Wales different and thus shaped events that followed' (Johnes, 2016, p. 667-668).

Contrary to its production and reproduction in the shared imagination, the reification of identity removes it from the contingency of the social process, as 'national identity itself is grounded in

wider discursive practices in which the nation is constructed as an objective entity, one which is represented as existing above and beyond the social relations which constitute it' (Thompson and Day, 1999, p. 31). The construction of the nation through discursive practice situates identities as 'real, objective, enduring and externally bounded entities' (Jaskulowski, 2005, p. 404). Closure and hardening protects against the uncertainty and conflict inherent in this process. In this way identity settles on 'shapes' (Raymond Williams, 2003) that obscure the fluidity and uncertainty that threaten the connectedness and meaning that a shared self-image offers. The dichotomy of identity is that the need to ameliorate confusion and instability upholds and sustains unitary and relatively secure forms. But the concept dependent, intersubjectivity of these forms does not alter their status as real and causally generative. If they 'feel' or appear real to people, that gives them more strength as structures that make things happen in the world:

Perceptions, symbols, and images may well serve to reduce the complexity of the 'worlds' we live in to a range of discrete and contrasting defined units (...) These units may well exaggerate the sharpness of boundaries, the uniqueness of resident populations, the 'identity' of neighbourhoods, and the like, but as representations they are an integral aspect of wider patterns of thought, knowledge, and organisation (Francis, 1982, p. 139)

As Johnes notes, the perception of history has a role in the construction of identity and the formation of shared values and assumptions. Assumptions that underpin the perceived bonds and characteristics that govern the assertion of 'us' and 'we' as a unified people ("this is what us Welsh are like'', "We have always been like this"), 'the very idea of a national identity, as a collective identity, presupposes common understandings and agreement as to the form of "our" identity' (Thompson and Day, 1999, p. 31) This illuminates the centrality of the imagined in the reproduction of the nation as a narrative construction. A national singularity must be imagined as it does not correspond to what is happening or what has happened. As a singular, unitary past can only be imagined (White, 1987), it is selective, condensed narrative that obscures the complexity of a past that is not available to empirical observation (see History and Narrative later in this Chapter). Despite the logic of hardening and homogenisation, it is a product of conflicts of ownership and meaning where plural, competing histories achieve hegemony, or are marginalised. Like all forms of knowledge, our understanding of the past is subject to revision and reinterpretation, as it can only be viewed through the changing lens of the present, the 'emphasis here is not on the linear, formulaic relationship between history and national identity formation but the complex, ad hoc, often contradictory interface between a range of "pasts" and the present' (Phillips, 2005, p. 42). This is consistent with Stuart Hall's assertion that 'if feel we have a unified identity (...) it is only because we construct a comforting story or "narrative of the self' about ourselves (...) The fully unified, completed, secure and coherent identity is a fantasy' (1992, p. 277).

Michael Billig's (1995) concept of 'banal nationalism' locates the reproduction of the national selfimage in the often routine and mundane ways in which history and identity is reinforced. What is seen and experienced in a local, every day context works to strengthen the sense of belonging and attachment to the imagined national community. From this perspective, 'nationalism is primarily embodied in such banalities as the unwaved flag outside a public building, the organization of sporting events, the language used by media, politicians, weathermen and philosophers' (Thomas, 1999, p. 215). Attention paid to the features of group identity expressed at this level 'encourages us to examine how national identities are embedded in routine social practices of everyday life' (Thompson and Day, 1999, p. 29). The relationship between this quotidian level and the wider identity is a relationship of parts and the whole that they indicate. Small, 'banal' symbols and behaviours 'add up' to the whole identity as the connective tissue of the national narrative gives shape and meaning to lived experience. Symbolic practice is metonymic, it configures mental and material images that connote the historically embedded, transfactual layers and mechanisms that are the component parts of the whole shape, the whole identity (the semiotics of CR and collage will be addressed in Chapter 4).

The work of the critical engagement with identity is to interrogate why these shapes come into being, what component parts they are 'made of', and how this can reveal underlying complexity. It is in being sensitive to contingency and complexity that we can gain a better understanding how identities come to be formed and why. This must involve working towards unmasking and unpacking the changing, relatively enduring 'structured but composite formations' (Wayne, 2018, p. 3) that point to the causal forces 'underneath' identity. It is through an interrogation of identity that we can come to know how the formation is composed. Wayne's identification of a composite formation is synonymous with the part and whole relationships. An identity is structured as a whole but is a composite of parts that have different causal mechanisms. The intersection of multiple mechanisms is the site of the formation of identity as a layered structure. The investigation of stratification, worked through in the praxis of collage, aims to render a 'complex prismatic account' (ibid, p. 7) of Welshness as a 'complex collective schema' (Phillips, p. 42) that penetrates beneath the surface of reductive appearances.

Raymond Williams (2003) stresses that a complex account must extend past the level of the popular and familiar within the everyday and banal, 'so if you say "Welsh culture" what do you think of? Of *bara brith* and the *Eisteddfod*? Of choirs and Cardiff Arms Park? Of love spoons and *englynion*? Of the national costume and the rampant red dragon? All these things are here, if at different levels and in different ways. But over and above them is another culture' (2003, p. 5, emphasis in original). This other culture is found in the structures determined by economic and

political powers that drive the material life of the people. In Wales, and in the formerly industrial south in particular:

Depopulation, unemployment, exploitation, poverty: if these are not part of Welsh culture we are denying large parts of our social experience. And if we have shared these things with others, that sharpens the question. Where is it now, this Wales? Where is the real identity, the real culture? (ibid.)

Echoing this, Brian Roberts has called for 'a more complex model for the interpenetration of social identities in the south Wales Valleys (...) which takes more fully into account local situated experience and relationships with *other sources* of identity' (1999, p 116-117, my emphasis).

The remainder of this section will focus more specifically on the particular plurality of Welsh identity with regards to what the component parts are, how they interrelate, and how they manifest in the regional identity of 'Welsh Wales' as a complex layered structure.

The title of Gwyn William's When was Wales? (1985), indicates his view that there is no fixed point when Welsh nationhood was unambiguously 'whole' and naturalised. Acknowledging that all national identify is fluid, there are pointed and persistent uncertainties at the root of Welsh identity engrained in the ambiguity of its status. Wales has never been an independent nation.²⁰ Wales was fully incorporated into the emergent British State through the two acts of union of 1535 and 1542, cementing a process of assimilation that had progressed over the preceding centuries (Johnes, 2019). This has underscored a lack of confidence in firmly defining the character and scope of its nationalism. Martin Johnes argues that there is difficulty in recognising Wales if approached with the assumption of a relative wholeness and independence. The notion of a Wales that has ever had the autonomy and power to determine its own form is a historical chimera. In reality, Wales has never existed outside of the primary force determining its demarcation as a separate entity - its relationship with England. This echoes Gwyn Williams assertion that 'the realities of fewness and fragility have their own logic. Wales, as a political entity, comes into existence as a junior partner in a Britain run by England' (1985, p. 58). Adrian Hastings has said that 'we are still after more than a thousand years not quite sure where the Welsh stand - an ethnicity in Britain or even, as at one time seemed the case, within England, a

²⁰ The treaty of Montgomery of 1267 did establish Llywelyn ap Gruffudd (c. 1223-1282) as the Prince of Wales. It was the only time an English ruler recognised the right of a Welsh ruler over Wales. But Llewelyn did not control the whole of the territory that we now know as Wales, and the treaty ended when Edward I declared war on Llewelyn in 1276.

nation in a multi-nation state, even (still to come) a nation-state of their own?' (1997, p. 181). The full political integration of Wales with England has precipitated the internalisation of a sense of dependence and inferiority that have formed the 'mental maps' of the Welsh public, impeding the formation of an independent mindset (Thomas, 2005).

The ambiguity of the status of Wales as a coherent whole is further complicated by its internal differences. Influenced by Benedict Anderson (1983), contemporary historians and sociologists have wrestled with the plurality of Welshness. Dai Smith has stated that Welsh is 'a singular noun but a plural experience' (1999, p. 1). Similarly for Thompson and Fevre, 'there is not one Welsh identity but many' (1999, p. 23). This mutability in the Welsh context means that 'there is no single way of talking about, or being, Welsh that has achieved total acceptance' (Day and Thompson, 1999, p. 39). In seeking to articulate and negotiate these complexities and contradictions, Krzyszjef Jaskulowski argues that 'there is no 'Welsh identity'' as such or ''Welsh nation'' as such, but there are the numerous projects of ''Welsh identity'' and various meanings given to the term ''Welsh nation'' (2005, p. 406). Day and Suggett (1985) suggest that the components of Welsh identity are disaggregated and identified; 'we need to treat ''Wales'' as it has figured in successive, rival discourses, and consider the question ''How many Wales?'' or ''How many ways of being Welsh?'''(cited by Thompson and Fevre, 1999) to arrive at a true and productive understanding of Welshness.

The recognition of multiple, modern Welsh identities in history and sociology stem back to the interwar period. In 1921, Alfred E. Zimmem discerned three distinct cultures:

The Wales of today is not a unity. There is not one Wales; there are three (...) There is Welsh Wales; there is industrial or, as I sometimes think of it, American Wales; and there is upper class or English Wales. These three represent different types and different traditions. They are moving in different directions and, if they all three survive, they are not likely to re-unite (cited in Johnes, 2019, p. 141)

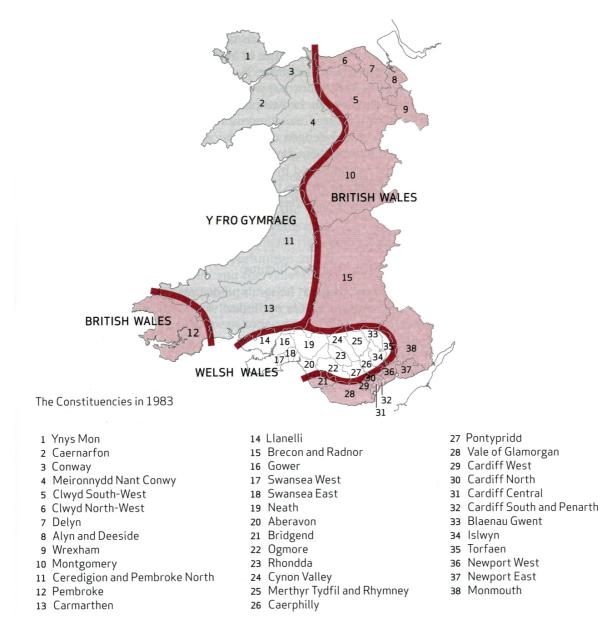
'Welsh Wales' described the Welsh speaking people in the rural western and northern areas, industrial or 'American Wales' belonged to the largely industrial, working-class south, and 'English Wales' referred to the more Anglicised (in a linguistic and also a cultural sense) border regions. The formation of these divisions was extraordinarily rapid. In 1800 Wales was an agrarian, agricultural region with an evenly spread, predominantly Welsh speaking population of half a million. With the onset of industrialisation, along with mass internal and external migration and huge demographic change that it triggered, by 1911 there was a mostly urban population of two and a half million people. This massive shift generated the urban majority in the South and produced Zimmen's three distinct sub-groups in just over a hundred years. The demographic change was 'accompanied by significant cultural shifts that were the making of modern Wales'

(Daniel Williams, 2003, p. xxxii). In 1985, Denis Balsom's work 'attempted to map the complex relationship between place, identity, class, cultural attachment and political affiliation in Wales' (Evans, 2019, p. 169). Echoing Zimmen, he proposed a similar three-part division in his '3 Wales Model', classifying groups according to the differences in the strength and features of 'Welshness' that they exhibit. The two dominant regions with regards to their more clearly expressed Welshness were 'Y Fro Gymraeg' (literally 'The Welsh Language Area') of the West and North, and the 'Welsh Wales' of the industrial valleys area (in a reallocation of Zimmen's term 'Welsh Wales' to a different region). Both these areas had populations that predominately identified as Welsh. Raymond Williams recognised the rural and Welsh speaking, against the industrialised, Anglo-Welsh as the two 'truths' projecting competing, alternate images of a Welsh heartland. He says they are:

...alternative prologues to the action of modern Wales. The first draws on the continuity of Welsh language and literature: from the sixth century, it is said, and thus perhaps the oldest surviving poetic tradition in Europe. The second draws on the turbulent experience of industrial South Wales, over the last two centuries, and its powerful political and communal formations (2003, p. 27)

The third region, the discontiguous area of the border counties, the coastal counties of the south and Pembrokeshire is referred to as 'British Wales'. Just over half of the inhabitants of this region affiliated with a Welsh, rather than British, identity.²¹

²¹ In response to surveys, in 'Welsh Wales' 63% identified as Welsh, '62.1% in 'Y Fro Gymraeg' and 50.5% in 'British Wales' (Source: Daniel Evans, 2019)



(Source: Day, 2010, p. 29)

Separated by 64 years, the equivalence of the Balsom and Zimmen models is striking and attests to the relative durability of core regional differences. This persistence is explained by the economic, geographic and cultural factors that established and may still reinforce these divisions. Daniel Evans (2019), drawing from Gruffudd (1995) and Day (2010) has identified the key historical forces that imposed the split: The uneven penetration of English colonialism and the British state, internal migration to the industrial regions, migration from England and elsewhere, the lack of a unifying national civil society, the absence of transport infrastructure connecting North and South and the physical division of the central mountain range. Summarising these divides across binary separations, Charlotte Williams says that 'Wales is internally divided - north/south, urban/rural, Welsh-speaking/non-Welsh-speaking, native born/incomer - to the extent that finding common concerns or any sense of common history and common destiny so

central to nationalist projects may be problematic' (1999, p. 85). Although these binaries might obscure the mixing and hybridisation of identity (Chris Williams, 2005) that is a feature of its ongoing formation, they do express where the main fault lines of Welsh nationhood have been located. These divides mean that the form and intensity of Welsh nationalism is uneven and fragmented (Fevre, Borland and Denney, 1999). Moya Jones has emphasised the significance of physical and linguistic forces in patterning divisions, as well as their very old and persistent influence. She says that the:

...two intertwined, interpenetrative elements of territory and language have fashioned Welsh identity, as has the country's resulting history. Difficult terrain fashioned communities and mentalities while hindering unity. The nature of the land also determined industrial and agricultural differences and subsequent political divisions; thus the pattern and nature of nationalism and politics in Wales have hinged on factors that have been in place for centuries (2008, p. 16)

For Gwyn Williams, the tension between the communities shaped by these forces contains deep rooted and entrenched antagonisms and resentments. The Anglo-Welsh of the south traditionally feel that their status as Welsh people is treated with derision by those from the Welsh speaking rural regions. This has led to a suspicion and mistrust of political movements that have championed the language and campaigned to challenge its decline (Williams, 1985). The urban south has been the centre of industry and economic activity, and is now the location of its political and cultural institutions, predominantly in the capital city. Those in the North and West commonly feel excluded from, and ignored by, the political and cultural life that is focused on Cardiff. The resentment is especially acute following devolution, as the institutions in the Cardiff Bay area are seen as the arbiters and custodians of Welsh issues that seem remote from the concerns of rural communities (Brooks, 2017). These are some of the symptoms of schisms with a long and complicated history. As Gwyn Williams has put it:

That whole complex of contradictory and often unpleasant attitudes which had characterized Welsh political life since the tenth century assumed permanent and painful form in the minds of most Welsh people. Half-suppressed (...) it has helped to make the Welsh the peculiarly schizophrenic people we are (1985, p. 113)

These divides have had the historical significance that this emphasises, but that does not mean that they are absolute or impermeable. Neither are they critically threatening to nationhood. There is still a country we call Wales and a people we call the Welsh. As Martin Johnes puts it, 'all nations have geographic and social divides. These do not undermine nationhood because, ultimately, it is an idea rather than a category which has to adhere to any strict definition that all agree upon' (2019, p. 142).

The more general, whole identity is flexible and elastic enough to accommodate its subgroups. This attests to the fact that internal division is an innate feature of, not an anathema, to nationhood. The malleability of nationhood has allowed for a Welsh nation to endure despite sustained pressure. But it has also meant that the divisions have sedimented as a source of uncertainty and amorphousness that 'meant Welsh identity had little focus or political salience' (ibid.). Resistance to the assimilation (and economic exploitation) of Wales within the British state has seen Nationalists call for Wales to be an entirely autonomous and self-governed nation. But as Daniel Williams points out, 'the new Welsh nation would itself, however, be open to the same charges of cultural homogenization with regard to its constituent sub-cultures' (2015, p. 5). Since devolution, the focus of a more inclusive, civic nationalism has been the construction of an open, bi-lingual Welsh identity that can accommodate a diversity of cultural positions. Conversely, in producing an identity that is open to everyone, minority cultures with a monolingual, ethnic dimension can be ignored and neglected (Brooks, 2017). In this sense, 'multicultural ''civic'' nationalism (...) is often just a mask used by dominant nationalisms to hide the inevitable ethnic dimension of their make-up' (Daniel Williams, 2015, p. 158).

Despite the forces that supress them, the divisions of Welsh identity will persist in the dynamic reconstructions that take place within the domain of the real. Identities may decline or change, but a permanently multidimensional Welshness can't and won't be homogenised. As Daniel Williams contends

...there is no pre-determined shape that Welshness will inevitably take, for that elusive entity - 'Wales' - is not the neutral frame within which any array of forces contend for power, but is, rather, itself the subject of persistent cultural and political contestation (2003, p. x|v)

The underlying presence of Balsom's divides is still a force in Welsh identity, but in the more recent period the definition of the subgroups has been destabilised by large scale changes across society and culture. A number of the central characteristics of the two dominant identities have been upset by the decline of the Welsh language in its heartlands and the destruction of the industrial economy of the South. In 1992, Merfyn Jones wrote that 'the combined historical weight of economic base, political tradition, and a distinctive cultural inheritance supplied Wales with its certainties for generations, but that hegemony has now dissolved into a multiplicity of directions into an unfamiliar pluralism' (p. 332). The structures and mechanisms of identity have limited resistance to the weight of major historical change. Identity is rooted and generated by interdependent structures that are transformed or terminated by large scale demographic, economic and political shifts. Most recently, a housing crisis driven by a major increase of second home ownership, accelerated by Brexit and the COVID19 pandemic, threatens to wipe out the Welsh speaking communities of 'Y Fro Gymraeg' within a generation (Morris, 2021). Ffred

Ffransis, a leading member of the pressure group Cymdeithas yr laith Gymraeg (the Welsh Language Society) has called this process 'cultural genocide by bank transfer' (quoted in Morris, 2021). In this sense, what appears to be the persistence of the '3 Wales Model' may be misleading with regards to the most recent past and the rapid changes we are experiencing in the present moment.

With reference to the character of the 'Welsh Wales' region, it is made from a particular confluence of component parts. Some overlap with the other subgroups, and some are more specific to its particular composition. Within its structure, there are parts that are more dominant than others, but that does not mean that the 'smaller' components are not an important element of its history and its present condition. Despite the antagonisms highlighted above, the overlap of sub groups mean that they share interpenetrating mechanisms based in a complex and mixed history. The borders of 'Welsh Wales' have been permeable and elastic. Martin Johnes argues against the tendency to over-emphasise the solidity of boundaries:

...the division of Welsh historiography into 'labour' and 'national' traditions is rather artificial. This division also belies the complexity of the actual Welsh experience, something evident in how parts of the industrial working class spoke Welsh and how sections of the Labour movement were deeply influenced by Nonconformity (Johnes, 2010, p. 1261)

The absolute separation of the primarily Welsh speaking regions and the Anglo-Welsh industrial south is misleading, as the history of cultures does not follow a unitary, even course towards homogenous, separate wholes. Large scale demographic and cultural shifts don't completely eradicate previous cultural practices. As South Wales industrialised and migration changed the composition of its people, the Welsh speaking rural culture that predated the change endured as a subordinate, but persistent feature of the emergent identity. This is what Raymond Williams has called 'residual' culture (1977), a reduced, but still active structure that continues to reside within the dominant culture. A multidimensional identity is formed through the composition of older and newer elements that work as stronger and more subordinate tendencies. This positions 'Welsh Wales' in a 'specific but ambiguous position' (Roberts, 1999, p. 112) that is caught between 'Y From Gymraeg' and 'British Wales'. Roberts recognises that 'a range of social images of "Welshness" (...) can be held within a given area or even a group. These "social images" are not isolated entities but, at least in part, defined in relation to one another' (ibid.). The components of an identity are no more fixed and autonomous than the 'whole' identity itself. The coexistence of apparently conflicting and incompatible components can settle into a relative balance and cohesion. Traditionally, the members of 'Welsh Wales' have been at ease with their status as Welsh people and as part of a wider British culture (Johnes, 2011). Although this tendency may now be in decline, the region's strong history of socialist politics has been key in anchoring its people to a wider, working-class sense of Britishness. In relation to the deteriorating features of a culture, the reconstruction of an identity is contingent on the presence of the structures that engendered and support it. If economic and other forces alter or remove those structures, the real, active identity will change. The industrial history of 'Welsh Wales' produced the collective values born out of shared experience of economic exploitation and political struggle. But given the deterioration of working class cultures (Wayne and O'Neill, 2013), and the disruption of their values, Brian Roberts suggests that the historical image of 'valleys life' as:

...a traditional social identity, in decline for so long, is at a final turning as its content and symbolic boundary markers are challenged. This Welsh character, usually described by local residents in terms of communal values (for example, friendliness, sharing and helping), may now be fading due to the decline of the close knit between work and communal patterns (1999, p. 121)

As the social identity is destabilised and transformed, a nostalgic attachment to traditional images may hide the contingency of structures. Critical and political awareness is undermined by a selective reading of the past that can obscure the changing realities of the present. The clichés of valleys life are repeatedly invoked through reference to the colliery, trade unionism, rugby, choirs, the chapel and the 'we left our doors unlocked' community spirit. But these 'activities are now indicators of a declining tradition - used as a simple view of Welshness from outside, while becoming 'endangered'' inside' (ibid., p. 120).

These features may still be residual as identifiers that shape a self-image, but they are not fully active in the reproduction of identity if not present in social relations. They can also be damaging if distorted and perverted in historical consciousness as a stereotypical view of 'Welshness from the outside', someone else's entertaining, amusing idea of us that we adopt with pride. This is the acquiescent reduction of identity that comes from the internalisation of externally imposed shapes, a balm to the frictions of subordination and complexity:

...find a scene, find a character, play it on English television; admit and exaggerate your weaknesses before they have time to point them out (...) Be what they expect you to be, and be it more. Tell the joke against yourself before they do (...) Show the distinctive bits and pieces they've already cast you for. It's easier and more successful than living with the whole of yourself. It's not me exactly, or you exactly, but by God it's Welsh, and by God it will slay the English (Raymond Williams, 2003, p. 10)

Bella Dicks and Joost Van Loon (1999) have interrogated the representation of the Rhondda valley's mining communities at the Rhondda Heritage Park tourist attraction. The Park promises to provide an experience of 'life underground and the history of the Black Gold that was shipped from the Rhondda around the globe' (Rhondda Heritage Park website). According to Dicks and Van Loon, the presentation of history narrates an identity through a selective construction of a

fixed industrial past worked through 'remembering certain traditions, events and origins and by forgetting their contingency, contestation or their embroilment in quite different narratives' (p. 223). In this way the past is subject to a 'backward looking gaze' (ibid.), imagining a unity that ignores how history has produced the complexities of the present. Against tendencies towards reduction and homogenisation is the recognition that social identities are continually changed in the present, and are subject to our changing relationship with a layered and dynamic past. A process of recovery and reconnection with the difficult complexities of identity can explore its reality more fully, rather than falling into flattened representations that are 'asserting a version of it which may be protecting us against it' (Raymond Williams, 2003, p. 88). The painful shifts in the contexts of our identity, as well as the plurality of the past, must be central to conceptualising and articulating images of 'Welsh Wales' (Charlotte Williams, 1999; Johnes, 2016). It is 'this culture of Wales, profoundly and consciously problematic, which is the real as distinct from the ideological difference from a selective, dominant and hegemonic English culture' (Raymond Williams, 2003, p. 20). A static reality will blind us from ourselves:

...some shapes confine us, confuse us, indulging and magnifying or degrading and belittling. All significant shapes move, even if it is only a move to a new confirmation. The shape of Wales, more than most, is in constant movement, and this is of course unsettling. But our experiences have been so dynamic and so shifting that if the shapes had not changed we should now be wholly adrift: adrift of ourselves (ibid., p. 12)

We need the:

...necessary access to things that are indeed our common life but which are not accessible by means of direct observation and experience. Certain things which are now profoundly systematic, which happen in complex ways over very large areas, and which we had to understand in ways that, by comparison with the simple affirmatives extended from experience through community to the making of new societies, seem and indeed often are distant and dehumanized (...) which *cannot be observed*, which has to be consciously discovered. New characteristic social relations which have, in a sense, to be discovered, *not only by factual enquiry* but by *very complex interpretation*, discovering all kinds of *new systems and modes* (ibid., p. 182, my emphasis)

Williams' focus on discovering the unobservable nature of identity through moving past the surface of appearances expresses the purpose of this project's synthesis of critical realism, archive film and collage. Through the balance of the empirical and the intersubjective, CR demands that we see identity for the continually reproduced multidimensional structure that it is. Through judgemental rationality, explanation and representation must be causally complex to avoid reductionism. Collage, as a mode of practice that is both indexical and iconic, realist and mediated, draws attention to the constructed nature of representation and the construction of things that it represents. In a challenge to the reductions that push identity towards unitary simplifications, we need to foreground complexity and reconstruction in historical consciousness.

Unlike civic nationalism, an openness to the difficulty of identity should not reconcile internal difference by pretending it doesn't exist. Pursuing the visibility and legibility of complexity is the aim of realist collage as a cultural and social practice.

The 'Welsh Wales' identity will be further explored in Chapter 4, where its composition will be analysed and explored through collage practice.

THE SOCIAL CONSTRUCTION OF KNOWLEDGE

In this section, I will develop the reasoning that supports the project's position on the status of the archive footage and collage construction. The archive film occupies the status of facts and fulfils the need for ontological realism, and the collage construction performs the role of building explanatory models (further explored in Chapter 4). Realist collage reconstructs pre-existing archive film in response to existing concepts and theories. In this way, realist collage is aligned to the CR position on knowledge production introduced in Chapter 2. For CR, knowledge is socially reconstructed from extant materials. As such, the negotiation of reality is an intersubjective, social process. Connected to this, this section also discusses the role of the imagined in knowledge production in relation to the apprehension of transfactual phenomena.

The assertion of the independent existence of reality is the fundamental basis of CR's ontology and epistemology. However, CR rejects the empiricist view that knowledge is unproblematically 'read off' external reality through experience. This assumes that knowledge with a direct correspondence with reality is generated through the sensory experience of human subjects. In this sense, empiricism is guilty of reducing reality to what is observable. To critical realists, reality is far more complex than what is perceivable, and experience is always subject to contextual factors that invariably determine the perception and interpretation of intransitive phenomena. These contextual factors are the social structures that underpin knowledge production, inclusive of pre-existing knowledge and established cultural and social practices. Antecedent knowledge is a pre-requisite condition for the production of new knowledge. Perceiving phenomena outside of an interpretative framework that has been shaped by existing theories is not possible. In reference to the influence of existing knowledge in the reading and processing of experience, Andrew Collier says that empiricism:

...does not recognize that what we experience is determined not just by what is there, but by what we have already learnt. Hence it can take experience itself to be an authority above criticism, unaware of the way experience can confirm our prejudices, since we may see what we have been taught to see (1994, p. 72)

Experience is not a mirror of the intransitive world that imprints an unmediated impression on the transitive world of knowledge. Experience responds to the external world, but the data of experience is filtered by an 'ensemble of theoretical and empirical ideas' (Bhaskar, 1975, p. 138, emphasis in original), that structure our subjectivity through 'social transmit' (Toulmin, cited in Bhaskar, 1975, p. 138). Experience and the description of experience 'will always be to a greater or lesser extent theoretically determined (...) not neutral reflections of a given world' (Bhaskar, 1975, p. 249). In a challenge to the idea of knowledge autonomously emerging from wholly original insights, Bhaskar refers to knowledge production as a collective process of transformation:

...men never construct their knowledge from scratch. It stands to them always as a given product, a social transmit; which they must themselves reproduce or partially transform (...) man never *creates*, but only *changes*, his knowledge, with the cognitive tools at his disposal (Bhaskar, 1975, p. 138, emphasis in original)

Given that there must always be a something already produced and established to enable the production of knowledge, it can't be viewed as a product of *individual* experience. But that does not mean that experience is not central to the process, that 'knowledge is not analysable in terms of *individual* experiences does not imply that it is not analysable in terms of experience' (Bhaskar, 1975, p. 178, my emphasis). Experience must be thought of in terms of a social, collective process that can't be taken outside of a social context. The interdependence of social life determines the unavoidable social underpinning of knowledge production. Against what she calls the individualistic epistemology of cartesian thinking, Allison Assiter argues that 'the solipsistic knower is implausible in the light of human socio-biology. This suggests that people are basically collective and social beings and therefore collective knowers' (Assiter, 2001, pp. 245-246). As the interpretation of phenomena is activated by socialization, the reading of facts is a function of human agency that is conditioned by social structures:

Established facts are social products (...) a reading depends upon antecedent social activity; the acquisition of a language by the reader. It is in this sense that the facts always depend upon social activity (...) reading depends upon the mechanisms of the reproduction and transformation of language, of knowledge and of society (Bhaskar, 1975, pp. 187-188)

Against the expectations of empiricism, critical realists Danermark et al. argue that:

The empirical domain, which in scientific contexts contains our 'data' or 'facts,' is always concept impregnated and theory laden. All our data arise in connection with some concepts and theory, and thus we do not experience the events in any direct way - which is what empiricist research tradition tends to assume. Data are always mediated by our conceptualizations (2019, p.25)

The error of empiricism's naïve realism is that as there are no theory neutral observations, this is why 'what is considered a fact by one theory may not be so considered by its rivals' (Porpora, 2015, p. 84) The social and intersubjective basis of knowledge production positions it within a dynamic and contingent process. As Collier says, 'the most common and helpful of the interventions of critical realism in the everyday work of the human sciences is precisely this insistence that the republic of knowledge has a federal constitution' (1994, p. 214). Through the dogma of objectivism, facts may appear to exist in an independent, neutral zone. But nothing is fixed and inert in the social mediation of reality, and facts can't be entirely cut off from their contextualisation and interpretation. Facts, warranted as evidence of events, may tell us that something happened at the empirical level. But they may not tell us what caused it and what it means. A deeper causal explanation must be arrived at through negotiation and consensus.

The recognition of the social and structural factors at work in knowledge production does not suggest that it is limited to discourse. This is because the intersubjective production of knowledge addresses a common object - the external world of things. As Collier puts it:

...since we can always change the transitive dimension, and that we do so in the ways that we do is explained by the fact that the transitive dimension is not an end in itself, but produced entirely in order to explain what occurs in the intransitive dimension (ibid., p. 82)

For CR, intersubjectivity does not signal a move towards relativism and the incommensurability of competing accounts. Rather than taking us further from the truth, 'by learning from each other's culturally limited perspectives and adjudicating among them, we can move from situated knowledge to (...) a truth that transcends the limits of our socio-historical situatedness' (Porpora, 2015, p. 76).

Bhaskar uses the following example to illustrate the contingency of knowledge in response to an independent world:

If changing experience of objects is to be possible, objects must have a distinct being in space and time from the experiences of which they are the objects (...) when modern sailors refer to what ancient mariners called a sea-serpent as a school of porpoises, we must suppose that there is something which they are describing in different ways (1975, p. 31)

The point here is that when the mariners and sailors describe the same concrete, external phenomena in different ways, they are not 'creating their own inner realities', as a postmodernist

might suggest.²² To believe so is to commit the epistemic fallacy. The descriptions serve to address the same external thing according to different historical contexts, with different 'standards' of existing knowledge. What the example illustrates is that our knowledge is relative, but only in the sense that it is historically and culturally embedded. The relativity of knowledge means that the complexity of the intransitive can never be apprehended in any total or absolute sense. Consequently, there 'are no absolutely privileged statements' about the world (Bhaskar, 1975).

The mariner and sailor example also reinforces another factor that invalidates the empiricist's confidence in the direct capture of fixed, immutable facts. The processes of social transmit and the reproduction of knowledge are characterised by *change*. Firstly, the relationship between object and description that at one time seems secure and self-evident is subject to transformation as the 'cognitive tools' at our disposal develop. Secondly, knowledge can never fully apprehend an inconstant and complex world; knowledge is always 'out of phase' (Outhwaite, 1987) with the reality it reflects. By the time we apprehend reality, it may have already changed. Following Bhaskar, Collier says:

...the crucial premiss of the realist argument is *change*. A static, 'snapshot' view of perception may well appear to be adequately analysed without reference to beings independent of us. But we can neither describe nor justify cognitive change without reference to independently existing objects (1994, p. 84, emphasis in original)

For critical realists, human beings produce knowledge in the collective attempt to understand the complexity of a multidimensional, stratified reality. Libraries and archives form part of the cumulative resource that are a product of this effort. The film archive is one source of knowledge that provides evidence of the multicausal, complex events that generate our social experience of the past. The products of the collective construction of knowledge are:

...part of our socially innate intellectual endowment. It is this endowment that we must draw upon as we attempt to deepen our knowledge of the way things are and act in the world; and in so doing we can continually add to and modify it. The existence of this stock, as a layered structure, is a necessary feature of any human cognitive situation (Bhaskar, 1975, p. 178)

The film archive is a source of antecedent knowledge that I will draw upon and modify. To more fully understand and better represent the events that the films have recorded, it is necessary to mediate the material through the construction and creative model building advocated by

²² Steve Fleetwood says 'critical realists reject the idea of 'multiple' realities as a category mistake: reality is not the kind of thing that there can be more than one of. There is only one reality although, importantly, there often are several discourses (etc.) that act as interpretations of it' (Fleetwood, 2014, p. 208).

transcendental realism. Bhaskar identifies the role of extant materials in all social activity and production, 'all activity presupposes the prior existence of social forms (...) People cannot communicate except by utilizing existing media, produce except by applying themselves to materials which are already formed, or act save in some or other context' (Bhaskar, 1979, p. 34). The reference to the modification and transformation of existing media is pertinent to the role of extant materials in creative practice in the arts and media. All cultural practice must reconfigure existing ideas, materials, methods and technologies. The archive film deployed in this project is a 'social form' with a prior existence, an 'existing media' and an 'already formed' material. The footage has been generated by other people at other times. The existence and availability of the material is reliant on the people who originally shot the film, the private individuals and public bodies that donate film, and the archivists who assemble and maintain the collection. The activity of the archive would not be possible without the necessary technologies. The collection would not be available without public funding from within the cultural and institutional structures that support its existence and maintenance. My own practice would not be possible without the hardware and software that makes the production achievable. The work applies existing theories of Welsh identity and history referred to in the previous section, as well as the theories across the other disciplines.

For Terry Lovell, artworks (like all forms of knowledge) are produced through the manipulation of materials that are not the same thing as the intransitive phenomena they depict. This is consistent with the epistemological relativism that recognises the slippage between knowledge and its object:

Because the work of art is constructed out of different materials from the world it represents, the extent to which that representation is 'like' the thing represented must be strictly limited. But this limitation is shared by any system of knowledge construction, whether it utilises the language of art, of science, or of common sense (1980, p. 79)

This is echoed by Mike Wayne in his analysis of video practice and photographic representation:

...we need to stress that the image and the real, the record and the thing recorded, are two distinct phenomena. This is not to say that there is no relationship between representation (in images, in language or whatever medium) and the real, just that the relationship is a complex and indirect one (1997, p. 81)

The relationship between knowledge and representations and the reality they describe in not one of total correspondence or identity. The description is the outcome of human processes that must condition and mediate the reality represented. These processes can help us understand and know the real, but reality cannot be reduced to our representations of it. As described in Chapter 2, reality is comprised of experiences, events and causal mechanisms across three categorically independent domains. The complex structures generating events are not directly observable through experience. Mechanisms may be present and unrealised or realised and not observed. Access to the domains of the empirical and actual does not provide direct access to the domain of the real. But there has to be something causing and connecting events. Events can't happen for no reason at all, 'there must be necessary connections between matters of fact. Such necessary connections are provided by enduring mechanisms (...) mechanisms not only endure but are transfactually active' (Bhaskar, 1975, p. 193). The enduring activity of generative mechanisms producing the history and identity of 'Welsh Wales' should be interpreted in a non-empirical, transfactual way. In complex open systems, structures like collective identity are independent of any particular sequence or pattern of events (what is observable is not reality i.e. the operation of social relations is not observable, the reproduction of identity is not observable). The building of an explanatory model of identity is necessary to explain facts manifest in the archive film, this is the attempt to explain experiences by modelling what is beyond the visible at 'a level at which things are really going on irrespective of the actual outcome' (Bhaskar, 1975, p. 41). Judgemental rationality is applied in selecting from the theories that most adequately account for causal mechanisms of 'Welsh Wales'. As imagination is unavoidable in the absence of the empirical, it is central to this effort. All invisible phenomena must be imagined through theoretical interpretation:

Only when we have constructed a model can we be said to have achieved (...) understanding. That is, not just saved the facts, preferably with elegance and economy, but explained them (...) Explanation thus involves, centrally, the substitution in our *imagination* of a real or empirical relationship for an unreal or theoretical one (Bhaskar, 1975, pp. 144-145, my emphasis)²³

As facts indicate only the perceived result of structures and mechanisms, reality can't be known through the empirical alone. The empirical doesn't explain the unobservable mechanisms that generate events and the facts that they establish. This is implicit in a common-sense view that assumes that events must be analysed and interpreted. Imagination and theory are inevitable in their full apprehension. How we understand reality is in the dialectic between theory and the empirical:

...some of the accepted criteria for distinguishing the observable from the unobservable, and hence observation statements from theoretical statements, lack foundation. Both have in common the feature of being conceptually mediated. In view of the universality of theory-ladenness, the popular alignment of the distinction between empirical and

²³ Bhaskar also makes a distinction between the imagined and the imaginary. The 'imagined' is that which is possibly real, the 'imaginary' is unreal (see Chapter 4). Also, Hayden White has discussed the role of imagination in the construction of historical truths (see History and Narrative section later in this Chapter).

theoretical knowledge with the observable and the unobservable must therefore be judged dubious (Sayer, 1992, p. 53)

In conclusion, facts are not enough to explain reality of 'Welsh Wales', as reality cannot be reduced to facts. As Raymond Williams (2002) implied, facts and reality are not identical, as facts and the events that they describe are not the whole of reality. The realist explanation of events entails the simultaneous and interdependent interplay of facts and imagination in apprehending causal mechanisms that are beyond the level of the visible and the empirical. In this project, the process of model building by way of imagination is undertaken through the construction of non-fictional collage film works that mediate the factual materials of the archive film. This intervention is extended and amplified through collage and animation.

PHOTOGRAPHIC EVIDENCE AND MEDIATION

In this section I will further address the question of how the practice deploys archive film materials and the importance of this as a central feature of the work. It argues that photographic evidence must be understood within its mediating context, and that mediation can either disclose or suppress causal complexity. Through perusing this argument, it applies the points made in the section above in relation to the CR position on the construction of knowledge to the field of images and film. This develops the political role of realist collage in connection to the ethics of representation.

The use of the archive footage within realist collage is based on the contention that indexical photographic film materials have a representational and evidentiary value that is absent from purely iconic elements (drawings, paintings etc.). Furthermore, the work makes exclusive use of archival non-fictional footage. This includes amateur film, home movies, newsreels, news reports and public information films. In the production of documentary, archive materials are placed in constructed compositions that shape and mediate the evidentiary value that the footage items contain. The various implications of construction and mediation are discussed here, and advanced further in the following section and in Chapter 4.

Many film and media scholars have written of the capacity of the photographic to provide direct evidence of what happened in front of the camera at a particular moment at a particular location. The photographic image presents the actual and tangible of lived experience. This promises an access to reality that entirely drawn or iconic elements can't provide. The photomechanical process produces an indexical image that corresponds to the objects captured by the camera lens and chemicals on the film (or sensor in a digital device). The academic debate around film realism frequently cites the work of Andre Bazin (see Chapter I) and Roland Barthes. Barthes theorised the capacity of photography to connect the image with the physical object it captured at a particular instant of past time. He refers to the existential bond between reality and the photographic as 'a sort of umbilical cord' that 'links the body of the photographed thing to my gaze' (Barthes, 1980, p. 81). The light emanating from the physical bodies captured by the camera and imprinted in the photograph presents the viewer with an almost palpable connection with the past moment. This is synonymous with Bazin's contention that photographs are forced to correspond with reality, providing contact with the past by 'embalming time' (Bazin, 1960). The causal relationship between the event and the representation warrants the photograph's capacity to record what 'really happened' in front of the camera. Bazin asserted that the production of images by 'automatic means' has a radical effect on the psychology of how images are received and understood with regards to the credibility and authenticity of the image. The ways in which photographic images can 'say' things about reality has its own distinct potency. This capacity to 'furnish evidence' (Sontag, 1977) of what 'really happened' provides archive film with a strong degree of authenticity and credibility in the depiction of the actual occurrence of historical events. The viewer of an archive or found footage film 'takes up' and receives images as representations of the real world of actual lived experience. The archive film says 'these things happened in this place at this time'. The existential bond with reality is the basis of photography's status as reliable evidence. This status is acknowledged in the use of photographic materials as evidence within legal contexts (Tagg, 1988). The real occurrence of an event is proven by the image, this establishes the event as fact (notwithstanding how the interpretation of the event is shaped by contextual factors). Archive film footage occupies this factual space.²⁴

As argued in Chapter I, a collage that includes photographic materials incorporates photomechanical imprints of factual events. The presence of indexicality forces the collage to contain actuality. This eschews the exclusivity of fabrication and the subjectivity of an entirely internal, 'sealed off' image space. The ontological realism of collage is predicated on the evidentiary status of the materials it deploys. In reference to animated documentary, Jonathan Rozenkrantz has challenged the swell of critical opinion that affirms the legitimacy of animation as a non-fictional strategy. Recalling Bazin and Barthes, he contends that purely animated non-fiction, with its exclusively fabricated status, is missing the power of 'photographic verifiers' as the 'evidential ingredient' that connect images to concrete reality He says that 'indexicality is a ''sign of existence'' and, so to speak, an *existentially significant sign*' that 'requires and gives evidence of its referent' (2011, emphasis in original). With regards to the role of the indexical within collage

²⁴ This is supported by the institutional collection and cataloging of film material that identifies known contextual information (location, date, format, producers, original contexts of production and distribution etc). This reinforces the film's status as a recording of factual importance that is worthy of preservation in the interest of historical knowledge.

aesthetics, Rozenkrantz echoes a view expressed in an uncredited early description of photomontage techniques from the soviet art journal 'LEF' (1923-25), stressing the importance of the photograph's bond with reality:

By photomontage we mean the use of the photograph as an illustrative means. A combination of photos replaces a composition of graphic images. The sense of this substitution is that the photo is not a sketch of a visual fact, but an exact fixation of it. This exactness and documentariness give the photo a power of influence over the observer which a graphic image can never obtain (quoted in *Collage: Critical Views* (1989) by Katherine Hoffman, p. 11)

Also, in reference to collage, Marjorie Perloff has described the logic of the assimilation of indexicality:

The question of referentiality inherent in collage thus leads to the replacement of the signified, the objects to be imitated, by a new set of signifiers calling attention to themselves as real objects in the real world (1983, p. 40)

The potency of the photographic film image was deployed by soviet archive filmmaker Esther Shub in her political found footage works. Through the manipulation of what she called 'authentic material', the power of the image was mobilised through the creative treatment of 'historical data' (Chanan, 2007, p. 260). In this way, Shub used her film practice to rescue 'fact from oblivion and made it speak again in a new context' (ibid, p. 11). Also writing about Shub's work, Esther Leslie says a piece of film is a 'chip of the world as it is', it is a:

...piece of actuality, something that could yield knowledge about what exists, once it is deployed in the right way. It is this physically, in that it has absorbed something of a world that passed before it and that may even have been caught unintentionally on the strip (2015, pp. 9-10).

This expresses Shub's commitment to the factual status of filmic materials, and to the ontological realism of addressing 'what exists', and 'in the right way'. In her film *The Fall of the Romanov Dynasty* (1927), Shub redeployed film archive from the collection of the Russian czarist elite. In her hands, materials that were produced to revere, celebrate and elevate aristocratic society, are transformed through montage in order to highlight the injustice of power structures under the hegemony of the (former) ruling class. Facts are made to speak again and to say something very different. The indexical trace is redeployed and reversed against the grain of its original and intended political and social purpose. The aim is to use archive material extracted from its original context to offer a reinterpretation of events and to affect the 'politicised activation of 'suppressed'' ideas or the inversion of conventional meanings' (Arthur, 1993, p. 2). This is a process of reversal that Jaimie Baron has called 'intentional disparity', a disparity based on 'our perception of a previous intention ascribed to and (seemingly) inscribed within the archival

document' (2014, p. 23). As the audience is aware that the archive film was shot for another intention other than its use within a found footage montage, the disparity asks the viewer to question why the footage has been re-used in the ways that it has, and for what political purpose (Baron says that the phenomena might equally be described as 'social disparity' or 'rhetorical disparity'). Under these conditions, the index remains stable, but the iconic and connotative levels are remediated for opposite or alternative political ends. Michal Chanan describes this shift wherein 'the ideological circumstances that had produced much of the material did not adhere to the film pieces once they were redeployed in a new context. Ideology could be respun or even overturned' (2007, p. 12). In her description of what she has recently termed the practice of 'Archiveology', Catherine Russel (2018) echoes a CR perspective on the ontological status of archive films. In the turn away from the relativism of postmodernism, archive film practice has reasserted and reinstated the evidentiary value of archive and photographic media, 'underlying much of the rethinking of archive-based arts after postmodernism is a recognition that images are constitutive of historical experience and not merely a representation of it' (p. 15). Just because the meaning of an image is fluid and can serve 'multiple interpretative frameworks' (Baron, 2013, p. 4), that doesn't terminate a document's ontological link to the histories and realities it records. This position is aligned to CR's assertion of ontology and the necessity within transcendental argument to negotiate and explain the intransitive world of things themselves. As Bhaskar says, 'for critical realism, relational dialectics, however thorough-going, can never abolish the existential intransitivity of the relata' (1993, pp. 3-4).

Archive materials are antecedent knowledge objects produced in response to the intransitive. This grounds the material basis that establishes and confirms the real existence of the events that the practice negotiates. The use of archive film satisfies the empirical component of building a transcendental argument. The use of exclusively iconic and fabricated elements would exclude the presence of external, antecedent knowledge objects. As early as 1913, Guillaume Apollinaire described the production of collage as the reconfiguration of extant factual materials. He says that the presence of 'actual objects' in the collage is 'already soaked with humanity' (cited in Leighton, 1989). For Apollinaire, this is what provides collage with its particular force in addressing the social world; the reconfiguration of socially produced knowledge objects. This has been reiterated by William C. Seitz when he says: 'found materials are works already in progress: prepared for the artist by the outside world' (1989, p. 82). Susan Buck-Morrs reflects the CR principle of knowledge production when she describes the juxtapositions of collage as 'not subjective invention so much as the objective discovery of the new within the given, immanently, through a regrouping of its elements' (1977 p. 132). In this way, collage will use the archive film as 'antecedently established knowledges capable of functioning as the transitive objects of new

knowledges (...) used to explore the unknown (but knowable) intransitive structure of the world' (Bhaskar, 1975, p. 23).

Marianne Hirsch has described the tension between the indexical and the iconic in relation the meaning of family photographs. This acknowledges Barthes' indexical bond, whilst accepting the mediating forces that shape meaning in the production and 'framing' of the photograph within the collective culture of the family. Hirsch identifies a very complex and dense dialectic between the indexicality of the real, physical moment captured and the 'resistant readings' that can determine how an image is presented and understood. She suggests that the photograph can offer a truth that is located in both the indexical and the iconic, the denotative and the connotative are not mutually exclusive and antithetical; meaning is generated in their dialectical interrelationship:

The picture exists because something was there, and thus, in my own family pictures, I, like Barthes, can hope to find some truth about the past, mine and my family's - however mediated. I find this 'adherence of the referent', in the sense of its indexical presence, in my own thinking both burdensome and fascinating (...) My resistant reading of family photographs thus turns the indexical reference emphasized by Barthes into something more telling (1997, p. 6)

The 'something more telling' that a photograph offers is found *within* the mediating forces themselves, in response to, and in dialogue with the image as an objective record. The mediating forces are not a barrier or an obfuscation of truth, as an objectivist viewpoint might suggest. Rather, mediation offers potential insight into another kind of truth. A kind of truth that transcends the visible, revealing the social and familial mechanisms that generated the photograph and determines its status as a carrier of meaning. Here, there is a suggestion that the subjective understanding and interpretation of the image is not purely, epistemic and internal phenomena. The meaning is socially negotiated and shared, it is not exclusively and totally individual, so is not exclusively internal and transitive. The meaning is socially shared, so externally present. Writing on CR and the production of meaning, Gary Potter (2001) has argued for the real world, external existence of meaning. For him, meaning is not 'locked' in the transitive through the dualism of subject and object. As the structure of languages and all forms of communication emerge from other structures, including the reality of material needs and practices, meaning is a real emergent phenomenon generated in the 'dialectical interchange' of physical, psychological and sociological levels. He says:

Beneath all cultural, historical and individual psychological diversity, some aspects of meaning simply exist. Such commonalties with other human beings, which we experience simply through being alive and human, enable cross-cultural communication. Such common features of reality ground my assertion that the structure of language is not arbitrary. Meaning (...) is grounded in reality (2001, p. 190)

This is consistent with CR's insistence on the causal power of social structures, inclusive of structures of meaning. As previously argued, knowledge in the transitive is in response to the intransitive, meaning is grounded in reality, it points outside of itself to the world, not only back into itself and the sphere of discourse (this line of thinking is developed in Chapter 4). Consistent with Hirsch, Michael Chanan identifies the simultaneous, dialectical relationship between the iconic and indexical. Echoing the realist claim that observation and theory can't be fully separated, he stresses that the iconic inferences that operate through and around the indexical and denotative don't nullify the evidentiary status of the image:

...to discount the automatic function of the camera altogether and emphasise only the subjective part - the film-maker's conscious and unconscious choices - is to fall into error. For one thing, in semiotic terms, this opposition between objective and subjective is false. The photographic image (...) is both index and icon at the same time: an automatic rendering of the scene and a pictorial resemblance full of associations and connotations (2007, p. 4)

To recognise the connotative and transitive meaning of images foregrounds the subjective and the plurality of interpretative frameworks. But this doesn't sever the bond between image and referent, as recognising that the bond is mediated doesn't imply that there is no bond at all. No index remains pure and untainted by iconic inflections (Kim Ji Hoon, 2011). Images are immediately conceptualised and are fused with the iconic as they are received. This is not a collapse into relativism, but an acknowledgement of the concept laden interpretation of all images. Through associations and connotations, we imagine the causal content of an image and position it in a conceptual frame. Shaped by the inference of collage and montage, the referent of conceptual interpretation is the causally generative domain. Chanan suggests that rather than suppress the unavoidable presence of mediation, documentary practice must embrace the potential of inflection and inference through foregrounding the construction of montage, releasing and amplifying the connotative to address the real. From a CR perspective, this movement from concrete to abstract and the dialectic between the intransitive and connotative inflection, shifts representation from the empirical and actual towards the domain of the real through 'associations, nuances and undertones' that render the 'level at which things are really going on' (Chanan, 2007, p. 60). The connotative provokes engagement with the causal complexes generating the events captured in images. This extension opens an interpretive space that asks viewers to consider not just 'what happened', but how it happened, why, what it meant, and what has changed. This is the site of transfactual meaning. The properties of montage in documentary practice function as the model building that CR and the construction of knowledge supports. Hirsch refers to the interplay of evidence and an aesthetics laden with subjectivity in the construction of reality. The evidence of documentary images 'remove doubt, they can be held up as proof to the revisionists. In contrast, the aesthetic is said to introduce agency, control, structure and, therefore, distance from the real, a distance which might leave space for doubt' (1997, p. 24). This space for doubt is the slippage between the image and its referent that is enlarged when the image is contextualised and mediated. However, given the unavoidable role of mediation in most representation, 'some have questioned this distinction between the documentary and the aesthetic, highlighting the aestheticizing tendencies present in all visual representation' (ibid.). This could lead to the conclusion that all images have a diminished power to represent reality. But citing Walter Benjamin, Hirsch argues that it is not the mediation that is deceptive, but rather the empirical claims of photography and indexicality that the image represents reality 'how it really was' in a full and absolute sense:

For Benjamin, photography is too transparent, too mimetic an art, one that disguises its own inability to represent. By producing what appears to be a too straightforward or faithful reproduction of the photographed, the picture actually accentuates its own infidelity to a complicated and layered real (Hirsch, 1997, 118-119)

The surface appearance of reality captured in a photograph is only the surface of reality, causal mechanism and complexity aren't visible. The photograph might capture an event, but not the events causes and context. Hirsch goes on to say that for Benjamin, the dangerous reductionism at work in the more empirical claims of the photographic apparatus has serious political consequences. By claiming the photograph is a window onto reality, thus reducing reality to the level of events, photography can have 'dangerous, possibly fascistic, ideological implications' (Hirsch, 1997, 118-119).

On the subject of evidence, Bill Nichols has said:

Evidence refers back to a fact, object, or situation – something two or more people agree upon, something verifiable and concrete – but facts and events only acquire the distinctive status of evidence within a discursive or interpretive frame. Evidence, then, is that part of discourse, be it rational-philosophic, poetic-narrative, or rhetorical, charged with a double existence: it is both part of the discursive chain and gives the vivid impression of also being external to it. In other words, facts become evidence when they are taken up in a discourse; and that discourse gains the force to compel belief through its capacity to refer evidence to a domain outside itself (2013, p. 29)

He describes the process by which facts are mediated as evidence in order to establish a relationship of correspondence and identity with the external world. The production of photographic images by photochemical and automatic means is exemplary as a device that establishes an apparent transparency and correspondence. But like all representations and forms of knowledge, the production and reception of images is conditioned through existing conceptual and theoretical complexes. The empirical value of images is never independent of

context and concepts. As such, evidence cannot be considered a neutral carrier of empirical data. All evidence is burdened by some degree of connotation and inference, as it is part of an argument, part of a narrative about an event developed to solicit a response from an audience. But this does not mean that it can't tell us about reality, and what it tells us is legitimate and trustworthy. It's just that this truth value is subject to the fallibility and contingency of all knowledge. Evidence can be used ethically or ideologically, to reveal or to obscure.

Several scholars have referred to the Rodney King incident in exploring this point.²⁵ Nichols says:

The defense lawyers for the four LAPD officers charged in the beating turned Rodney King from victim to dangerous provocateur and converted police response from raw brutality to panicky self-defense. Their skill testifies to the malleability of footage that may document what happened on one level but not guarantee its meaning on another. The historical imprint may attest to authenticity, but meaning remains the result of interpretations applied and accepted (Nichols, 1993, p. 190)

This highlights the interrelationship of facts and values in how events are understood and how meaning is produced in the discourse that an event provokes. Nichols' point affirms that the indexicality of the document is no guarantee of an intrinsic, self-evident truth. The indexical, the fact, and 'the historical imprint', is bonded with notions of truth through the process of mediation. The truth of an image is a complex compound of the indexical record and the inferences conditioned in discourse. The Rodney King case also highlights how the transformation of antecedent materials can be used to either reveal or obscure the mechanisms generating an event. In this case, the racist social and institutional structures that led to the beating are obscured, supplanted by an erroneous, perverse distortion of real causes. The lawyer's interpretation has transcended the visible level of the footage, but only to enter the area of false appearances. In a direct inverse of the effort to reveal causal mechanisms, the real existence of the social structures at work in American race relations are hidden. Another viewing from another perspective might take for granted that these structures are very plainly and starkly 'visible', but this is counteracted by the *ultimate* invisibility of those structures. We can't know, in an absolute and unitary sense, what the police officers were thinking or feeling. No one can absolutely know, in reference to the footage, whether they feared for their lives (as they claimed). As Carl Plantinga says, 'though the video clearly showed that man's beating, it remained mute about his or the policemen's intentions and motivations' (Plantinga, 1997, p. 57).

²⁵ Rodney King was an African American man who was a victim of police brutality. In Los Angeles in 1991, King was beaten by police officers during his arrest after a high-speed chase. The incident was filmed from a nearby building. The footage was sent to a local news station, and the incident was subsequently covered by global news media. The result of the trial was a contributing factor to the 1992 Los Angeles riots.

This *ultimate* invisibility is what the lawyers so cynically exploited. The footage is shot in one single take, there are no 'in camera' or other edits. It is from one fixed angle and perspective; the only camera movement is from the hand-held shake. It is typical of the amateur footage generated by the consumer video technology of the period. The footage has not been creatively shaped through manipulation, stylisation or montage. It is a piece of actuality that has not been creatively treated. As such, it opens up the space for the creative shaping that was applied by the defence lawyers in the courtroom. The extent and power of the mediation is clear in the outcome of the trial and its consequences.

The ultimate truth is the totality of the event at every level of the intransitive and transitive, across every causal mechanism, down to the most basic physical structures. A totality never fully accessible to knowledge, across a complexity that is beyond representation. As Bhaskar says:

To completely account for an event would be to describe all the different principles involved in its generation. A complete explanation in this sense is clearly a limit concept. In an historical explanation of an event, for example, we are not normally interested in (or capable of giving an account of) its physical structure (1975, p. 111)

In this way, 'history makes fools of those who claim to have at last discovered the truth in some absolute, ultimate sense' (Sayer, 2000, p. 40).

As suggested above, we can't know exactly why something happened if we can't know precisely why agents acted. They may not be capable of accurately describing their internal motivations and reasons, their actions may be driven by erroneous beliefs that they are not fully aware of. People don't always know why they do the things they do. But by accounting for the event as accurately as possible within the limits of knowledge, we imply more values by revealing the causes and effects of the event as fully as our cognitive tools and the data will allow. This is summed up by William Outhwaite:

What science is typically concerned with is not truth or falsity in an absolute and timeless sense, but with relative degrees of truth and falsity, adequacy and inadequacy, better or worse knowledge (...) Transcendental realism (...) must be distinguished from a 'vulgar realist' position that there is some possible description which could encapsulate the truth about the world. But this is not to say that there is not a 'fact of the matter' which gives meaning to our pursuit of truth (1987, p. 40)

Evidence, like all forms of knowledge, is fallible and contingent under CR. But that does not mean that evidence does not carry any truth value, or that it can't facilitate a better understanding of the world under the right conditions. These conditions are determined by ethics and values. In relation to the mediation and the distinction between facts and values, Bhaskar has addressed the role of perlocutionary force in the descriptive adequacy of accounts of events. He uses an example from Isaiah Berlin to illustrate how true statements about an event are not equally true, as the modulation of language achieves different levels of mediation at different levels of descriptive adequacy:

The significance of the fact that one is here concerned with questions of *descriptive* (and more generally scientific) *adequacy* may best be introduced by considering a famous example of Isaiah Berlin's. Thus compare the following accounts of what happened in Germany under Nazi rule: (α) 'the country was depopulated'; (β) 'millions of people died'; (γ) 'millions of people were killed'; (δ) 'millions of people were massacred'. All four statements are true. But (δ) is not only the most evaluative, it is also the best (that is, the most precise and accurate) description of what actually happened. And note that, in virtue of this, all but (δ) generate the wrong perlocutionary force. For to say of someone that he died normally carries the presumption that he was not killed by human agency. And to say that millions were killed does not imply that their deaths were part of a single organized campaign of brutal killing, as those under Nazi rule were (Bhaskar, 1979, p. 59, emphasis in original)

The fourth statement has 'maximum explanatory power' (ibid.) as its perlocutionary force gives *more* truth than the others. Although the alternate accounts may have the appearance of 'neutrality', their truth value is poorer because of the absence of values and the suppression of causality. Andrew Collier (1994) has added to the argument. He acknowledges the role of language in providing greater or lesser evaluative force, but maintains that that the power and truth of the statement is derived from its basis in the reality of the event, an ontological phenomenon independent of interpretation. He says:

...evaluative force arises entirely out of the factual content. It is not that by bringing values into the discourse one makes it a fuller statement of the truth, but that by making a fuller statement of the truth one implies more values (Collier, 1994)

As Douglas Porpora, says, 'the two more neutral accounts are not objective. Instead, their posture of neutrality actually misleads us about what happened. They convey impressions short of the full truth (...) Here, it is neutrality rather than partisanship that distorts' (2015, p. 15). Despite their common interchangeable use, Porpora's point highlights that neutrality and objectivity are not the same thing. For CR, being objective means being true to the object in all its complexity and causality, not affecting the distance of neutrality. In being true to the object, we go beyond the empirical surface in the pursuit of stratification, causality and ontological depth. Discovering the causal connections behind events uncovers more of its significance in relation to its human impact and effects. This is how values lead to a clearer truth. Instead of maintaining the dogmas of objectivity, 'we need to come clean and admit that in many cases we are dealing with thick descriptions and moral facts, hybrids of fact and value' (ibid, p. 15).

In mediating photographic evidence of the history and identity of 'Welsh Wales' in the collage aesthetic, the compound of the indexical record and inferences generates realist collage as a hybrid of fact and value.

The analysis of the archive film as photographic evidence of causal mechanisms and how causal inference is undertaken is explained in Chapter 4. This will describe the selection and sorting of film material according to a system of analysis that targets the mechanisms of 'Welsh Wales'. The Chapter also describes how these materials are abstracted and combined within the mediations of collage.

HISTORY AND NARRATIVE

This project asks how realist collage can negotiate and represent the complexities of the history and identity of 'Welsh Wales'. The following section considers relevant theories in relation to the construction of historical narratives, connecting theories of history with the CR concepts already explored. This involves the compatibility between CR and approaches to history that are aligned with its ontological and epistemological position. It will argue that historical events are mediated by narratives in a process that is consistent with the theories of knowledge production already presented in this Chapter. In arguing that historical knowledge is a contingent material of social transmit, historical narratives are considered in relation to epistemic relativism and the interplay of facts and values in how we understand the past. It will also suggest that orthodox histories produce totalized, homogenized 'whole' narratives that obscure the complex, stratified conditions of reality. Realist collage is positioned as a form of history that generates critical realist historical narratives. The section will begin by drawing on the theories of historiography and historical narrative developed by Hayden White. It will then go on to link these ideas with film practice.

Hayden White is critical of the assumption that historians are capable of unproblematically capturing the complexity of reality and the past. This assumption is guilty of the epistemic fallacy that conflates narratives with the events themselves:

What is 'imaginary' about any narrative representation is the illusion of a centered consciousness capable of looking out on the world, apprehending its structure and processes, and representing them to itself as having all of the formal coherency of narrativity itself. But this is to mistake a 'meaning' (which is always constituted rather than found) for 'reality' (which is always found rather than constituted) (White, 1987, p. 36)

Historical narratives are a construction, reality is independent of the constructions that we produce to explain it. History does not progress in discrete units of time that can be captured in the coherence of linear, sequential narratives. As knowledge and reality are not the same thing, history as written and the complexity of events in open systems are not the same thing. Within this argument, White makes the distinction between a chronicle and a narrative. A chronicle is a list of historical events that does not offer explanation, it does not suggest why events occurred or what they could mean. In contrast, a narrative creatively imposes the form of a story, 'filling in the gaps' between events to produce the image of coherent and contiguous chain of actions and occurrences, 'in historical discourse, the narrative serves to transform into a story a list of historical events that would otherwise be only a chronicle' (ibid., p. 43). Through contextualisation and explanation, this transformation reconfigures facts through the insertion of meaning and interpretation. Any historical account that provides more than the chronological list of events operates according to a mediating process of narrativization. This process is embedded in the cultural and social situatedness of the historian. Despite the presence of narrative as integral to the modern discipline of history, its status has been attached to empirical claims of objectivity and the impartial presentation of facts. White says that the scientific view of history fails to take account of the significance of the meaning encoded by the narrative forms that history adopts. Rather than being a neutral 'carrier' or container for the objective presentation of facts, the narrative structuring of events is the location of the meaning that determines how history is interpreted and understood. The work of the historian is in the mediation of facts that implies the causal determinants at work in the generation of events. This structuring consists of representing the mechanisms that connect events, including the intentions motivating the actions of the people involved. The presence of causal mechanisms is 'set forth in the narrative in the form of the story it tells' (ibid., p. 41). The way that history is written, interpreted and understood is about more than just the facts, 'the content of the discourse consists as much of its form as it does of whatever information might be extracted from a reading of it' (ibid., p. 42). In common with 'objective' images, the operation of mediation is denied in more conventional, scientific histories that present the narrative a self-evident, natural and a transparent window onto the events themselves. But as White says, that the past cannot be objectively observed, as it no longer exists:

The events that make up the past are gone and can never be the object of a present perception (...) every putative investigation of the past is and can only be a meditation on that part of the present that is really either a trace or a sublimation of some part of the past (ibid., p. 91)

The conflation of events and narratives masks the ideological bias that underpins mediation. In contrast, White suggests that approaches to history that explicitly deploy a multiplicity of narrative codes through a 'complex multilayeredness of discourse' function as 'apparatus' for the

production of meaning, rather than solely acting as vehicles for the presentation of factual information about the intransitive world (ibid.). In layered discourses that foreground multicausality, the flat ontology of empirical history can be expanded. This is a process by which the complexity of history can be negotiated and a better understanding of the lamination of the past can be achieved. Through this sort of transfactual thinking, we can illuminate how historical events are embedded in the complexity of stratification, 'to understand historical actions (...) is to ''grasp together'', as parts of wholes that are ''meaningful'', the intentions motivating actions, the actions themselves, and their consequences as reflected in social and cultural contexts' (ibid., p. 50).

From a CR perspective, the 'parts' are the identified empirical events, to 'grasp together' is to model a multidimensional reality, 'wholes that are meaningful' are transfactual representations that apprehend the domain of the real. White refers to the emphasis on the social and cultural conditions of knowledge production in the work of nineteenth century German historian Johann Gustav Droysen. In a challenge to a conception of history based purely in empirical epistemology, Droysen asserted that any account of the past has to be considered according to its social and cultural context, defining historical knowledge as a product of the mediation of the facts through the creative structuring of empirical evidence. Recognising the simultaneous operation of facts and mediation, this is a 'discipline that is empirical and speculative at one and the same time' (ibid., p. 98). Consistent with CR, in the intermediate space between the poles of empiricism and subjectivism, the interpretation and representation of real events will always be 'worked on' through biases and processes that are historically specific, 'the historically real is never given by naked "experience"; it is always already worked up and fashioned by a specific organization of experience, the praxis of the society from within which the picture of reality is conceptualized' (ibid). White identifies the role of ontological realism and antecedent knowledge in the construction of historical narrative. Like collage, history isn't worked up from nothing, it negotiates the actuality of real things that happened in the world of lived experience. The independent intransitive world is the common object of historical writing. The work of history is to sequence and structure real events through the organisation of traces that serve as indexes of the events themselves:

...the historian cannot (...) invent the events of his stories; he must (in that other, equally traditional sense of invention) 'find' or 'discover' them. This is because historical events have already been 'invented' (in the sense of 'created') by past human agents (ibid., p. 144)

What is found and discovered are not the events themselves, but the knowledge objects that evidence events that were generated by someone else at some other time. In this sense, the work of history is inherently collective and social. Archive films are part of the store of extant knowledge objects that we can organise and form into historical narratives. The archive filmmaker uses archive materials as documents that evidence historical events whilst creatively mediating the material in the construction of narrative. This practice occupies the same space that White describes at the liminal point between empiricism and subjectivism, where the 'multilayerdness' of representation can address the 'multilayerdness' of historical events themselves. In relation to the multilayerdness, critical realist George Steinmetz has stressed the contingency of events as resulting from the stratification of reality. He defines contingency within the realist view of history:

Contingency in this context refers to situations in which complex events are determined by variable constellations of causal factors rather than a single factor or constant set of factors. Contingency thus includes both the idea that an event is not explicable in terms of a single causal mechanism (...) and the notion that the same type of event may be caused by different (sets of) mechanisms (1998, p. 173)

Given that no event is caused by a single mechanism, 'multicausal, contingency-based approaches are the most appropriate ones for capturing the ontological specificity of social reality' (ibid., p. 174).

Using terms consonant with a CR perspective, Paul Ward suggests that this should be the aim of non-fictional representation of the past:

The key is for a documentary representation of historical events not to capture the exact and detailed textures of 'what happened' but rather to communicate the underlying contextual forces at work, and thereby achieve some explanatory power rather than simply describing (2005, p. 63).

This section will now move on to applying the CR interpretation of White's ideas to film practice. Scholars writing about the capacity of film as historical narrative have recognised 'multicausal, contingency-based approaches' as an answer to the problems of scientific, empirical history (Skoller, 2005; Anderson, 2011; Rosenstone, 1995). It has been argued that conventional 'Hollywood' realism replicates the reductionism that White criticises. Robert Rosenstone has identified the key elements of historical narrative delivered by this realism; 'history is delivered in a story with beginning, middle, and end (...) The story is closed, completed, and ultimately, simple. Alternative versions of the past are not shown', and also that 'history is a story of individuals' (1995, p. 123). With these features, Roderick Coover says 'cinematic realism (or naturalism) obscures the flux and instability of actuality by neatly resolving events into single and totalizing representations' (2012, p. 210). In constraining how images and the events they depict are interpreted, this sort of production presents itself as an 'authoritative voice' that moulds a unitary,

inert past. Robert Hodge and Gunther Kress claim that the unity and simplicity of linear stories de-politicize historical events:

Narrative takes flux, incessant activity, insoluble problems, and turns them into stability, coherence, solution. It puts boundaries around disruptive processes and events, and often breaks them up further into discrete steps or stages, again limiting their disturbing force (1988, p. 230)

By 'breaking up' history, events are removed from their embeddedness in the contingency of the social process. Geoffrey Skoller has identified filmic conventions that function in this way, wherein 'notions of inevitability, predictability, and causality (...) become binding agents that seem to cement fragments of events into seamless, whole stories that satisfy our apparent need for closure' (Skoller, 2005, p. 39). Conditioned by the expectations of a 'clean', empirical history, inevitability and predictability collapse multicausality, presenting events as the closed, 'natural' outcomes of a monological process. These narratives may appeal to the psychological need to withdraw from the complexities of the past, but as White says, 'this is the coherence, integrity, fullness, and closure of an image of life that is and can only be imaginary' (1987, p. 24). The political effect of these histories is to deny the stratification determining that 'there is no inevitable outcome to anything, because so many things are happening simultaneously' (Skoller, 2005, p. 42).

In contrast, more critical and politically engaged approaches are 'most fully realized when these media are not constrained by conventions of narrative or factuality' (Anderson, 2011, p. 43). In describing an approach that recognises contingency, Steve Anderson says:

A more valuable conception of historiography is not one that recovers or preserves an objective factual history but rather one that engages actively in the conflicts and uncertainty of the past (...) to construct a relationship with the past that is imperfect and improvisational and to understand 'history' as constituted through multiple voices and cascading layers of meaning (ibid., p. 125)

In whatever form, our knowledge of the past, like all knowledge, is fallible and provisional. But rather than suppressing contingency through what Anderson calls the 'totalising impulse', gaps in knowledge offer opportunities for a socially negotiated, pluralised and transfactual (re)reading of the past. He argues that popular media and film images are central to the formation of a shared, cultural memory that is shaped in dialogue with 'official' histories. Authoritative histories are not left 'untouched' as they proliferate in culture, they are adapted and reinterpreted within other forms. In this way, historical knowledge is built in a social process that hybridises information from official sources with the popular (films, music, TV shows, video games and so on). As written history is only one way of accessing the past, engaging actively in the uncertainty of contingency calls for imaginative interventions across the range of creative devices available. As

Robert Rosenstone states, all history, including its written form, is a cultural product conditioned by accepted conventions:

...language itself is only a convention for doing history - one that privileges certain elements: fact, analysis, linearity. The clear implication: history need not be done on the page. It can be a mode of thinking that utilizes elements other than the written word: sound, vision, feeling, montage (1995, p. 11)

If language is as subject to conventions as other forms of knowledge, it does not hold a privileged position. Other forms of doing history are equally valid, and offer an alternate (perhaps superior) set of tools. Rosenstone's point suggests that we reflect on the nature of the historical thinking that is practised through films, particularly those that actively challenge the orthodoxies of totalised narrative. Unconstrained by dogmas of objectivity and neutrality, he implies that it is more emotional and intuitive, rather than analytical and structured. In the absence of the certainty and security that empirical history fails to offer, this embraces the role of the transfactual imagination. However, as Rosenstone argues, the use of creative, mediating devices should not signal the abandonment of analysis, rigour, and seriousness of intent. As CR would have it, these elements should not be used *instead* of fact and analysis, they should be applied *along with* fact and analysis. As has been argued, in its non-fictional form, collage is a method that is dedicated to a construction that mediates facts. As a 'discipline that is empirical and speculative at one and the same time', the explicit intervention of collage abandons the objectivist pretence of naïve realism, but not the facts themselves.

Filmic mediation introduces formal, stylistic devices that offer historiography the ways of thinking about and 'seeing' history called for by White. Rather than abandoning fidelity to the real, 'formal and aesthetic aspects are foregrounded to become the generative element that releases history as a force acting on the present' (Skoller, 2005, p. xv). Within the vocabulary of film, the capacity of fragmentation has been identified as an effective device for destabilising the linearity of closed narratives. As Hirsch has said in relation to still images, 'photographs are fragments of stories, never stories in themselves' (1997, p. 83). The stories themselves are built inbetween 'traces and sublimations' through mediation. Conservative histories suppress fragmentation, generating the illusion of full coherence and linear causality. True to the principles of centrifugal forms of collage, film narratives can actively use fragmentation to open the past for the critical apprehension of causal contingency. In an assertion that has relevance to both collage and archive film, Skoller says:

...films reconstruct time from a series of discrete shots, each an incomplete fragment severed from ongoing time. Both history and cinema are structured by what is missing and by the resulting gaps and elisions that can only be imagined or inferred (...) Meaning

accrues through the constellation of bits and pieces and the spaces between them, rather than the illusory totality of a seamless whole (2005, p. xvI)

If the seamless totality of a whole is destabilised, then the gaps between fragments work to infer the constellation of transfactual forces that generate historical events. This asks that viewers actively engage in an imaginative investment that generates meaning. They must 'link the fragments and reconcile the parts in an imagined vision of a whole and inhabitable world' (Coover, 2001, p. 416). In eschewing the conventions of an objective history to relay the past 'not in coherent stories but in fragments and collage' (Rosenstone, 1995, p. 201), these narratives activate the imagination in response to the real, engaging 'pulse and intellect simultaneously' (ibid.). This leads Rosenstone to claim that 'the only honest way for us to render the fullness of the past is through montage, the juxtaposition of unlike images to form new combinations of meaning' (ibid., p. 192).

The last part of this section will address the archive film practice in relation to the theories of history and film explored. This will draw from scholarship that has interrogated the specific properties of archive film as historical and political discourse. As dealt with above in relation to photographic evidence, archive film is distinguished from other forms as it contains indexical material that is causally connected to the events it depicts. Debates have identified this property as a tool for resisting, destabilising and challenging orthodox histories, lending archive film its political and social voice. Anderson has said that the need to create alternate narratives is the core motive that drove the birth and development of the form. He says, 'it is in resistance to this totalizing impulse that much archive film work originates, frequently resulting in fragmented and chaotic reworkings that open up spaces for alternative voices or readings from within received historical texts' (2011, p. 71). A prevalent part of experimental and Avant-Garde practice in 1960s European and American movements, archive film was catalysed within a countercultural context where orthodox histories were challenged. At this time, the practice was 'fed by two interdependent initiatives: the desire to reformulate tropes of historical narrative, and the micro-political critique of historical exclusion or distortion enacted by disenfranchised groups on the terrain of dominant representation' (Arthur, 1999, p. 60).

In her book *The Archive Effect* (2014), Jaimie Baron has offered a taxonomy of archive film, describing its elements as historical narrative in relation to the general property of 'foundness'. The phenomena of 'foundness' is triggered by an archival document's identity as re-used, as distinct from film materials that are generated 'first hand' by a filmmaker during production. This sense of 'foundness' is central to what Baron describes as 'the archive effect'. The presence of this effect is what lends the archival film fragment 'its aura of 'authenticity'' and enhances its seemingly evidentiary value' (Baron, 2014, p. 17). She disaggregates the archive effect into two

distinct but interrelated forms of reception. First there is the effect of 'temporal disparity'. This is the perception by the viewer that the archive or found materials contained within an appropriation film were originally produced at a different time to the production of the archive film itself. This engenders a sense of multiple temporalities that are generated within a single text. Viewers are aware of the 'then' of the production of the footage for its original purpose, the 'now' of the re-purposing of the footage in the new film, and the 'now' of the present viewing. As mentioned earlier in the Chapter, viewers of archive film also sense that the footage it contains was originally shot for a variety of different purposes, that might include advertising, home movies, educational films or newsreels. This produces the effect of 'intentional disparity'. This is an awareness of the tension between the purpose behind the production of the original footage, as opposed to the purpose of the new film. These disparities engender a form of defamiliarization that is specific to archive film practice. A number of writers have engaged with the political implications of this. Catherine Russell's theory of 'Archiveology' relates it to Walter Benjamin's figure of the dialectical image. Archive film produces a:

...point where the past and the 'now' form a constellation in the form of an image that flashes up quite suddenly (...) In archival film practices, the image bank in its fundamental contingency and instability becomes a means by which history can speak back to the present. The dialectics of the film image, and the optical unconscious, are mobilized for the ongoing rewriting and reconstruction of history as a materialist practice (2018, p. 50)

Russell's emphasis on a material practice stresses the ontological realism of archival film. The physical material of the film documents physical events that are the product of the real social relations. As products of the social process, the archive film fragment is tainted by the ideological and political contexts of its production within a matrix of beliefs and practices. Michael Zryd says that through its function as a form of 'metahistory', archive film can comment on the 'cultural discourses and narrative patterns behind history' (2003, p. 42). Anderson's analysis of archive film echoes this when he says that 'just as it is impossible to frame a shot or select a film stock without being implicated in a system of ideological values and industrial production, one cannot select an image to be reused without creating a historiographical argument' (2011, p. 70). Paul Arthur points out that the political use of archive film operates through 'redirecting' the meanings already inscribed in the pre-existing footage itself. Meaning isn't generated from nothing, but is produced through reconfiguration in a new context; 'the crucial task is not the combining of "pure," unaffiliated fragments in order to construct new meanings with alternative historical perspectives, but rather the interrogation or "detourning" of collusive strands of embedded ideology in extant materials' (1999, pp. 62-63). Within juxtaposition and recontextualisation, factual and empirical 'questions of 'who-where-when'' are bracketed in favor of an affective charge or latent meaning' (ibid, p. 65). For CR, the 'latent meaning' of factual materials lies in a

causal explanation that steps from 'who-where-when' to 'why'. This is the fulcrum of archive film as a historical and political form.

Baron has also described the potential of archive film to evoke a sense of continuity and contiguity in the emotional connection to past events. The experience of watching an archive film closes the gap between the then and now, disrupting the distancing effect that renders people in the past as 'other' and unrelated to our present social conditions. It asks us to recognize that "our" context "here and now" and "their" context "there and then" may be extremely similar' (Baron, 2014, p. 43). This has considerable political implications for our emotional experience of archive film, particularly in its power to provoke an empathy and identification. This is a response that Alison Landsberg has theorised as 'prosthetic memory', a social form of collective memory felt by people who did not directly experience the actual events:

...an experience occurs through which the person sutures himself or herself into a larger history (...) the person does not simply apprehend a historical narrative but takes on a more personal; deeply felt memory of a past event through which he or she did not live. The resulting prosthetic memory has the ability to shape that person's subjectivity and politics (Landsberg, 2004, p. 2)

This can open an interpretive space that asks viewers to consider not just 'what happened', but how it happened, why, what it meant, and what has changed. In a parallel to Raymond Williams concept of 'social extension', collage can uphold and defend social complexity, reveal the diversity and plurality of social identities and history, and extend the scope and range of images that challenge ideological reductions within regimes of representation. In terms that link with contiguity and continuity and prosthetic memory, Emma Cocker has said that:

The borrowing and reanimation of the archival fragment becomes a way of disturbing the smooth structure of an historical narrative, in order to reintroduce the possibility of other realities in the gaps and pauses (...) They attempt to liberate images and individual pasts from their static relationship to linear history, to create spaces in the narrative (2009, p. 101)

In this way, archive film can illuminate the causal links between past and present, and our contingent understanding of those links. It shows us 'that the historical event does not only reside in the past but is inevitably connected to the present' (Bruzzi, 2000, p. 30).

My work with archive film aims to confront reductive accounts that frame the history of the South Wales region according to the mechanisms of capitalist economics. This narrative asserts the inevitability and linear causality that determined the destruction of the regions industrial base, and neglects the consequent human cost of deteriorating communities and local cultures. It presents regional identity as naturalised, fixed and homogenous, suppressing the tensions and

contradictions that drive its formation and reproduction. Recently, the effects of economic and social conditions in South Wales have been fetishized through colonised representations of the Welsh working class in reality shows like *Skint* (2013, Channel 4), *Valley Cops* (2017, BBC), *The Valleys* (2012, MTV) and *Young, Welsh and Pretty Skint* (2015, BBC). These are deliberately reductive representations that channel damaging and pernicious stereotypes. They project 'attitudes *to* working people, rather than an attempt to reach, imaginatively, the feelings of their lives' (Raymond Williams, 1958 p. 92, emphasis in original). In Raymond Williams's words, they are shapes that 'confine us, confuse us, indulging and magnifying or degrading and belittling' (2003, p. 12). This is representation that is not about us, it is not for us, it is not with us, it is something being done to us, and against us.

In a challenge to this, representation and mediation can work to connect us to with a shared, social sense of political and cultural memory and identity. Mike Wayne says, mediation:

...involves linkage; it reconstitutes the less immediate and visible relations that lie behind the appearance of the object (...) Like a brass rubbing, mediation makes visible the (social) patterns and connections that make up the complete picture (...) As a critical tool, the concept of mediation is deeply subversive since it cuts against the apparent isolation and independence of social phenomena (Wayne, 2003, p. 126)

The privileging of notions of linkage and connection are synonymous with White's call for the 'grasping together' of parts, in wholes that are 'meaningful'. It is also consistent with the explicit aims of CR. In adopting a critical approach to film form, realist collage engages with the complexities of history and identity to do justice to the richness of the past.

CONCLUSION

The Chapter began by describing collective identities as a complex, layered structures that are reproduced and contested in the tension between closure and 'wholeness' on the one hand, and plurality and internal division on the other. Sitting sits at the intersection of multiple historical forces, identity is fluid and resists a unitary, fixed status. It manifests at the empirical level through actions and events, but it is a concept dependent, non-empirical object. From the perspective of CR, identity is best understood through the balance of the empirical and the intersubjective.

In common with the reproduction of identity, the construction of knowledge uses antecedent materials within pre-existing contexts. Knowledge is transformed in a social process wherein facts are conceptually and theoretically mediated. For CR, this does not lead to the relativism that denies that the world can be known, as the intersubjective production of knowledge addresses a common object, the external world. Mediation occurs because the powers that determine

facts at the level of experience are not empirically detectable. Through judgemental rationality, history, identity and the other features of non-empirical reality can be apprehended through intersubjective consensus.

The evidentiary value of archive film is in the causal relationship between the photographic and empirical events. Photographic images, as indexical traces, are used within competing interpretative frameworks. But this does not disconnect the ontological link with reality. Used as evidence within collage, photographic film can be deployed to infer the causes that generated the events recorded. Like all socially produced objects of knowledge, archive film can be reconfigured to amplify its iconic and connotative properties. This suggests that the meaning and truth value of images is located in the the dialectic between the indexical and iconic, that it is catalysed by collage. In relation to the politics and ethics of representation, in rejecting the flawed premise of neutrality and objectivity, collage can open up an interpretive space that activates causal inference.

Against the elevation of objectivity in the representation of the past, the mediating presence of form is unavoidable in historical narratives. Like all spheres of knowledge production, history is discipline that is simultaneously empirical and speculative. Narrative works to sequence and structure real events through the organisation of fragments and traces. Conventional film realism presents reductive historical narratives that collapse complexity and contingency. Alternative approaches to film history acknowledge uncertainty and the non-empirical, deploying creative mediation and inference alongside fact and analysis. According to this principle, much archive film practice has been developed to challenge orthodox histories. As a form of critical collage, archive film can illuminate the past through a multi layered discourse that offers more complex accounts. Within this project, this capacity is used to explore an alternate image of the history and identity of the 'Welsh Wales' region.

CHAPTER 4 – THE CONSTRUCTION OF REALIST COLLAGE

INTRODUCTION

As has been argued, the foundation of collage practice is the selection of materials that can be manipulated, reconfigured and juxtaposed in order to penetrate the surface, factual reality recorded by the materials themselves. This is particularly true of collage that makes extensive or exclusive use of photographic materials, including found footage film (see Chapter 3 for a discussion of photographic media and evidence). From a CR perspective, the selection of materials is driven by the search for evidence of structures and mechanisms. The combination of materials is driven by the effort to foreground and reveal mechanisms through the interdependence of concurrent layers in the collage composite. The process and outcomes of collage can reveal or amplify the presence of mechanisms that generated the empirical phenomena that were originally filmed or photographed.

The following points are reiterated here in order to ground the following Chapter:

- On the assumption of ontological realism, the world is independent of knowledge and representations. The footage has recorded empirical events that happened in space and time. Empirical evidence of events is provided in the light of the CR qualifications addressed in Chapter 3, in relation to knowledge and photographic evidence.
- On the assumption of stratification and causation, these events were caused by nonempirical structures and mechanisms in the domain of the real. Most events are caused by the conjunction of multiple mechanisms.
- The archive film documents behaviours and actions that were activated by causal mechanisms. These mechanisms are related to the structures of the history and identity of 'Welsh Wales'. Actions and events are caused by collective identity as a cultural and social structure.
- The archive film is part of the socially produced store of knowledge that we can access in the production of socially mediated, fallible objects of new knowledge.
- In a balance between the empirical and the qualitative, viewing the footage can and does allow for interpretation that identifies the mechanisms generating events. The alternatives to this are that the recordings evidence nothing at all, as the events recorded are not caused by any mechanism. Or, that the mechanisms are entirely transparent in the recordings and that no interpretation or mediation is necessary. These are unsustainable positions.

If we can assume the above is correct, as has been argued for and supported throughout this thesis, then we can accept that we need qualitative methods for analysing data in the imaginative modelling of the deep domain. This Chapter is about how this rationale is taken into the development of a practical system for the production of film collage works. It will describe the specific function of the collage work in detailing how the practice is both informed by CR and is itself a form of CR inquiry. Its aim is to articulate the collage process by breaking it down into constituent stages that 'add up' to a 'whole system'.

The theoretical framework outlined by the previous Chapters has informed the development of a research model that regulates the practical process. As claimed in Chapter I, collage is not just a material art practice, but it is a philosophical principle with particular ontological and epistemological features. The role of the collage is to answer the research questions through processes and outcomes that address the transfactual in ways not possible through other methods. The three constituent phases of realist collage as a visual research method are: the observation and sorting of the footage, the editing and rotoscoping of individual clips and elements, and the recontextualization and juxtaposition of elements. Each of these phases performs a role within a stage of the CR research across abduction, abstraction and retroduction. In order to provide the background for this work, the Chapter will begin with an overview of the multidisciplinary CR approach to the relationship of theory and practice. The next two sections will draw from concepts from within hermeneutics and semiotics in developing how the specific language of realist collage works as a model of causal structures and mechanisms. The Chapter deals with:

- How CR incorporates hermeneutics and semiotics in relation to a focus on meaning that maintains ontological realism. This sees interpretation, representation and semiotic analysis as ways of engaging with intransitive reality that are not restricted to the analysis of language and discourse alone. This lays the groundwork for a semiotic system that is compatible with CR.
- The use of thematic analysis and abduction, informed by CR, as a method for analysing and selecting the footage.
- A concept of metonymy is described wherein indexical elements infer unobservable forces through spatial abstraction.
- How metonymic fragments are brought together as collage composites. The composites
 perform retroduction through metaphor as a device for representing the domain of the
 real. This will offer a concept of metaphor that bridges the empirical and the subjective,
 consistent with CR and the balance of the indexical and mediated in collage.

The practical stages refer to the relevant practical outputs in the accompanying practice portfolio.

RESEARCH, PRACTICE AND INTERDISCIPLINARITY

Metatheory and Interdisciplinarity

CR is a metatheoretical position. Metatheory is a set of assumptions about the nature of the world and how we can have knowledge of that world. It establishes an ontological position in relation to the objects of knowledge, and an epistemological position in relation to the conditions for knowledge (Bhaskar and Danermark, 2006). In itself, CR does not endorse or imply the use of any particular theory or method. As Douglas Porpora says, 'CR is not a theory that directly explains anything, but a metatheory that establishes the boundaries between good and bad theorizing. It does so by advancing basic ontological and epistemological assumptions' (Porpora, 2015, p. 6, my emphasis). CR is a 'container' or 'home' for the ordering of a collection of theories that are brought to bear on the complexity of reality in the production of fallible knowledge. Given its focus on complexity and heterogeneity, it is cautious of the reductionism that results from an over-emphasis on a singular theory at the expense of a more multi-layered perspective; and 'it questions any ambition to develop a specific method for all research' (Danermark et al., 2019, p. 96). There is no such thing as 'the' specific method of CR. Its purpose in the research process is to provide underpinning guidelines when responding to the reality investigated, 'metatheory informs you as to what you can/cannot do (and even see) and what kind of knowledge you can/cannot obtain' (Bhaskar and Danermark, 2006, p. 294). In relation to the stratified world that CR describes, we can come to know the existence of causal structures and mechanisms through their effects, but we can't 'see' the transfactual mechanisms themselves. Informed by theories, we can obtain knowledge of mechanisms by the practice of modelling their presence in generating events, but complexity and contingency place limits on this knowledge. We can't obtain absolute knowledge of reality.

The selection of methods and a theoretical framework should be determined by the nature of the object of study, 'we cannot commit ourselves to a particular research method; we cannot decide which method is the most appropriate without taking in to consideration the properties of the object about which we wish to acquire knowledge' (Danermark et al., 2019, p. 96). This premise establishes the importance of the 'ontological - methodological link' (ibid). The object of study for this project is the identity and history of the 'Welsh Wales' region (see Chapter 3). This has been investigated through archive footage that records events and phenomena that are part of that history. This entails events determined by a plurality of intersecting economic,

political, social, cultural and material causes. If events in open systems are produced through the interaction of multiple mechanisms, then we need 'different research methodologies to 'see' the different layers of social reality' (Price, 2014, p. 64). An openness to different disciplinary perspectives has been described by Bhaskar and Mervyn Hartwig (2010) as the 'critical realist embrace'. From this 'maximally inclusive' (Bhaskar and Danermark, 2006, p. 280) starting point, multiple theories and methods are embraced, as this gives us the best chance of identifying the 'causally relevant levels of reality' (ibid) within stratified structures, providing answers to questions starting with 'what' (is the phenomena in question?) or 'why' (is it the way that it is?) (Buch-Hansen and Nielsen, 2020).

As Amber Fletcher has pointed out, while the philosophy of CR has been thoroughly explicated, the absence of literature on the applied, practical implications of CR leaves its role in shaping research processes 'vague at best' (2017, p. 185). More recently, Noora Ronkainen and Gareth Wiltshire (2021) have cited work that has developed a variety of methods underpinned by CR ontology, including realist interviewing (Mukumbang, Marchal, and Van Belle, 2019), realist grounded theory (Hoddy, 2019) and realist case studies (Wynn and Williams, 2020), as well as their own system of realist thematic analysis (see Thematic Analysis, Abduction and Selection section below). They also suggest that methods need refinement and adaptation when applied to different forms of data, including visual data. This points to the need to develop visual research methods that are compatible with CR, and could be applicable across the arts and media disciplines. At this stage, there is little research that is informed by CR within the arts and media areas, and none that is related to non-fiction film (this is a gap that was pointed out by Gary Maclennan in 1999). Although the lack of previous work in the use of CR in creative practice research presents a challenge, it also opens a space for the development of the novel methodology described here, supported by the theoretical underpinning laid out in the thesis in the first three Chapters. This lends the research originality in relation to its processes and techniques. Supported by CR's openness, and in the absence of any pre-existing structure to follow, the research has adapted and modified the key stages of realist research across thematic analysis, abduction, abstraction and retroduction. The collage method that runs through these stages is informed by and integrates the theories and ideas articulated in the previous Chapters. CR's inclusivity allows for the interconnection of ideas drawn from politics, philosophy, sociology, media, animation, documentary and history. So far, the thesis has established a focus on negotiating the interplay of the empirical and the subjective in disclosing causal complexity. This common argument unites the various ideas under the umbrella of CR. The remainder of the thesis will now focus on how this will be applied in practice.

Theory and Practice

According to its openness and pluralism, CR advocates the development of alternate ways of engaging with complexity and producing knowledge. Andrew Sayer has argued that research must avoid the reductions of dualism to do justice to realist depth ontology. The predominance of empiricism on one hand, or subjectivism on the other, restricts the scope of research to the surface level of experiences and events. In discussing the split between subjective and objective within social science, he identifies a series of associated dichotomies (mind/body, individual/society, thought/action, mental/material) that tend to negatively condition attitudes and approaches to research, including the split between knowledge and practice. Sayer maintains that this division is 'beset with misconceptions which generate problems in our understanding of the world and of ourselves' (1992, p. 23). Through the influence of dualism, making and doing are removed to 'a kind of limbo' that separates thought from its function and practical expression in the world. This has led to the 'widespread belief that theory and practice are two completely different things' (Danermark et al., 2019, p. 199). To challenge this division, critical realists hold that theory and practice should not be regarded as two independent spheres. As the intransitive is the common object of all conceptualising activity, theory is developed through the practice of mediating the external world. As such, there is no inherent and natural conflict or contradiction between theory and practical activity. Theory is not separate from our lived, material experience. Theory is 'nothing else but the concepts we have of reality (...) an extract containing the fundamental or essential part or the core of a phenomenon, which is as concrete a phenomenon as any other object', as such 'there is no such contradiction between theory and practice' (ibid.). Theory develops starting points for empirical analyses and practical work. In turn, practice then conditions and transforms our theories in an interdependent relationship. Objects of study are always unavoidably theoretically defined. Rather than seeing theory and practice as distinct, they are overlapping and intersecting parts of a continuum (Wayne, 1997). Given this, it is 'not a question of knowledge developing autonomously first and then (perhaps) being applied in a practical context later: knowledge and practice are tied from the start' (Sayer, 1992, p. 25).

With regards to film production, the combination of photographic recording and aesthetic construction sits at the intersection and overlap of the objective and the subjective. This approach asks us to see the factual and the mediated as operating simultaneously and dialectically. This has the potential to engage with and 'reveal' what is going on beyond the surface, empirical level of reality. Given that reality comprises of more than the observable and factual, we can and do have ways of negotiating and understanding what is not visible or directly recordable. Theory doesn't develop in a vacuum away from and distinct from observation and

direct experience, and empirical observation cannot happen outside of conceptual frameworks. Theory is not observation or practice neutral:

As regards the alleged neutrality of theory with respect to observation, the conventions of such theories would be free of any constraints regarding practical adequacy (...) for in being immune to challenges from any possible observations they would be unable to make any firm commitments about any real objects (ibid., p. 74)

This echoes Lovell's contention that 'theories, scientific laws, methodological practices, etc. - are not the free constructions of human creativity, as the idealist would have it, but objective reflections of that underlying reality (the real world), in its essences rather than its appearances' (1981, p. 70). If theory wasn't responsive to observation and the empirical, it would have nothing to say about the world, and be of no practical value at all. Any system of concepts that refer to the world must be judged according to empirical anchors and material and practical contexts. On the other hand, observation is not theory neutral, as it is conditioned and mediated through existing theories. Non-dual ways of understanding reality are both theoretical and empirical, intersecting and integrating the factual and constructed. The interdependence of theory, observation and practice dissolves boundaries and divisions, allowing for a more cyclical and interactive approach.

Arguing against its subordination to theory, Sayer has expressed the realist emphasis on making and practice as a crucial component of research and knowledge production. In criticising what he calls the 'intellectualist fallacy' he says that there is a 'tendency to pedestal spoken or written forms of knowledge and to imagine that these are the only ways in which meaning can be communicated and knowledge can be "carried" and applied' (1992, p. 14). The presumed superiority of the written and spoken reduces other forms of knowledge that are not directly grounded in linguistic skills. This includes the types of 'everyday knowledge' that take 'a practical form' (ibid, p. 15). We may have knowledge that is not wholly expressible through language, that still plays an essential role in how we interface with the world and communicate with others. We know the world through a range of interactions, signs and forms that are not exclusively linguistic, including gestures, actions, non-verbal inferences and images. Complexity and density in the exchange of meaning determines that it is not possible to 'to live on propositional knowledge and linguistic communication alone' (ibid.). Therefore, making and doing should be considered alternate forms of 'communicative interaction' that can communicate in ways that are beyond the limitations of the spoken or written. Based on its particular properties and conditions, realist collage promises the possibility of addressing causal complexity in a way that is not replicable in written or other forms. In addressing the research questions, the development of the research model and its component parts is directed towards this aim. As Timothy Rutzou says:

...a methodology is only useful or relevant when its operating apparatus conforms to independently existing structural characteristics (...) Methodology has an inherent teleological orientation, a purpose, on account of which it is deployed in accordance with its internal mechanisms of operation to get at a particular sort of phenomenon (2016, p. 331)

The 'operating apparatus' of realist collage is a set of stages within a process that will 'get at' the causally generative domain. Consistent with the depth ontology of CR, this legitimates a layering and stratification of communication that exists on a number of different levels, and this has the potential to communicate in ways not limited to the linearity of language. Photographs, drawings, films and non-verbal sounds can contribute to how we understand and gain knowledge of the complexity of the world. Art practice can operate as a 'skilled practice of giving shareable form to our aesthetic experience - that mediates between our individual atomistic aesthetic experiences and our social surroundings' (Wilson, 2020, p. 8). Art and media practice is a shareable, social form of knowledge that is a key part of how we build understanding of reality and the social world, and our position within it. In his call for the development of more adequate metaphors of social complexity, José López urges us to embrace the social and plural basis of knowledge production. He says, 'it is only by recognising the discursive features of our theory production that we can search for more powerful metaphors of social organisation, and thus more powerful ways of seeing social structure' (2001, p. 93). Having situated hermeneutics and semiotics within CR in the next two sections, this Chapter will go on to describe the 'internal mechanisms of operation' that allow collage to undertake this work.

Overview of Research Process

The collage process determined by the components described in this Chapter balance and integrate theory and practice. It has been developed in response the particular context of the project and applies the key phases of CR research within a specific model. The process proceeds according to a nonlinear structure of overlapping and interdependent stages. Danermark et al. (2019) say that the divisions separating the practical and the theoretical can be surpassed through what they call a 'tripartite regulatory relationship' that marries ontology, methodology and practice. In this relationship, practice is undertaken under the guidance of a set of theories that are rooted in a metatheoretical commitment. Similarly, Archer et al. (2016) suggest that 'we might think of this in terms of three layers: our empirical data, the theories that we draw upon to explain our empirical data, and our metatheories - the theory and the philosophy behind our theories'.

There are a number of different systems that have been proposed by critical realists that separate the research process into a series of stages (Collier, 1994; Decoteau, 2016; Danermark et al. 2019). Although it has been acknowledged that these systems need not be followed in a linear, rigid pattern (Danermark et al. 2019), it is still the case that 'in practice, there are (...) very few examples of critical realist scholars who follow such models slavishly' (Buch-Hansen and Nielson, 2020, p. 66). This reflects Bhaskar's assertion that methods should always be context dependent according to the objects of study and how we can know them, which counteracts the proposition of a fixed system. There is also a risk in proposing general models, that formal, linear procedures could be seen 'to exemplify the difference between theory and practice' (ibid.), unintentionally falling back into the dualisms that CR seeks to avoid.

Buch-Hansen and Nielson counsel against a universal, rigid system, but suggest that the primary 'building blocks' of CR research, underpinned by its ontology and epistemology, are used in various ways to conceptualise the objects of study and the possible causes behind them. They are: theory, abstraction, retroduction and the construction of models. This is unusual in the literature as they exclude abduction from the stages they identify, and suggest a conflation of abduction and retroduction when they say that 'retroduction is associated with what Charles S. Peirce (...) referred to as ''abduction''' (p. 69) (the distinction between abduction and retroduction is returned to later in the Chapter). Blom and Morén (2011) explicitly include abduction, and suggest this series of flexible stages:

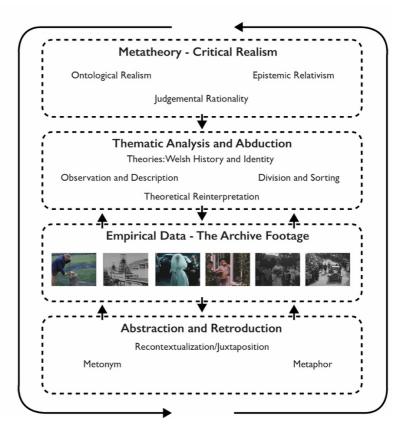
Step 1. Observation/description
Step 2. Division and sorting
Step 3. Abduction/redescription/theoretical reinterpretation
Step 4. Retroduction
Step 5. Contextualization/concretization
(p. 67)

In developing a CR approach to ethnography, Claire Decoteau (2016) insists that:

It is important to retain the abductive component of research in ethnography, in order to highlight the importance of hypothesis-generation for innovative theorizing. In abduction (...) surprising empirical findings lead to hypothesis-generation (...) However, between abduction and retroduction, 'abstraction' is essential (p. 72)

The research model presented here responds to these developments through a specific approach to abduction, abstraction and retroduction within the collage research process. When the collage process is undertaken, they are the guiding and organising principles operating in what materials are selected, and how and why they are applied. In line with this, the structure of

the research process is outlined in the diagram below and is described in this Chapter. This sets out the overall structure that determines how realist collage carries out the CR research and what components it includes:



Metatheory – Critical Realism

The philosophical framework for the research in ontological realism, epistemological relativism and judgemental rationality, as well as the other concepts that form the ontology of CR (see Chapter 2). This determines how theories, data and practice are ordered and used with regards to their status as evidence and their capacity to generate knowledge of causal complexity.

Thematic Analysis and Abduction

As Amber Fletcher (2017) has said, 'CR aims to find the best explanation of reality through engagement with existing (fallible) theories about that reality' (p. 186). The theories of Welsh identity introduced in Chapter 3 are used to evaluate the footage to identify the possible presence of structures and mechanisms, as evidenced by the data (the archive footage). They are the existing theoretical resources used to inform the thematic analysis applied in the observation and analysis of the footage. Abductive inference is conducted in the process of dividing and sorting the footage into smaller units. Temporal video editing is the practical method used at this point.

Empirical Data – Archive Footage

The archive footage is the data that provides access to the object of study, the complex and layered identity of the 'Welsh Wales' region.

Abstraction and Retroduction

The collage carries out the modelling of structures and mechanism through abstraction and retroduction. This is done through the abstraction of fragments from the footage, which allows for recontextualizations through temporal and spatial juxtaposition. This is informed by a critical realist approach to semiotics and the use of metonym and metaphor developed in the practice. Practically, this stage includes the spatial extraction of elements from the footage (abstraction) and spatial and temporal juxtaposition (retroduction).

The large arrows running around the structure, and the smaller arrows pointing up and down through the 'layers' indicate the process is not conducted on a strictly linear basis. For instance, ideas for how the footage will be used in abstraction and retroduction occurs during thematic analysis. Thematic analysis will continue during abstraction and retroduction, and does not 'stop' at its own stage.

CRITICAL REALISM AND HERMENEUTICS

The process of viewing, analysing and using the archive footage entails identifying and modelling mechanisms through interpreting and manipulating the content of the film. The approach to analysing the footage will be qualitative and centred on meaning. Qualitative methods respond to the concept dependence of the social world. As described in Chapter 2, concept dependence refers to the claim that human practices and social structures 'do not exist independently of the agent's conceptions of what they are doing in their activity' (Bhaskar, 1979, p. 48). Given this:

...we can only investigate this interior by engaging with it hermeneutically. The consequence of this starting point is that critical realist social research is characteristically associated with methodologies that are typically considered to be qualitative or focused on meaning (Price & Martin, 2018, p. 92).

Hermeneutic engagement is necessary in moving beyond the surface level of events towards understanding the underlying reality not available to direct perception. Unlike the objects of natural science, this level is comprised of forces and powers that can't be measured or quantified. As they can only be known through qualitative analysis, they must be conceptualised in the imagination. As Andrew Sayer says, 'we can understand and "use" meanings but we can't pick them up, prod them or measure them. Deciding how to interpret, say, "patriotism", is simply not like measuring the boiling point of water' (1992, p. 221).

Natural scientists deal with a 'single hermeneutic', as natural objects have no human meaning in themselves before becoming objects of study. Their meaning is within the confines of the scientific discipline and knowledge, not 'within' the objects themselves. In dealing with social reality, we navigate a mediation between our own interpretations, plus the meaning that is already embedded in the phenomena studied, as people are active in producing the contexts and internal meaning of those phenomena. This means that there is a 'double hermeneutic' at work. This presents difficulties, tensions and complexities in the judgement of what is correct, accurate and most truthful. But this doesn't mean that understanding and explaining the social world is impossible, or that knowledge must collapse under the weight of relativism. The mediation of non-empirical levels of reality is undertaken continually and successfully. As Sayer says, 'it must be remembered that hermeneutic problems are not insuperable but rather something we cope with continually in everyday life' (ibid., p. 221.). As most of reality can't be 'seen', it must be pieced together and negotiated through an iterative, fraught and fallible process. This reaches for the best available knowledge to deliver the most adequate account, that is always imperfect and never total. Against the notions of incommensurability favoured by postmodernists, rather than suggesting relativism or the denial of an independent ontology, the contestation of meanings proves that there is something external to discourse that is being contested. If purely subjective meanings (if such a thing was possible) were equally valid, there would be no tension or conflict, as there would be nothing to judge them against. Disputation not only indicates that we inherently and instinctively know the external world is there, but also that we care about the fidelity to reality within competing claims. For critical realists, this is the purpose and aim of discourse within judgemental rationality. On this, Sayer says 'the contestation of meaning (...) points not only to the fact that it is contestable but to the fact that it matters that not just any interpretation is acceptable. Dissensus over interpretations signifies not that we are indifferent to them but that they matter' (ibid., p. 221-222). In relation to the complexity of events, contestation and ambiguity in interpretation points to the fact that all events will produce multiple, overlapping meanings. Rather than provoking relativism, ambiguity is born out of and indexes the reality of causal complexity, as all events are produced by simultaneous causes that lead to multiple meanings. Sayer uses the example of an army parade on Remembrance Day, 'a deeply ambiguous event, combining both a recognition of the horrors of war ("Never again...") and a celebration and glorification of the army and perhaps war itself (ibid, p. 222). The horror of war and the glorification of war may seem antithetical, but both mechanisms could be causes of the same event, and both could be meanings attached to the event. The effort to make sense of the world and to cope with complexity underpins our propensity to focus on singular causes and meanings, but this denies reality:

...to interpret an event as ambiguous or as having multiple meanings is not to admit just any interpretation for not all interpretations would recognize the ambiguity. Ironically, if we are to do justice to ambiguity we cannot interpret it in just any way (p. 222)

Ambiguity recognises the multiple parts that comprise the whole event. Interpretation requires working through relationships and examining the meaning of parts in relation to the whole, and the whole in relation to the parts. As Philip Gorski puts it: 'the accurate conceptualization of a social structure must be pieced together from the multiple perspectives out of which it emerges in the first place' (2013, p. 666).²⁶ In this way, the interpretation of complex events is made 'in the light of knowledge of the material circumstances, social relations, identities and beliefs and feelings to which the contested ideas relate' (Sayer, 1992, p. 223). This situates hermeneutics as compatible with the judgemental rationality of CR and the critical capacities of collage practice. It is in the properties of recontextualization and juxtaposition, as a form of retroduction, that collage can defamiliarize events and address their multiple meanings and causes.

Despite the centrality of meaning suggested above, there are fundamental differences between CR and the tradition of hermeneutics. Realism responds to the reductions of empiricism and conventionalism by asserting the independence of reality (see Chapter 2). Hermeneutics is concerned with explaining the social world through its analysis of the production and transfer of meanings. Given its ontology, CR is sensitive to an idealising over-emphasis on meaning, and cautious to avoid a conflation of reality and interpretation. Conversely, disregarding hermeneutics would make it difficult for critical realists to engage with the role that meaning plays in the social process. For Bhaskar (1979), the object of social science is a society made up of agents conditioned by structures, who are also capable of reflecting on and modifying their actions. Through this, they are able to reproduce and transform social reality (see Chapter 2). People will be motivated to act according to the meanings they attach to their actions and the results of those actions (like abhorring the horror of war and glorifying the army). In contrast to the natural sciences, 'the objects of natural science are naturally produced but socially defined, the objects of social science are both socially produced and socially defined' (Danermark et al., 2018, p. 20). The understanding of meanings is central to our capacity to explain a socially defined object, the concept dependent social world. Concept dependence can be defined as 'the dependence of human practice on systems of "meaning" or "signification" (Steinmetz, 2004). As Gorski puts it, 'we can only ever observe social structures via the activities and concepts of

²⁶ Gorski also states that social structures 'may also include dead persons, whose agency and intentions "live on" in social structures through their mental and physical labor and creations' (2013, p. 666). This echoes Margaret Archer's contention that 'the concept-dependence of such structures can be affirmed in only one acceptable way: by reference to the concepts (ideas, beliefs, intentions, the compromises and concessions plus unintended consequences) of the long dead' (1995, p. 147). This indicates the potential durability of social structures and mechanisms across time, and suggests how archive footage acts as evidence of structures that may have persisted across multiple generations.

human beings or the material traces and artifacts they generate (...) Unlike natural reality, social reality is not independent of human minds' (2013, p. 666). As the deep domain is not directly perceptible, and is not transparent to us through the empirical level, interpretation and conceptualising is necessary. Without interpretation, we are 'stuck' at the surface level of events.

Although Bhaskar advocated the role of hermeneutics in realist research, this comes with the warning that 'it is the characteristic error of hermeneutics to dissolve intransitivity' (Bhaskar, 1979, p. 48). It is a tendency of hermeneutics to 'bend the stick' too far towards subjectivism and away from ontology (sometimes away from ontology altogether). To the critical realist, the focus on meaning should not suppress the independence of the external world. Meanings are part of that world and must be studied to understand reality, but never obscure its existence. As referred to in Chapter 3, Garry Potter asserts that language and meaning are rooted in the materiality of the intransitive domain. He says:

The structure of language (which includes a social materiality of conventionally bounded meanings) emerged from other structures, other aspects of reality, including the realities of our needs and interests, our necessity to communicate and act within a natural world, of which our nature is just a part (2001, p. 188)

CR's use of hermeneutics resists the danger of the epistemic fallacy through its focus on the independence of reality. Just because our access to the social world is through interpretative processes that are inseparable from the social world, it does not follow that 'this is all that exists, or can be known to exist' (Outhwaite, 1987, pp. 76). As Fairclough et al. put it, 'just because the relation of reference between individual lexemes or phrases and objects to which they refer is not one-to-one or self-sufficient, it does not follow that language and ways of thinking are unconstrained by the world' (2002, p. 5). The absence of an absolute correspondence theory doesn't collapse into relativism. Language and representations have an indirect relationship with reality, but the relationship is not arbitrary. The constraint forced on representations is that they are not conjured from nothing. They respond to the external world. The implication this has for interpretation is that it can't be considered entirely 'of our mind', it is not purely intransitive or relative. As Kieran Cashell says, 'interpretation is both motivated and determined by socio-historical (transitive) and existential (intransitive) factors. Therefore, clearly, interpretation cannot be regarded as irreducibly subjective or relativistic in nature' (2009, p. 157).

As social things usually have non-human parts, the social is neither immaterial nor a different ontological realm than the material, it consists of entities with material parts (Elder-Vass, 2012). CR should not 'lose sight' of the independent world, or the fact that the social world is made from agents, actions, concepts *and* material parts. Maintaining its particular footing in ontological realism is how it negotiates the dualism of the subject and object split. However subjective our

understanding, we need to keep hold of the object as well, as 'the failure to grasp the specificities of the concrete inevitably weakens attempts to inform practice. Practice always takes place in the muddy waters of the concrete' (Sayer, 1981, p. 6). Actions within a concept dependent society are conceptually mediated, but 'action always, or almost always, has a material (or outer) aspect, so that it cannot be reduced to its conceptual component' (Bhaskar, 1979, p. 136). As Porpora puts 'along with the discursive, there is also the extra-discursive, the two often intertwined. To forget the latter in an exclusive focus on the former is a reductionism of an idealist sort' (2015, p. 51). Using these points as a basis, we can see that the material parts of social structures are connected to and manifest their non-physical aspects. Social structures can be embodied in physical phenomena, but that does not render causality fully available to perception (The British flag is a physical outcome of the structure of Britishness, but it does not make the complexity of Britishness visible). A distinction should be made between the physical, factual outcomes of causal structures and the transfactual causes themselves. However, the factual can *infer* the non-empirical within analysis that is focused on moving past actualism to the real domain.

The double hermeneutic of archive film collage takes place through the analysis and construction of film elements that are already the product of other people's understandings and actions. The research does not involve witnessing any event on a 'first hand', primary basis. The production of the archive films used in film collage was activated by the creators need to capture and commemorate aspects of their social reality. The selection and omission of events within the films are premised on the values and perceptions of the people who made them. In reference to the production of amateur and home movies, Patricia Zimmermann says that 'film artifacts present a materialisation of the abstractions of race, class, gender, and nation as they are lived and a part of everyday life' (2007, p. 4). I would extend this argument to all films found in the archive, not only the 'home movies', as all films are products of the cultural contexts they came out of. The historical actions, objects, rituals, speech and behaviours accessible through the materials are bound up in a matrix of social associations and connotations that are integral to the formation of identity. The events themselves are embedded in the system of values, beliefs and meanings held by the people who were filmed (and did the filming). People's beliefs and values, and the identities that they structure, are the reasons behind the actions that generate events; 'in so far as reasons and beliefs can be causes of social events, the evaluation of interpretive understanding is not so different from that of causal explanations as is often supposed' (Sayer, 1992, p. 223). This is consistent with Bhaskar's support for the recognition of reasons as causes, 'for every action (or belief) there is a set of real reasons, constituting its rationale, which explains it (...) Reasons, then, are beliefs rooted in the practical interests of life' (Bhaskar, 1979, p. 96). Socially shared, 'everyday knowledge, perceptions and concepts' are a primary causal force governing social actions and events, they are 'the immediate mechanisms behind the activities making up the social phenomena' (Bhaskar, 1979, p. 13). This suggests that fragments within an archive film function metonymically, they are vectors of the social structures that condition the events and behaviours recorded. Zimmerman's notion of the 'materialisation of abstractions' indicates how the archive film can operate within the modelling of non-empirical aspects of reality as 'intelligibilia' (Archer, 1996) that allow access to structures and mechanisms:

...hermeneutic interpretation is the distinct kind of interpretation we use to decipher the meaningful content of anything that results from intentional behaviour. Through hermeneutics, we decipher what a product meant to whoever produced it. That meaningful content is what is referred to by intelligibilia (Porpora, 2015, p.161)

We need the interpretation of meanings in order to make sense of events that are both concept dependent and material. We have to use interpretation because there is no alternative way of understanding the social world. In order to maximise the adequacy of explanation, a fact must always be put into a larger context of meanings so that its significance becomes clear. Interpretation is a process wherein we piece together meaning and knowledge in an interplay between facts and the value-laden concepts we use to connect them and make sense of them (See Chapter 3 on Photographic Evidence and Mediation for a discussion of the fact/value distinction). We place facts within what we think may be the 'whole picture' that explains why an event occurred. This is the transfactual process of revealing the causal mechanisms at work. This stands against reductive accounts that deny multicausality by collapsing reality to the domain of the actual and empirical. In a description that is pertinent to the principles of collage, Danermark et al. say:

Every action gets its meaning in relation to other actions and in this way the web grows from a single detail to a comprehensive social web. There is a constant interplay between the whole and the parts. All interpretation is contextual in time and space (2019, p. 174)

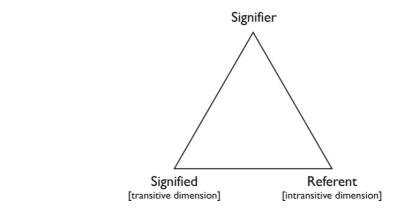
The collage practice will approach hermeneutics and interpretation in this way. The events within the footage will be viewed as parts of a reality comprised of the different causes that generated it. The events will be analysed as 'pieces' of the 'whole' laminated reality. Interpretation will look for elements that are a part of the social whole, these parts will be abstracted in order to reconstitute the whole in the transcendental movement from surface to depth, in a shift from the domain of the empirical to the domain of structures and mechanisms.

CRITICAL REALISM AND SEMIOTICS

This section addresses the relationship between CR and semiotics and concerns the production of meaning in response to an external reality. Building on the previous section on hermeneutics, it acknowledges the role of meaning systems in how we understand reality, whilst maintaining a focus on ontology and the independence of being. The argument that hermeneutics can function extra-discursively to represent the intransitive is extended to semiotics. Through this, semiotics is incorporated into a CR research framework that supports the investigation of the 'Welsh Wales' identity as a feature of non-empirical reality through collage.

According to the theories of Ferdinand de Saussure, a sign is made of two elements: it contains a signifier, the vehicle for meaning (the spoken or written form), and the signified, which is the concept or meanings attached to the signifier (Chandler, 2007). The relationship between the two is 'arbitrary', in that the meaning attached to the signifier is a social convention, there is no 'natural' or 'fixed' connection between them that is external to language. Signs are distinguished by their differences, they produce meaning through relations of contrast with other signs, which together form the total system of meaning. In developing a CR approach to semiotics, Tobin Nellhaus has pointed out that Saussure's signs exclude extra-linguistic elements that are outside of the signification process. He argues that as the Saussurean sign gives no role to the external world, it can't be compatible with ontological realism, so 'it cannot be incorporated into critical realism' (1998, p. 2). In common with Nellhaus, Terry Lovell sees Saussurean linguistics as the basis for conventionalist accounts that place meaning and the construction of theory exclusively within a system of terms. Theories and concepts are then 'internally defined by the theory rather than by reference to some object in reality' (1981, p. 16). As Robert Hodge and Gunther Kress put it, 'as long as the general relationship of semiosis and reality is avoided as too problematic, the study of strategies for relating specific acts of semiosis to reality also tends to be deferred or ignored' (1988, p. 26). In this way, reality and language are conflated in the conventionalist form of the epistemic fallacy. Realism seeks to reassert ontology into meaning systems, as 'signs cannot be permitted to swallow up their referents in a never-ending chain of signification, in which one sign always points on to another, and the circle is never broken by the intrusion of that to which the sign refers' (Lovell, 1981, p. 16).

In his later work, Bhaskar also disputes the idealism of the Saussurean sign, maintaining that 'the centrepiece of any adequate theory of meaning must be the semiotic triangle' (1993, pp. 222–223). The triangle adds the real object of reference to the semiotic system. The triangle is illustrated in this diagram:



(Source: Nellhaus, 1998, p. 2)

The referent's existence in the intransitive dimension asserts its independence from its identification as an object of knowledge. Nellhaus argues that Bhaskar's triangle is very similar to the concept of the sign developed by Charles Sanders Peirce. Although Peirce 'occasionally makes odd swerves into both empiricism and idealism' (ibid., p. 3), some of the key features of his ideas are compatible with a form of semiotics that addresses the intransitive world. Peirce distinguishes between the 'dynamical object', which is the real object 'out there' in the world, and 'immediate object', which is the object as the sign presents it, as a perception or mental image. Nellhaus aligns the distinction between the dynamical and the immediate with Bhaskar's distinction between the transitive and intransitive dimensions:

The dynamical object is relatively independent of the present thought (and thus intransitive) and remains an influence upon semiosis, and therefore the immediate object tends to give at least a hint or indication of the dynamical object. Thus knowledge of the dynamical object is possible, even if mediated and perhaps approximate. Signs, then, mediate our interpretive relation to the world (ibid., pp. 4-5)

Peirce's system of meaning eschews the epistemic fallacy by anchoring signs in the intransitive world. The socially negotiated function of signs makes them 'inherently dialogic and social' (ibid., p. 7), but the socially negotiated conventions of meaning don't 'swallow up' the independent reality of the referent, as 'through the object, every sign maintains connections to history and society' (ibid.). This echoes Garry Potter's (2001) argument that meaning is embedded in the materiality of the intransitive domain. If communication does not exist wholly independent of material conditions, signs are of and within the external world, as well as being representative of it. Valentin Voloshinov pursued this line or argument in critiquing the idealism of Saussure's model of a sign. From the perspective of ontological realism, 'a sign is a phenomenon of the external world' that has 'some kind of material embodiment' (1973, p. 10, cited in Chandler, p. 52). Citing Voloshinov, and echoing Hodge and Kress's identification of the 'multi-accentuality of the sign' (1988), Nellhaus asserts that from the CR standpoint, signs must be seen as simultaneously material, sociological, and meaningful. The layered properties of the sign are concomitant with

the composite nature of real events themselves. As products of the ontologically heterogenous social world, events emerge from the interaction of people, relations and material things. Fairclough et al. argue that 'the identification of an "event" and its constitutive elements (persons, objects, places etc.) from the ongoing flow of social action and social processes necessarily requires some act of semiotic interpretation' (2002, p. 5). This is because the full, non-physical constitution of an event can't be known through the empirical alone, it has to be imagined. The imagined is the only access to what is most important and valuable in the understanding of an event, its causes in the generative domain that lie beyond its surface appearance.

In navigating the space between the empirical and subjectivism, CR tries to relink concepts and the real, and the signified and the referent. In an absolute separation, idealism denies that a concept can represent the intransitive. But as Bhaskar says, 'whereas for transcendental idealism the imagined mechanism is imaginary, for realism it may be real, and come to be established as such. What is *imagined* may be real; but what is *imaginary* cannot' (1975, p. 146, my emphasis). An emphasis on the imagined indicates that the object and referent of semiotics is often of a non-physical, but real, kind. As established, the intransitive contains the material and the non-material forces that can generate events. As Nellhaus has argued, Peirce's system is sympathetic to realism as it includes the physical and external. This extends past the empirical, as 'Peirce's referent (...) is not limited to things which exist in the physical world' (Chandler, 2007, p. 61).

Kieran Cashel has written of the function of representation within the CR focus on 'independently existing structural characteristics' (Rutzou, 2016, p. 331). He describes the aim of representation within realist methodologies in similar terms to Rutzou, 'as purposive activity, it should be regarded as teleological in nature: pursuit of an external object that establishes the internal conditions of possibility for representation-transcendent contact with that object' (Cashell, 2009, p. 137). Here the end goal of representation is the revelation of a non-empirical reality through forms that exceed their own internal conditions, *through* those internal conditions. For Cashel, this is only possible if representation is undertaken with an awareness of the separation of the representation and the object. Reality is the 'truth maker' (Porpora, 2015), and not the representation itself. Things are true before we come to know and represent them. The intransitive and transitive can't be identical:

What is essential to avoid here is the unintuitive notion that the act of representation confers reality on what it refers to. If this is rejected, representation can be acknowledged to disclose reality *only* if what it represents is ultimately *separable* from its representation (Cashell, 2009, p. 138, my emphasis)

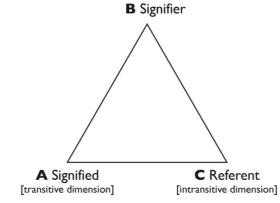
If it can't be divided in this way, representation can only refer to itself. If it has no referent in reality, it is imaginary and has no relationship with the intransitive. Representation:

...appears now as an opaque surface with its own unique material characteristics rather than a vector that relays attention to something else. Such a crucial switch leads to the error that has been identified as the 'aesthetic fallacy': the conviction, related to the epistemic fallacy, that the referent is always reducible to its representation (ibid., p. 153)

This applies to fictional entities that are of *an* invented world, rather than *the* historical world. Realist representation presupposes external reality and *is* primarily a 'a vector that relays attention to something else'. This separation is integral to representation that is distinct from but responds to what 'is there' in the world. As representation is not entirely epistemic, and not entirely objective either, it is in the zone occupied by the signifier, between the intransitive and the transitive, and between the signified and the referent. From here, representation acts as the mediator between the two dimensions. In reference to Bhaskar's triangle, Cashell says:

It then becomes possible to claim that if A is the transitive and C the intransitive, then B is the process of representation that mediates their interaction (...) The transitive can therefore be recapitulated as the intransitive mediated through representation (ibid., p. 144)

This is illustrated in this adaptation of Bhaskar's triangle:



(Source: Cashell, 2009, p. 144)

At this midpoint on the triangle, a CR representation is neither a baseless mental image nor a simple mirror of reality. There is no absolute break between signified and referent, neither can there be a point-to-point relationship of identity, as non-empirical things can *only* be mediated. There is a connection between transitive and intransitive that representation conditions and amplifies in reaching for fidelity to the real. It attempts to close the gap between knowledge and reality, without collapsing into relativism. The representation is the location of the interdependence of facts and the subjective interpretation. Consistent with the general principles of CR, the process of representation resists the dualism of the subjective and objective. It is a mediator of facts that facilitates the emergence of new conceptualisations of the non-empirically real. Rather than emerging out of nothing, as if in a vacuum, the transitive is the fallible image of

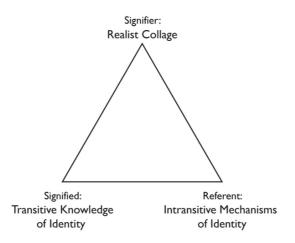
the complexity of the intransitive. Cashell claims that the process of mediating the intransitive can give contact with reality in its autonomy:

If, according to this picture of representation, the transitive dimension can be characterised as the intransitive mediated, then, through a recursive activity, the intransitive will emerge, in turn, out of the process of representation, at the end of inquiry, as the transitive de-mediated (p. 145)

De-mediation is the effort at revelation that moves towards the convergence on ontological depth 'as the final object of inquiry' (ibid.). This can be seen as a circular movement from referent to signifier, signifier to signified, and back from signified to contact with the referent. Representation is the catalyst, process and vehicle for the dialectical interaction and resolution of the transitive and intransitive. In this way:

...referential activity achieves contact with autonomous being by providing a way of successfully de-mediating and thereby accessing the *unobserved cause* of an *observed effect*, because such activity takes the effect to be an indexical empirical representation of something ontologically antecedent to it (ibid., p. 147, my emphasis)

Events can't happen for no reason at all, they are the outcome of unobserved powers. As the outcome of transfactual mechanisms, empirical events are the visible, indexical representation of antecedent causes that can give access to those causes. Accessing the unobserved cause of an observed effect through mediating indexical representation is how realist collage attempts to achieve ontological depth. In advancing and further extending the CR semiotic triangle, Nellhaus and Cashell have provided a basis for a model of a *semiotics of ontological depth*. This can be aligned to what has been argued in this thesis in relation to the position of collage at an intermediary point between the objective and subjective, driven by the non-dualism of CR and deploying the dialectical properties of montage. I have adapted the semiotic triangle with the particular object (referent), methodology (signifying system) and transitive knowledge (signified) of this project.

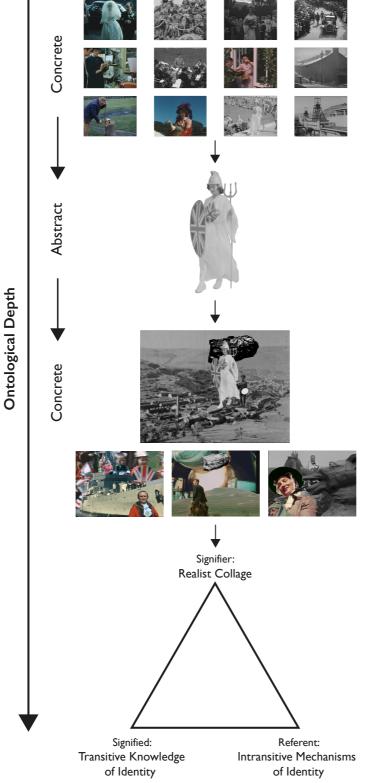


Realist collage is the signifying system, modelling transitive knowledge of the intransitive structures and mechanism of the 'Welsh Wales' identity (in this specific project, the referent is the identity of the 'Welsh Wales' region, but this system does not determine a specific object, as it could be applied to any intransitive phenomena).

Robert Hodge and David Tripp insist that 'fundamental to all semiotic analysis is the fact that any system of signs (semiotic code) is carried by a material medium which has its own principles of structure' (1986, p. 17). Representations don't follow a uniform system, and they will function according to Cashell's model in different ways. The rest of this chapter will unpack the specific 'principles of structure' within realist collage, and support and substantiate the claim that realist collage can occupy its position in the semiotic system, as a mediator of the intransitive and transitive.

The diagram below visualises the practical research process as a staged system. The adaptation of the CR semiotic triangle is included at the point where the production of realist collage performs the function of signifier, with the aim of ontological depth. The next three sections of this chapter will entail the three stages of the system; abduction and thematic analysis; abstraction and metonymy; and retroduction and metaphor.

THE RESEARCH PROCESS



Stage I - Abduction

* Observation and thematic analysis conducted in response to theories of Welsh history and identity. * Theoretical reinterpretation and re-description.

* Division and sorting in response to themes.

See 'Abduction and Thematic Analysis' section on page 141.

Stage 2 - Abstraction

* The production of metonymic fragments through spatial extraction and abstraction. See 'Abstraction and Metonymy' section on page 149.

Stage 3 - Retroduction

* Spatial recontextualisation and juxtaposition.
* Exploration of metaphor in retroducing causal mechanisms and structures.
See 'Retroduction and Metaphor' section on page 158.

ABDUCTION AND THEMATIC ANALYSIS

Based on the CR position on hermeneutics outlined, this section is about how the archive film will be viewed, analysed and selected within the first stage of the collage process. It is conducted in line with the stage of CR research called *abduction*, and pursues a CR form of thematic analysis. Using theories of Welsh identity, thematic analysis structures the observation of the archive film as empirical data. The theories are a starting point for scrutinising the footage and looking for patterns that indicate causal mechanisms. Based on the CR approach to meaning and semiotics already outlined, this process is sensitive to the metonymic function of visible features within the footage as 'vectors' of non-empirical reality. Observation looks for the possible manifestation of mechanisms in events in order to conceptualise the unobservable powers present in the deep domain. These powers are the non-empirical aspects active in the social reproduction of identity as a 'structured but composite formation' (Wayne, 2018). Linked to the discussion of identity in Chapter 3, this section will identify the overlapping mechanisms or 'parts' within the structure, rooted in the particular history of the 'Welsh Wales' identity.

Abduction

For CR, interpretation and classification is the move from the specific and empirical, towards the general and the conceptual. Factual information is an empirical starting point that is of limited value unless interpreted and placed within a theoretical context that explains it (Price, 2014). Against the empiricist faith in the neutral observation of phenomena, it is in the nature of observation that we interpret what we perceive at all times. As Denermark et al. put it:

Perception or empirical observation (...) demands that we give meaning to what we observe, by interpreting or classifying. Classification in its turn means that the object is subsumed into general classes or concepts. Even the simplest observation of something is thus linked to a generalization (2016, p. 116)

Analysis that is underpinned by a focus on the non-empirical aspects of an event engages in a theoretical reinterpretation that hypothesises its causes. This can otherwise be described as the move from the concrete to the abstract that CR calls abduction. Abduction means that single events are interpreted as particular instances of more general phenomena for the purpose of theoretical redescription and reinterpretation. This is a process that 'demands a theoretical language that penetrates the empirical surface and forges contact with the reality that exists beneath the level of events' (Blom & Morén, 2011, p. 63). Realist observation and analysis has been defined as a process of 'inference or thought operation, implying that a particular

phenomenon or event is interpreted from a set of general ideas or concepts' (Danermark et al., 2002, p. 205). For example:

...the single occurrence that a person anxiously and suspiciously turns around when meeting people in the street can theoretically be described and reinterpreted as the 'general' phenomenon of paranoia. In other words, something that is concrete and particular is reinterpreted as something more general and abstract (Blom & Morén, 2011, p. 69)

The concept derived from the inference is not an 'abstraction' in the sense that is unrelated to the real and the concrete. The 'something more general' is real and causally active. It is not *imaginary*, but an *imagined* mechanism that may come to be known as real (Bhaskar, 1975). Based on antecedent theory, observations are recontextualised within existing ideas in order to conceptualise unobservable connections and relations. In this way 'individual phenomena are understood as embedded in, and an outcome of, social structures' (Danermark et al., 2019, p. 117). This occurs through 'placing and interpreting the original ideas about the phenomenon in the frame of a new set of ideas (...) the switching between the parts and the whole applies to interpretations of social phenomena in general' (ibid, p. 113). Switching between the particular and general offers a deeper or more complex conception of the event within a new conceptual framework.

Within abduction, observation will treat the archive footage as 'intelligibilia' (Archer, 1996; Porpora, 2015) that provides empirical evidence of the causal conditions within the structure of interest, in this case the identity of 'Welsh Wales'. To guide the process, ideas developed within the existing literature provide a framework for observation. As Amber Fletcher (2017) has said, 'CR aims to find the best explanation of reality through engagement with existing (fallible) theories about that reality' (p. 186). The theories of Welsh identity introduced in Chapter 3 are used in analysing the footage to identify the possible presence of structures and mechanisms. They are the existing theoretical resources that open up and clarify key concepts (Ronkainen and Wiltshire, 2021) in relation to the composition of the 'Welsh Wales' identity. Relevant theory provides a more formalised, standardised framework of concepts as a basis for abduction, wherein 'empirical phenomena may be selected for comparison for explicitly political or ''interested'' reasons' (Steinmetz, 2004, p. 393).

With its focus on recontextualization, creativity and imagination are central to abduction (Jagosh, 2020). It requires from the researcher the 'creativity and the ability of forming associations' needed to 'formulate new ideas about the interconnection of phenomena' (Danermark et al., 2019, p. 115). The connection between events is understood and formulated with the support of theories as 'interpretative frameworks' (ibid., p. 139). In relation to the knowledge contained

within archive film, a connection can be usefully made to film practice through Walter Benjamin's concept of history and the figure of the collector. As Catherine Russel has argued, 'the images collected in archiveological films acquire meaning through their usefulness and their ability to awaken, stimulate, or attune the viewer's belief in their indexicality' (2018, p. 98). This 'awakening' is not based only in the perception of the empirical level of events, but rather in how images manifest themselves as 'social facts' (Cohen, 1993, p. 225, cited in Russell, 2018, p. 73). They are social facts that can infer deeper levels of transfactual reality. They are not to be 'taken for granted' on a surface level (Russel, 2018, p. 98), but recognised as products of the 'constellations of social relations from which they were produced' (ibid.).

Thematic Analysis

Drawing from the recent work by critical realists Noora Ronkainen and Gareth Wiltshire (2021), abduction will follow a process of thematic analysis.²⁷ Thematic analysis (henceforth TA) is a widely used method for the processing and 'coding' of different kinds of textual data in qualitative research.

Ronkainen and Wiltshire have described a split between two leading traditions of 'small q' and 'big Q' TA. 'Small q' (or 'less' qualitative) TA, has a more quantitative focus and is underpinned by an empiricist, 'straightforward realist' ontology. This seeks to make qualitative information compatible with statistical, quantitative methods. Alternatively, 'big Q' (or 'more' qualitative) TA is rooted in the interpretative tradition. In line with a more subjectivist standpoint, this approach assumes that reality is socially constructed and is not independent of human concepts. For 'big Q' TA, data analysis is about creating truth through 'telling stories', rather than discovering a truth that is independent of interpretation (Braun and Clarke, 2019). As such, critical realists would identify it as a form of relativism, where reality is determined by the subjectivity of the researcher.

Ronkainen and Wiltshire have pointed out that these two forms of TA are split across the dualism of objectivism and subjectivism. This offers the 'false choice' (Lovell, 1981) of a reality that is transparent to quantification and statistics, or the relativist denial of a reality that is independent of knowledge. In response, they suggest that CR's reconciliation of dualism offers an alternative 'third way' that challenges the binary split between the 'surface' level of empiricism and the 'deeper' (but relativist) level of interpretivism. They say that the 'surface/deep binary (...) need not be seen as characteristic of two opposing approaches because both may be needed

²⁷ As Amber Fletcher (2017) has pointed out, there has been a lack of literature on qualitative analysis under CR. She says 'even in the empirical literature on CR, references to qualitative data processing are vague at best, describing the process in (...) nondescript terms' (p. 184). In their development of a CR informed thematic analysis, Ronkainen and Wiltshire have contributed to a clearer framework for qualitative work informed by CR.

in building knowledge about a particular phenomenon of interest' (2021, p. 162). For them, the solution lies in the pursuit of a CR approach to analysis that 'values both surface and deep aspects of qualitative analysis' (ibid., p. 176). Their system uses Bhaskar's stratified ontology to establish three levels of analysis that reflect the empirical, actual and real domains. Like the domains that they are aligned to, the three thematic levels are distinct but interconnected. They are:

• Experiential themes

Referring to subjective viewpoints such as intentions, hopes, concerns, beliefs, and feelings captured in the data.

- Inferential themes
 Referring to inferences and conceptual redescriptions using more abstract language; and
- Dispositional themes
 Referring to theories about the properties and powers that must exist in order to produce the phenomena being studied.
 (ibid., p. 164)

As presented by Ronkainen and Wiltshire, the themes pertain to the analysis of interviews conducted as the primary method of gathering data. As they suggest, the model requires modification for use with other forms of data, including visual information (ibid, p. 177). I have adapted each stage the purpose of analysing archive film:

- Experiential themes observed events in the empirical domain Experiential themes relate to what can be seen in the recorded events.
- Inferential themes unobserved but occurring events in the actual domain
 Inferential themes relate to what is not directly recorded and observable, but we can reasonably infer exists or has existed.
- Dispositional themes unobservable causal powers and potential mechanisms in the real domain

This assigns themes that indicate the cause of the events recorded. Referring to theories about the properties and powers that must exist in order to produce the identity of 'Welsh Wales'.

Experiential themes are derived through the search for the outcome of mechanisms at the empirical level. They are of interest if hypothesised as the tendency of a mechanism to regularly trigger similar events. These tendencies 'can be seen, for example, in rough trends or broken patterns in empirical data' (Fletcher, 2017, p. 184). They are known by critical realists as 'demi-regularities'. A demi-regularity is defined as 'a partial event regularity which prima facie indicates

the occasional, but less than universal actualization of a mechanism or tendency, over a definite region of time-space' (Lawson, 1997, p. 204). The recognition of demi-regularities are often the catalyst for inquiry and investigation, as they provoke questions that address the deep domain. Offering historical examples, Buck Hansen and Nielsen (2020) say that 'for Marx, it was class struggles, and to Keynes, it was persistent unemployment that served as the demi-regularities that fuelled much of their scientific work' (p. 71). The observation of footage identifies demi-regularities through repeated evidence of phenomena (including rituals, ceremonies, festivities and other behaviours and actions) captured that indicate the 'intentions, perceptions, feelings and beliefs' of the people recorded. CR considers 'the ideas and meanings held by individuals – their concepts, beliefs, feelings, intentions, and so on – as equally real to physical objects and processes' (Maxwell, 2012, p. viii, cited in Fletcher, 2017, p. 190). The experiential seeks to record phenomena that may indicate the presence of these mechanisms, and is advanced through the next two stages.

In responding to the experiential themes, inferential themes are developed with the assumption 'that some aspects of the social world are not empirically observed but can be inferred through our experiences and empirical investigations' (Ronkainen and Wiltshire, 2021, p. 169). This extends the experiential themes through abductive thinking that assumes demi-regularities indicate general patterns across both observed and unobserved events. The events recorded in the archive film accessed offer a fragmentary and partial glimpse of historical events. For the research to use the film as evidence of patterns and mechanisms in the formation of identity, it must be reasonably assumed that recorded events indicate the repetition of behaviours and actions that were not recorded. Also, it is assumed that the events recorded can reasonably be interpreted as evidence of social and cultural patterns that extended beyond the particular events themselves (see Chapter 3).

Dispositional themes are arrived at through conceptualising the structures and mechanisms that must have been active in producing the observed event. As Danermark et al. say, this is driven by asking questions like 'what properties must exist for X to exist and to be what X is?' and 'how is X possible?' (2019, p. 118). The themes developed at this level refer to the intersecting structures of powers that reproduce the 'Welsh Wales' identity. The interpretative framework supported by the literature is applied at this stage as the inferential themes are extended. This level asks that creativity and imaginative re-contextualisation is applied in hypothesising causal links between events. In relation to the necessity of imagination, 'the assumption of ontological depth suggests the need for researchers to engage in empirical as well as highly theoretical and speculative activities' (Ronkainen and Wiltshire, 2021, p. 163).

The relationship between the themes is that the process moves from the experiential, to the inferential and then to the dispositional, from the empirical, to the actual and then to the deep domain. Although the themes can be worked through the sequentially, Ronkainen and Wiltshire suggest that they are likely to be 'simultaneously present in the minds of researchers throughout the process and that this can be helpful' (ibid., p. 164), and that 'generating inferential themes is likely to take place after the generation of experiential themes but could feasibly take place simultaneously or at least involve some overlap' (ibid., p. 170).

Based on a reading of the existing literature, the constituent components of the 'Welsh Wales' identity are as follows. These are the initial themes used to guide the close analysis of the archive footage. Each 'major' theme itself contains constituent elements, or 'sub-themes', that comprise it:

Working-Class, Industrial Culture:

- Socialist political consciousness (Gwyn Williams, 1985)
- The dominance of heavy and extractive industries over patterns of life (Mervyn Jones, 1992)
- Community values and solidarity (Raymond Williams, 2003)
- The assimilatory 'Britishness' of socialism (Brooks, 2017)
- Deprivation, unemployment and poverty (Raymond Williams, 2003)
- Hostility to the Welsh language (Brooks, 2017; Gwyn Williams, 1985)
- Patriarchal gender relations (Charlotte Williams, 2005)

'Britishness'

- The integration of Welshness within a 'flexible' Britishness (Johnes, 2011; Charlotte Williams, 1999)
- British imperialism and colonialism (Gwyn Williams, 1985; Chris Williams, 2005)
- Deference to the British royal family and other facets of the British state (Jobbins, 2011; Chris Williams, 2005)
- War and militarism (Johnes, 2011; Davies, 1993)
- British socialism's hostility to nationalism (Daniel Williams, 2015)
- Anglicisation through English culture and the English language (Chris Williams, 2005; Daniel Williams, 2015)
- The internalisation of subordination to the centre of power (Raymond Williams, 2003; Daniel Williams, 2015)

Welsh History and Cultural Life

- Welsh language culture and its expressions (Johnes, 2016, 2010)
- The symbolic assertion of historical figures, events and images (Johnes, 2016, 2010)
- The image of a semi-mythic, mystical and ancient Wales (Daniel Williams, 2015; Johnes, 2016)
- Nationalist assertions of Welsh political independence (Gwyn Williams, 1985; Brooks, 2017; Raymond Williams, 2003)

Nonconformist Protestantism

- The emergence of the working-class culture from nonconformist radicalism (Adamson, 1991, 1999)
- Nonconformist hostility to nationalism (Jobbins, 2011; Brooks, 2017)
- The traditional image and conception of the 'Gwerin' (Adamson, 1991, 1999)
- The survival and influence of the 'Gwerin' in Welsh institutions (Adamson, 1991, 1999)

The Preindustrial

• The preindustrial, pastoral, rural pattern of life as a 'residual' culture (Raymond Williams, 2003)

The Physical Environment

• The physical features of the natural environment as emblematic of identity (Gruffudd, 1999; Moya Jones, 2008)

Through the analysis, clips are selected for use in the collage process if 'they are believed to be relevant to uncovering or illuminating the causal mechanisms and structures of interest' (Steinmetz, 2004, p. 393). In relation to the establishment and composition of the themes, there are a number of points to clarify:

Dominant and Residual Mechanisms

Some of these components, as causal mechanisms, are more dominant, where others sit at a more 'residual' level (Raymond Williams, 1977). Working-Class Culture and Britishness are more dominant within the 'Welsh Wales' identity. As such they contain a more significant number of sub-themes that describe mechanisms that are derived from the major theme and can be placed within it. Residual components, like the preindustrial in this case, do not determine the identity to the same or equal extent, but are still a part of its whole composition.

Overlap

There are sub-themes that are present within more than one major theme. This is because there is significant overlap between the major themes in the reality of how the identity is comprised. A hostility to Welsh nationalism is found within working-class culture and Britishness, as it is a recognised feature of them both. Community solidarity is a key feature of working-class culture, but community solidarity has been exercised and expressed through celebrations of Britishness. There is also overlap within the major themes. For example, as the monarchy are such a potent symbol of Englishness, deference to the royal family can't be separated from Anglicisation. This is in keeping with the complexity and stratification of open systems, as mechanisms interact to produce events. In reality, any single mechanism is never wholly independent of what happens at other levels, it is only analytically independent when generalised (Elder-Vass, 2010).

Internal Contradiction

In keeping with the considerable internal tensions of identity, some mechanisms within the overall formation are in direct conflict. The hostility to Welsh nationalism and the Welsh language coexists with affirmative expressions of Welsh cultural life, linked to nationalism and language.

The Observable and Unobservable

Social structures are concept-dependent and activity-dependent (Bhaskar, 1979). The causal mechanisms within social structures 'exist only in virtue of the activities they govern and cannot be empirically identified independently of them' (Bhaskar, 1979, p. 48). This means that 'causal mechanisms are social products that can ultimately be understood through – and indeed, that exist within - phenomena at the empirical level (e.g. human actions and ideas that are generated by these mechanisms)' (Fletcher, 2017, p. 183). Within the themes listed above, there are causal powers that are more and less empirically identifiable, and more and less observable. For example, within the major theme of Britishness, deference to the royal family is a causal power with clearer instances of empirical manifestation. This can be observed within the archive footage. In contrast, the internalisation of subordination and socialism's hostility to nationalism are mechanisms that are not as directly observable to the same or equal extent. Addressing the aims of retroduction, Andrew Sayer has said that 'in many cases the mechanism so retroduced will already be familiar from other situations and some will actually be observable. In others, hitherto unidentified mechanisms may be hypothesized' (1992, p. 107).²⁸ Some mechanisms that are not as empirically detectable must be 'brought forth' through retroduction within the composition

²⁸ In contrast to Bhaskar, Sayer also says 'I see no reason for subscribing to the view (...) that mechanisms are always "underlying" and unobservable. Clockwork, the ways of producing commodities, electing MPs, etc., involve mechanisms which are no less observable than the effects they produce' (1992, p. 280)

of collage. Mechanisms that are more 'visible' at the empirical level, may be 'amplified', or have their meaning modified, through collage (as detailed in the retroduction section).

Modification and Extension

The themes listed above provide the initial framework, but analysis has not been limited to these themes alone. As the footage has been observed, the possible presence of other mechanisms in addition to the initial themes have been noted. If the interpretative framework is too rigid and fixed, predetermined expectations may limit the perception of what may be present in the events recorded (Saldaña, 2013, cited in Fletcher, 2017). A flexible and open process of analysis is adopted to be more fully responsive to the content of the footage as evidence. In this way, themes can be extended and modified in response to the data (Fletcher, 2017). Consistent with its use within CR, 'quality reflexive TA is not about following procedures "correctly" (...) but about the researcher's reflective and thoughtful engagement with their data and their reflexive and thoughtful engagement with the analytic process' (Ronkainen and Wiltshire, 2021, p. 162). This flexibility acknowledges that the identity is not unitary and fixed, it does not exist outside of its integration with the rest of the real domain and interpenetrates with other forces.

The practical result of thematic analysis is that elements of the archive footage are divided and sorted according to the themes and sub-themes. This has been conducted by editing the footage down to smaller parts (on the temporal level) using video editing software. The smaller units have then been organised into folders and sub-folders that mirror the themes and sub-themes. The next stage will further edit and abstract from the footage in the spatial dimension in the production of metonymic fragments.

Please see the appendix for a sample of documentation that records the process of observation and thematic analysis. The sample is also within the accompanying practice portfolio as a PDF file called I_ABDUCTION_TA.

ABSTRACTION AND METONYMY

Abstraction

Integral to collage practice is the process of 'breaking up' images and then recontextualising the fragments in the production of a new whole. James Peterson has said that all forms of assemblage art that reconfigure existing materials exploit 'the tension between the individual identity of the interpolated image and the new whole that comprises it' (1994, p. 147). Collage animations are particularly 'complex instances of assemblage, because they exploit this tension on several levels:

the construction of the individual images, the local juxtaposition of these images, and the overall structure of the film' (ibid.). The next section on retroduction and metaphor will address local juxtaposition and overall structure. This section will entail the production of individual image parts through rotoscoping, and how these function as metonymy and as a form of conceptual abstraction. Following observation, abductive analysis and sorting, this is the second stage of realist collage. For CR, 'abstraction is a general term used to indicate a move from the concrete details of empirical observation to the realm of the theoretical' (Decoteau, 2016, p. 72). Engaging with theoretical inference happens at the thematic analysis and abduction stage, as described in the previous section. Guided by the thematic analysis and the dispositional themes, the abstraction stage goes further in manipulating the footage through the practical intervention of collage. The extraction of film fragments from the context of the frame is used as a device for 'condensing' and 'focusing' the causal inferences of the footage through abstraction and metonymy.

As argued throughout the thesis, film material must be 'worked on' through mediation to move past the empirical surface of photographic representation. This stands against the naïve realist faith in the fidelity and truth of the unmodified image (Leslie, 2002). In reference to the properties of collage and montage in film, the principles of abstraction are reflected in the recognition of strategies that splinter and fragment the indexical image. Michael Chanan has said that as the meaning of a discrete film shot is largely determined by its context, its properties as an abstraction open up a conceptual space beyond its empirical and objective content. He says 'just because the shot is indeed an abstraction, it becomes possible, through the recombinations of montage, to transgress and transcend its limits by conjoining images' (2007, p. 79). Through the interventions and juxtapositions available through the critical use of abstraction within collage, the transfactual reality of stratification can be released from the constraints of the indexical. Indexicality is no longer 'held back by the drag of ordinary space and time' (Andrew, 2010, p. 30, cited in Buchan, 2013, p. 5).

The argument presented here is that an image must be abstracted from its original context in the movement from the particular to the general within causal inference. This develops a specific interpretation and application of the role of abstraction within CR research in the visual field, alongside a specific understanding of the metonymic status of photographic images.

Researchers investigating any social phenomena will be attempting to understand complex situations that are determined by the many things that are happening or happened at once. All mechanisms in the open system of the social world are continually interacting and merging with other forces (Bhaskar, 1986). Unlike natural scientists, social scientists cannot isolate specific

forces by artificially producing closed systems under controlled conditions (Steinmetz, 2004). Dealing with complexity and identifying mechanisms 'without being able to isolate them experimentally throws a huge burden onto abstraction - the activity of identifying particular constituents and their effects' (Sayer, 1992, p. 3). Abstraction is needed to 'unpack' events down to their constituent parts. As Sayer puts it:

To be practically-adequate, knowledge must grasp the differentiations of the world; we need a way of individuating objects, and of characterizing their attributes and relationships. To be adequate for a specific purpose it must 'abstract' from particular conditions (...) Even where we are interested in wholes we must select and abstract their constituents (ibid, p. 86)

Given the limitations of our sensory capacities through ordinary perception, reality appears as an undifferentiated whole (Elder-Vass, 2006). But as Bertell Ollman contends, 'reality may be in one piece when lived, but to be thought about and communicated it must be parcelled out. Our minds can no more swallow the world whole at one sitting than can our stomachs' (2001, p. 287). To make sense of events, we pick out particular elements of phenomena and structure them in a way that offers the best and most appropriate explanation. The more sensitive we are to the presence of the 'layering' of possible causes, the more adequate our understanding of the event will be.

In the popular use of the word, 'abstract' is typically used to describe something 'vague' or amorphous. An 'abstraction' is commonly understood to be divorced from reality and of little practical relevance or value. Conversely for CR, an abstraction is a concept that analytically isolates an aspect of a real complex object. What we abstract from are the 'many other aspects which together constitute concrete objects such as people, economics, nations, institutions, activities and so on' (Sayer, 1992, p. 87). Its purpose is to be precise and clear, and to be true to the complex nature of the intransitive object. The phenomena abstracted are real, and abstractions are used to call forth the nature of their reality at the non-empirical level. Given this, 'the abstract and the concrete should not be aligned with the distinction between thought and reality' (ibid.). Danermark et al. state that:

An abstract concept (...) should not at all be associated with 'vagueness' or 'unreality'; on the contrary, it aims, in a very precise way, to isolate an essential aspect of a concrete course of events. Social science abstractions, such as 'class', 'gender', 'role', or 'norm', are not more vague or unreal than natural science abstractions, such as 'air pressure', 'density', 'energy', or 'gravitation'. What unites all these phenomena is that they manifest themselves through their effects, but it is not possible to immediately observe or 'touch' what the concepts represent, that is, the generative mechanisms (2019, p. 39)

Through abstraction, we come to a better understanding of the causality of concrete objects. For CR, 'concrete object' denotes an intransitive thing that is constituted by a plurality of elements and forces. 'Concrete' refers to the layered structure itself, not only the fact that the object exists:

By 'concrete' we mean something real, but not something which is reducible to the empirical: we mean far more than just 'factual'. The concrete object is concrete not simply because it exists, but because it is a combination of many diverse forces or processes (Sayer, 1981, p. 7)

In this case, the concrete object is the structure of the 'Welsh Wales' identity. In response to the object, its separate elements can be isolated to provide a first stage in the conceptualising or modelling their combined effect, 'as a whole'. This process can be thought of as a double movement, first a movement from the concrete to the abstract and then from the abstract back to the concrete: concrete \rightarrow abstract, abstract \rightarrow concrete (Sayer, 1992, p. 87). When the elements are brought together, they are 'not just "listed" and "added up", but are synthesised; that is, their combination qualitatively modifies each constituent element' (Sayer, 1981, p. 7). In realist collage the first movement, from concrete to abstract, is performed through the editing and rotoscoping of the footage as evidence of the concrete. The second movement, from abstract to concrete, is performed through the recombination of layers in the collage composite (this is included in the research process illustration above). CR research and the practice of realist collage seek to concurrently 'grasp together' concrete and abstract elements that 'play together and refer to the same phenomena' (Buch-Hansen and Nielson, 2020, p. 72). This is about 'taking reality apart' in order to 'put it together' in a way that illuminates its complexity and reveals causality. As Bhaskar put it:

For critical realists the grounds for abstraction lie in the real stratification (and ontological depth) of nature and society. They are not subjective classifications of an undifferentiated empirical reality, but attempts to grasp (...) precisely the generative mechanisms and causal structures which account in all their complex and multiple determinations for the concrete phenomena of human history (Bhaskar, 1998, p. xvi)

From this perspective, the abstract is to be understood as 'an "extract" from reality, an extract consisting of "the fundamental part," "the essential part," or "the core" of a phenomenon, which is as real a phenomenon as any other' (Danermark et al., 2019, p. 43).

Ollman has addressed this principle in reference to Marx's system of abstraction. In describing how abstractions help us to access reality, he says that the method establishes an 'extension' that is derived from the abstracted part. At the same time as abstraction focuses and 'drills down' on the particular part itself, it also extends to a level of generality for seeing the whole system to which the part belongs. In this way, abstraction connects the object to structures that generate other instances of the same phenomena, embedding the object in a causal matrix. In relation to its diachronic aspects, Ollman points out that although it may refer to a specific point in time, abstractions should not be thought of as autonomous or independent 'slices of time':

...the whole of history is implicated in each level, including the most specific (...) they are ways of organising time, placing the period relevant to the qualities brought into focus in the front, and treating everything that comes before as what led up to it as origins (2001, p. 293).

This places an abstraction in a historical context, situating the part as an instance of a historical process that extends and flows through and across multiple events and multiple objects. Abstraction points towards the continuous, enduring and general operation of mechanisms that is independent of their manifestation in particular events. We may not be able to account for every mechanism, but we should try to identify the properties chiefly responsible for an object's existence or an events occurrence. The complexity that determines events is comprised of properties that can be brought into focus through abstraction and its extensions. This can illuminate the context of an object and its embedding in ontological depth:

...at the same time that abstraction establishes an extension and a level of generality, it also sets up a vantage point or place within the relationship from which to view, think about and piece together the other components in the relationship; meanwhile the sum of their ties (...) also becomes a vantage point for comprehending the larger system to which it belongs (ibid., pp. 293-294)

Abstractions isolate instances from particular circumstances, shifting focus away from the specific towards the general and the transfactual within the deep domain. They are derived from the concrete and invoke the non-empirical levels of reality. This is not the incommensurable abstraction of relativism, but abstraction that operates within the *imagined*, not the *imaginary*.

Metonymy

Within semiotics, Daniel Chandler has echoed Ollman's description of the capacities of abstraction. He says that 'any attempt to represent reality can be seen as involving synecdoche, since it can only involve selection (and yet such selections serve to guide us in envisaging larger frameworks)' (2007, p. 133). Here, Chandler's reference to synecdoche is synonymous with abstraction and inference. Reality is too complex to be dealt with 'all at once', but in selecting from it we aim to capture something greater than the selected elements themselves. This takes us on to how abstraction, in the visual field, functions as metonym.

The concept of metonym presented here is based on how collage fragments operate at the level of the individual part. The rotoscoping and abstraction process spatially extract elements from within the image frame. Applied to the new whole of the collage composite, fragments can then work as metonymic indexes of the mechanisms that produced them. Following on from the semiotics of photographic images already explored, this continues to address the dual status of photographic film recordings as both index and icon. In the context of the CR concept of abstraction, index and icon 'play together' in the dialectic between the particular and the general, and the concrete and the abstract. In this way, the photographic fragment simultaneously indexes the physical existence of the events captured and the causal mechanisms that produced the event. In regard to spatial relationships, it is claimed that spatial compositing provides film fragments with a distinct capacity for metonymic inference that transcends the limits of temporal montage.

In language, a metonym is a device where an object or idea is referred to through naming something connected with that object or idea. While metaphor is based on seemingly unrelated signifieds, 'metonymy is a function which involves using one signified to stand for another signified which is directly related to it or closely associated with it in some way' (Chandler, 2007, p. 129). The relation between the signified, the phrase and the related thing, is one of 'evocation of the whole by a connection', with the 'imputed relationship being that of contiguity' (Wilden 1987, 198; quoted in Chandler, p. 130). As an example, when we use the phrase 'Number 10' or 'Downing Street', we are referring at once to the physical location and also the British Prime Minister and the sitting government. The contiguity of the signifieds is related to their concrete proximity in time and space. Number 10 Downing Street is a real physical place where the members of the government live and convene. Here, the connection between the metonymic phrase and the larger entity it evokes is physical and concrete. The phenomena invoked through metonym can also be of an abstract, but still concrete, sort. The contiguous connection can be related to indexical non-physical relationships between signifieds, 'notably the substitution of effect for cause' (Chandler, 2007, p. 129, emphasis in original). In relation to the realism of Peirce's sign system discussed in the semiotics section above, 'metonymy can be seen as a textual (...) projection of Peirce's indexical mode' (Chandler, 2007, p. 131-132). In substituting a particular effect for a general cause, metonymy can work to materialise the non-physical cause of the effect, making 'an abstract referent more concrete' (Chandler, 2007, p. I 30). With its basis in indexicality and causality, metonym has been associated with realism, and is particularly suited to use within non-fictional contexts (Jakobson, 1956; cited in Chandler, p. 130).

In line with this, Lakoff and Johnson say that 'metonymic concepts are grounded in our experience. In fact, the grounding of metonymic concepts is in general more obvious than is the

case with metaphoric concepts, since it usually involves *direct physical or causal associations*' (1980, p. 39, my emphasis). The principles of contiguity and causality that ground metonym's concrete properties fit how 'we typically conceptualize the nonphysical in terms of the physical - that is, we conceptualize the less clearly delineated in terms of the more clearly de-lineated' (ibid., p. 59). Metonyms can be visual as well as written and verbal. In film images, 'a depicted object which represents a related but non-depicted object may not be a material thing, but a social or cultural force (Wayne, 1997). We conceptualize the non-empirical in response to the physical. In collage, this is activated by spatial juxtaposition, within the connotative tension at the interstitial meeting point of fragments. Following abstraction, it is the recontextualization of the object that can extend its metonymic, and transfactual, properties. Abstraction and mediation destabilise the index, this defamiliarization catalyses its interrelationship with the iconic and connotative. In relation to stratification, within collage and montage, the physical events and objects generated by mechanisms act as vectors to their non-empirical causes. This situates metonym as a key tool within the signifying system of realist collage.

In relation to history and identity, 'symbolic metonymies are critical links between everyday experience and the coherent metaphorical systems that characterize religions and cultures. Symbolic metonymies that are grounded in our physical experience provide an essential means of comprehending religious and *cultural concepts*' (Lakoff and Johnson, 1980, p. 40, my emphasis). Symbolic metonyms are 'part of the repertoire of signs upon which people draw in developing and maintaining their sense of personal and social identity' (Chandler, 2007, p. 55)

A sample of still images of abstracted film fragments are below. The notes indicate the mechanisms that they pertain to following thematic analysis. Video files of the film fragments can be found in the 2_ABSTRACTION_METONYMY folder within the practice folder.



Deference to the British royal family The internalisation of subordination



Deference to facets of the British state



Socialist political consciousness



Welsh language culture and its expressions The image of a semi-mythic, mystical and ancient Wales



Deprivation, unemployment and poverty



The dominance of heavy and extractive industries



British imperialism and colonialism



Anglicisation through English culture and the English language The internalisation of subordination



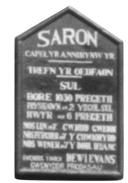
Socialist political consciousness The assimilatory 'Britishness' of socialism



War and militarism



The preindustrial, pastoral, rural pattern of life



Nonconformist Protestantism



The integration of Welshness within a 'flexible' Britishness Deference to facets of the British state



The integration of Welshness within a 'flexible' Britishness Deference to the British royal family



The preindustrial, pastoral, rural pattern of life

WORKERSOF THE WORLD UNITE

Socialist political consciousness

RETRODUCTION AND METAPHOR

Retroduction

Following the production of metonymic fragments through abstraction, the next stage of the research process is the combination of fragments in collage composites. The abstracted elements are brought together in spatial and temporal relationships. This moves from the level of individual images, first to the local juxtaposition of images in spatial compositions, then to temporal relationships in the overall structure of a sequence. The aim of this stage is that the combination of elements extends the transfactual inference, addressing those mechanisms that are not 'visible' in the parts themselves, that can only be inferred through the recontextualization of parts. This follows the CR principle of the recontextualization and combination of abstracted elements in order to grasp the concreteness of the complex object addressed. Sayer says:

In order to understand their diverse determinations we must first abstract them systematically. When each of the abstracted aspects has been examined it is possible to combine the abstractions so as to form concepts which grasp the concreteness of their objects (1992, p. 87)

Having isolated elements through abstraction, recontextualization and juxtaposition then operates:

...under the control of something like a logic of analogy and metaphor, of a mechanism, which if it were to exist and act in the postulated way would account for the phenomenon in question (a movement of thought which may be styled 'retroduction') (Bhaskar, 1979, p. 12)

This section will go on to describe the features of the inference enabled through realist collage as a form of retroduction. This entails the connection between retroduction as a 'central mode of inference' (Lawson, 1998, p. 156) with the semiotics of metaphor.

Since Bhaskar first suggested the term retroduction to describe a specific function of realist inference, the concept has been developed by many critical realists. Retroduction is the movement from empirical evidence to identifying the mechanisms that produced it. As a part of non-empirical reality, the mechanisms inferred through retroduction may not be directly observable outside of their effects. Retroduction 'entails the idea of going back from, below, or behind observed patterns or regularities to discover what produces them' (Jagosh, 2020, p. 124).²⁹

²⁹ Jagosh (2020, p.121) has offered Darwin's theory of evolution as an example of retroductive thinking. Although Darwin himself did not claim a realist position, his theory was developed to explain the underlying mechanisms of

The aim is to identify the contextual conditions and relations present for a mechanism to be active and manifest, to 'show itself' in the evidence that has been observed (Fletcher, 2017). This is central to any investigation that seeks to engage with why things are the way that they are (Jagosh, 2020). It has been described by Lawson as 'the move from knowledge of phenomenon existing at any one level of reality, to a knowledge of mechanisms, at a deeper level or stratum of reality, which contributes to the generation of the original phenomenon of interest' (Lawson, 1997, 26). The original phenomenon of interest in this case being the events in the archive film, the deeper level or stratum being the operation of the 'Welsh Wales' identity. Like abduction, the process requires imagination and is an 'intuitive and creative process, rather than a logical one' (Mingers, 2006, p. 28). This is an inherent aspect of inference towards what can't be seen. The absence of direct perception of the inferred mechanism calls for the creative and imaginative use of analogy and metaphor (Buch-Hansen and Nielson, 2020).

As Blom and Morén (2011) description of retroduction points out, in practice the process of hypothesising mechanisms begins in the earlier step of abduction. This is consistent with what Buch-Hansen and Nielson (2020) have said about the non-linearity and interdependence of the stages of CR research. But it also leads to a degree of confusion with regards to a clear distinction between abduction and retroduction. Dave Elder-Vass (2021) has said that retroduction and abduction are not used consistently across CR. This may be because 'retroduction is intentionally abstract and incomplete' (2012, p. 253). This suggests that it is intentionally incomplete as it is resistant to unitary and absolute claims that are incompatible with its ontology. Fallibilism and contingency are not consistent with 'completeness'. This has led Amber Fletcher to say that 'descriptions of retroduction are abstract at best' (Fletcher, 2017, p. 182). In suggesting clearer definitions, Jagosh has recently said that:

...abduction is a creative reframing of a phenomenon of interest into a conceptualization that leads inquirers to explore the empirical world in new and innovative ways. With this understanding, retroduction and abduction in the scientific realist process can be seen as a proverbial 'two sides of a coin'. On the one hand, abductive theorizing is epistemological in the sense of directing attention to how we should think in terms of scientific innovation. Retroduction is ontological in the sense of unearthing mechanisms that are part of manifested reality. Creative imagination (abduction) is needed to study mechanisms (retroduction) (2020, p. 122)

Abduction and retroduction, as 'two sides of a coin' are interdependent and work interactively. This is consistent with Elder-Vass's (2021) claim that that retroduction is a 'special case of

evolution as causal explanation of the adaptation and the diversity of species. The theory could not be developed on the basis of empirical evidence alone. It required an imaginative, creative leap.

abduction' and its suggestion that retroduction is derived from abduction. The confusion of the precise nature of retroduction and its distinction from abduction presents a problem, as there is no 'clear-cut' definition to work from. However, this also presents the freedom and opportunity to adapt retroduction to the specific needs of this project. In line with Jagosh, my interpretation of abduction and retroduction follows his epistemology/ontology distinction. Abduction is the stage where mechanisms are imagined and hypothesised in thought, whereas retroduction (following abstraction) is the point at which these hypotheses are put into more concrete 'action'. This is the move from abstraction to the concrete. This is the difference between *imagining* mechanisms and then attempting to reveal them *in practice*. In realist collage, abduction (as we have seen) is in the response to the evidence that leads to division and sorting, following abstraction and the production of parts, retroduction is in the active pursuit of 'unearthing' mechanisms through the manipulation of materials in new wholes. This is how collage moves from a concept of something to an alternative, potentially deeper conception of it, progressing 'from individual observations to conclusions about general structures' (Danermark et al., p. 99). As Raymond Williams has said:

Specific studies must often temporarily isolate this or that element. But the fundamental principle of a sociology of culture is the complex unity of the elements thus listed or separated. Indeed the most basic task of the sociology of culture is analysis of the interrelationships within this complex unity (Raymond Williams, 1977, p. 140)

Metaphor

As seen above, Bhaskar saw retroduction as a form of inference synonymous with metaphor. Bhaskar's invocation of metaphor signals that for CR, it is a device for addressing the real and concrete, rather than the subjective or illusory. The following discussion of the role of metaphor within retroduction deepens the understanding of what happens when image fragments come together within the collage composite.

According to Lakoff and Johnson, 'the essence of metaphor is understanding and experiencing one kind of thing in terms of another' (1980, p. 5). A metaphor works through the combination of a primary intended subject, or 'tenor', expressed in terms of a 'figurative' secondary subject, or 'vehicle' (Richards, 1932, cited in Chandler, 2007, p. 127). For example, in the phrase 'the brain is a computer', the word 'computer', as the vehicle, is attached to the root concept or tenor, 'brain'. 'Computer' allows the speaker to communicate something about the brain that can't be expressed in the word 'thought' (Lewis, 1996). The compound meaning is in the combination of tenor and vehicle, and can't be ascribed to either one them alone. Unlike the contiguity that characterises metonym, 'the linking of a particular tenor and vehicle is normally

unfamiliar: we must make an imaginative leap to recognize the resemblance to which a fresh metaphor alludes' (Chandler, 2007, p. 127).

Given the 'imaginate leap' required, metaphor has not been associated with realism (Chandler, 2007). However, Lakoff and Johnson highlight that 'metaphors come out of our clearly delineated and concrete experiences and allow us to construct highly abstract and elaborate concepts' (1980, p. 105). To them, metaphors that use physical phenomena to infer non-empirical forces are a ubiquitous device in our conceptual systems. They say:

Because so many of the concepts that are important to us are either abstract or not clearly delineated in our experience (the emotions, ideas, time, etc.), we need to get a grasp on them by means of other concepts that we understand in clearer terms (spatial orientations, objects, etc.) (ibid., p. 115)

In the negotiation of abstract concepts, and the non-empirical phenomena that they address, empirical phenomena are used as a device for describing the unobservable. This is consistent with CR's non-dual balance of the empirical and the conceptual, echoed in Lakoff and Johnson assertion that metaphor:

...unites reason and imagination. Reason, at the very least, involves categorization, entailment, and inference. Imagination, in one of its many aspects, involves seeing one kind of thing in terms of another kind of thing - what we have called metaphorical thought. Metaphor is thus imaginative rationality (ibid., 1980, p. 193)

Within the context of CR, if the vehicle of a metaphor is an object of empirical experience, then the tenor is an inferred force within the causal domain. Seen in this way, the metaphor of 'imaginative rationality' addresses causality and the transfactual as 'one kind of thing', in terms of the empirical and objective, as 'another kind of thing'.

Through their concept of metaphor, Lakoff and Johnson mount a direct attack on the dualism of empiricism and idealism. In terms synonymous with Terry Lovell's challenge to the 'false choice' of dualism (1980), they say 'we see ourselves as offering a third choice to the myths of objectivism and subjectivism' (Lakoff and Johnson, 1908, p. 185). 'Imaginative rationality' foregrounds the independence of reality and resists the suppression of the material aspects of meaning. With a concept of metaphor that they go on to call 'embodied realism', Lakoff and Johnson assert that our understanding of the world and how we communicate about it has physical roots. This negates the idealist drive to sever the production of meaning from its 'bodily dimension'. As described in Chapter 3, language and meaning are rooted in the intransitive domain, and develop in response to material reality (Potter, 2001). In retroduction, abstractions, derived from observation and the material are brought together in the move from abstract to

concrete ('concrete' referring to a layered structure, not only the fact that the object exists, as noted in Chapter 4). In the practical retroduction of realist collage, this occurs as the metonymic fragments established through abstraction (as the material 'one kind of thing') are applied in relationships within the collage composite to describe non-empirical reality (as the imagined 'another kind of thing'). Consistent with Bhaskar's distinction between the imagined and the imaginary (see Chapter 4), the CR form of retroductive metaphor makes reference to the nonempirical, the possibly real that can only be imagined.

Despite their insistence on the 'bodily dimension', where Lakoff and Johnson part company from ontological realism is their insistence on what CR deems an epistemic, rather than and ontic, conception of truth. Believing that a notion of an absolute truth should not be tied to objectivism, they say that 'an adequate account of meaning and truth can only be based on understanding' (ibid., p. 184). In response, Kevin Schilbrack has said that although communication and meaning is inextricable from 'discursive practices', the truth is not determined by those practices. CR's epistemic relativism acknowledges that our perceptions and beliefs are contingent on our knowledge and contexts, but ontological realism puts the truth outside of the discursive field. As noted in Chapter 2, Schilbrack insists that 'truth does not depend on understanding' (2014, p. 170). Lakoff and Johnson are right to emphasise the role of imagination and concepts in the construction of knowledge, but in doing so they fall into the error of locating truth within those concepts. With an ontic conception of truth, we can see that 'whether a given person can see that a sentence is true is relative to the capacities of the historically and culturally located person, *but whether the sentence is true is not'* (ibid., p. 170, my emphasis). This calls for the development of a concept of metaphor characterised by ontological realism.

Paul Lewis states this case emphatically when he says that 'only from something akin to a critical realist perspective that the true importance of metaphor can be demonstrated' (1996, p. 488). This is because CR provides the basis for reconciling the ontological foundation of metaphor with the imaginative leaps that it elicits (from the observable to the unobservable, from the material to the imagined). Following Boyd (1993), Lewis argues that CR's non-dual emphasis on the empirical alongside the social and intersubjective aspects of knowledge production provides a form of 'epistemic access'. This is achieved when the connections between signifiers and their referent in the intransitive are understood, within specific contexts, as 'epistemically relevant indications of the existence of that referent' (Lewis, 1996, p. 490). The context of the reference is a community (and its language), that use signifiers to address particular non-empirical objects of interest. Lewis notes that epistemic access, and knowledge of the non-empirical, is activated where the concepts and theoretical language that mediate reality correspond to the causal structures of the world. The ontological realism of the reference is predicated on its assumption

of, and engagement with, external structures. Epistemic relativism places limits on the identity between reference and its subject. According to the fallibilism and contingency, the nature and context of terms are important in enabling epistemic access, but should not be seen to tie the reference to 'an immediate, unyielding, and exhaustive description of the referent' (Lewis, 1996, p. 492). For example, within the community of CR, the metaphorical terms 'lamination' and 'stratification' are used to describe the multidimensional and interconnected constitution of social structures. The term 'mechanism' is used to describe the causal forces that produce empirical events. Whilst these terms have become well established within the vocabulary of CR, it is acknowledged that more adequate, more descriptive terms may emerge.³⁰

In locating a CR notion of epistemic access, Lewis has developed Donald Schön's (1963) concept of the 'generative metaphor'. Lewis also draws on the work of I. A. Richards (1936) and what he called the 'interanimation' of words. Interanimation sees metaphor an interdependent exchange between two contexts, and not just as a unidirectional displacement of one term into another context. When we use metaphor, 'we have two thoughts of different things active together and supported by a single word or phrase, whose meaning is a result of their interaction (...) [W]e arrive at [the meaning] only through the interpretive possibilities of the whole utterance' (Richards quoted in Lewis, 1996, p. 495). This suggests a relationship of juxtaposition between two elements that can be thought of in terms of emergence. Richards emphasis on the 'whole utterance' highlights the total effect produced by the compound of synthesised parts. As a word or phrase inserted into a new context through the metaphor, the recontextualization produces new meanings that are not reducible to the elements themselves. In this way, 'metaphor has emergent cognitive content, portraying its underlying subject in a unique and novel way' (Lewis, 1996, p. 495). A generative metaphor is productive and emergent, it is not just an ornamental way of expressing a similarity or alignment that the author is aware of beforehand, but it is 'the source of new perceptions of similarity and analogy, picking out similarities and analogies that were unknown until the metaphor pointed them out' (ibid, p. 493). This can be used as a tool to conceptualise unobservable, theoretical forces in terms of more familiar, known phenomena, establishing relation of similarity between unidentified mechanisms and a better understood, already recognised phenomena. Lewis argues that generative metaphor allows the conceptualisation of unobservable phenomena through invoking more familiar objects and entities. Familiarity with commonly understood and recognised entities is a gateway to what is yet to be fully captured and understood.

³⁰ For example, Gorski (2009) has argued that 'mechanism' is possibly a misleading and helpful term, as it suggests a predictable, 'mechanistic' entity or process. He suggests the term 'power' offers a clearer description of a causal force.

In clarifying the role of generative metaphor within a CR context, Lewis stresses the dialectical property of emergence in the interanimation of terms. As the metaphor is a compound that synthesises its elements, it can't be reduced to a division between distinct subjects. The new perception emergent from the interanimation, or juxtaposition (the 'intercourse of thoughts' as Lewis puts it), has only one distinct underlying subject inferred through the interaction of concepts. Invoking material elements in novel relationships produces a new concept within thought. This new concept is not located within either of the constituent terms, it is located in the emergent property of their interaction. The novelty of the metaphor, rendered through the unfamiliar juxtaposition of formerly understood terms, can provide a new understanding of the underlying concept. In this way, metaphor produces 'irreplaceable cognitive content' (Lewis, 1996, p. 496), a new insight into its subject that goes beyond the description of an already understood phenomena. The conditions that determine the compound meaning of metaphor also apply to the visual equivalent employed by collage. In its form of generative metaphor, the underlying subject is neither in the image fragments, nor in the juxtaposition of the whole. As an image is recontextualised, its status is modified through the emergent meanings produced in association with other elements in the interanimation of layers. The material contact point at the overlap of layers births the conceptual perception of the non-empirical, describing the unobservable mechanisms generating the observable world. The metaphor collage deploys extends the iconicity of the photographic image without abandoning the indexical. In doing so, it amplifies the capacity for indexical materials to infer the non-empirical within ontological depth.

Following Harre (1970) Lewis applies the concept of paramorphic models to further elucidate the properties of generative metaphor. A model refers to its referent through a 'real or hypothetical resemblance, to some other object or state of affairs' (Lewis, 1996, p. 497). The two primary features of a model are its *subject*, what it represents, and its *source*, what it is 'based on', or how it is comprised. With this distinction established, models can be described as either *homeomorphic* or *paramorphic*. Homeomorphic models feature an identity between subject and source (as seen in a scale model of a physical object like a vehicle or building). Paramorphic models feature a distinction between subject and source, they refer to different kinds of things. These models are necessary in describing phenomena and processes that are not visible, empirically detectable or fully understood. One example is the image of an iceberg, as the source, to describe the domains of the empirical, the actual and the real, as the subject (see Chapter 2). As the subject has no known physical or visible presence, the source can only be of a different kind to its referent. The source must be based on an already known and understood phenomena that explain the operation of the subject. As Lewis says:

Paramorphic models draw on our understanding of their source to suggest existential hypotheses about putative entities, relations, and causal mechanisms which might

account for the behavior of the subject; that is, they offer as candidates for existence putative entities, relations, and mechanisms which are as yet unobserved (ibid.)

As metaphor asks us to see one thing in terms of another, when we use models to refer through comparison and analogy, we are communicating metaphorically, referring to a subject through the vehicle of the model's source. Models offer the theoretical and conceptual terms necessary for referring to the non-empirical objects that operate transfactually. The primary subject of the models developed by critical realists are the structures and mechanisms of the domain of the real. The phrases 'lamination', 'stratification' and 'mechanism' are sources within paramorphic models that describe features of transfactual reality. These models are required for describing a non-empirical social phenomenon (like regional and national identity), as they cannot be referred to in any other way.

When a metaphor is used, it does more than renaming and redescribing the already recognised and understood features of the subject. If its integral features are not visible, and are not yet fully understood, there is 'no way in which a literal description of the subject can be given in order to effect a comparison with the source' (Lewis, 1996, p. 499). There can't be a direct identity between the form of the model and its referent. In the absence of literal and direct terms, metaphor provides indirect analogies between the source and subject that explain the visible, detectable effects of a non-empirical, transfactual object. In doing so, it generates the 'existential hypothesis' that link observable effects with causal mechanisms. Given the unavailability of literal terms, this is not only an effective or preferable way to describe the subject, it is often the only available way. For example, Lewis states that that there is 'no way of describing and understanding electricity other than as a current' (ibid., p. 499). Without the metaphorical substitution, where the visible and tangible is deployed to invoke the unobservable, we would not be able to conceptualise electricity at all. We would then have no starting point for investigating its behaviours and effects. The core metaphorical terms of CR refer to features of the deep domain that can only be known through devices derived from physical phenomena. Our image of social structures as stratified and comprised of mechanisms is the access point for investigating their composition, nature and effects, 'it is only through metaphor that such avenues for further exploration come to our attention' (ibid., p. 500). In this way, generative metaphor expresses features of the world that can't be communicated in any other way.

The emergent concept it generates is irreducible to the individual terms, as its constituent components, that the metaphor contains. The concept is produced by its whole composition, plus its use within the particular context it is used. Lamination and stratification mean something different within other contexts. It is because the components of the metaphor are part of the process of making reference, but are not exhaustive of it, that metaphor is such a useful device

for retroduction and CR. As the concept is generated by the constituent terms plus context, the way that the efficacy of metaphor is established 'has an essential dynamic and dialectic aspect' (ibid., p. 502). The terms don't determine the effect of the reference, they have to be applied within context to produce particular concepts. As such, 'it is not words that refer, but speakers using words in particular contexts who refer' (ibid., p. 502). For CR and retroduction, terms derived from the domain of the empirical are constructed within context to conceptualise the domain of the real.

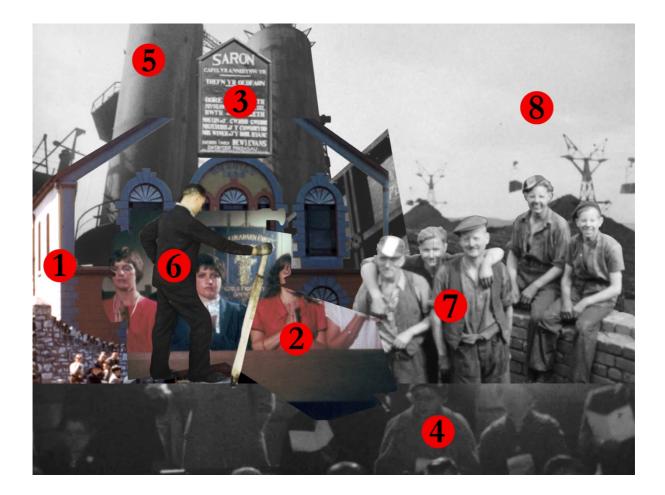
Retroduction, as a form of metaphor, is the practical working through of the operation of analogy that is central to CR. As discussed earlier in this Chapter, we come to know the world through a range of interactions, signs and forms that are not exclusively linguistic, including images. Visual metaphors, as visual retroduction, offer an alternate form of epistemic access, addressing parts of reality that may be better understood through non-verbal forms. Consistent with the ideas explored in this section, the perception of what we can't observe is not expressible in direct and literal terms. This suggests that new perceptions of the non-empirical world may not be fully expressible in words. In realist collage, the transfactual reality of identify, as the subject of the model, is investigated through the spatial composition of metonymic fragments, as the source. The generative metaphor produced through the recontextualization of image parts in new wholes aims to generate emergent perceptions of the causal mechanisms inferred.

Still images of five of the spatial compositions are below. They are annotated with reference to the mechanisms inferred by each film fragment and the mechanism that is retroduced by the whole composition. Video files of the spatial compositions can be found in the 3_RETRODUCTION_SPATIAL folder in the practice folder. The video file 3.1_RETRODUCTION_SPATIAL_SEQ within the practice folder combines the spatial compositions as one sequence.



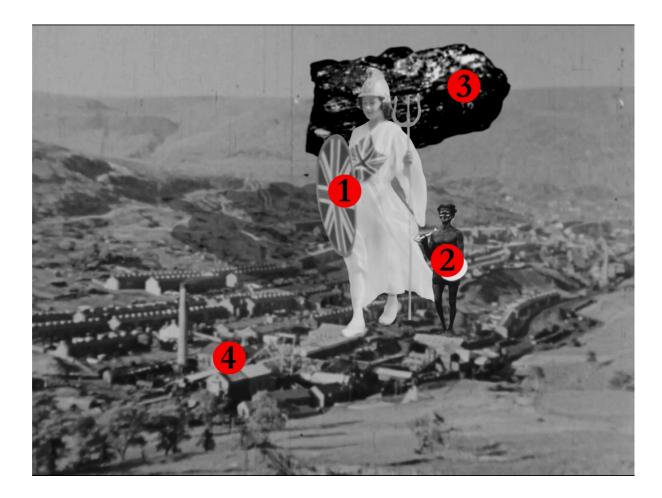
- I. Socialist political consciousness
- 2. Socialist political consciousness
- 3. Socialist political consciousness
- 4. The dominance of heavy and extractive industries over patterns of life
- 5. Nonconformist Protestantism

Retroduced mechanism: The emergence of the working-class culture from nonconformist radicalism



- I. Nonconformist Protestantism
- 2. Nonconformist Protestantism
- 3. Nonconformist Protestantism
- 4. Nonconformist Protestantism
- 5. The dominance of heavy and extractive industries over patterns of
- 6. The dominance of heavy and extractive industries over patterns of
- 7. The dominance of heavy and extractive industries over patterns of
- 8. The dominance of heavy and extractive industries over patterns of

Retroduced mechanism: The emergence of the working-class culture from nonconformist radicalism



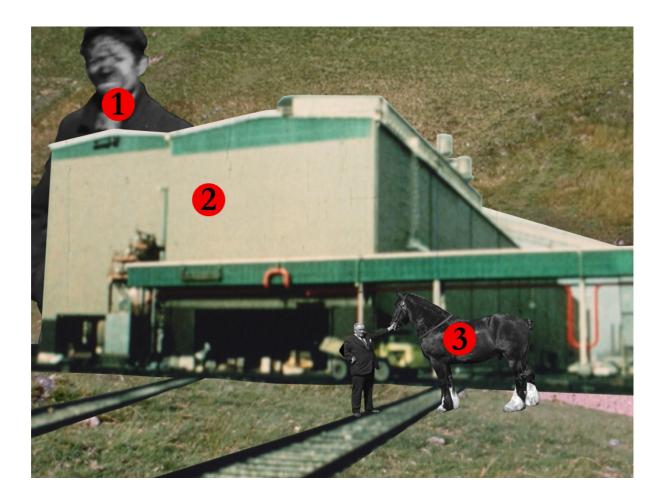
- I. Deference to the facets of the British state
- 2. British imperialism and colonialism
- 3. The dominance of heavy and extractive industries over patterns of
- 4. The dominance of heavy and extractive industries over patterns of

Retroduced mechanism: The historical roots of the heavy industries in British imperialism



- I. Welsh culture and its expressions
- 2. The image of a semi-mythic, mystical and ancient Wales
- 3. Deference to the British royal family
- 4. Deference to other facets of the British state and deference to English culture

Retroduced mechanism: Anglicisation through English culture



- I. The dominance of heavy and extractive industries over patterns of life
- 2. The dominance of heavy and extractive industries over patterns of life
- 3. The preindustrial, pastoral, rural pattern

Retroduced mechanism: The preindustrial, pastoral, rural pattern of life as a 'residual' culture

GENERAL CONCLUSION

The claim that archive film collage can be employed as a form of critical realist inference has been the central argument of this thesis. Its key aim was to develop a philosophically and theoretically informed process of film collage practice that can address the causally generative level of reality. I have called this specific form of practice Realist Collage. The object of the study was the identity of the 'Welsh Wales' region, accessed through archive film materials from the National Screen and Sound Archive of Wales. The capacity of realist collage to negotiate identity as a complex non-empirical object was investigated. This has entailed considering the implications of the practice from the perspective of documentary film and politics. The central importance of the dialectic between factual material and creative mediation has been a key underpinning theme of the work.

To pursue the project aims, a novel system of visual research has been developed within the philosophical framework of CR. The system has been informed by existing theories across film realism, documentary, animation, archive film and experimental film as detailed in Chapter I. Key CR concepts relevant to the research were described in Chapter 2.

Chapter 3 developed and extended the core ideas explored through reference to history and Welsh identity, and how they can be addressed through photographic media and film. The research process is undertaken through the CR stages of abduction, abstraction and retroduction. Within the flexibility and pluralism of CR, these stages have been tailored to the practice of film collage that operates in the spatial and temporal dimensions, as described in Chapter 4. This has been premised on a CR approach to semiotics and the production of meaning.

As previously stated, there has been little academic work that applies CR within art and media contexts. There is none that applies CR specifically to non-fictional animation, archive film or collage. The main contribution of this thesis is in the development of a visual research method as a form of CR. Articulating this process has offered a new perspective on the vocabulary of non-fiction film as a tool for dealing with the complexity of reality. This has implications for how film can be analysed and understood from a CR perspective. Particularly in relation to epistemological and ontological debates around objectivity, the role of mediation, and how film captures the non-empirical causes of events. The research also has implications for our understanding of how collage and montage generate meaning in response to the external world.

In relation to future research, the engagement with the archive collection was limited by financial and temporal resources available during the study. The PhD work is a platform for a wider and deeper engagement with the sound and film archive and the further investigation of Welsh identity. With the necessary resources, this could be extended to media archives held within other Welsh institutions, including BBC Wales and the National Museum of Wales.

The analysis and processing of the archive film was exclusively based on my individual interpretation of the materials. Although this is supported by the CR framework and rationale developed, thematic analysis and abduction, and the following abstraction and retroduction, would benefit from contributions from other participants. A larger scale project, involving a team of contributors from a range of disciplinary areas, bringing a range of expertise and knowledge, would offer the opportunity for a multi levelled observation of the archive film. Within a multidisciplinary process supported by CR's methodological pluralism, a fuller realist analysis of the mechanisms evidenced in the footage could be achieved. This could make a further contribution our understanding of archive film's value in negotiating history and identity, as well as providing a model for projects of this nature, as informed by CR.

The research, as a system of visual research, is potentially portable and transferable to other sources of information and other intransitive objects of inquiry. For example, the model developed could be deployed in analysing and working with other regional film archives. Also, the process is not limited only to the study of identity, other topics could be explored using the same system of stages and processes.

From a practical point of view, the research has not fully engaged with the sound component of collage film practice. Future work could apply the principles and systems of collage to the audio elements derived from the archive film, providing a reflection on the role of sound within collage and causal inference.

Lastly, I would like to continue to develop this practice as a contribution to how we understand the status of visual representations of the social world. Understanding how images of the real are constructed and interpreted, and how the world is mediated in relation to what is visible, invisible and meaningful is important to the negotiation of our present political conditions. Current developments in digital imaging and their presence in mass communication have the potential to destabilise the reliability and trustworthiness of representations of the world. This in turn shapes debates that attempt to negotiate issues of truth, and how reality can be accessed or 'seen', particularly with regards to the social and political implications of 'visibility'. We can't directly see many of the structures and forces that determine the conditions of politics and society. These forces are not visible through ordinary perception or from within an interior subjectivity. Thought of as a technology of seeing, the potential of realist collage, as a form of animated documentary, is in seeing external things differently. In this way, 'animation can be the realm in which such graphic rendition might make social forms available to knowledge' (Leslie, 2014). In the antithesis of the reductionist and ideological suppression of complexity, this enables and supports revelation and visibility, fostering higher levels of awareness and understanding. This can't be achieved through overextending the powers of the photographic or collapsing into subjectivity. This is best achieved through CR's ontic conception of truth. I hope this thesis has presented one potential way forward in this effort.

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APPENDIX

Document that records the observation and thematic analysis of the archive footage.

Still	File	Timecode	Experiential	Inferential	Dispositional
	50 years of ITV Roll 1599879943 602419 AT1641	00:00 – 00:36	Talking head interview in street about the morality of gambling. Aberfan circa mid 60s Question in reference to gambling during the depression 'To expect anything for nothing is immoral, in the bingo hall or the stock exchange.' 'It was very natural for a man drawing very little on the dole to spend a tenner and hope to get 5 bob in those days of depression' Question in reference to social aspects of gambling 'This is a sociological problem – we are moving very rapidly into an automation age – where people work less and have more leisure. I enjoy my leisure – I am comparably educated. I can find pleasure in everything but gambling. We have to produce a democracy that can do that – find its leisure in everything but gambling'	 Hostility to gambling The inferred connection between gambling and financial market Hostility to capitalism A puritan attitude to social 'immorality' The roots of immorality in the depression era Pride in education and knowledge 	 Socialist political consciousness Deprivation, unemployment and poverty The emergence of the working-class culture from nonconformist radicalism

	00:29 - 02:00	No sound. Shots of Slot/Pinball machines from same report. The graphics and decorations feature images and phrases from north American culture.	•	Technologies of entertainment and distraction The presence of American iconography and popular culture The wide availability of opportunities to gamble	 The visibility and dominance of American culture The association between American iconography and wealth and glamour The economic exploitation of working-class regions
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		02:08 – 03:04 No sound. Young people dance in a club. Circa early 60s. Location unknown. The popular dress, hairstyles and dances of the period that are of a general, British character. No discernible elements that are specifically Welsh.	Early 60s trends in British youth culture	NA
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<u>Gwynfor Evans</u> <u>992692868</u> <u>0241913217</u>	03:08 – 04:10	Gwynfor Evans, leader of Plaid Cymru party political broadcast – Circa early to mid 60s. 'Is Wales to be governed as a national community, or is it just a piece of land tacked onto England, to be handled in the manner that is most convenient for England? Is the Welsh nation to be governed by the people of Wales, or by people whose concerns lie elsewhere? 'Is Wales to be no more than 2 industrial strips, one in the south and one in the North, offshoots of Severnside and Merseyside - Beautiful but empty? Will it no longer be homeland of the living nation that has been here from time immemorial? Wales must be governed by as a national community, honestly, before God and man.' The speech is delivered with the typical, very distinctly anglicised formality of the period.	 Welsh nationalism Plaid Cymru's political activism The projection of images of Welsh independence The invocation of a distinct, independent Welsh history The link between Welsh nationalism and religious sentiments, rooted in nonconformism 	 Nationalist assertions of Welsh political independence The symbolic assertion of historical figures, events and images The image of a semi-mythic, mystical and ancient Wales The physical features of the natural environment as emblematic of identity Conversely, The integration of Welshness within a 'flexible' Britishness
	04:13	Chapel exterior and graveyard. Sound – Male voice choir singing Welsh language hymn		

	04:28	Interior, Male voice choir. Circa early 70s.	 Cultural activity tied to working class communities Link between cultural life and religious practice 	 Community values and solidarity Welsh language culture and its expressions The emergence of the working-class culture from nonconformism
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	06:06 - 08:08	Ted Rowlands MP for Merthyr Tydfil 1972 – 2001. Meet and greet with miners at Merthyr pit. 1972 byelection campaign. VO – 'He may draw comfort from the fact that neither Henry Richard nor Keir Hardy were locals. Employment is the overriding issue in this campaign' Campaigning in Merthyr 'D-day for Merthyr Tydfil, to choose a new MP, make this choice your labour candidate Ted Rowlands, use this chance to tell Heath and the Tories to get out'	 Active extractive industries Labourism in South Wales Labour's relationship with the trade unions The intersection of local and parliamentary politics 	 Socialist political consciousness The dominance of heavy and extractive industries over patterns of life The assimilatory 'Britishness' of socialism
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Highway Merthyr 09:5 99187930 10:3 802419 60T2830	53 – 35	Phillip Joll, opera singer from Merthyr Tydfil, performs in chapel. Circa early 90s. Merthyr Tydfil.		
0:-	40 – 49	Dowlais male voice choir perform Joseph Parry's 'On Their Return from the Cross', a Welsh language hymn.	 Cultural activity tied to working class communities Link between cultural life and religious practice 	 Community values and solidarity Welsh language culture and its expressions The emergence of the working-class culture from nonconformism

	12:00 – 13:39	Harry Secombe Singing at Cyfarthfa Castle, Merthyr Tydfil. Castellated mansion that was the home of the Crawshay family, ironmasters of Cyfarthfa Ironworks.	The physical presence of buildings and monuments constructed by industrialists	 The dominance of heavy and extractive industries over patterns of life and the physical environment British imperialism and colonialism
	3:3 – 5:00	Rhondda valley streets. Poor quality living conditions. Sound – VO, Gwyn Thomas recital. 'South Wales is a place to which town planners could be said to be hardened against the threat of battle shock. Most of its housing is a vast mistake. Held together by television aerials.	 The deterioration of housing and amenities The proximity of housing to heavy industry The dominance of the physical environment in the development of housing, roads etc. 	 The dominance of heavy and extractive industries over patterns of life Deprivation, unemployment and poverty The physical features of the natural environment as emblematic of identity

14:43	little girl and boy under the pit head.	ο σ	0.0
15:31	Clothes in the wind against mountainside. Steam train passes. VO, 'Movement and changed. Places where people once worked fall silent, places where people once lived fall empty. And places where children played fall still.'		

	15:40	Derelict playground. VO, 'the fall of rust on things that once spelt delight are the most endlessly sad things on the earth'	ο σ	
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9 <u>976324310241</u> 17:38 Ty <u>9</u>	 Jo Sound. Prince Charles hospital Merthyr ydfil. The unveiling of new medical quipment following the heads of the alleys laser beam appeal, and onlookers 	ologies • The promise that new technologies and investment could reverse economic deprivation following deindustrialisation
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	17:51 – Labour Party Wales meeting at Merthyr 18:19 Tydfil led by Michael Foot. Circa early 80s. Followed by march through town centre. VO – reference to disappointing turnout and internal party conflict	 Labour party activism in South Wales through community activities Reference to low attendance suggests a decline in participation 	 Socialist political consciousness Community values and solidarity
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	TRI-ANG Toy showroom and factory during threat of closure in mid 70s. Interview with one of the 400 employees and shots of exterior. The factory closed in 1978.	 Deteriorating economic conditions leading to decline in manufacturing and unemployment The failure to intervene in and develop the south Wales economy during the 70s 	 Deprivation, unemployment and poverty Free market capitalism
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20:17	Exterior tin houses, Merthyr Tydfil, circa mid 70s.	• The deterioration of housing and amenities	 Deprivation, unemployment and poverty

25:04 – 25:24	(No sounds). Military event at base. First world war era Armoured car and tank. Modern tank performs manoeuvres for the crowd.	Public relations activity conducted by the armed forces	 War and militarism Deference to facets of the British state British imperialism and colonialism The fetishization of military technologies