

Reframing the director: distributed creativity in filmmaking practice

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Introduction

Filmmaking is one of the most complexly layered forms of artistic production. It is a deeply interactive process, socially, culturally, and technologically. Yet the bulk of popular and academic discussion of filmmaking continues to attribute creative authorship of films to directors. Texts refer to ‘a Scorsese film’, not a film by ‘Scorsese et al.’. We argue that this kind of attribution of sole creative responsibility to film directors is a misapprehension of most filmmaking processes, based in part on dubious individualist assumptions about creative minds. Such a misapprehension is effacing the public value that a more inclusive and accurate understanding of filmmaking offers. By ‘public value’ we mean the potential to enhance social and cultural well-being, particularly in working lives and collaborative undertakings in the screen industries. Better understanding of the systemic and social nature of creativity in filmmaking can potentially help in democratising aesthetics, which we consider a clear public good.

By treating motion picture production as a model case of distributed creativity, we can more accurately identify the public value of filmmaking processes. We can do justice to the unique roles of highly skilled individuals, and offer some insights into creative collaboration. This approach has theoretical, descriptive and normative benefits. A more robust understanding of how films are ‘made’ serves as a model for a richer understanding of distributed creativity and cognition. By considering filmmaking as a “‘trans-corporeal’ enterprise, not simply

bound by the skull or the body, but as actively mediated through artifacts, tools, and social-communicative processes" (Theiner and Drain 2016: 7), we enrich understanding of collaboration. A more accurate description of the work of women that has been historically effaced by focus on individual, mostly male, directors has intrinsic social and political value. These results and insights carry clear implications for how aesthetic credit should be assigned, and demonstrate the benefits and value of gender parity.

We begin with a first-hand account of a filmmaking process by a director, working on a film about Russian constructivist filmmaker Esfir Shub (1884-1957). This is followed by discussion of ideas of creative process that this first-hand account adds to or challenges. We then offer an alternative conception of what may be occurring, starting with a broad description of distributed creativity, what it is and where it is in creative processes. Our argument for distributed creativity in filmmaking is finally made through two short case studies of editing that illustrate some of its intersections with directing. Our first draws on research done in preparation for making the film about Esfir Shub and asks why and how Shub's innovations in film form during the influential period of innovation known as the Soviet Montage era have been sidelined compared to those of her male contemporaries. We then turn to a workshop we staged in 2019 with four film philosophers and four editors. We show that the philosophers' reports on their experiences of directing in this workshop support a view of filmmaking creativity as distributed across the brains, bodies, and tools of collaborators who 'make' the film together.

Although the link between creativity and authorship is deeply embedded in industry practice and in the public understanding of cinema, the two concepts are not equivalent. Creativity, our primary focus here, is a psychological and aesthetic concept; it is a matter of degree;

making sense of it requires close attention to process. Authorship, a puzzling and imported notion in the context of film, is a legal, political, and economic concept, a matter of credit and responsibility, of marketing. It is often linked to what Dana Polan identifies as a cultural “desire” (2001) for a single artist to whom we can attribute generation of an artwork. Creativity is neither necessary nor sufficient for legal authorship: some ‘authors’ of some films deploy and exhibit minimal or no creativity, and conversely many highly creative contributions to filmmaking are neglected or bypassed in the contexts of power and institutions where authorship is attributed.

Of course, creativity and authorship in film are connected, though not necessarily in any stable, context-independent way. We suggest that understanding creativity better will, and should, affect and liberalise attributions of authorship. In future work we will address the political elements of authorship status in film directly. One recommendation is that a simple innovation in film referencing developed by Pearlman should be widely adopted. In-text citations of films should read (DirectorSurname et al. YEAR), and bibliographies and lists of works cited should follow up with an IMDB link or an AFI database link to the credits for the film. We propose this in part because referencing systems that cite the director as author are unclear as to whether that citation is intended to signify legal authorship (as in who would be the respondent in a legal case concerning the film’s ideas or other things) or creative authorship (as in who has the ideas and realises them onscreen). In either case citation of director as sole author is fallacious. The director is not the legal author of a film, the production company is the author for legal purposes. The director is also not exclusively the creative author of a film, as we will argue in the balance of this chapter. Thus, if the reference system’s citation method is intended to imply that the director is the creator of the film, adding ‘et al.’ is not only a positive reminder that films are created in complex

embodied, embedded, and enactive cognitive systems. It is also an implied question that begs readers to ask themselves who else may have been involved. Were there women, for example, who have not been foregrounded?

This is significant because a film reference gets re-printed, repeated and relied upon by others. If, by attributing authorship to one person, it implicitly attributes creativity to just one person, it is causing harm. This 'harm' manifests in quantifiable ways such as wages and prestigious invitations. Calling a film 'a Scorsese film' for example, has the effect over time of securing more money and visibility to him than the editor with whom he works so consistently, Thelma Schoonmaker. But the 'harm' also operates in less quantifiable social and cultural spheres. Reinforcing ideas of sole authorship in filmmaking reinforces, we argue, misapprehensions about creative process. This may impede development of better methods of creating and collaborating. Adding 'et al.' implies what we try to demonstrate here: that filmmaking creativity is distributed creativity, and if acknowledged as such is a rich source of film's public value.

So, this essay is essential preliminary work to ground a future case for an 'et al' approach to authorship, with its institutional ramifications. In this chapter we focus primarily on creativity, on the complex processes and resources involved in making novel, surprising, and valuable films (Boden 2010). While directors are not sole creators, it is not necessary to take anything away from recognition of directors as creative artists. Rather we can add a more informed, empirically demonstrable understanding of the generation of ideas in the distributed cognitive systems in which films are made.

Film-Directing – a first person account

We begin with an image (fig.1). We ask what different people and different things actually do on a film set to create that image and what kinds of agency their different roles allow them in shaping the eventual outcome, the film. We use this first-hand account of a director's experience to provide empirical evidence of significant creative actions and decision-making being authoritatively executed by different 'departments' of a standard film crew, even as the director retains and authoritatively executes the creative responsibilities of her role.

Fig.1 Esfir Shub (Victoria Haralabidou) and her assistant (Violette Ayad) in a frame from 'Reel 2' of 'I want to make a film about women' (Pearlman et al. 2019)

This image is a frame of *I want to make a film about women* (Pearlman et al. 2019), a short speculative documentary about Russian Constructivist women. The director, Karen Pearlman, is one of the co-authors of this chapter. Switching to the first person, as I do in the film itself, let me re-phrase: I directed this film. I 'directed' this scene, and this image. But I did not create it. The creation, the 'making' part of filmmaking, I can say from first-hand experience, is distributed. Some of this creativity is hidden but much of it is in plain sight, here in this image, and deserves a closer look.

I begin with design. Designers are responsible for everything you see in the image except for the performance and the light. Take away design and you have two naked women in a lit studio. Well, actually you probably don't, since the women would not show up for work

under those circumstances. Take away design and you have light in a studio and actors on strike. The actors are not just angry because they don't have clothes. Take away design and you take away their key co-creators of character. Actors create action in space, designers create space for action. The director, in a physical, material, actual sense, creates neither. She gives direction. Not instruction, direction.

The direction that I gave to the production designer Valentina Iastrebova, through a series of conversations, was to research, synthesise, imagine and create an image of the home filmmaking studio¹ of Russian constructivist filmmaker Esfir Shub. I provided the antique film editing gear, which I had sourced for another film, and the designer did the rest. For example: the images on the wall behind the characters. Close examination reveals a series of frame grabs from films by Esfir Shub and her colleague Dziga Vertov. To the right of these stills is a portrait of a person who looks like Shub's friend Sergei Eisenstein, but is in fact actor Tug Dumbly, who is playing Eisenstein in this film (Vertov and Eisenstein both appear as characters in 'Reel 3'). The costumes hanging on the left side of the wall (designed by Valentina Serebrinnikova, inspired by Varvara Stepanova), will be worn by dancers in 'Reel 5'. Placing the frame grabs, the portrait and the costumes into the set was an idea generated and executed by the production designer. Although she was briefed and directed by me to make this *kind* of thing possible (because these *kinds* of things may well have been in the workshop of the character), it would be wrong to say that 'director Karen Pearlman uses

¹ Within the limits of budget and resources available to us. These included the screen studio at Macquarie University, objects lent to us by the Australian History Museum, the generous in-kind sponsorship of Opera Australia who provided some furnishings and props, Iastrebova's own Russian heritage and family heirlooms, and some stuff my mother collected from flea markets. Iastrebova and the design department she manages/directs (a team of 5 to 7 people on this production) were responsible for identifying, gathering, selecting, arranging these items, as well as designing, drawing, creating, constructing, painting, graphic design, printing, arranging and managing everything that is ultimately in the image except for performance and light.

techniques of mise en scene to foreshadow events and create character.' I didn't even think of these ideas for the integration of plot and character's space, let alone make them.²

Similarly with actors. Their performances, their gestures, postures, attitudes and actions arise from their research, their immersion in the character's world, wearing of the character's clothes. The actor Victoria Haralabidou, playing Esfir Shub, asked the designers for pencils, notebooks, and the scissors on a string around her neck that her character would have worn. Haralabidou's performance decisions are creative responses to her own knowledge of the character³, direction, script, context, space, and other actors. Cate Blanchett puts this well: "...thinking the director is going to tell you what to do - that's a cliché. It is *not* the director's job to connect the dots for you. The director makes a proposition and *you* complete the sentence - that's the actor's job" (italics in original, Blanchett as quoted in Blake 2011).

The director did not, in fact, 'make' anything that is *visible* in this image. Not the design or the performances. Not the light, which comes from the 12 or so light sources the cinematographer has directed the gaffer, best boy, and camera assistants to arrange.⁴ The director also does not 'make' anything that will eventually be heard in the film. The sound designers and composer and musicians will never even be on set, but will 'make' the film by making its sound world and score.

² The screen shots and portraits actually have an even more complex, but fairly typical, creative backstory. Iastrebova wanted to put many images into the design, which she knew, from her research and from her own upbringing in Russia, would be typical for the space. She mentioned to the producer Richard James Allen, in a conversation that I only happened to overhear fragments of, that she wanted to get portraits of the actual historical figures who were Shub's friends, but was concerned about copyright. Allen arranged instead to give a stills photographer access to the actor's costumes fitting sessions so that she could take pictures of them 'in character'. These were selected and graded with Marcus Eckermann, Macquarie University technical manager, framed by an art department assistant and hung by Iastrebova. Probably. I wasn't there, so I don't know, and my only contribution to the whole sequence was to say 'sure, if you can manage it, go for it!'

³ Haralabidou attended VGIK in Moscow, a film school where she studied the work and milieu of her character, Esfir Shub, who 'supervised the montage workshop in Eisenstein's class' (Petric 1978: 430).

⁴ Directors don't direct these people, they give direction to cinematographers, often by sharing visual references. Cinematographers then give direction to the camera crews who create by arranging the lights.

In the end, the director, often referred to as the creator of the film, does not really ‘make’ anything except decisions. Decisions about offers made to them by other creative people in the filmmaking team, decisions about what ‘direction’ to lead in. The director’s role on the crew is to be the central node of coordination. This is a vital role, of course, implemented in many different ways by different directors in different contexts: the director develops a capacity for situated anticipation, navigating or weaving a path-dependent trajectory through tangled fields of affordances (Rietveld & Kiverstein 2014; van Dijk & Rietveld 2018). As director, I talk to every other member of the key crew (they talk to/direct the members of their own departments). I am responsible, for example, for making sure that the sound design, done months after the shoot, is “coordinated” with the image design, because the sound designer and the production designer will never meet. I do not literally make sounds or images, I make sure they all cohere with each other and move in the same direction.

Making good decisions and skilfully giving direction are undeniably significant, absolutely vital to the realisation of a coherent film. But the fact that directors make decisions and are ultimately held to account for all decisions made, has rarely been overlooked or undervalued. Cultural evaluation of the significance of film directors is robust. But what has it eclipsed? Is the director’s work of decision-making valorised at the expense of the work of hands in literally ‘making’ the film? In other words, is the word ‘labor’ at the centre of the word ‘collaboration’ misunderstood as being “only or merely” (Pearlman, MacKay, Sutton 2018) the work of hands and not the work of minds? Attempts to compare the film’s director to the literary notion of an ‘implied author’ in support of the idea that a film is ‘the unified product of a single controlling intelligence’ (Chatman 2005: 191–2, as discussed in Meskin 2008: 23) highlight the problem⁵. The notion of a ‘single controlling intelligence’ is not just a slight to

⁵ In context, Chatman is suggesting not that a film is the product of a single controlling intelligence, but that films *seem* to be such. We suggest that, to the extent films have so seemed, to some viewers and critics, this too is an outcome of problematic

the creative and intellectual work of the key crew members who actually make things – with their hands, their bodies, their voices, their tools, their teams – it is, in our view, a misapprehension of what intelligence actually is, particularly in the work of creative cognising.

Returning now to the first-person plural, because more than one of us is needed to connect the domains of cognition and creative practice, we will argue that film ‘making’ is the work of the brains, bodies, tools and interactions of many creative people functioning in distributed cognitive ecologies or systems. Given the enormous cultural influence of cinema and ideas about cinema, we propose that a distributed cognition understanding of creative practice in filmmaking has public value. It has potential to enhance well-being in working lives and collaborative undertakings, particularly those involving women whose agency and creative participation may be being effaced by individualistic assumptions about the generation of creative work. Malinin (2019: 10) calls for “a new definition of creativity ... needed to describe creativity as situated practice, emerging through person-environment interactions (material/technological as well as socio-cultural).” We aim to contribute to this emerging definition in such a way that it does not take away from the strengths or valuation of any individual in the filmmaking process. Rather, our more accurate account of film ‘making’ clarifies aspects of cognition and creativity. This clarification, we propose, allows for the unrecognised work of others to be evaluated – something that certainly has public value. It promotes evaluative frameworks in film that recognise the work of people other than the

and culturally specific assumptions. In what follows, we do not consider the influence of continental philosophers whose work has shifted some discussion away from individual authorship towards understanding the author as a construct or as a relationship. While we agree that authorship can be discussed as ‘a dynamic enterprise among author, work and spectator’ (Gerstner 2003: 19), for our purposes here we look to discussions in aesthetics, social ontology, and cognitive theory of the specifics of creative collaboration in filmmaking.

white men who dominate film history thus far, and provides a model, moving forward, for enriched approaches to creative practice in film and other disciplines.

We turn now to discussion of the ‘distributed creativity’ model we are proposing.

Distributed Creativity

Creative processes do not, in general, occur wholly in the mind or brain of a single individual. Rather, they are often spread or *distributed*: both (sometimes) across the brains and bodies of collaborating participants, and (typically) across objects, technologies, locations, systems, and environments. We’re thinking here of the central contributing cognitive, imaginative, emotional, motor, and social processes which drive creative work that turns out to be (more or less) novel, surprising, and valuable (Boden 2010). Among these processes (in no particular order) are visualising, feeling, decision-making, designing, acting and interacting, selecting, remembering, making, wondering, composing, and perceiving. Everyone engages in these activities, but they operate in many different ways and contexts. The claim that creativity is distributed, which we can make in both critical and constructive modes, is that – at least in the context of culturally-embedded art forms such as film, dance, and music – these are *embodied* processes stretching across specific systems or *ecologies* of practice. This increasingly influential distributed approach to creativity falls out of broader *situated* and *anti-individualist* movements within the cognitive sciences (Hutchins 1995; Clark 1997; Barrett 2011; Newen et al 2018). These wider theoretical shifts depict our mental and emotional lives as always already to some extent cultural, collaborative, and creative: but they also afford rich resources for analysing specific forms of creativity in the arts, and for

working with practitioners for mutual benefit (Sawyer & DeZutter 2009; Preston 2013; Torrance & Schumann 2019; van der Schyff et al 2018).

In a critical mode, we claim that creative cognition is not a hidden, private, inner source of decisions and actions: rather, it is a worldly, public, and emergent action or interaction.

Distributed creativity can thus be framed as a critique of residual individualism in thinking about the arts, of the modernist-romantic cult of genius. Clarke and Doffman, introducing their book *Distributed Creativity: collaboration and improvisation in contemporary music* (2017), note that ‘the twenty-first century is still in thrall to an early-nineteenth-century vision of the heroic individual creator – even as the most distributed technologies of production that have ever existed increasingly come to pervade our lives and our music’.

They aim ‘to redress the balance by bringing creativity’s hidden side – its distributed other, with all its contradictions and uncertainties – into the light’ (2017, p.x). Riffing on David Byrne’s attack on the ‘romantic notion’ of creativity in *How Music Works* (Byrne 2012), Mike Wheeler aims to reveal and then undermine the natural assumption that creative processes *must* start with and in the individual mind:

We can barely see the cognitive mechanisms underpinning creativity because our heads are in the way. Once this cranial obstruction is fully removed, the path of creation is revealed to be routinely constituted by dynamic arrays of body-involving and environment-involving processing loops. In other words, the creative mind is embodied, embedded and extended. (Wheeler 2018, p.247).

In the case of film, the distributed framework opens up new avenues of positive enquiry into the complex ecologies of filmmaking.

In a constructive mode, then, we can examine specific ways in which the component processes of creative cognition and action are realised in unique settings. Remembering, sensing, constructing and decision-making are hybrid processes, involving not just subjective and neural but also bodily, material, and social resources. These are embodied, collaborative, worldly, practical cognitive skills. Such heterogeneous resources, each with their own dynamics, timescales, histories, formats, and tendencies, can *complement* each other (Sutton 2010; Colombetti & Krueger 2015). This kind of systemic ecological view does not debunk or efface the aesthetic role of individuals in creative processes, or downplay the originality of work produced in unique cultural contexts. Because humans are thus interactive and integrative, the extent of our reliance on other people, routines, artifacts, cultural norms, and environmental support is not a deficit or weakness, but ordinary interdependent distributed agency (Hutchins 2010; Sutton 2015; Harcourt 2016). In gaining skills in a particular creative domain, we rely on (social and material) *scaffolding* to support and anchor our learning and early practice. With developing expertise, artists become so firmly and effectively enculturated in the practices and norms of their field that they may even begin to transform or reject those norms. That is not the dismantling of all scaffolding, but its transformation: even the maverick film director continues to rely on vast and uneven arrays of technological and institutional resources, and especially on other skilful practitioners working together across distinctive roles. To urge attention to these ecologies of filmmaking practice is not to erase individual creativity, but to understand it better. It is not to make the director disappear, but to locate her and her work more accurately within its rich networks of practical action.

Methodologically, this kind of interdisciplinary project must be a two-way street, not another imperialist takeover of film theory and aesthetics by cognitive science. On the one hand, the idea is to use these independently motivated theoretical concerns to help us see real features

of film making practice that might otherwise remain invisible. On the other hand, the specificity of film cultures and the diversity of on-the-ground creative practice will drive revision and further development of the framework (cf Sutton 2009; Sutton & Tribble 2014).

There are at least three levels at which we can address distributed creativity here. First, there is the general aim of building an account of distributed creativity, in abstraction from particular art forms, but in alignment both with aesthetic theory and the cognitive sciences. Film will – at this general level of analysis – look quite different from visual art, from music, from dance and drama and performance arts, and from literature, as well as from non-artistic domains of practice. The distributed creativity framework joins other aesthetic and theoretical approaches in assisting in comparative analysis, identifying patterns in the ways creative processes emerge across and within distinctive fields.

But of course, ‘film’ is no single domain, no unified art form: not only does it include (and require) highly divergent roles, skills, and practices, it also takes radically different forms across historical periods, across genres, and across contexts. So, to demonstrate the analytic utility of the idea of distributed creativity, we move now to more specific, lower levels of analysis. Our distributed approach queries standard hierarchies, refusing to privilege one player in the complex cognitive ecology of filmmaking. But having flattened the rug, so to speak, we can then reintroduce differentiation and specificity in more precise analyses. Not all films, and not all cases of creativity in film, involve the same balance of resources, the same kinds of collaboration, the same spread of aesthetic decision-making. Once we open up the field or flatten the rug, we can analyse multiple different roles, sites, forms, or locations of creativity in filmmaking, finding many different humps in the rug.⁶

⁶ The metaphor is from John Haugeland’s brilliant essay ‘Mind Embodied and Embedded’ (Haugeland 1998, pp.228-230. Compare Sutton 2010, p.201.

So, in the next section, we pick out editing as an example of a second level at which to show distributed creativity at work. Our brief account of creativity in film editing is one of many possible mid-level analyses of particular roles, practices, or processes in filmmaking which can be better understood when we focus on the embodied and collaborative deployment of heterogeneous social, kinaesthetic, imaginative, emotional, technological, and cultural resources in specific distributed cognitive ecologies. Then, in the final full section of the chapter, we turn to two case studies of different modes and practices of editing in particular epochs or genres of film history and practice: our distributed framework drives interventions in existing, independently motivated debates about unique episodes.

Editing, authorship and distributed creativity

The two short case studies that follow both concern film editing. One reason for focussing on editing is that the creativity, cognitive complexity and dynamics of collaboration in editing are perhaps the least understood of filmmaking disciplines. Even scholars arguing that collaborators are participants in creative authorship of films, sometimes reveal, in their examples, some misapprehension about how editors' creativity is activated. For example, Gaut writes:

There are some film tasks such as when a director tells an editor to cut a shot after 240 frames, which can be specified exactly, and the collaborator can carry out the order with no room for discretion. But most film tasks are not at all like this, for the dimensions of variation possible in performing the job are immense (1997: 159).

Asking for “240 frames” is not really how directors and editors interact. Even if it occasionally happened, there is still significant room for discretion. Which 240 frames? Place them where, in amongst the thousands of other frames that make up a film? 240 frames continuously or in a number of interpolations? Is 240 the final number to be used or the first guess in a highly iterative process? An editor contends with an immense number of variables in exercising embodied and embedded expertise (Pearlman 2016). Similarly, Bacharach and Tollefsen misconstrue typical interactions between editor and director: 'True, the director sanctions these idiosyncratic expressions ... in the end, by allowing a certain line to remain in the film.' (Bacharach & Tollefsen 2010: 24). While directors do generally take final responsibility, they don't 'allow' a shot to remain in, they collaborate on and are convinced by its inclusion in a composition⁷

The two collaborators, the director and the editor, are working on the same thing.

Colloquially, in film school, our teachers would say: “the editor doesn't work for the director, they both work for the film”. Neither of them fully knows the material form the final film will take, so director and editor bounce rapidly and repeatedly from a “joint commitment” (Bacharach & Tollefsen 2010) to find something which they agree is the realisation of the idea, to “shared intentions” (Livingston 2011) that inform their agreements on more specific decisions.

They are both trying to make the film, for want of a better word 'work'. To say the director “allows” a line to remain in implies that the director has one idea of what would work and the editor a different one. In fact, the editor and director may jointly and individually have *many*

⁷ With thanks to Ted Nannicelli for his note on a draft of this article pointing out that the philosophers writing about director/editor relationships are proceeding from “general intuitions” that “the director is in charge” (Nannicelli 21/03/2020) we take the opportunity to clarify that while the director may be deemed responsible for creative decisions in the end, the phrase “in charge” points to precisely the cultural misapprehension about creative process we are addressing herein.

different ideas of what will work, and they will try them all out until they, and their producers, and other sources of feedback, such as audiences, agree on one that works best. Editors are trained in film schools to exercise diplomacy in these processes because they are, in fact, so much more in charge of editing processes and what will finally be ‘allowed’ than directors. They can make something work, or not. They can make the director think it was their idea, or not. They often do, in fact, manipulate situations so that directors feel they are in charge because it makes the working process more efficient. However, perhaps that training in self-effacement to create procedural efficiencies should be challenged, because it is having wide reaching effect on public perception of process and contributes to the ‘invisibility’ of editors and editing in evaluation of films.

The industry truism that ‘good editing is invisible’⁸ may also explain why editing is poorly understood. ‘Invisible editing’ is shorthand for continuity style cutting, which will lead the viewer’s eye without effort from one onscreen action to the next (see Smith 2012). However, on closer inspection the idea that the editing (as opposed to the edits themselves) is invisible is readily refutable. Editing is a ‘choreographic’ process (Pearlman 2016), through which we shape physical, emotional, and structural movement. All of these kinds of movement are visible onscreen.

True, you don’t see the edits, but you *do* see the editing. In fact, saying “editing is invisible” is like saying films or videos are invisible. So, what do you see? You see movement. Movement shaped by editing [...] If the images fall into a compelling visual pattern, if the emotions engage, if the story makes sense and keeps moving, the editing has shaped these three kinds of movement. (Pearlman 2016: p93)

⁸ See for example the popular industry blog ‘Premium Beat’, where on 10 July 2018, Lewis MacGregor writes: “After all, the editor’s job is to be invisible. The American Cinema Editors Association quite literally calls it the invisible art.”

What is less visible, and rarely theorised, is the cognitive complexity of shaping movement, and of collaborating with directors, shots, tools, contexts and conventions to create or realise ideas in editing. This decision-making is often described using variations on the word “intuitive” (see Oldham 1992, Oldham 2012, Kerrigan & McIntyre 2019). One aspect of our work on editing, therefore, is to productively unpack the word ‘intuitive’ to find out what the cognitive actions of editors actually are and to contribute these not only to discourses of creative practice, but to discussions of distributed skilled cognition (see Pearlman 2016, 2017, Pearlman, MacKay & Sutton 2018).

Another reason for choosing editing for an in-depth discussion is this: editing was understood in early and silent cinema to be ‘women’s work’ (see Hatch 2013, Meuel 2016). As Gaines and Vatsal note about film in Hollywood before 1925: “some departments became exclusively organized along gender lines, with editing or joining being the most visibly gendered work” (Gaines and Vatsal 2011: 2). Editing continues to be one of the only disciplines in filmmaking where women come close to parity in employment⁹. The presence of women editors as effective agents in filmmaking since the beginning, and the absence of theory or recognition of the creative cognitions of editors provokes questions.

Were women eventually excluded from most jobs in filmmaking but able to work in editing departments because the creative decision making of editing was unrecognised? Or could it be that the creative decision making of editing was unrecognised because it was work done by women? (Pearlman & Heftberger 2018)

⁹ Throughout film history, women have had more opportunities in editing than many other areas. This continues to be the case even as gains in gender equity are being made. According to the 2020 Center for the Study of Women in Television and Film Report, in the 500 top grossing films of 2019, ‘Women fared best as producers (27%), followed by editors (23%)’.

Distributed creativity in film history and practice

Our approach to revising the narrative that effaces women is to look at the actual work that women were doing and re-classify it. Cumulatively, these case studies support the proposition that ‘good editing is not invisible, and neither are the women who do it’ (Pearlman 2019).

To illustrate this lower level of analysis at which distributed cognition and film history can be integrated for mutual benefit, we first show how editing can itself be understood as authorship, through the work of compilation filmmaker Esfir Shub. Finally, we draw some more experience-near evidence from a workshop exercise we did with four contemporary film philosophers and four editors, using the industry standard tools and materials of contemporary filmmaking practice.

Esfir Shub

‘A person who cannot edit should not make films at all’

Esfir Shub (as translated by Anastasia Kostina 2016: 22)

Esfir Shub (1894-1959), Soviet director-editor, is often credited with the invention of the ‘compilation’ film – a form of documentary constructed entirely in editing, from archival footage¹⁰. Her work demonstrates the ways that ideas are created in editing. That Shub’s own

¹⁰ For contemporary examples of this still popular form see *From Scotland with Love* (Virginia Heath et al. 2014) or *Terror Nullius* (Soda Jerk 2018). Feminist film theorist Laura Mulvey writes of the compilation film that ‘the practice, which is specifically one of montage, is a reminder that editing is one of the few professional skills in filmmaking in which women have traditionally had a place. It is no surprise that some of the key influential compilation filmmakers have been women.’ (Mulvey 2015:28).

writing tends to de-centre the individual's brain and acknowledge the work of hands, tools, and associates in creative process may have been partially responsible for her erasure from film theorising. This points to the urgency of recalibrating our understanding of film making creativity for the appropriate recognition of women in film history.

Shub began her career in the early 1920s, re-editing imported films to make them “appropriate” for Soviet audiences. 'Western and American films had to be ideologically corrected, which meant changing the plot and the editing structure of the film, as well as writing new intertitles' (Shub 1927, translated in Gadassik 2018: 3). By turning celebrations of capitalism into cautionary tales about its excesses, Shub developed expertise in writing (or re-writing) through editing to create new meanings from film footage. Building on this skill, her celebrated 1927 full-length documentary *The Fall of the Romanov Dynasty* is made entirely in editing.

The process of locating, sifting through, compiling, reshooting, reframing, enlarging, matching speech, action, and movement within the frame of pieces of film originally shot by many different cameramen – all of this Shub did in order to produce a coherent and fluid narrative ... with documents that had been made for an entirely different, if not the opposite, purpose (Kaganofsky 2018: 7).

However, Shub's “transformative use of footage” did not “fit neatly into the established picture of a director as someone staging and managing a film set...She could not get directorial credit until colleagues intervened on her behalf” (Gadassik 2018: 2-3). Or, as Stollery reports it: “After the film was released controversy arose because Sovkino initially refused to recognise Shub's author's rights and pay corresponding royalties” (Stollery 2002:

96). It is not likely, in her time, that her radical incursion into film form was seen as “merely” the work of hands. Editing was understood by the Soviets to be the medium-specific attribute that distinguished cinema from all other art forms and the most important aspect of filmmaking. “Shub’s belief that editing is the primary creative force in cinema’s visual grammar is consistent with the theoretical underpinnings of the Soviet avant-garde...” (Dyshlyuk 2016: 10). Further, even within this hotbed of montage creativity, Shub’s “vision of archival compilation ... is quite original” (Dyshlyuk 2016: 10), and originality is not usually a reason why creative people get overlooked. So, it is probably not her work’s originality that impedes Shub’s occupation of a more significant position in film history¹¹. Perhaps then, it is the compilation film form itself, particularly because it “could be perceived as an extension of the type of work usually performed by invisible, uncredited women.” (Stollery 2002: 96). This form of erasure seems the most plausible explanation. Shub is undoubtedly not the first case of editors and women being disappeared, and she is also far from the last.

However, Shub’s own stance in relation to this question of a creative authorship credit may also, Stollery argues, have been a factor. “The compilation led to a cultural theory where author's autonomy was drastically reduced, and the film archive became the ultimate 'author', the matrix out of which films were generated” (2002: 94). It is clear from the few translations of her writings into English (see Gadassik 2018, Dyshlyuk 2016, Petric 1978) that Shub sees her work as an instance of distributed creativity. She “insisted that ‘mastery’ in filmmaking was not a matter of personal genius: “It is all a matter of technique...of aims and method.

¹¹ There are, at time of writing, no books of theory about Shub in English. Vertov and Eisenstein, by comparison are each the subject of very substantial, diverse studies and many books, chapters and dissertations in film theory. While Vertov only has one biographer in English, the biography is in three volumes (see MacKay 2019 and forthcoming). Eisenstein has four biographies written about him in English. Shub has none. She may have contributed to, even welcomed this anti-individualist position. “Vlada Petric points out that Shub's autobiography, yet to be translated into English, dedicates separate chapters to great Soviet and European socialist cultural and cinematic figures, including Mayakovsky, Eisenstein, Vertov, and Joris Ivens. This posits a collaborative and collective sense of self in relation to colleagues” (Stollery 2002: 96).

That is what we must talk about” (Shub as quoted in Stollery 2002: 93). Unlike her colleague Sergei Eisenstein who “was accused by various *LEF*-ists¹² of a multitude of interrelated sins” (Stollery 2002: 92) to do with developing an individual and individualist style, Shub “was actively rejecting the notion of the artist as Romantic, solitary genius” (Stollery 2002: 94). In a 1972 documentary about Shub, director Grigorii Kozintsev describes Shub’s ideas in terms that are highly resonant with a distributed cognition framework: “For Shub, he notes, montage was not the mere act of gluing together pieces of film, nor was it merely a way to tell a story; montage was a way of thinking, of expressing thought on the screen” (Kaganofsky 2018: 7). Or, as Shub writes: “unexpected solutions come up when you hold film stock in your hands. Just like letters: they are born on the top of the pen” (Shub as quoted in Petric 1978: 429). In other words, ideas generation is distributed between Shub, her tools (eg. strips of film), and the images in the filmed material, at least.

Questions arise from this brief study of Shub about why ideas of creative authorship have remained so persistently individualistic. Cultural desires for a single creative artist to laud and the economic/marketing efficiencies of recognising a single person are not the only reasons distributed creativity is left out of film history. Both poor, overly individualist assumptions about the nature of cognition, and the element of unconscious sexism are also significant. Stollery challenges us to take the questions seriously, noting: ‘It is significant that it was a woman who pioneered this new genre based upon a repudiation of established notions of authorship.’ (2002: 96).

Contemporary collaborative work of hands, minds, tools and film materials

¹² LEF was the journal of the ‘Left Front of the Arts’, published between 1923 and 1925 by a group of constructivist Soviet writers and artists.

In our final case study four philosophers confirm our claim that in the actual process of wrenching significant form from disparate shots, editing is never “merely technical” (Hatch 2013: 2). It is “expertly technical, and it is creative” (Pearlman & Heftberger 2018).

In early 2019, as part of a Macquarie University Research Seeding grant, we staged a workshop in which we paired four editors with four film philosophers¹³. The workshop offered the philosophers the chance to experience the process of editing and working with an editor. Our intention was to give them first-hand experience of the kinds of decisions made in continuity editing processes: how many choices there are about which shot to use, where, and for how long, and how substantially editing shapes performance, structure, order, tone, mood, emphasis and meaning. We were curious about whether the philosophers would come away thinking of editors as co-creators of a film.

For the exercise, we gave each team the filmed material of a very short (30 second) drama scene between two people. The materials included plenty of coverage of the whole scene - wide shots, mid-shots, over the shoulder shots, and close ups. The material was from a studio shoot, so the lighting was consistent throughout. The actors and crew were professionals, everything was in focus, no one crossed the line. In other words, if anyone had thought that editing was just ‘cutting out the bad bits’ they would have been disappointed. There were no ‘bad bits’ and there were potentially thousands of options for how they might tell the story.

The teams watched the rushes all together, taking notes on shots they liked or might want to use. They were given some prompts as to what they might think about, e.g. ‘decide whose

¹³ Our thanks to Lucy Darwin, Xanthe Dobbie, Harrison Finch, Joerg Fingerhut, Timothy Hadwen, Jennifer A. McMahon, Richard Menary, and Robert Sinnerbrink for their lively engagement with this creative workshop. Quotations used herein are taken from transcripts of recordings made on October 18th, 2018 at Macquarie University.

story you want it to be, his or hers, and use that decision to guide shot choices.’ These prompts were pretty much universally ignored by the philosophers - three of the four seemed intent on disrupting the material in some way. So, while we were disappointed in their learning about how straight continuity editing can change storytelling, we were richly rewarded with the revelations they had about the creative potential of editing and the creative agency of editors.

Each team had their own edit suite and one hour to cut the 30 second scene. All of the philosophers were surprised to find that one hour was barely enough time – and three of the four (the same three intent on disrupting the scene’s design rather than shaping its nuances) requested ‘a few more minutes!’ This was the first indication that we had been successful in conveying the cognitive complexity of editing. Once in the suite, the options, creative opportunities, and decisions to be made, even with this straightforward material, left them with insufficient time to fully explore.

After their time working in the suites, each philosopher did a short interview with Pearlman about the process, without their editing partners present. They responded to open ended questions such as ‘tell us about your experience or process.’

Philosopher #1 describes a number of instances of ideas arising from material, in a back and forth conversation. She compares the editor to the painter’s hands, finally stating quite directly: “we ended up with something that really, he really created.”

Philosopher #2 was surprised to realise that although he would have expected to want lots of shots to work with, in fact he struggled with his memory of the ones they had and wished for

fewer, or a shooting process over which they had more control. He notes about the editor they worked with, that “she had a better memory for some of the things than I had. And I kind of realised, okay, it’s not my strong suit, it’s hers. So, leave it to her.” Philosopher #2 also notes about that the process was very physical. Ideas for juxtaposition and timing did not arise in their heads and then get translated in to edits. Rather, the editing itself, the moving of shots into various configurations, was where ideas arose. It was ultimately necessary to try things to find “lucky moments”, and concepts needed to be formed in relation to the material, not independently of it. He notes, “before you see it, it’s not there.”

Philosopher #3 also describes the creative process as a continual back and forth. He says the editor “and I sat down and I ran a few ideas past her and she thought some of them were good. ...We both came up with ideas and then tried to find ways of implementing them.”

Philosopher #4’s interview points most explicitly to distributed cognition when he talks about the images having some agency in how they would tell the story: “it was a matter of, you know, working with the images and seeing what came out. And how, starting to put the images together. It’s like the story unfolded as we started cutting and assembling the shots. So, that was fascinating”. About working with the editor, Philosopher #4 simply says: “It was collaborative thinking”.

While there are no great surprises for us from these philosophers’ comments, it is worth noting that they, like most of us, have, in their writing and conversations before this workshop generally referred to films by the surname of the film’s directors, not the director et al. The question arising from the workshop then is: given that they are now all cognisant of

the distributed creativity of editing, would it be possible to extend this into thinking about filmmaking creativity more generally?

Conclusion

Early in this chapter we made a distinction between creativity and authorship in filmmaking. We noted that conflation of these two things and ascribing sole creative authorship to directors may be doing harm by obscuring or misapprehending the ways that films are ‘made’ and the people who ‘make’ them. We therefore propose that a more accurate understanding of process has public value. This value is in providing greater recognition for the work of skilled experts, particularly women who have been marginalised when individual directors (overwhelmingly male in the film history books), have been singled out for cultural valuation. Recognition of the distributed creativity involved in filmmaking also has value for understanding of creativity and collaboration more generally. As noted, we are interested in the ecologies of filmmaking practice, but do not think this need erase individual creativity. Rather it helps us to understand it better. Our experience-near accounts of these processes reveal some of the ways the creativity of *making* the film is distributed through dynamic enaction of many forms of embodied and embedded expertise. These accounts, in turn also contribute to the refinement and development of the distributed cognition theses. Having worked our way through to this point, we come now to the question: are the readers of this chapter sufficiently convinced by our argument that filmmaking creativity is distributed creativity to adopt a film referencing system that readily acknowledges this? Doing so, we propose, would galvanise the considerable power of academics to incrementally change the

ways that film is talked about and be an incursion into writing about film that would have direct and lasting public value.

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