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**Research article**

# Vernacular cinema, self-concept and the perceptual–conceptual shift: exploring conversations between film education and developmental psychology

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## Abstract

Co-authored by film education practitioners and developmental psychologists, this article seeks to establish an interdisciplinary dialogue between the emergent discourses of film education and developmental psychology. In particular, it explores the possible implications for our understandings of film education of recent psychological research into: (1) the cognitive and social consequences for young people of developing a sense of self; and (2) understandings of children's development of visual cognition. Seeking areas of commonality and mutual resonance between different disciplinary vocabularies and methodologies, ultimately we present a series of proposals for how film education may benefit from further interface with developmental psychology.

**Keywords** film education; developmental psychology; cognitivism; vernacular cinema; self-efficacy

The anthropologist E.B. Tylor (2010) proposed the notion of ‘survivals’ to denote the manner in which aspects of earlier traditions remain vestigial within contemporary culture. While ironically now itself significantly outdated within cultural studies, the Tylorian survival nonetheless remains a useful means of understanding the interdisciplinary anachronisms through which the outdated insights of one discipline frequently continue to appear as contemporary currency within another. Jay Ruby (2000) has bemoaned the way film-makers and film studies tend to recycle outdated understandings from anthropology, echoing similar concerns articulated by Mikel Koven (2006) in regard to the disciplines of folklore and ethnology. Within the context of this article, such criticisms are pertinent to the way film studies continues to recycle understandings of psychology (in particular, the psychoanalytic theory of Freud and Lacan) that have since been significantly overtaken within contemporary psychological discourses and practices.

This article responds to the resulting imperative of maintaining up-to-date dialogues with cross-disciplinary colleagues in seeking points of interconnection and overlap between the early pedagogical discourses of film education, film studies more broadly, and those of developmental psychology. It embodies a series of conversations between film education scholars, practitioners and film-makers Jamie Chambers (University of Edinburgh, UK) and Robert Munro (Queen Margaret University, UK), with developmental psychologists Josephine Ross (University of Dundee, UK) – who draws upon research into the cognitive and social consequences for young people of developing a sense of self – and Marina Wimmer (Edinburgh Napier University, UK) – whose research explores aspects of visual cognition in children and, in particular, how the mind deals with visual ambiguity. Together, we present a series of critical observations on how recent developments in psychology might help film educators to think about the ways children learn through and with film. Written collectively, and drawn from a series of shared conversations serving to shape its focus and structure, this article adopts a collective ‘we’, while making reference to the research of individual contributors where appropriate. While conscious of its appearance within *Film Education Journal*, and thus being rooted primarily within the discourses of film education, we reach outwards to consider some of the resonances that film education may find on a cross-disciplinary basis with the broader discipline of developmental psychology.

This is certainly not the first foray either of film studies or, indeed, of early scholarly considerations of film education into interdisciplinary explorations of psychology. Writing in *Film Education Journal*, Steve Connolly (2018) mounted an earlier reconnaissance into the implications of David Bordwell’s (1989) ‘case for cognitivism’ for teachers working with film in classroom settings. Noting that ‘theories [from cognitive psychology] have become part of an increasingly dominant discourse in education’ (Connolly, 2018: 135), wherein classroom teachers continue to be asked to consider cognitive insights within their pedagogical approaches, Connolly presents a series of resonant suggestions for how teachers of film might use evolving understandings of cognitivist psychology, exploring how aspects such as memory retention may work within the specific context of film education. Elsewhere, Cary Bazalgette’s (2018) semi-ethnographic reflections on how toddlers experience film remains a source of provocation that troubles the fault line between the emergent discourses of film education and nearby discourses of cognitive and developmental psychology. Mark Reid (2019) has also reflected upon cognition and arts education, drawn from Elliot Eisner’s (2002) *The Arts and the Creation of Mind* to a case study of France’s Cinéma, cent ans de jeunesse (CCAJ) project. Considering how CCAJ may embody a ‘film-thinking’ pedagogy (allowing young learners to ‘think “in, through, and with” film’), Reid (2019: 470) explores how film education may serve to deploy the six kinds of thinking that Eisner (2002: 35) argues may be stimulated within arts education: ‘judgement in the absence of rules, flexible purposing, using materials as a medium, exercising the imagination, framing the world aesthetically, and transforming the learning experience into language’.

As seems to be self-evident, there is no one, singular lesson for the emergent discourses of film education (itself a fundamentally unfixed object, as Robert Munro [2023] has explored) to be drawn from the similarly heterogeneous, multivalent discourses of cognitive and developmental psychology. In full acknowledgement of this, the following discussion embraces the partiality that accompanies all appeals across disciplinary fault lines, in drawing upon the insights of developmental psychology for a delineated

purpose. The conversations that gave rise to this article were motivated by a desire to explore the broader, interdisciplinary validity and resonance of certain hypotheses arising from a decade of teaching film to learners within primary, secondary and higher education. These hypotheses, each related to the central notion of a *vernacular cinema* – a cinema seeking a localised focus on dialect, place and lived experience – have been discussed in detail elsewhere (Chambers, 2022a), and have subsequently been embodied within the proposal for a detailed new programme of film education aimed predominantly at young learners within Scottish primary classrooms from the ages of 8 to 12, entitled ‘Our Cinema’. Our Cinema is premised upon the hypothesis that encouraging young people to recontextualise the interwoven activities of watching and making films within their own lived experiences (particularly regarding dialect, identity, place and community) may simultaneously foster parallel benefits in social, emotional, cognitive and broader academic development. This cross-disciplinary conversation with developmental psychology therefore proceeds from a distinct (and perhaps even partisan) set of assumptions and objectives, seeking to explore the insights that developmental psychology may afford, first, for cognitive understandings of attention and the manner in which young people respond to multivalent moving images (drawing upon the research of Marina Wimmer), and, second, for understandings of developing self-concept, self-esteem and perspective taking (drawing upon the research of Josephine Ross), and how these may interface with young people’s experiences of film education.

While our more film-focused contributors (Jamie Chambers and Robert Munro) draw here upon 10 years of experience working with film in primary, secondary and higher education classrooms, we are keenly aware – particularly when in conversation with colleagues for whom new assertions must be presented with a significantly greater degree of substantiation – that many of our assumptions about film education are based largely upon anecdotal accounts and our own auto-ethnographic experiences within classrooms. As such, many of the observations presented here remain largely at the level of conjecture, and we thus conclude this article with a series of short proposals that we contend would fruitfully inform further and more empirically focused research into the emergent field of film education and its significant synergies with developmental psychology.

## ‘Bottom-up’ versus ‘top-down’ processing and the perceptual–conceptual shift

A significant area of learning that film education may draw from developmental psychology relates to the relationship between so-called ‘bottom-up’ and ‘top-down’ cognitive processing of external stimuli. Bottom-up processing here refers to what might be considered rawer aspects of perception and incoming stimulus from one’s surrounding environment, whereas top-down relates to how one subsequently interprets and structures the raw stimulus received into sensical patterns. For Bordwell (1989: 18): “‘Bottom-up’ processing refers to those fast, mandatory activities, usually sensory ones, that are “data-driven”. “Top-down” processes are concept-driven; they are more deliberative activities like problem-solving and abstract judgement.’ The dialectic between the two is itself reflected within the disciplinary history of psychology, in which what was considered a gestalt approach, emphasising the essential, bottom-up nature of perceptual experience (Köhler, 1940; Köhler and Wallach, 1944) was subsequently superseded by the cognitive revolution of the 1940s and 1950s (Bruner and Minturn, 1955; Girgus et al., 1977; Gregory, 1970), which instead emphasised more top-down processes of cognition. More concretely, the phenomenon of after-images provides a useful example of how bottom-up visual perceptual processes work: if one is exposed to a hue of, for example, green for a few seconds, and then looks on to a white background, one often sees the inverse colour (in this case, red), because the retinal photoreceptor cells become fatigued, making the opposite colour more prevalent. Further, intensity and illumination of a picture or an object affect what we see, to the extent that incomplete or less illuminated figures take longer to be ‘deciphered’. Conversely, top-down accounts of visual perception posit that expectations, knowledge and context affect our visual experiences. For example, when one is presented

with a broken-B figure (which can be perceived as a B or as the number 13) among numbers, one is more likely to perceive the number 13 as opposed to a B, and vice versa if it is embedded in letters (Bruner and Minturn, 1955).

As should be readily apparent, bottom-up and top-down are not easy to separate, and most commentators now recognise that internal cognition and external stimuli exist in inseparable, mutually mediated dialogue. As Bordwell (1989: 18) notes (drawing on the work of Jerome Bruner [1973]), perception ‘always goes “beyond the information given”’, and ‘is not a passive recording of sensory stimulation; the sensory input is filtered, transformed, filled in, and compared with other inputs to build, inferentially, a consistent, stable world’. Attempting to separate out considerations of unmediated external stimuli from how they are subsequently interpreted by the brain thus seems to be a question of chickens and eggs. And yet, as we shall argue, keeping a notional (perhaps metaphorical) distinction between the two serves as a useful corrective in considering the different emphases through which the two may be articulated within approaches to film education.

This is particularly the case with theorisations of more medium-specific approaches to film education, seeking to step beyond the ambivalent inheritances from longer established disciplines. Steve Connolly (2018: 134) has written of the ‘linguistic turn’ that has exercised considerable influence upon how film has been approached in English classrooms: ‘learning about moving image texts was, like much other learning, in thrall to what has become known as “the linguistic turn”’. Language and language systems were the predominant way of analysing and explaining learning, and, as such, the role of the brain was not given much thought.’ Connolly’s (2018: 135) intervention into how cross-disciplinary links may be established between film education and cognitivism follows Bordwell (1989) in arguing that ‘traditional interpretive and linguistic accounts of how film is watched and learnt do not tell the whole story’. Here, we similarly draw upon aspects of cognitivism in staging our own minor rebellion against what, alongside Connolly (2018), we consider to be the overly linguistically oriented, ‘interpretivist’ bent by which film education tends to be approached in classrooms, arguing instead for a more medium-specific approach in which film itself might be allowed to shape the terms on which it is taught. Considering Alain Bergala’s (2016) *The Cinema Hypothesis*, Alejandro Bachmann remarks how Bergala

makes the medium itself the starting point for reflections on how to teach it. Cinema, and its passing on, is not shaped by our conceptions of how to teach. The approaches of how to teach are derived from cinema. It is cinema itself that articulates how it can be taught and how, maybe, it cannot be taught. (BFI Southbank, 2017: n.p.)

Contrastingly, we argue that the manner in which film is approached in Scottish secondary classrooms in particular (as shaped by national curricula [Abercrombie and Chambers, 2021]) tends to be premised upon epistemological understandings developed for the teaching of English (where film is treated as a ‘text’ to be analysed in a manner not dissimilar to how one would study a novel), or within broader considerations of media (where, within a wider plurality of forms, film’s distinctive limitations and affordances, and its expressive capabilities in particular, tend to be given thin description). As such, film’s medium-specificity, and the more particularised developmental potential this may hold for young people, is frequently lost.

The central opposition of top-down and bottom-up processing within basic models of cognition helps, we argue, to construct a provocative counter to the excesses of linguistic, interpretivist approaches to classroom-based film education. In seeking to formulate such a counter, the question of ambiguous figures (images which may be interpreted in more than one way, such as Jastrow’s [1900] duck/rabbit or Rubin’s [1958] vase/faces) serves usefully to illuminate aspects of the interplay between bottom-up and top-down processing in visual cognition, and how this changes at different developmental stages. The human visual system is largely developed by the end of infancy, at which point one can see individual forms, and the world in colour and sharp focus, perceive depth, form and size as constant, and fill in objects disappearing behind occlusion (Slater, 1998). However, there remain differences in children’s and

adults' perception up until the age of 12, suggesting that visual perception is not adult-like until this point. Previous studies have suggested that our visual system is largely developed by the age of 1 (Slater, 1998), meaning that a 1-year-old child and a fully developed adult sitting side-by-side would see, in effect, the same thing. If, following the earlier arguments of gestalt theorists such as Wolfgang Köhler (1940), human perception is shaped entirely by bottom-up information, a 1-year-old child should be able to see both interpretations of an ambiguous figure such as a duck and a rabbit in Jastrow's (1900) duck/rabbit figure. Research, however, demonstrates that this is not the case, and that only children of 5 years and upwards are able to see both interpretations (Doherty and Wimmer, 2005; Wimmer and Doherty, 2011). Developments in visual cognition continue, however, throughout childhood, and 6- and 8-year-old children are less able to discriminate between two natural images that differ in texture compared to adults (Elleberg et al., 2012).

In broad terms, cognitive psychologists have thus reached a consensus that top-down processing exercises a cumulative impact upon the way in which we experience images, meaning that younger children conversely retain a greater degree of bottom-up processing than older children and adults. For example, one study (Liben, 2003) demonstrated that if young children at the age of 5 are shown a map featuring a road that is coloured red, they will expect the road itself to be red, as they have seen it on the map. A further study (Mitchell and Taylor, 1999) asked children of different ages to draw a plate on a table. Crucially, the study's young participants were positioned at a distance, looking down upon the table, meaning that the plate appeared not as the round shape one would see if one were standing directly over it, but rather as an ellipse. The study found that older children and adults asked to draw the plate were more likely to draw the circle-like shape of the plate one would see from more direct, overhead perspectives (a more Platonic plate, perhaps), whereas younger children were more likely to draw a shape closer to the ellipse, as seen from their perspective. The case of the red road and the ellipse plate serve to demonstrate some of the ways in which younger children retain a more literal, less mediated and – as such – more bottom-up experience of visual perception. Here, the notion of Bayesian priors (modelled on the work of Thomas Bayes, and adopted elsewhere within developmental discourses [Kersten and Yuille, 1996]) is useful in denoting a cumulative sense of prior understandings or mental objects, which increasingly come to mediate perception: with fewer priors, we are more likely to see what is in front of us in more literal, direct terms, whereas with a greater number of priors, we are likely to have less access to more bottom-up experiences of visual stimuli. Interestingly, research has shown (Pellicano and Burr, 2012) that individuals with autism spectrum disorder are less susceptible to having priors and – as such – are likely to perceive images in more bottom-up terms.

A further significant feature of visual cognitive development is what is known as the perceptual-to-conceptual shift (Smith and Heise, 1992), tending to occur between the ages of 5 and 10, in which younger children (typically those between 5 and 7) are more likely to focus on perceptual (and thus bottom-up) features in their surrounding environment, such as light, colour and texture, rather than on conceptual aspects requiring some degree of semantic (top-down) decoding. In this context, it is interesting to consider how frequently film education programmes (such as those of Alicia Vega [2020] in Chile, Children Meet Cinema in Japan [Chambers, 2023] and Cinéma, cent ans de jeunesse in France), while not excluding older learners, tend to gravitate in particular towards middle childhood (towards the upper end of primary or elementary school). While beyond the bounds of this article, it is interesting to speculate about whether this perceptual–conceptual shift is one reason why learners in middle childhood seem to demonstrate a significant propensity for engaging with film education, as we return to below.

Such conclusions hold significant import for film education and – in particular – for approaches to film pedagogy seeking to prioritise a greater degree of medium-specificity regarding film's fundamental ontology. The Italian film-maker and theorist Pier Paolo Pasolini (1983: 31) has written that:

... while in the case of the writer things are destined to become words, that is to say, symbols, in the utterance of a film director things remain things; the 'signs' of the verbal system are

therefore symbolical and conventional while the ‘signs’ of the cinematographic system are nothing more nor less than the things themselves in their materiality and reality. It is true that they become ‘signs’, but they are what one might call living ‘signs’ of themselves.

Expounding elsewhere on a similar theme, Pasolini states:

Jakobson, followed by Barthes, has spoken of the cinema as a metonymic, as opposed to a metaphoric art. Metaphor is an essentially linguistic and literary figure of speech which is difficult to render in the cinema except in rare cases – for example, if I wanted to represent happiness I could do it with birds flying in the sky ... The cinema represents reality with reality; it is metonymic and not metaphoric. Reality doesn’t need metaphors to express itself. If I want to express you I express you through yourself, I couldn’t use metaphors to express you. In the cinema it is as though reality expressed itself with itself, without metaphors, and without anything insipid and conventional and symbolic. (Stack, 2018: n.p.)

Such a rehearsal of film’s ontology (what Mark Reid [2019: 475] has called film’s ‘indexicality’) contrasts starkly to that present within most Scottish classrooms, in which – following the linguistic, interpretivist tradition identified by Connolly (2018) – film is seen primarily as a ‘text’ from which a latent, underlying meaning must be extracted or decoded. While Pasolini (Stack, 2018) arguably exaggerates his case (it is easy, for example, to imagine a cinema, beyond Pasolini’s filmography, in which images *do* articulate a metaphoric or symbolic component beyond themselves, such as the apples and apple trees within the Bill Douglas Trilogy [Chambers, 2022b]), his rehearsal of a relatively *immediate* cinema serves to highlight how institutionalised film education (in Scotland, at least) has been unhelpfully over-weighted in the opposite direction. The account of Scottish media studies explored by commentators such as Abercrombie and Chambers (2021: 90) is of an approach to film dominated by ‘codes and representation’, in which latent aspects of conceptual content – aspects of genre, character or narrative types, or other semiotic content – must be unearthed from moving images, with rare address to the images themselves. Here, moving images are signs requiring viewers to decode the *real meaning* inherent in what is signified, leaving the images themselves largely unattended to. Adopting and reorienting the terminology of Clifford Geertz (1973), we might say that the semantic, top-down aspects of filmic diegesis are here awarded relatively *thick* description, whereas the more medium-specific (and, to an extent, bottom-up) aspects of filmic diegesis receive comparatively *thin* description.

Arguably, this tendency towards an interpretivist – or, less charitably, extractivist – film education within Scottish secondary curricula mirrors that found within university-based film studies (Munro, 2023). As we have discussed elsewhere, a tendency towards top-down approaches to film remains pervasive within the broader discipline of Western film studies itself, in which the study of film is akin to the notion of ‘dancing about architecture’, albeit – considering abiding discursive tendencies to approach film as a springboard towards social, political and historical analysis, with increasingly scant mentions of the ontological parameters of the medium itself – of a dance becoming increasingly distant from the architecture that initially inspired it (Chambers, 2022b). It would be disingenuous to insist (as Pasolini perhaps risks doing) that cinema’s latent aspects of meaning do not remain important as a site of meaning. Yet the overemphasis on such an approach seemingly hardwired into Western film studies risks overlooking much of the fundamental material or matter of cinematic diegesis, within a medium constructed in large part through light, shape, texture, movement, colour and sound: elements which are expressive, valent and bear significance in and of themselves, rather than as mere prompts towards greater, underlying meaning.

In these terms, the notion of an approach to film education seeking to return to more bottom-up perspectives able to apprehend the more immediate aspects of cinematic diegesis described by Pasolini, wherein priority is given to what, specifically, is *exposed* within moving images, and the sensational, emotional and haptic responses these images may elicit in us, is a useful corrective to the dominance of

top-down approaches across film education. Such an approach shares significant overlap with discussions of aesthetic education, which, as the Lincoln School's Maxine [Greene \(2001: 7\)](#) has advocated, embodies 'an effort to move individuals (working together, searching together) to seek a grounding for themselves, so that they may break through the "cotton wool" of dailyness and passivity and boredom and come awake to the colored, sounding, problematic world'. In these terms, one of the central priorities of film education, we argue, is helping learners cultivate, or indeed *re-cultivate* (for those who have undergone the perceptual–conceptual shift), a certain quality of attentiveness: what [Greene \(2001: 10\)](#) describes as 'active perceiving'. We have elsewhere explored the central place of *attention* within the Catalan film education project *Cinema en curs*. The project's co-founder, Nuria Aidelman, has described how

For us, attention is the central methodology or crucial approach to everything that we do. Paying a lot of attention. Cinema is a way of looking and relating to the world and to others. Our essential approach is that cinema is a way of being in the world. It's an opportunity to look at the world in a new way, and find other ways to relate to places and people. ([Chambers, 2022a: 150](#))

The notion of *Cinema en curs* that 'cinema is all around us' here provides a welcome counter to the tendency in certain discourses of aesthetic education to draw an overly blunt binary between the supposedly exotic, colourful spaces of art and the drab textures of daily life beyond it. Rather than overly delineating 'the work [of art] as a privileged object, made for our delectation and delight' from 'the mundane and the routinized and the everyday' ([Greene, 2001: 10](#)), *Cinema en curs* – in accordance with Pasolini's conception of cinema as a medium drawing from the empirical materiality of the world around us – instead encourages the outward direction of a quality of attention not dissimilar to mindfulness, transferable both from lived experience to cinema, and vice versa. Here, efforts to encourage young people to re-sensitise themselves not only to aspects of their environment, but also to the way in which these aspects manifest themselves in cinema recalls the poetry of R.S. Thomas, as cited by the mindfulness psychologist Jon Kabat-Zinn ([Williams et al., 2007: 137](#)), that

I have seen the sun break through  
to illuminate a small field  
for a while, and gone my way  
and forgotten it. But that was the pearl  
of great price, the one field that had  
treasure in it. I realize now  
that I must give all that I have  
to possess it. ([Thomas, 1993: 302](#))

The sense that younger children may have a greater propensity for engaging more directly with the more immediate surfaces of film is also apparent within [Pantenburg and Schlüter's \(2018\)](#) consideration of children's engagement with experimental cinema. Drawing on the work of Wilhelm Genazino (2007), [Pantenburg and Schlüter \(2018: 117\)](#) write that:

... children consider the 'not-properly-understood as not-properly-understood'. While one should imagine one's perception as an 'endless mishmash of beginnings', 'an accumulation of baffling picture puzzles', from which the 'emotion of an enigmatic perception' (*ibid.* [Genazino, 2007]: 57) derives, adults, when looking, are always eager to synthesize picture puzzles and thereby solve them. The way that adults look at things [meaning art objects] assigns them meanings that cannot come purely from the things themselves (*ibid.*: 54). They even manage 'to construct adventurous meanings for images, without ever having learnt anything about the hermeneutical problems which jumping around so freely brings with it' (*ibid.*: 56).

Here, we encounter again a sense that the lack of preconceptions (or Bayesian *priors*) that younger children bring to their bottom-up encounters with film is a source of strength, in comparison to the significantly more top-down way in which the adult world increasingly teaches older learners to extract underlying semantic meaning from images, while implicitly de-emphasising the images themselves. Indeed, in our experience of teaching film, particularly with older learners in higher education, we have often found that the top-down inclination to interpret, or focus upon, linguistic or textual aspects such as narrative has become so ingrained that a certain degree of *unlearning* is frequently required in order to reorient learners to the more bottom-up aspects of perception that they are seeing, hearing and feeling but – crucially – overlooking in the search for semantic content. Teaching film within a higher education setting, one of our contributors encountered an almost hostile response from learners when screening the Soviet-era film-maker Alexander Dovzhenko's *Arsenal* (1929) within a discussion of filmic montage. Dovzhenko's film begins provocatively with a series of disparate images fragmenting any unified sense of place or time – of soldiers asleep on a moving truck, of smoke blowing over trenches, of an austere woman motionless within an empty kitchen, and of figures standing motionless in front of houses – which together conspire to articulate a sense of the horror and exploitations of war within smaller, rural communities. While the relationships between these disparate images remain markedly disjointed in their angular juxtaposition, one student – a mature learner – insisted that there was a logical, sequential narrative tying them together. When questioned as to whether such notably disparate images were indeed intended to conform so neatly to a legible narrative, the student became almost angry at the suggestion there might not be a fully causal, semantic explanation underlying the sequence. This echoes experiences we have had elsewhere within higher education contexts, wherein filmic excerpts which do not clearly conform to easy semantic or narrative decoding evoke a sense of frustration, or even hostility, from learners.

In concluding a reflection upon the significance of distinctions between bottom-up and top-down processing for film education, we argue that understandings of the perceptual–conceptual shift suggest that middle childhood (5–10 years of age) – as a formative moment in the establishment of top-down processing – presents a significant opportunity for film education pedagogies to assist young learners in cultivating the 'active perceiving' and rich 'quality of attention' advocated by Greene (2001) and Cinema en curs, at a moment in their cognitive development when they are already more predisposed towards bottom-up factors. Beyond this age group, we argue, there is subsequently an imperative to encourage older learners to swim back upstream, beyond the learned instincts of top-down processing (in seeking semantic content and interpretation), and to instead respond to the more immediate qualities of the image that, following Pasolini, we argue play a central ontological role within medium-specific considerations of film, and which tend to be neglected within the pervasive linguistic and interpretivist bent of Western film studies.

## Self-concept, self-esteem and perspective taking

In considerations of the interface between film education and developmental psychology, narratives regarding the establishment and development of a sense of self have long informed film theory (Bordwell, 1989), and have also begun to permeate the early discourses of film education (Connolly, 2018). Principally, Lacan's (1953) theorisation of the 'mirror stage' – which positions the moment in which a child recognises themselves in the mirror as a formative juncture in the development of identity – has been heavily drawn upon within Western film studies, particularly within theorisations of the way audiences experience cinema. Drawing upon Lacan's (1953) discussion of the mirror stage, Christian Metz (1982) has distinguished between the audience's *primary identification* with the camera, which serves to establish the fundamental, diegetic relation between the audience and the world pictured on screen, and a further *secondary identification* with the characters identified on screen. Laura Mulvey (1975) subsequently considered how, together, these two identifications conspire in constructing the contingency of subject



position within cinema, and the way such located subjectivities therefore position the audience into certain gazes and allyships.

In his seminal consideration of the significance of cognitivism for film theory, however, Bordwell (1989: 20) is more sceptical of the ‘Lacanian story ... retold’, speculating that there must be certain pre-existing cognitive factors also at play:

It is not enough to say that some time between the ages of 6 and 18 months the child spontaneously recognizes itself in the mirror as the image of the other. Unless this is a miracle, one needs to show that certain conditions (such as maturational factors) enable this to happen. To (mis)recognize your reflection, you must already be able to pick out a figure from the ground, extract texture gradients and assign them to continuous objects (in which case one already needs a rudimentary concept of object), and so on; these conditions are required for seeing the reflection as anything at all.

At the risk of perpetuating another ‘Lacanian story retold’, we here position a modulated rendition of the Lacanian mirror narrative that we argue is of particular significance within the particularised context of a vernacular approach to film education. As discussed elsewhere (Chambers, 2022c), our experience teaching film in Scottish primary classrooms has served – on what remains at present merely an anecdotal level – to challenge simplistic renditions of the Lacanian mirror story. Here, we have frequently encountered a sense in young people’s accounts of cinema-going that they *do not see themselves* when they look at the big screen, and that their sense of identification is complicated by a sense of dispossession and exoticism. When asked why he had set his film in America, rather than in the small town of Carnoustie where he lived, an 11-year-old student participating in a practical film-making project remarked that ‘nothing interesting happens in Scotland’ (Chambers, 2022a: 147). Similarly, we have frequently encountered the situation of having to encourage young people in Scottish schools not to assume American accents and, instead, to use their own voices when acting in films (Chambers, 2022c). Rather than a sense of young people looking at the screen and straightforwardly identifying with the characters they see, there is frequently a sense of looking at images that they, themselves, are not present within, and are perhaps excluded from. As we have discussed (Chambers, 2022b), recalling the stark contrasts between cinema and reality expressed within Bill Douglas’s *My Ain Folk* (1973), there is frequently a sense that the lives, voices, places and experiences depicted on screen in cinema are experienced as being in technicolour – as an exotic and unreachable ‘Great Elsewhere’ – whereas young people’s own lives and experiences outside are, by comparison, seen in humdrum black and white. Our subsequent experiences as film educators of seeking to invert this relationship, and instead to encourage young people to bring the filigreed gaze of cinema – and the importance, significance and quality of attention embodied therewith – to bear upon their own lived experiences (and, thus, to redistribute a sense of cinematic technicolour within their own lives) has resulted, on what again remains to date a merely anecdotal basis, in some seemingly transformative experiences for young people, in which ‘seeing oneself on screen’ has seemed to lead to transformative social, emotional and academic benefits. As we have recounted elsewhere, participating teachers reported how one young student (at a school in the small town of Prestonpans, outside Edinburgh) experienced an advance of reading age of three years in three months during the time they were simultaneously and concertedly engaged in making a film reflecting their own experiences (Chambers, 2022c).

Such experiences lead us to propose an alternative rendition of the Lacanian mirror story, wherein young people, looking at the screen, and (perhaps for the first time) seeing themselves – whether through Metz’s (1982) primary identification (their camera and perspective) or secondary identification, seeing themselves either directly (themselves and their experiences literally depicted on screen) or more indirectly (those like them) – may experience a transformative sense of developmental benefit. Such a re-rehearsal of the Lacanian mirror story – that, in looking into the dizzying mirror of cinema and finding a concordant image, the onlooking self experiences a sense of uplift – certainly finds significant resonance with contemporary discussions within film culture regarding the power of seeing oneself on screen for the

first time through pioneering on-screen representation of hitherto unseen or under-seen experiences and identities. At another time in film history, Italian audiences in the 1950s responded affirmatively to Luchino Visconti's *Rocco and His Brothers* (1960) for its sensitive portrayal of southern Italian migration to the north (Gennari et al., 2020); and, in the documentary *Trekkies* (Roger Nygard, 1997), Whoopi Goldberg recalled her amazement, when seeing Nichelle Nichols in *Star Trek* as Uhura, at seeing 'a Black lady on television and she ain't no maid!' More broadly speaking, such anecdotes point to the long history in world cinema wherein counter-hegemonic representation (through location shooting, vernacular storytelling and films drawing upon localised lived experience) has served as a means of strengthening and renewing collective identity within cinematic movements such as Italian neorealism, the Iranian new wave, India's parallel cinema, Britain's film workshop movement, the Third Cinema of postcolonial nations or the Fourth Cinema of Indigenous communities.

In seeking to bring greater rigour to the anecdotal accounts of transformational benefits for learners' personal development drawn from our experiences of working in Scottish primary and secondary classrooms, we have sought to draw upon the wealth of understandings within developmental psychology regarding how a developing sense of self is experienced by young people. Studies show that children are able to reflect upon themselves and their environment from around the age of 2 years, using and correctly understanding personal pronouns, which vary depending on speaker ('I' versus 'you') (Bates, 1990), and evolving understandings of ownership ('mine' versus 'yours'), which indicate the association between objects and the self (Fasig, 2000) at a similar point in development at which children claim ownership of their autonomy and of their body (Stipek et al., 1990). While a child's ability to point to themselves in a picture or say their own name are aspects of self-identification that, as Bordwell (1989) suggests, have been learned and built up over time, the mirror-mark or 'mirror self-recognition' test developed by Amsterdam (1972) serves to concretely demonstrate the point at which children are able to spontaneously associate themselves with a reflection they see in the mirror. Here, a sticker or something similar is put on a child's head somewhere they are unable to see or feel it, adding a novel aspect to the self-image. It is not until children are around 2 years of age that, if they are asked where the sticker is, they will reach up to their own heads and, as such, realise the correspondence between themselves and the image they see in the mirror in that moment (Courage et al., 2004). Further, as we return to below, studies have suggested (Lewis et al., 1989) that children who pass the mirror-mark test also tend to experience a feeling of embarrassment, thought to arise from a feeling of the self being exposed. This is thought to be one of the first developing forms of self-conscious emotion (that is, emotions deriving from self-reflection and evaluation), a natural consequence of the development of the capacity for self-recognition.

This moment, around the age of 2, tends to be recognised as the beginning of what could be considered basic 'self-concept' – the *idea of me* – to which is subsequently added an increasingly complex network of associations, memories and experiences, as children become older. How, then, might self-concept be significant within the context of education, and for vernacular approaches to film education? Recalling Connolly's (2018) early consideration of the relevance of cognitive theory for teachers of film, one benefit of mobilising self-concept in classroom settings pertains to attention capture and memory retrieval. If one considers memory, and the manner in which it is organised within the mind, as being akin to a network, then the self-concept can be understood as its strongest nodal point. This, in turn, means that those memories linked to self-concept are likely to be the most easily retrievable, well organised and elaborated. This has been termed the self-reference effect – the tendency for people to remember information more accurately when that information has direct relevance to the self, compared with others (Klein et al., 1989; Symons and Johnson, 1997). Self-concept is thus a site of significant cognitive energy: not only does it exert a significant impact upon memory, it is also a strong captor of attention. The so-called 'cocktail-party effect' (demonstrated in a classic study by Colin Cherry [1953]) serves as an example not only of human capacity to narrow attention to focus upon one voice among many, but – more significantly for discussions of self-concept – of the strong attentional pull of the self-concept that is activated when overhearing one's name. These powerful cognitive consequences of self-recognition

develop, alongside the self-concept, across early childhood (Cunningham et al., 2014; Hutchison et al., 2021; Ross et al., 2011, 2020).

The educational benefits of seeking to shape pedagogical approaches that are self-relevant to learners would thus seem to be self-evident. The work of Sheila Cunningham and the Self Lab established by Abertay University and the University of Dundee has explored the role self-referencing can play in fostering greater levels of classroom engagement, such as through the insertion of personal pronouns into mathematics problem solving (whereby the learner's name and other autobiographical cues are inserted into the presentation of mathematics problems to students [Cunningham et al., 2023]). If the insertion of basic autobiographical cues into mathematical problem solving has a proven basis for enhancing cognitive engagement for young people, how much more powerful a source of pedagogical energy might be harnessed if young people are encouraged to project their own autobiographical experiences on screen as part of film education? While the insertion of autobiographical content presents one potential source of pedagogical energy for film education, the significance for young people of *film itself* – as a medium that seems to arrive in classrooms pre-energised through its ubiquitous presence in contemporary culture – is another. Not dissimilar from the manner in which autobiographical cues have been employed to foster additional relevance and engagement for subjects such as mathematics, film has been used in some Scottish schools in order to bring energy and coherence for young people to subjects as disparate as physics, design and technology, and English, allowing teachers to reach learners who may struggle with more conventional literacies (Daly et al., 2020).

Beyond questions of memory retention and attention capture, mobilising aspects of autobiographical relevance arguably possesses a deeper relevance for film education regarding the relationship between self-concept and self-esteem, in terms of the proven importance for personal well-being of maintaining a positive self-concept (Silvia and Duval, 2001). Self-esteem can be understood as how we feel, at a given moment, about our self-concept. As research has shown (O'Mara et al., 2012), human beings are psychologically hardwired to try to capture aspects of positive self-esteem and, indeed, in early childhood, self-esteem is often at a ceiling, with more realistic self-perceptions of competency developing throughout childhood (Harter, 2006). Positive self-esteem (and parallel qualities of self-efficacy) have been proven to be very important for children's capacity for learning (Bong and Clark, 1999), in terms of fostering resilience and the ability to re-engage with challenges. The relationship between positive self-concept and self-esteem continues throughout life, and there is subsequent evidence to suggest that, later in the lifespan, the loss of access to memories and other aspects of self-knowledge during dementia and related cognitive decline is frequently a stress point for poor well-being (Mentzou et al., 2023).

Returning to the question of how understandings of self-concept may serve to inform a vernacular approach to film education, in our experience, practical film-making, in particular, can provide for young people a significant arena through which to articulate a complex sense of self, in a manner that may allow scope to foster self-esteem and positive self-concept. Recalling Bill Douglas's stark contrast of the 'Great Elsewheres' of cinema with the drab realities of real life outside, this would seem to stem not only from the opportunity to articulate aspects of self-concept and the autobiography within a medium arriving pre-energised as a cultural form valued by young people (and within which they are unused to seeing their experiences included), but also from the opportunity to articulate certain uplifting narratives and performances of the self in a manner that may subsequently achieve aspects of social validation. A vernacular-focused approach to film education has led us to encourage young people to use their own voices and names when acting in films, to shoot in the places they themselves live, and to draw on their own experiences when producing films. Indeed, emergent research within developmental psychology further suggests a perhaps inevitable degree of proximity between vernacular language and self-concept. Recent studies seem to suggest that those fluent in a second language consider emotion to be expressed more tangibly and directly when speaking in their native tongue (Dewaele, 2008). Such research seems to position the vernacular as a site of greater emotional significance, with greater proximity to self-concept, a level of proximity that we argue likely also pertains to more

figurative interpretations of the vernacular, as extended to encompass our lived experiences and the places where we live.

While notions of a vernacular cinema may be considered (as we have explored elsewhere [Chambers, 2022c]) to draw upon a certain aesthetic of (neo)realism or naturalism, equally, we acknowledge that – in order to serve as a means of personal uplift – the self-representation and narratives depicted on screen also frequently draw upon a sense of myth-making. Elsewhere in film studies, Giles Deleuze (1990) has considered the way in which film may serve as a means of *fabulation*; of cinematic storytelling as a means of collective becoming or myth-making in formulating and cohering a sense of subjectivity, reflecting Cairns Craig's (1990) discussion of contrasting Marxist and Nietzschean conceptions of myth. Craig (1990: 219) describes how, while for Marx, myth is 'something to be unveiled, torn aside so that the real can stand forth and be recognised for what it is', for Nietzsche, 'the need is to recover the mythic identity that makes action possible ... we need to attach the broken particularity of our existence to some myth that will return to us the sense of the universal significance of our actions'. Within the vernacular approach to film education we have outlined elsewhere (Chambers, 2022a), it is not always easy to disentangle the realist, naturalist aesthetics of cinema in which young people are encouraged to pay attention to the material properties of their immediate surroundings on the one hand, and, on the other hand, the sense of fabulation and myth afforded by cinema as a space for young people to present their experiences in a manner aligning with positive self-concept. In our experience, and as discussed elsewhere in regard to children's film-making in Scottish classrooms (Chambers, 2022c), this is frequently embodied through a sense of wish-fulfilment and happy endings that may serve to present aspects of the ideal self, as complexly entangled with the more naturalist, neorealist or quasi-documentary register of drawing from one's own surroundings.

Articulating aspects of self-concept, and presenting one's experiences on screen, is not without risk. As mentioned above, the 'mirror-mark' experiment frequently leads to a sense of *exposure*: being seen in this respect, in having one's self-image readily apparent, comes accompanied by a certain vulnerability. Georges Didi-Huberman has discussed how cinema serves to expose those it images; as Alison Smith (2021: 76) has explained, the French word *exposer* serves as an:

extraordinarily polysemic word ... able to carry contrary meanings: as well as to 'exhibit', it covers to 'put at risk', to 'reveal', to 'explain'. The ethical and political imperative [Didi-Huberman seeks] is that of 'revealing', making visible, *without* spectacularising or 'putting at risk', the fragile, complicated networks of beings which constitute ordinary humanity.

The attendant benefits and risks of 'making visible' lived experiences and expressions of self-concept through cinema seem equally as relevant to considerations of vernacular film education as they are to the political cinemas with which Didi-Huberman is concerned. While the opportunity for young people to articulate aspects of self-concept (which for younger learners, in particular, is frequently scaffolded – albeit not unproblematically – by aspects of co-creative adult support [Chambers, 2019]) tends in our experience to be empowering, it remains eminently possible for the opposite to be true, if a young person exposes aspects of self-concept that are subsequently met, not with social validation, but with dismissal or denigration. Frequently, in our experience of practical film-making with young people, the moments in which the film is screened – at times on a big screen in a cinema, at others in a school hall in front of parents, or simply in a classroom in front of peers – serve as a significant rite of passage, and a key juncture at which the rendition of self-concept inherent within a film may be affirmed or more ambivalently received. In one example, the cumulative films made within a programme of film education by several Scottish primary schools were screened on the big screen at the Edinburgh International Film Festival to an audience of children and teachers. For a film which was well received, this reportedly (according to teachers) marked a high point in the fostering of the self-confidence of the young P7 learners (10–11 years old) who had been directly involved in the film, who happily came on stage to answer questions from the audience (Chambers, 2022c). For another film from the same school, however, which was received more

with bemusement and confusion by the young audience, those answering for the film on stage looked noticeably more uncomfortable and, sadly, each erred towards an excusal of responsibility, meeting more critical questioning with a degree of disavowal: ‘those decisions were all made by [our classmate], who is not here today’. A question thus remains for vernacular approaches to film education in which young people are encouraged to expose themselves through cinema, as to how one can mitigate such risks, to ensure that the attendant benefits of such an approach are maximised within a relatively safe environment.

Considerations of the way in which the self-concept articulated within young people’s film-making is subsequently subject to an unruly diversity of responses serve also to highlight the inextricability of ‘the self’ from that of broader collective experiences. Accounts of self-concept within developmental psychology emphasise the fundamentally *interpersonal* nature of how self-concept develops. The American sociologist Charles Horton Cooley’s (1902) notion of a looking-glass self, while predating Lacan (1953) by half a century, also draws upon observations of childhood development. For Cooley (1902: 184), the figures of the self and the (collective) other remain complexly entangled, the ‘looking-glass self’ serving as an imaginative prompt regarding how the self appears to others, and how others appear to the self, based on aspects of appearance: ‘As we see our face, figure, and dress in the glass and are interested in them because they are ours ... so in imagination, we perceive in another’s mind some thought of our appearance, manner, aims, deeds, character, friends, and so on, and are variously affected by it’ (McIntyre, 1998). Rather than the inauguration of an ontological self, here the experience of apprehending self-image in the mirror is that of beginning to consider how one looks from the outside and, consequently, how we are perceived by others. Understandings of psychological development within the Global North continue to be shaped by a significant metropolitan bias, wherein, in keeping with the abiding neoliberal tenor of individualism, it is presupposed that children are first egocentric, before beginning to develop a sense of others. In contrast, contemporary theories, such as that advanced by Victoria Southgate (2020), propose that the opposite may be true: that very young children at first exist in a state of togetherness wherein – within a situation in which the psychological and physical needs of newborn babies are met almost entirely by parents – it is difficult to draw finite distinction in psychological terms between newborn children and their parent. As such, given the tendency of newborn infants to be outer-directed in terms of their attention, Southgate and her colleagues are starting to provide evidence to suggest that it is not until children start to become self-aware that more egocentric notions of the self begin (Yeung et al., 2022). In this respect, Aron et al.’s (1992) formation of the ‘inclusion of other in the self’ scale serves as an intriguing provocation in considering the extent to which, within a given sociocultural location, and at a given state of development, the respective experiences of ‘self’ and ‘other’ overlap.

Returning to the relevance that such insights may have for film education, considerations of the entangled figures of self and other raise the resonant question of *perspective taking* (see Frick et al., 2014), as pertaining to the ability to consider or imagine the perspectives of those other than yourself and – in particular – reflect upon *theory of mind* (what others may be experiencing and thinking). Studies based upon asking children to put themselves in another’s shoes have suggested that children do not have a mature theory of mind until they are around 4 years of age (Wellman et al., 2001). When asked what other people are thinking, 3 year olds tend to answer based on their own perspective. The classic ‘Sally–Anne’ experiment (Wimmer and Perner, 1983) features a narrative in which Sally leaves her ball in a box, before exiting the room. While Sally is gone, Anne moves her ball to a basket. When subsequently asked where Sally is going to look for her ball when she re-enters the room, children under the age of 4 tend to be unable to distinguish between their own perspective (the knowledge that the ball is now in the basket) and Sally’s (the presumption that the ball is still in the box). From around the age of 4 onwards, children start to develop a sense of reasoning regarding the perspectives of others, which subsequently develops in middle childhood to more complex understandings. It is interesting to note here, however, that Southgate’s (2020; Yeung et al., 2022) team have more recently provided evidence to suggest that, prior to the development of self, thinking from the perspective of others may be our natural stance. Very young infants react with surprise (as shown by visual fixation) when adults look in the correct area

for their misplaced ball in the Sally–Anne task, implying that they have belief-based rather than reality-based expectations. Following the development of self at 2 years, however, children make the erroneous prediction that Sally will look for the ball where they (the child) know it to be, rather than where she (Sally) thinks it is. As such, the development of self-focus may present a conflict for understandings of perspective taking, in requiring a greater balance between conceptions of self and other to form a mature ‘theory of mind’.

The ability not only to assume a theory of mind, but also to engage more generally in imagining perspectives other than one’s own would seem inherent within the interrelated acts of watching and making films. Indeed, a complex sense of perspective taking is inherent within the very act of camera placement. When starting to make films, younger children (in our experience) frequently struggle initially to approach their choice of camera placement with reflexive agency. Asked to choose where to position the camera, younger learners, in particular, frequently place the camera either at their own eye level, or at the default position of a fully extended tripod. Beyond aspects of creative and aesthetic decision making, the act of camera placement simultaneously involves a complex act of future-tense perspective taking; for, where we choose to place the camera, there we are also – eventually – placing the audience. Such future-tense perspective taking pervades the act of making a film: frequently, one finds oneself in the present, caught within the unruly, worldly chaos of a film shoot, striving to think ahead to the moment in which what is captured therewith will be watched by an audience. In our film education work in Scottish schools, we have frequently adopted an approach whereby, when film work is screened to an audience of peers back in the classroom, those who produced the work are not allowed to speak until they have heard the responses of those not present when the material was shot. Frequently, and particularly when working with younger learners (8–11 years old), we have found that children want to explain their work, whether this is making excuses for aspects they consider less desirable, or simply sharing stories of the moment when the material was filmed. Thus, being required first to listen to the responses of their classmates is frequently a valuable experience (which, admittedly, older learners at undergraduate and postgraduate level also struggle with!) of learning that, within the dialogical encounter of cinema, authorship can never exercise complete control over audience response.

Past-tense perspective taking is also inherent within the act of watching a film when engaged in what Alain Bergala (2016: 74) has described as ‘creative analysis’, in which one seeks to make the ‘logical and imaginative effort necessary to move slightly back upstream in the creative process, to the moment where the film-maker made his decisions, where the choices were still available’:

In the pedagogy of creation, the task at hand is to return, in one’s imagination, to the moment that slightly preceded the moment of definitive inscription, where the various choices that simultaneously confronted the film-maker were about to be decided, to that final moment where the possibilities were still available, to that instant, still vibrating with uncertainty. (Bergala, 2016: 74)

In these terms, the ‘creative analysis’ inherent when watching a film critically involves an act of *retrospective* perspective taking, in which one seeks to place oneself in the position of the film-maker in asking ‘why is the camera placed here?’ As Bergala (2016) details, watching films in this respect, within programmes of film education encompassing both watching and making – a dual approach that we, alongside a growing consensus of commentators (Buckingham, 2003), argue is imperative – also entails a certain degree of *future-tense* thinking, when reflecting that ‘I like what the film-maker has done here, perhaps I could use this in my own work’. Here, creative analysis:

... unlike classical film analysis – whose only purpose is to understand, to decode, to ‘read the film’, as they say in schools – would prepare students for, or initiate them into, creative practice ... Creative analysis ... has a transitive nature that makes it different from classical analysis. The analysis is not an end in itself, but a movement toward something else. (Bergala, 2016: 74)

In these terms, while it remains again at the level of hypothesis, one might speculate that the interrelated activities of watching and making a film may serve to develop and strengthen perspective taking in young learners, not only regarding how such activities ask learners to imagine the future-tense perspective of an audience (or the past-tense perspective of those who made the film one is watching) but also – more simply – through the way in which we, as audience members, respond to the perspectives, lived experiences, and expressions of self-concepts other than our own, when we are ourselves sitting in the audience.

## Conclusion

Reflecting upon the parallel considerations of film education studies and developmental psychology, we have frequently been struck by the sense of perspectives arising from different backgrounds, yet with significant shared interests. While our conversation frequently had to navigate the general interdisciplinary challenges of being divided by a common language, this also provided significant scope – particularly for those of us located within the more emergent discourses of film education studies – to draw energy and inspiration from new aspects of vocabulary, both literally (regarding useful new terminology) and more broadly (regarding an expanding lexicon of concepts). The notion of ‘perspective taking’, for example, serves not only as a lucid means of identifying and focusing one of the central concerns of film education, but equally highlights the links that such a focal concern within film studies may have within broader accounts of cognitive development.

An interface with the discourses of developmental psychology also serves to provoke an interesting source of disquiet regarding contrasting methodological approaches. Whereas aspects of knowledge presented by our colleagues in developmental psychology seemed almost always to be corroborated by empirical study, our own insights – drawn to date largely from anecdote or auto-ethnographic case studies of practice – were frequently presented with significantly less substantiation or confidence. As such, we are aware that the conclusions we have been able to draw here, from what has otherwise been a highly stimulating and productive interdisciplinary dialogue, remain highly tentative, and require significant further research and corroboration. In conclusion, we therefore offer the following proposals for film education, which, on the basis of the cross-disciplinary conversations embodied here, we argue warrant further exploration, both in terms of classroom practice, and in terms of further research that might beneficially seek more empirical means of substantiating and demonstrating the cognitive benefits of film education for young people.

We propose that:

- film education rebalances the pervasive hegemony of top-down approaches within film studies – classroom film education’s linguistic, interpretivist bias (Connolly, 2018) – to prioritise re-sensitising learners to foster more bottom-up approaches to film, focusing upon more immediate aspects of filmic diegesis
- film education prioritises engagement with younger learners (those aged between 5 and 10 years) who have not yet fully undergone the perceptual–conceptual shift, in order to help consolidate a bottom-up ability to respond more directly to the immediate qualities of moving images, while an aptitude for doing so remains more readily accessible
- film education considers how best to mobilise aspects of self-concept and autobiographical relevance, both as a means of maximising attention capture and engagement with young learners, and also in considering how vernacular approaches to film education may serve to mobilise positive self-concepts and, as such, assist learners in enhancing a sense of self-esteem.

As identified by Mark Reid (2019: 11), Robin Alexander (2009) has drawn a distinction between British models of pedagogy premised upon notions of ‘teaching as facilitation’ (which tends to emphasise developmental principles) and European models premised upon notions of ‘teaching as initiation’ (in which education is positioned ‘as the means of providing access to, and passing on from one generation

to the next, the culture's stock of high-status knowledge, for example in literature, the arts, humanities and the sciences'). While we present only one rehearsal of the broader possibilities of film education, we argue that the pedagogical approach outlined here may (as Reid [2019] has argued in regard to the CCAJ project) serve to bridge contrasting notions of 'teaching as facilitation' and 'teaching as initiation', in pursuing a medium-specific approach in which film remains allowed to dictate the terms upon which it is taught, while simultaneously seeking significant interface with developmental understandings of the broader, more holistic cognitive developments such an education may afford young learners.

## Declarations and conflicts of interests

### Research ethics statement

The authors conducted the research reported in this article in accordance with the University of Edinburgh's research ethics standards.

### Consent for publication statement

Not applicable.

### Conflicts of interest statement

Jamie Chambers is Editor-in-Chief for this journal. All efforts to sufficiently anonymise the authors during peer review of this article have been made. The authors declare no further conflicts with this article.

## Filmography

- Arsenal* (SU 1929, Alexander Dovzhenko)  
*My Ain Folk* (GB 1973, Bill Douglas)  
*Rocco and His Brothers* (IT/FR 1960, Luchino Visconti)  
*Trekkies* (US 1997, Roger Nygard)

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