Figure 1: Unattributed screen shot, source unknown.

Philosophy of Photography
Volume 3 Number 2
 doi: 10.1386/pop.3.2.310_1

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Photographic Scale

Keywords

Scale
photographic scale
social ontology of photography
time
space
place
spatiotemporality

Abstract

This article sets out to develop a critical and theoretical interpretation of what scale means in and for photography, an investigation provoked by the expansive character of photography in the context of networked digital culture that also involves questions relating to historical practices and theorisations of photography. Scale has many different meanings in these contexts and these are normally addressed separately in specialised discursive frameworks. This article explores an alternative, namely, that it is its very diversity which gives the clue to what scale means for photography. The article projects a concept of 'photographic scale' to delineate the relational form of scale in photography and argues that photographic scale has ontological significance for photography. This concept denotes a ubiquitous, variegated and compound play between differing but necessarily associated scales that inform the spatiotemporality of photography, that allow for its sense as a form of visual representation, that structure its modes of materialisation and that figure significantly in determinations of its global geo-political processes.

> However often it is used, [scale] is seldom questioned.
>
> (Boudon, 1999)

> What is important in the play of scales, in effect, is not the privilege granted to the choice of some scale so much as the very principle of a variation in scale.
>
> (Ricoeur, 2004)

A Scalar Delirium and the Derangement of Scale

Sometimes it seems that photography has been overcome by a scalar delirium that has spread through all of its levels to impinge upon everything a photograph might show or hide. And perhaps in the process scale – a prime figure of order and measure – has become photographically deranged.[1] This suspicion provokes reflection on scale in relation to contemporary photography. And, in turn, this leads to the suggestion that photography's various scales have always been crucial in combining to give photographic acts, modes of perception and uses their setting and sense. It is light of these suggestions that this article sets out to examine the association between scale and photography.

There are few things more familiar in photography than the fact that photographs scale things up and down and that they come in different sizes. It is only slightly less obvious to note that they are made and reproduced according to techniques entailing and governing their scaling and rescaling, that they result from the use of formats infused with differently scaled values, that the photographic image can be useful as a tool of measurement but also grants a tendentious sense of omnipotence over otherwise unseen and distant things and, overall, that cameras and photographs take on a range of material scales to act within global circuits of social and economic exchange so that, somewhere down the line, a surplus of profit can be abstracted from their use. But whilst questions of scale are obviously ubiquitous in and for photography, its character remains theoretically neglected.

An attempt to make sense of scale in this context is crucial to the understanding of photography, especially in light of its recent technological-historical transformation. Scalability, one might say, is a fundamental characteristic of images in the network, which in large part gives contemporary photography its condition. Noting this undercuts the priority conventionally granted to representational and visual concerns, though scale is the form according to which photographic representations appear. Photographic images are always encountered at scale. But it is important to consider also the very possibilities of the image's scaling, the scaling operations enabling photographs to take on scale. The question of scale in relation to photography might be projected as follows: If one brackets out the visual content of a photograph from its theorisation what is left over are its scales. Questions about the rhythms of movement and the affective timbre of photographs, which have proven to be

1. The notion that scale may be deranged is indebted to Timothy Clark's discussion of climate change and the interpretation of literary texts in his essay 'Derangements of scale' (Cohen 2012: 148–66). Celebrated literary instances in which scale is deranged are obvious in Swift's *Gulliver's Travels* and Carroll's *Alice* books. Another is Will Self's story *Scale* ([1994] 1995), that begins: 'Some people lose their sense of proportion; I've lost my sense of scale' and ends 'It may be said that I have lost my sense of scale, but never that I have lost my sense of proportion'. Self wrote about his abiding fascination for scale in 2010 for the British newspaper, *The Guardian*, http://www.guardian.co.uk/culture/2010/aug/28/will-self-bigness-and-littleness, accessed 25 April 2013 in which he cites Claude Lévi Strauss's striking discussion of the concept in *The Savage Mind* ([1962] 1966: 1–34). For a different take on literary questions of scale see, Tanoukhi (2008: 559–617).

of great concern lately, and the social and political meanings associated with these, are at root enabled by the play between different aspects of photographic scale.

It is important to note at the outset that issues of scale in photography cannot be limited to the visual form and relative dimensions of things represented in photographs, though these too are inherently scaled.[2] Scale is a broader technical, material and phenomenological condition of all encounters with photographs, tactile and kinaesthetic as well as visual. Whether we come across them in print, hung or projected on walls or view them on screens, we face variable realisations of photographs as readers who are accustomed to shifting scales of interpretation in ways that shape what can be made of them and that remind one of the fact that vision is never unmotivated. Even as the same image changes relative size to appear in part or as a whole in front of us, we shift habitually between reading it at the scale of a momentary event, a life, a history, an era, but also simultaneously as being bound up with a particular body, locale, region, nation or as having global scope and reach. The representational organisation of space and time in visual terms in photographs is important to, but does not exhaust the significance of scale for photography.

Furthermore, in our era of networked digital imaging there are, it is often remarked, more photographs produced and disseminated than ever before, for instance in excess of two hundred million uploaded to Facebook on a daily basis.[3] These images are disseminated with increasing speed and at ever greater frequency, facilitated by material infrastructures that underpin their ability to appear *as if* immediately. The global consolidation of photography's digital condition bears within it such exponential growth and speed of exchange as twinned facets of its social promise and its openness to economic exploitation.[4]

Within this image ecology, the experiences and behaviours associated with photography are tempered and redisposed in compound processes of scaling and rescaling. The modes of bodily comportment involved in taking up a device to make photographs have come to hinge on equipment increasingly evenly keyed into the horizon of networked global dissemination. Older modes of making photographs scale their horizons of time and space with interests and values that structure bodily acts of decision and viewing according to the design of the equipment involved and the delays and spatial displacements governing the realization of images. These horizons are rescaled in the use of networked mobile devices involving expansive postures in which both eyes range over a screen held at arms length. These screens compound global commercial imperatives with apparently immediate modes of perception. They have tended, for example, to increase in size relative to the body of the device housing them, making perceptually emphatic the collapse of differences between what is viewed before the moment of capture, the resulting image and its unprecedented openness to publication (Rubinstein and Sluis 2008).[5] This most immediate seeming mode of perceptual experience is shot through with laboriously prepared external interests that set bodily comportment and the desires informing it in the context of globally scaled processes.

2. This comment marks the difference between the present study and the limited purview of one of the very few other existing theoretical studies of scale in photography, Patrick Maynard's *Photography and Philosophy: Essays on the Pencil of Nature* (2008: 187–209).

3. Accounts of contemporary photography very often frame themselves, for good reason, by noting such statistical facts. One recent example, reviewed in this issue, is Nathanial Cunningham's *Face Value: An Essay on the Politics of Photography* (2012: 10).

4. For an account of the historical ontology of photography that focuses attention on its determination by Capitalism's modes of abstraction and exchange, see Osborne (2010: 59–68, 2003: 63–70). An interesting account of the economic forces and modes of cultural inertia surrounding the development of digital cameras is given by Kamal A. Munir (2005: 93–112).

5. Note their account of screen size relative to the apparatus and questions of its functioning but, perhaps

The act of looking at photographs is also recast in online contexts, reset within new processes that challenge the investments one might maintain in the face of photographs. And much of what's important here occurs beneath the level of visual perception. As Mika Elo pointed out recently, the metadata that accompanies a digital image inflects its circulation with automatic linkages that 'go beyond visual mastery of spatiotemporal relations'. (Elo 2012: 20–21) This leads him to the conclusion: 'Photographic interfaces, i.e., the ways in which photography faces the body, provide something like an 'aesthetic horizon' for the experience of digital culture by engaging the contradictions of our time at the level of the senses.' (Elo 2012: 25) One might go as far to say that these contradictions take the form of a massively determined 'face-off' between images and their users, a situation structured at and by various spatial and temporal scales.

Each photograph, at whatever scale it is made, encountered or addressed, harbours within it a plethora of other scaled relations and material facts of scale that, so to speak, spiral upwards and downwards, inwards and outwards, to enable and to impinge upon what the image is and how it can be used. Thus it is that a generalised body of individuals is inscribed in photography's technical and social process. In his essay, 'Nous Autres', Jean Luc Nancy projects an intersubjective account of photography inflected with just such a sense of scale:

> Each 'subject' in the photo refers tacitly, obstinately, to all the others, to this prodigious universe of photos in(to) which we all take ourselves and one another, at some time or other, this colossal and labyrinthine phototheque in whose depths there stalks—like a Minotaur—the monster, the monstration, and the prodigious image of our strangeness.
>
> (2005: 106–7)

As noted above, the explosion of production and consumption provoked by photography's networked digital condition encourages description at engorged statistical scales. The 'colossal and labyrinthine phototheque' is metastasizing and with it the social meanings of photography mutate. This has exciting and troubling implications, not least because photographs act within this sphere as ubiquitous vehicles for assumed human values whilst also undercutting what might ground these values. In *Being Singular Plural* (2000), Nancy confronts the expectations of sense that are conventionally ascribed to the scale of the human with the infinitely scalable horizon of number, which might serve here to inflect photography's familiar human scales with questions arising at other registers.

> Man as the measure of all things has taken on a new, excessive meaning: far removed from every relation to the human as some mediocre standard and also far removed from its remnants, this meaning relates humans themselves to an immensity of responsibility.
>
> (2000: 179)

especially, the manner in which their account of the networked digital snapshot accrues scaled meanings that reach well beyond its visual form: 'Through the semantic mechanisms of tagging and metadata, the specificity of each online snapshot is obliterated by the way in which a single hyperlinked keyword can group together thousands of disparate images. Can 4,150,058 photographs tagged with "party" be wrong?' (Rubinstein and Sluis 2008: 24).

But it has to be noted that other lesser senses of scale are also at work in each instance and every event of photography. These combine to structure the enormity in which photography's appearances and their subjects are lodged. The task of theorising the intersubjective form and ethical horizon of this massive economy of images is not exhausted by reference to its potential for sublimity. Whenever such issues of scale arise, there is a tendency to reach a little too hastily for the category of the sublime, which, with no little irony, has come to function as a familiar and reassuring conceptual reflex. From certain perspectives the category of the sublime might attain theoretical traction on photography's experiential registers of complexity and import. But it also tends to short-circuit and to displace interrogation of photographic specificities and their contexts of mediation.[6]

At the outset, then, one might think of scale in relation to photography as being delimited to banal conventions of relative size or the sublime enormity of the photographic as such. But these assumptions do not exhaust the specific meanings of the term, nor do they help us to understand its importance for photography. So how might one go about this?

The Principle of Variation in Photography's Play of Scales

The quotation from Philippe Boudon used as an epigraph above highlights the obvious but relatively unexamined concept of scale, here, in relation to photography. The accompanying quotation from Paul Ricoeur marks the centrality of this concept to his theorisation of history, memory and forgetting and his meta-critical analysis of the relative values of 'micro' and 'macro' models of historiography. It serves here as a heuristic device to suggest how one might address the questions provoked by importing Boudon's concern for scale into photography, given that scale means so many different things in this sphere. Simply put, its semantic diversity gives the clue to what the concept of scale means for photography. Indeed, I argue that the variation of its senses of scale – and not any one particular fact, phenomenon, technique, order or discourse of scale alone – have ontological significance for photography. The task is, then, to develop the implications of these suggestions by exploring what it means to conceptualise scale in this context, at this particular historical conjuncture and according to the 'very principle of a variation' at work in photography's 'play of scales'.

The term 'photographic scale' might thus be reserved to denote that dynamic nexus of operations, phenomena and ideas, which promises to elucidate photography as a matrix of technologies, discursive formations, aesthetic encounters and socio-historical uses. The scope of the concept testifies to photography's profound ability to touch upon and be informed by other forms, practices and discourses. It therefore incorporates, but cannot be delimited by, the explicit concerns for scale that have come to inform recent debates about art historical, technical-historical and globalised-technical aspects of photography, such as the imposing scale of the photographic tableau as a genre of artwork (Fried 2008; Elkins 2005: 938–56; see also Fisher 2009),[7] the historical significance of instrumental

6. In this light, the interest of James Elkin's interrogation of scale as an issue for photography is undercut by the manner in which it appeals to sublime artistic effects in order to distinguish it from other modes of imaging (Elkins: 2008). An alternative approach to bridging the gap between technical and critical issues in photography is found in Sean Snyder (2008).

7. Michael Fried's writings have come to dominate these debates. For a short but incisive critique of his account of the photographic tableau see, Michael Lobel (2010: 256–60). The Fotomuseum Winterthur's blog Still Searching recently hosted an exchange of views between Hilde Van Gelder and David Campany that foregrounded scale as a problematic aspect of such works, whilst also exemplifying the limited terms in which it tends to be addressed: http://blog.fotomuseum.ch/, accessed 7 November 2012.

applications of various scales of measure in, to and with photographs (e.g. see Benjamin 1996: 99–122; Daston and Galison 2010; Cohnen 2008; Müller-Helle and Sprenger 2012; Reichle and Siegel 2009); or even the global scope of networked digital photography (Fuller 2005). Whilst these existing debates give important clues to the character of scale in photography, none of them exhaust the significance of photographic scale and their evaluation is dependant upon the development of this broader concept.

Within the variegated field denoted by photographic scale, three aspects stand out as predominant. Firstly, that all of photography's productions set space and time together and *to scale* in the form of an image. Secondly, all forms of photography – even those conventionally considered immaterial – necessarily find some kind of material form, however attenuated or dispersed, and do so in taking on scale. Thirdly, that photography not only has, so to speak, a weighty geo-political scale but that its geo-political import is grounded in and through the scaling operations and processes it operates within and serves to facilitate.

Photography's representational character as a visual image form, questions of the materiality and/or immateriality of the photographic image and photography's expanding and increasingly intensified roles in the global order of contemporary capitalism are bound up with one another in ways that invite conceptualisation as modes of photography's variegated scale.

If the principle of a variegated play between different modalities of scale is significant, then the visual character of photographic representation, phenomenological encounters with things photographic and even the fact that photography's representations and its phenomenologies unfold within capitalism's global order of abstract exchange, remain partial unless thought in terms of the play that structures their variegation *at* and *as* scale.

This claim needs, however, to be qualified. Perhaps most importantly it should be noted that recent attempts to theorise photography as a social form in relation to capitalism are right to establish parallels between the forms of social abstraction determining of social life and those characterizing the digital condition of photographic images. A compelling example is Peter Osborne's theorisation of the social ontology of the photographic according to its intrinsic historical-technical character and shifting cultural formations. Osborne distinguishes between the 'event of capture' and the 'event of visualisation' to mark the distinctiveness of the digital image, including photography as one of its most important modes, and to reveal its relation to the forms of abstraction and exchange central to capitalism. Thus, in the digital image: 'the infinite possibilities for social exchange generated by the abstraction of value from use finds an equivalent visual form' (Osborne 2010: 67). And this form is one in which the 'post-capture' life of inherently de- and re-realizable technical-image visualisations are opened up to the vagaries of infinite exchangeability: 'Via the multiplicity of visualizations, digitalization draws attention to the essentially *de*-realized character of the image. It is this de-realized image – supported in each instance by specific material processes – that strangely

'corresponds' to the ontological status of the value-form' (Osborne 2010: 67 emphasis in original). This enables him to project a determining parallel between image and exchange-form in the context of the social abstraction of value. But it also provokes questions as to what mediating forms, processes and experiences might flesh out the space between abstraction and exchange, on the one hand, and the specific uses and meanings of photographic images, on the other hand. What relates the general correspondence between image and value-form to the many different ways in which 'each instance' of the photographic is 'supported by specific material processes'? The concept of photographic scale articulated here is projected to elucidate this gap.

Scales of Scaling in Photography

In order to make sense of these claims, it is worth stepping back briefly so as to set them in the more general context of related discourses on scale and its existing uses in and for photography.

In general, scale denotes relative magnitude, extent, degree or proportion and the application of some standard of calculation. This always entails setting things at some level in relation to each other and often also the establishment of hierarchies between them. Scale refers to apparatuses or systems used for measuring: the graduated marks on a line or rule used to measure distances and ascertain relative dimensions; the equally divided grid-lines on the surface of a map, chart or plan that enable ratios of area and distance to be established; the ratio pertaining between a model and the reality it represents or projects.

Importantly, Geography teaches that scale is a socially produced dimension of spatiality and that scales emerge from unevenly distributed, temporally disjunctive or overlapping and politically conflicted processes. Erik Swyngedouw formulates this as follows: 'geographical scales are both the realm and the outcome of the struggle for control over social space.' (1992: 60) Debates about the geo-politics of scale have seen many critical modulations of the concept, from those hierarchies of scale that appear nested one in the next – from body to family, locale to nation, region and globe – to the bending of scales and moments at which social actors might jump between them, to arguments about whether scale remains an appropriate conceptual tool for investigation of contemporary social life at all.[8] These critical developments obviously stand to inform understanding of photography's globalised form and use. But there are other aesthetic and ontological aspects of photographic scale that militate against taking one or other geographical notion of scale to exhaust what it means in photographic terms.

The labile relative dimensions of things encountered in embodied perception can also be thought in terms of scale.[9] Things emerge from the depths of one's surroundings in sensible experience organised at levels of greater or lesser engagement and significance. And this phenomenologically scaled aspect of perceptual dimensionality is not uninflected by the technical processes and forms

8. As a sample of the literature on scale in Geography, see Smith (1984), Neil Brenner (1998: 459–81), Eric Shepherd and Robert B. McMaster (2004), Herod and Wright (2002) and Denis Cosgrove (2008). Explicit studies of the relationship between geography and photography are relatively few. What there is tends to focus on the photographic construction of place as in Schwartz and Ryan (2003). By way of contrast, see El Hadi Jazairy (2011, especially Kelsey 10–16). See also Benjamin Lazier (2011: 602–30). These last references draw on Hannah Arendt's, 'The conquest of space and the stature of man' ([1963] 2007: 43–55).

9. See the 'working note' entitled 'Scale – ontological significance of this notion', in Maurice Merleau-Ponty (1964: 226–27). See also Lingis's sensualist articulation of Merleau-Ponty's notion of 'perceptual levels' in *The Imperative* (1998: 25–40).

characteristic of photography. Remarking this sense of scale, here, serves to highlight the tension between scale as calculable abstraction and the phenomenologically informed idea that, ultimately, such abstractions find their sense in axiomatic reference to the human, in particular, the capacities and values ascribed to the human body.[10] The specific character of photographic scale hinges in important ways upon this tension. But noting this does not return the notion of scale to a defining homology between visual perception and the photographic image. Rather, it inverts the axiomatic reference to the scale of human embodiment, revealing it in eviscerated form to be the condition of embodied experience of visual culture in the age of the networked digital image. One might think of the way in which a photographic apparatus anticipates visual experience by coding things spatio-temporally on the surface of a print, for instance, as but one stage in the life of an image, a stage that is contingent and that does not have the form of necessity often attributed to the photograph as a material object. What remains necessary, here, even though phenomenologically it might appear most contingent, is such a photograph's scalability.

Photography specifies spatial and temporal relationships between things in constitutively variable frames, the horizons of which are always scaled and, in principle, are open to being rescaled. Any photographic representation or visual experience is bracketed, one might say structured, by the other possible scales at which it might have been - and still might be – actualized. Photography's mediation of actual size relationships with real things has always been subject to shifting scalar possibilities that knit together discursive, phenomenological, technical and social processes in and at labile dimensions. Photography has always also held out the promise and/or levelled the threat that it will render the 'natural' character of embodied perceptual experience and the 'real' dimensions of things in technically contingent and radically changeable terms. And this aspect of photography is defining of its contribution to that nature and that reality of which it has come to form such a significant part. From a phenomenological viewpoint, this reality and this nature are not alien to the forms of abstraction signalled by the processes and results of photography. Reality and nature are amenable to being framed in photographs. They are encompassed by and altered through photography. And photographs, cameras and associated accessories take their place alongside other things as objects within the natural framework of perception and the material strictures of reality.

One can trace the complexity of these apparently straightforward general meanings of scale in disciplines such as cartography, ecology, ethnography, archaeology, microscopy and macroscopy but also those practices of measure and survey involved in military tactics, social administration and the policing of populations. It is notable that photography features – in combination with other machinery, text, diagrams and protocols of use – in all of these disciplines as a component part of apparatuses developed to establish and to interpret scales of different kinds.

Since its inception, photography has harboured scalar promises, for instance, that it might bring small, large, distant and hidden things into the range of human perception. It has also

10. See, for instance, Mary Ann Doane's bald statement of this view: 'scale as a concept in general can only be understood through its reference to the human body', and what she does in its name, in 'The close-up: Scale and detail in the cinema' (2003: 108).

proven open to other uses, equally oriented to establishing the scale of things that harbour scaled injustices. Take, for instance, aerial photography's long standing centrality to cartography and its intertwined civil and political developments, and other related modes of photography used to survey territory of military, commercial and political interest.[11] The development of these interrelated discourses of photomensuration has hinged on the establishment of increasingly expansive, increasingly manipulable and analysable photographically framed viewpoints. These find themselves folded back into the social world through related applications of scaling embedded in online applications such Google Earth, Woophy and Photosynth, which cover the simulated surface of the earth with its own image and enabling the use of these images at distance or *in situ*.

Photography also entails the creation of scalable spaces 'within' the image. This is common to all photographic representation, but also underpins a wide range of specialised photomensuration strategies. For instance, the many projects that have set out to survey and measure the world photographically - in ethnographical, archaeological, geographical or geological terms – and the representational strategies these have adopted to establish the scale of things – rulers resting on rock formations, local guides standing next to pyramids, subjects of an ethnographical gaze posed against gridded backcloths – scaled abstractions organised according to rules that inscribe the self-evident appearance of photographic measure with discordant meanings harboured in the image but exceeding its representational framework.[12]

And the list could go on, sliding up and down the scales from molecule to body, geo-political context to distant planet and back again, tracing each time a related possibility of photographic scale along trajectories defined by divergent, overlapping and/or conflicting interests. Given that these specific strategies of scaling exploit propensities and possibilities harboured in all photography, they exemplify the ubiquity of photographic scale. Photography appears as a system of scales that structure space and time to give, in many different senses, the measure of things and a measure to them. Photographic scale is the mode in which photography's abstractions unfold and are encountered. But what is the character of abstraction in this context if, as is implied here, photomensuration is generic to the photographic?

Scale Sets the Scene for Questions asked by Photography Theory

Questions about scale, forms of scaling and the application of scales of different kinds have been a recurring, if muted, concern for its critical and theoretical discourses. For example, to note four canonical instances: scale is central to Walter Benjamin's influential conception of photographic reproduction, the spatial and temporal expansiveness of the close-up and slow-motion and, especially, the 'unconscious optics' introduced by the camera, a notion explicitly characterised as a

11. For a survey of the different meanings given to scale in the social sciences see Clark Gibson et al. (1998; see also Jenerette and Wu; Wu 2007; Weins 1989). Chunglin Kwa narrates the history of imaging practices prefiguring and partly shaping the development of ecology as a science, with emphasis on its ambivalent relationship to aerial photography in,'Painting and photographing landscapes: Pictorial conventions and gestalts' (2008).

12. For debates about forms of measure, calculation and scale in scientific uses of technical images and studies of measure and survey in the history of photography see, Marina Benjamin (1996) and Lorraine Daston and Peter Galison (2010). Much attention has been paid to such issues recently in German language research, notably, Thomas Cohnen (2008) and Arthur Engelbert (2011). For a temporal inflection of such concerns see Katja Müller-Helle and Florian Sprenger (2012). Another example, dealing in broad terms with scale and oriented by notions

scale-effect: 'The enlargement of a snapshot does not simply render more precise what in any case was visible, it reveals entirely new structural formations' (Benjamin [1936] 1969: 236–7). Susan Sontag's famously dour appreciation of the mass forms taken by photography is motivated to understand a closely related set of scalar concerns in a way that binds together the material modes, representational functions, aesthetic effects and world spanning cultures of the photograph:

> Photographed images do not seem to be statements about the world so much as pieces of it, miniatures of reality that anyone can make or acquire. Photographs, which fiddle with the scale of the world, themselves get reduced, blown up, cropped, retouched, doctored, tricked out.
>
> ([1977] 1979: 4)

What might previously have been thought of as the immutable characteristics of the photograph's fixity and pastness, and the pathos these grant its relation to historical reality, have been rendered yet more unstable by technologies as, for instance, in recently developed cameras that enable one to alter picture settings after the event of capture (Palmer 2012: 38). Explicitly made to be 'tricked out' in scalar terms, photography's unconscious optics are thus inflected with possibilities that dilate the event and the functions of its pictorial authorship. The apparently immutable and defining carving out of a stilled moment of the past are in the process of being dissolved. Benjamin's and Sontag's photographic world is transformed and the site of this transformation is the defining suite of scaling operations built into the camera, reflected in its image and found in their uses.

In perhaps less readily acknowledged phenomenological terms, the rhythms according to which mass forms of photography impact upon consuming subjects find an enervating scalar outlet in Roland Barthes's *Camera Lucida* (1982). His celebrated eidetic reduction of photography's normative use hinges upon a series of embodied acts – little moments of transformative interface between the privacy of affect and the banal enormity of photographic culture – that pivot from acedia to intense affect and, in doing so, serve to project Barthes's claim on the ecstatic temporality of the photograph: 'I was leafing through an illustrated magazine. A photograph made me pause' being one such spur (1982: 23).[13] Technique and its historical effects, the cultures of the photograph as a socially dominant image form and the critical potentialities emerging from all of this, are linked implicitly here by dint of the fact that they take on importance as they take on scale. Barthes's subtle binding of affect to photographic temporality still rings true in many respects, but its resonance in the present is complicated by the loosening of his – always tendentious – radicalisation of photography's realistic visual effects.

A fourth theoretical marker is worth dwelling on in slightly greater detail, because it treats the photographic apparatus as a programmed modality of the social production of space, namely, Vilém

of 'transgression' and 'sublimity' is Ingeborg Reichle and Stefan Siegel (2009).

13. See my analysis of this in A. Fisher (2008).

Flusser's account of photography as the exemplary form of technical image. Flusser theorises the spatiotemporal scaling operations embedded in cameras as structuring the interface between photographic apparatus, operator and world: a relationship in which the apparatus, famously, has the upper hand. The apparatus extends beyond the camera to include various levels of discourse and social practice that shape and orient its use. Mathew Fuller describes this well: 'Here, iterations of multi-scalar relations of causality and interpenetration are compiled layer upon layer. Base and superstructure shot through a kaleidoscope. Programs and metaprograms are never clearly defined as distinct. The relation is simply one of scale, or of order' (2005: 2). The application of technical and scientific concepts predetermine the photographic apparatus as a tool for schematising space and time in symbolic terms. The apparatus – a technical embodiment of anonymous social interests – delimits individual freedoms and meanings traditionally associated with making and viewing images. This generates and gives spatiotemporal flesh to Flusser's critique of technical image culture from, so to speak, the ground up:

> The photographer's gesture as the search for a viewpoint onto a scene takes place within the possibilities offered by the apparatus. The photographer moves within specific categories of space and time regarding the scene: proximity and distance, bird- and worm's-eye views, frontal- and side-views, short or long exposures, etc. The Gestalt of space–time surrounding the scene is prefigured for the photographer by the categories of his camera. These categories are an a priori for him. He must 'decide' within them: he must press the trigger.'
>
> ([1980] 2012: 198)

This might be taken as a signature form of photographic scale: its dissociation between the 'human' quotient in imagination and the meaningful experiences taken to be embedded in visual culture. For Flusser, this dissociation is a core truth of the age of technical images and thus the source of potentials that might reorient the apparatus to suggest modes of freedom that might attain critical purchase on their era.

So scale appears to be something of a critical norm for photography theory, though it remains more or less implicit in the examples sketched above. Indeed, when one approaches the history of photography theory primed to discover a concern for it, one finds scale everywhere. But one also discovers that scale is, more often than not, accepted at face value and as being so obvious as to escape examination. Scale is on the surface of photographic discourse and yet remains subterranean within it. It tends to feature, if at all, merely to set the scene for other questions and problems. There is an implicit truth in this, scale does set the scene for photography's other questions and problems, quite literally. But it does so in more substantive ways than have been acknowledged to date.

Photographic Scale

In light of these historical, practical and theoretical traces of scale in photography and as a starting point for conceptualising photographic scale as a variegated, ubiquitous and ontologically significant modality of the photographic, one might observe a truism: There's no photography without it.

That is, there is no photography of any kind without their being established a manifold of scalar relations which serve as material, conceptual and phenomenological horizons for the production, dissemination and consumption, as well as the form, appearance and meaning of photographs. There are always, as a matter of fact, multiple, different and overlapping scalar operations and scaled processes at work in each instance and every form of photography. These might be thought of as scalar adumbrations of the photographic that extend across the application of mathematically and scientifically derived technical scales in the design and operation of photographic equipment; the spatial and temporal possibilities held out by the photographic apparatuses so structured; the ways in which this sets the terms for decisions and actions performed in their use; the aesthetic experiences that any resulting photographs might engender; the possibilities of use that photographs as material objects might proffer; and the institutional, commercial and geo-political spheres of interest within which such uses and encounters may or may not unfold.

A range of relatively discreet scalar phenomenon, possibilities and contexts are always operative at these different registers and more. Whilst, at any one level, a particular question of scale may appear dominant, others are also operative, albeit in latent form. To put this differently, other senses of scale always haunt the manifest as its supplement. They resonate within the dominant as its under- or overtones. And these relations change and shift from instance to instance, encounter to encounter, transmission to transmission as admixed scales that impinge upon the making and experience of photography at all levels. Photographic scale, it turns out, is modal and compound in form.

The variegated play characteristic of photographic scale reveals it to be a complex and shifting, but nonetheless concrete, matrix of broadly social, phenomenological, and technical modalities of the photographic. One of the distinctive features of this notion of photographic scale is the relationship it foregrounds between specific and general aspects of photography. The variegated admixture of scales that play across each and every moment, event or object of photography do so in ways that pertain to *whichever* form, use or object of photography *may* be in question. And yet, precisely as such, photographic scale is always also concrete in and specific to *that* particular instance of photography which *is* in question. In this manner that photographic scale suggests itself as an ontological modality of the photographic. In contrast to other ontological categories that are conventionally

projected onto photography, the generality of photographic scale remains intimately entwined in the detailed specificity of photography's diverse moments and different uses.

At a range of levels, scalar operations and phenomenon are central to diverse photographic processes, their uses and the discourses that frame these. But a basic function of all forms of photography is also to register the ostensible spatial and temporal state of things, to fix these together at a certain scale and according to a combination of prefigured and anticipated scales. One significant implication of this is that, in photography, one never encounters 'space' or 'time' – nor for that matter any place, thing, moment or event – other than through a combination of processes that entail the setting of salient aspects of appearance to scale in the more or less enduring but also changeable form of an image. If *to scale* in this sense is a basic function of photography – the interior horizon, so to speak, of the photograph as image – photographs of all kinds are also, as a matter of principle, subject to the demands of what one might contrastingly call 'exterior horizons' entailing their *being scaled* and *re-scaled*. Any actualization of a photograph according to its particular scales is inscribed within a horizon of other scales not, or not yet, taken.

However much scale might be said to be central to photography, it cannot simply take over the theoretical roles ascribed to other categories of which similar generality is also claimed, for instance, photographic temporality and the persistent convention which tells us, after Barthes, that time as such is photography's *eidos*. Having remarked this, however, it is also important to note that photographic scale is not reducible to the contingent form of an empirical given. In the form outlined above, it is always a feature of all modalities of the photographic, and necessarily so.

On the one hand, scale is integral to photography and the photograph but not in the manner of an essence, whether surreptitiously projected or made explicit. On the other hand, photographic scale allows for but is not contained by the self-evident empirical horizons of specific photographs. This latter horizon has often been central to claims on photography's role in the construction of place and its entanglements at the scale of individual experience.[14] But, just as *every* compelling claim on the generality of 'the Photograph' as a paradoxical temporal ecstasy has emerged from a particular encounter with one or other variation on the range of photography's possible scaled materialisations (however attenuated its material form and singular its affective force), similarly, and without exception, *all* uses of photographs taken to enable meaningful engagements in and with particular places arise from an encounter with one or other scaled variation on photography's very ability to set up such relationships (however strong the attractions and values of the photographic particularities thus presented may be). Yet this does not mean that time or place are denuded of importance, that they are simply displaced by photographic scale as a newly revealed metaphysical principle, or as the actual form of photography's empirical contingency. Photographic scale does not displace these explicitly projected or implicitly assumed ontological categories, nor does it dissolve the strong affects and significant meanings that have been associated with them. Rather, photo-

14. With regard to the relationship between scale and place as spatial categories of photography and discourse on landscape, see Van Gelder and Westgeest (2011). For critical alternatives see, David Cunningham (2012) and John Roberts (2010).

graphic scale is that variegated play of concrete spatiotemporal possibilities through which these categories and particularities take on their form and force.

Coda

In order to locate what is at stake here, one might consider briefly how photographic scale plays across and informs a concrete example, for instance, a black and white screen-shot of a photograph found online, the provenance of which I have no record for (Fig. 1). It shows a metal rule, a rude shiv and a blurred mug-shot laid out on the surface of a copy-stand and has multiple frames of black and white that speak ambiguously of its editorial history.

This is photography as institutionalised and instrumental measure, involving that familiar strategy of scaling in which a reference object is inserted in the field of the camera's view and on the same plane as the object to be measured. It appears to be the product of an unidentified penal institution's panoptical operation. Shorn of anything but the most generic indicators of this context, the image nonetheless continues to suggest itself as the record of things involved in a violent event. There is the improvised and stained knife bearing traces of its making or use, the casually placed and cropped metal rule and the mug-shot of a man holding a name board to his chest.

The man depicted in this mug-shot has, perhaps as a condition of the image's public release, at some point been obscured by the addition of digital filter of the kind familiar from Photoshop. This blur is superposed on the surface of the mug-shot's reproduction. Two photographs and two material processes entailing various modes of scaling and the application of scales are, here, compounded in the visual surface of the screen image. Perhaps counterintuitively, the loosening of contextual ties that are defining of its manipulation and online circulation emphasises the material form of the mug-shot, its re-sampling and electronic dissemination. The apparently flat surface of this photograph – carrier of significations and enabling photographic representation to point at *this* body and enable identification of that man and these things – takes on a visually paradoxical 'thickness' which is readable in terms of its compounded modes of scale.

This photograph's openness to be being scaled and re-scaled is marked by the various frames that now form part of it as an image: the casually cut white borders on the mug-shot, the vertical white strip at the left hand side and the black bands at top and bottom. These speak ambiguously of different contexts of use and appropriation, placing emphasis upon its original function but also exemplifying the emphatic mutability of the networked digital image. This photograph is one amongst billions comprising the 'colossal and labyrinthine phototheque' of networked images. If one cares to follow this photograph's own suggestion that it is 'all about' scale and scaling, one finds that its scalar aspects multiply and that they spread out beyond the contexts, periods,

practices and techniques that might, at different moments, have anchored its meanings. Insofar as it isn't particularly special and *qua* image, it might be taken to stand as a register of the principle of a variegated play of scales and as an opening onto thinking explicitly about photographic scale.

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Suggested citation

Fisher, A. (2012), 'Photographic Scale', *Philosophy of Photography* 3: 2, pp. 310–329, doi: 10.1386/pop.3.2.310_1

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