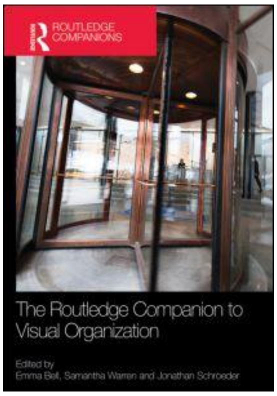

The Routledge Companion to Visual Organization

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Methodological ways of seeing and knowing

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Part III

Visual methodologies and methods

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Methodological ways of seeing and knowing

Dvora Yanow

> Seeing comes before words. … It is seeing which establishes our place in the surrounding world; we explain that world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled. … [T]he knowledge, the explanation, never quite fits the sight.
>
> *(John Berger 1972: 7)*

> The crunch of the crostini, the slitheriness of the penne alla vodka – a question preoccupying philosophers is where these personal experiences … [of] qualia, the raw, subjective sense we have of colors, sounds, tastes, touches and smells … fit within a purely physical theory of the mind.
>
> *(Syracuse University, NY, philosopher Robert Van Gulick, in a talk at the Association for the Scientific Study of Consciousness, Las Vegas conference, mentioned by reporter Johnson 2007)*

> And because I brought a critical approach to thinking about photography, I was interested in what these photographs were – not as windows through which you would look at a life and a world, but as cultural artifacts in their own right.
>
> *(Barbara Kirshenblatt-Gimblett, quoted in Gruber 2011)*

That organizational activities include the visual, as do methods for studying organizations and organizing, is, or should be, evident. From the moment a researcher physically enters the setting of a field research project, the eye is, or can be, confronted with a multitude of stimuli. Manufacturing, governing, educating and other forms of organized life take place in built spaces that are seen, experienced and responded to, from corporate headquarters to individuals' offices to the shop floor. Working artists and university art major graduates advise executives on the purchase of paintings and sculptures intended to evoke just the right mood for visiting clients or customers, board members or community members. Employees adorn their desks, cubicles or lockers with cartoons, postcards, pinups, photographs, and more, giving visual voice to selected aspects of their identities. Organizations do the same with logos and brands. Designers generate images for annual reports, college catalogues and political campaigns to convey the organization's identity, as it wishes to be perceived publicly. Marketing has its own long tradition of symbolic representations of human social meanings, especially in the design of advertising (see, e.g., Cone 1960; Goffman 1979). And so on. Many organizational members are aware of the role of the visual in representing organizational values. As Dino Olivetti wrote half a century ago, reflecting on his company's role as a symbol of this notion, 'Respect for our customers is reflected in the design of our products, of our advertising, and of our showrooms' (1960: 42). The key methodological and methods questions in this arena are: what to look at in this vast array of sine waves that can stimulate the retina's cones; how to 'see', systematically, when we do look; and what informs and hangs on these ways of seeing and knowing.

For all the prominence of 'observation' in methods talk, visual elements have long taken a back seat in studies of organizations and in their dissemination, both of which have tended to privilege words, whether written or spoken.[1] Consider the kinds of evidentiary sources most commonly drawn on in organizational studies analyses: written documents of various sorts, from annual reports to memoranda, correspondence to webpages; formal interviews with managers and CEOs; water-cooler chats with staff, bar or kerb-side talk with workers. In this logocentrism, organizational researchers have tended to ignore, or forget, or simply turn a blind eye to the visual elements of the physical settings in which work takes place, with their varying spatial designs, contrasting building materials and landscaping, and wide-ranging types of furnishing and other decor, internal and external.[2] In turning to 'take language seriously' (White 1992), we have tended to forget that people do things not only with words (Austin 1962), but also with objects: the gold watch presented on retirement after 50 years' service to one company or the trophy awarded for a job well done (e.g. Kunda 1992, ch. 4), the food selected for an annual party or the dress expected in particular work settings (e.g. Dougherty and Kunda 1990; Rafaeli *et al*. 1997; Rosen 2000), and so on. All of these visual elements may be studied visually, although even researchers who turn to visual studies may initially ignore what visual media make available for analysis, favouring, instead, transcriptions of spoken language (e.g. Bertoin Antal 2012).

What might it mean to study organizations' visual worlds, visually, and to do so systematically, considering both data generation (including potential data types and sources) and data analysis? The topic – often under the heading of 'visual anthropology', 'visual sociology' or, more broadly, 'visual methods' – has typically focused on researcher-generated materials recording individuals, acts, interactions and events observed in field research, using still photography, filmmaking or video-recording. Photography and film in the hands of the researcher are old tools in anthropology, dating to Margaret Mead and Gregory Bateson's early twentieth-century work and, subsequently, Tim Asch's, and a presence in sociology. Documentary in form, they constitute a point at which social science and journalism come perhaps closest (e.g. the 1930s US 'Dust Bowl' photographs of Dorothea Lange and Walker Evans). In organizational studies, these were pioneered a century ago by Frank and Dr Lillian Gilbreth, working with Frederick Winslow Taylor on time and motion studies.[3]

In this chapter, I take a broader approach. 'Visual studies' might also explore the meaning(s) of Khrushchev's shoe (banged on his speaker's desk during a United Nations debate, 1960), the shape of the Vietnamese peace talks table (oval vs. square, 1969), or military cemeteries (Ferguson and Turnbull 1999). They need not be done only with technological prostheses, such as cameras. In that sense, *analysing visual data* (tables, charts, various objects or [inter]actions observed) is not necessarily coterminous with *doing visual analysis*, to the extent that that entails mediated study. Visual 'recordings', from pencil and paper to video, help us 'capture' 'bodies in space', but modes of research can also include ethnographic and other forms of observation that are not usually thought of as 'visual studies'. Indeed, we use the language of all the senses to signal observation and understanding: 'Yes, I see'; 'I hear you'; 'It smells fishy'; 'It left a bad taste in my mouth'; 'I feel your pain' all signal a grasping of the other's meaning, although sight-related expressions predominate.[4]

Methodologically, it is useful to distinguish between two kinds of method. One set is used in locating visual materials that were created independently of the research project: the kinds of visual material 'found' in the field, like sherds in an archaeological dig – organizational artefacts that are 'collectable' and/or accessible visually, created by organizational members for organizational purposes, which may become evidentiary sources for a researcher. The other is used in creating visual data for research purposes, which can be further divided into two categories: materials created by organizational members at the researcher's request – maps, drawings, photographs, videos, and so on – and those created by the researcher for analysing those and other data (see Table 10.1).

Table 10.1 Three genres of visual materials, by creator/source and purpose

	'Found' *[pre-existing the research project]*	*Generated* *[newly created for the research project]*	
		Member-generated	*Researcher-generated*
Creator(s)	'the organization' or its 'agents' [individuals, teams, departments] acting for the organization or a unit within it	individual members, at the behest of the researcher	researcher
Purpose	created for organizational purposes [i.e. independent of the research project]; [assumed to have been] created to express organizational or sub-unit values, beliefs, feelings [meanings]; collected by the researcher as data for analysis or as evidence in support of the analytic argument	research [data generation, analysis]: intended to show the member's own views of the organization or part of it; collected by the researcher as data for analysis or as evidence in support of the analytic argument	research [analysis]: to record observed objects, acts, interactions, etc. for use as a visual aid in thinking through persons' locations, movement patterns, and other aspects of organizational life observed; writing [research dissemination]: to present data in textwork phase – to communicate to readers, in condensed fashion, vast amounts of observed data
Examples	annual or divisional reports [including photographs, layout]; brands, logos; building and/or interior design; ceremonies [graduation, retirement]; dress [including uniforms]; graphic displays [organizational charts, workflow charts, report tables, posters]; trophies [the gold watch; statues (the Oscar)]	photographs, videos/films, drawings or other depictions of organizational life; photo elicitation [used to generate narrative evidence related to research question]	maps of movement through organizational space [who went where, interacted with whom, how frequently]; photographs, videos/films; sketches of interactions at meetings [e.g. Bales' interaction process analysis]

Before I turn to specific ways of seeing and knowing visually in organizational settings, a few initial questions – concerning the presuppositions underlying choices and uses of methods and the related issues they raise – need to be addressed, and, before that, some terminological clarification.

To begin with, this chapter rests on a distinction between methodology and method. The former enacts a researcher's ontological and epistemological presuppositions concerning the subject of study and processes of knowing it, along with knowledge claims issues arising from these. Methods themselves put those methodological presuppositions into play in everyday data generation activities and, later, in explicit, directed data analysis (by contrast with the less directed analysis that takes place in the course of field research or even in the process of formulating a research question). A second useful distinction differentiates between methods for generating data and methods for analysing them. In the context of visual methods, this distinction, although somewhat artificial in general, is particularly useful because of the need to attend to differences among organization-generated materials created for organizational purposes, materials generated by organizational members at the researcher's request for research analytic purposes, and researcher-generated materials created for research purposes.

Third, distinguishing, heuristically, among three phases of a field research project highlights the presence and role of visual methods in each: fieldwork, in which the researcher is busy with generating data, typically in interaction with situational members (although this could also include the interactions with texts characteristic of archival research); deskwork, in which the researcher is engaged explicitly in analysing those data, working from notes, recordings, transcripts, sketches, copies of original documents, etc.; and textwork, in which the researcher is actively transforming the analysis into a research text and disseminating it (Yanow 2000).[5] Treating research writing and/or reading themselves as methods (Richardson 1994; Yanow 2009) and, hence, presumably, also as enactments of methodological presuppositions (see also Schwartz-Shea and Yanow 2009) highlights the role of visual methods in 'textwork' as well as in 'fieldwork' and 'deskwork'. Further methodological ground-laying is called for before we take up visual methods for generating and analysing materials more directly.

Methodological priors

> Parfois les noms écrits dans un tableau désignent des choses précises, et les images des choses vagues; ou bien le contraire.
>
> *(René Magritte 1929)*[6]

Does the researcher consider visual materials to be transparent referents corresponding directly to, or mirroring, what they depict, or are they assumed to be interpretations – re-presentations – of that? Do the photographs of staff and students in a US college catalogue or on its webpage, for instance, depict the institution's population as it actually is – as an unannounced visitor might experience it? Or has each photograph been staged, the collected images carefully selected, and the layout strategically managed not only for aesthetic reasons, but in order to depict, publicly, the desired image of age, class, race-ethnic, sex or other demographic composition that a university sensitive to public opinion concerning diversity and affirmative action laws wishes to convey? How have changes over time in the series of photographs of prisoners of war held at US Naval Station Guantánamo Bay altered the image of the US military (Van Veeren 2011)? Parallel questions could (and should) be asked with respect to materials produced by or for the researcher: does he/she consider organizational members' videotapes or his/her own drawings and photographs to be mirrors of what transpired in meetings, in the corridors, wherever, or are they interpretations of organizational realities?

These are ontological questions concerning the 'reality status' of the materials produced with respect to what they depict, akin to what Magritte (in the epigraph) is pointing to concerning word and image. The first in each question pair above locates the researcher in a realist ontological realm; the second, in a constructivist one. Similar questions could be asked about organizational members' understandings of and/or attitudes towards the visual materials themselves: does the glass in the recently designed Scottish Parliament building in Edinburgh convey, in singular and possibly universal referential fashion, that governance is now transparent (glass = clear), as decision-makers wished it to (purportedly by contrast with non-transparent London-based decision-making)? Or might other interpretive communities interpret the use of glass there in other ways, thereby shaping, differently, their parsing of the building and the events and acts it houses? The one position rests on an understanding of direct correspondence between signifier (object) and signified (its meaning), to use semiotic terms; the other, on a presupposition of potential multiplicities of meaning-making shared within interpretive communities but not necessarily across different meaning-making groups, with conflict possibly arising from such differences.

Studying visual materials and their representations also entails epistemological questions concerning the 'know-ability' of visual elements by researchers and their analytic methods. If the objects or their portrayals are considered to be transparent (re)presentations of their underlying meanings, analysis can be made through observation alone. This is an objectivist epistemological realm: the researcher parses the object's, image's, event's or act's meaning by observing from a position *external* to it (the definition of objectivity), without necessarily involving the meaning-making of those who created or use(d) it. By contrast, if elements studied visually are understood as other than a direct capturing of what they depict, the researcher needs to discern their meanings through engaging with their creators and/or users – the research 'subjects' or participants for whom they have primary meaning(s). Context-specific meaning, rather than universal meaning, is central to this position: the researcher is seeking to understand organizational materials from the perspective of their customary (situated) users, the domain of 'subjective' meaning;[7] and the researcher is in an interpretivist epistemological domain (a position at odds, for instance, with psychiatrist Carl Jung's and mythologist Joseph Campbell's ideas about the universal meanings of archetypal symbols).

Consider, for instance, looking at an organization's building – its architectural design, construction materials, landscaping, furnishings, and the like (e.g. Berg and Kreiner 1990; van Marrewijk 2010; Wasserman and Frenkel 2011; Yanow 1993). Does the researcher hold that their significance for the organization can be established by analysing them objectively, drawing on established, general (and arguably universal) norms accepted throughout the design world, perhaps as an architecture critic might, without consulting the building's occupants or taking into account their values, beliefs and feelings? Or does the researcher hold that these elements' significance *for understanding aspects of organizational life* can only be established in the context of members' and/or stakeholders' experiences and meaning-making of the building and its furbishings, in their full, and perhaps conflicting, variety?

Alternatively, consider an editorial cartoon in an internal newsletter or a daily newspaper depicting an organizational decision that impacts on the local population. Cartoonists commonly exaggerate the features that, symbolically, denote that which they represent (Danjoux 2013) – whether of the Prime Minister or other actors (e.g. elongating Charles de Gaulle's nose) or of particular spaces or other objects, as in replacing the Statue of Liberty's torch of freedom with a carrot (Ilan Danjoux, personal communication, spring 2011). Does the researcher seek to ascertain 'the real story' masquerading in cartoon form? Or does analysis explore the multiplicities of possible meanings that the cartoon's symbolic elements – that carrot, for instance – might convey to various groups of readers, expressing their positions, giving voice or leading to conflict? This is one sense of Kirshenblatt-Gimblett's approach to photographs (see third epigraph above) 'not as windows through which you would look at a life and a world' representationally, providing a transparent view on to a singular organizational reality, 'but as cultural artifacts in their own right' (Gruber 2011), saying something about the values, beliefs and/or feelings of the photographer, perhaps, or of the organization.

Similarly, from such an interpretive methodological approach, researchers need to interrogate graphic representations of statistical data. As Drucker puts it, the 'simplicity and legibility' of graphic forms 'hides [*sic*] every aspect of the original interpretative framework on which the statistical data were constructed' (2011: 8). The vocabulary of bar graphs and other forms of visualizing quantitative information is not methodologically innocent: as she shows, charts' discrete bars, scale divisions, circles and rectangles, labels, arrows, vectors, paths, and their texture, proximity, grouping, orientation, and so on imply certainties about category definitions and quantities (nationalities, sex, time span, etc.), reifying them through the '*representational* force of the visualization as a "picture" of "data"' (ibid.: 12, original emphasis).[8] Even a map presumes a point of view, unarticulated, from which it was drawn (e.g. on mapping the US census category 'Asian-American', see Yanow 2003: 63–64).

Ontological and epistemological presuppositions intertwine; in 'ontoepistemological' fashion (Fuenmayor 1991), they position a researcher in either a realist-objectivist mode of enquiry or an interpretivist-intersubjectivist one (commonly referred to, these days, as 'positivist' and 'interpretive', respectively). These methodologies frame everything from the conception of a research question to its research design, from execution to analysis and writing (for an extended discussion, see Schwartz-Shea and Yanow 2012). This chapter proceeds mostly in keeping with the presuppositions that inform interpretive research, demarcating positivist approaches when appropriate and the differences between them. As meaning and meaning-making are central to interpretive methodology and methods, I turn next to the question of the locus of meaning, taking up hermeneutic approaches first and then phenomenological ones.

Locating meaning(s) I: creator, user, 'text analogue'

Where do the meanings of a visual representation of some aspect of organizational life reside? This is the sort of question that has long engaged literary critics or theorists concerning what texts mean, and how their theorizing can help us think systematically about analysing visual materials produced in or by organizations and their members for organizational purposes. It is a hermeneutic question, 'hermeneutics' referring originally to rules for interpreting biblical texts, these rules uniting members within an interpretive community and demarcating them from other interpretive communities, often in highly contentious ways. The concept was later extended beyond biblical passages to the interpretation of all manner of texts, and then beyond written words to all human artefacts, including film, architecture, art and other physical objects. Taylor (1971) and Ricoeur (1971) note that, in analysing human actions, we render them as texts – 'text artifacts', in Taylor's phrase – and apply to them the same hermeneutic processes that we bring to interpreting literal texts. This provides the philosophical ground-laying for methodological issues concerning the analytical applicability of literary theories to visual sense-making of physical objects and their representations.

Hermeneuticists argue that, in creating things, we embed in them the values, beliefs and/or feelings that comprise what is meaningful to us. The relationship thereby established is a symbolic one, the more concrete artefact (object, language or act) representing – symbolizing – its more abstract, 'underlying' meanings (values, beliefs, feelings). Every time we use or refer to an artefact, we sustain its established meaning(s) (although here is also where possibilities for change enter; Yanow 2000: 14–18). Hermeneutics sets out to decipher what these situated meanings might be.

To take a common example, the dove is often seen as a symbol of peace. For members of different epistemic-interpretive communities, it may symbolize other meanings or have solely instrumental meaning – as tonight's dinner. Or it may represent no particular meaning at all: the dove is just a dirty white bird. This example highlights several properties of artefacts and their symbolic representations: the meanings embedded in, carried by, and conveyed through artefacts are situation-specific; and, because the same artefact may have a 'situated' place in a range of settings, it can embody and convey multiple meanings.

In contemporary methods applications, 'hermeneutics' commonly refers more to the symbolic relationship between artefact and meaning and the idea of interpreting meanings embedded in and conveyed through those artefacts than to fixed sets of interpretive rules within interpretive-epistemic communities (whether of organizational members or researchers). Because of meaning's abstract character, interpretive research commonly begins with observing the artefacts themselves and their uses (including hands-on or other bodily 'observation'), inferring meaning, provisionally, and corroborating or rejecting those initial interpretations through further observations and/or conversations across persons, times, settings and/or written texts (depending on the research question). This is one of the central methodological differences demarcating 'interpretive' researchers from 'positivist' ones, who would commonly define their concepts and operationalize them a priori, before going to the field to test them (see Schwartz-Shea and Yanow 2012).

Ascertaining the meanings of texts has been of central concern to literary studies, and their approaches can be useful for analysing visual 'texts'. Initially, literary critics understood a text's meaning to reside in its author's life experiences (e.g. discerning whether his/her religious commitments influenced T.S. Eliot's crafting of *Four Quartets* or whether Shakespeare's possible homosexuality explains *Hamlet*), parallel to 'auteur theory' in film studies. Contesting that approach, in the mid-twentieth century, was the argument that textual meaning resides in the text itself – 'The author is dead!' (Barthes 1967) – conveyed through such devices as rhythm and rhyme, alliteration and metaphor (e.g. Ciardi 1959; consider light and shadow, angle, shot duration, and other filmic devices). Towards the end of that century, other theoretical approaches joined in opposing the relevance of authorial intent,[9] among them 'reader-response theory'. A more phenomenological orientation, this argues that meaning resides in the lived experiences that readers bring to their readings, thereby shaping textual meaning(s) (with some reader-response theorists arguing for interactions among all three sources; see, e.g., Iser 1989). In this view, meaning is indeterminate, potentially shifting not only from one reader/viewer to the next, but even from one reading/viewing to the next by the same reader.

The tripartite taxonomy of *creator* (author, painter, designer, etc.), *reader* (viewer, user, stakeholder, onlooker), and *text* or text-analogue (photograph, film) is useful in critically engaging visual artefacts' meanings. The researcher who explores intended meaning or his/her own meaning alone enacts a realist-objectivist methodological position. Meaning, in this instance, is assumed to be singular; and it is assumed that 'received' meaning (by those who engage with the artefact in question) is, or should be, identical to authored meaning. Discrepancies – e.g. a 'failed' brand image that is not being understood as its creators intended it to be – are attributed to poor design or some other 'noise' in the communications 'channel' between creator (the organization) and reader (e.g. customers).[10] On the other hand, the researcher who considers that the 'reception' of the artefact's meaning is not, or not necessarily, determined by and coterminous with its creator's intent – that, in other words, readers, viewers, users, passers-by and onlookers, near and far,[11] may have their own interpretations of the artefact – enacts an interpretivist-subjectivist position, assuming potential multiplicities of meaning. In addition, the symbolic repertoire of compositional elements – line, shape, form, colour, texture, size, weight, height, mass, and so on – can be studied to understand what meaning(s) they represent, for which interpretive communities. Each genre of visual material – built spaces, paintings, photographs, etc. – has its own meaning-communicating vocabulary.[12]

In asking about the meanings of organizational materials studied visually where 'authored' meaning does not predetermine 'constructed' meaning, analysis has to engage questions of 'whose meaning?' as well as 'where is meaning coming from?' Kenneth Burke's pentad (1945) contributes analytic systematicity here. Also a literary theorist, Burke identified five key elements in dramaturgical meaning, his key focus (but see Burke 1989 for extended sociological discussion), which lends itself directly to analysing films of organizational action: settings, actors, acts, agency and purpose (corresponding roughly to the journalist's where, who, what, how, and why or when). Adding objects (with or via what?) to the pentad expands the visual repertoire that can be analysed; growing the actors category to include both researchers and users/readers expands the hermeneutic realm. Analysis, then, needs to attend not only to who their creators are and the conditions of their use(s), but also to the purposes for which artefacts have been created: what their intended meanings were; who the intended 'users' ('readers', viewers) were/are, near and far; whether there are unintended users; what the interpreted uses and meanings are, perhaps unintended or unanticipated by their creators, and whether these generate tensions, and so on. Consider, for instance, the range of meanings expressed after the publication of the Abu Ghraib photographs or the Danish newspaper cartoon depicting the prophet Muhammad (on the latter, see Cohen 2009). Such questions might also engage creators' purposes and relative power vis-à-vis the full range of intended and unintended users, near and far, and the matter of strategic intentionality in artefact creation. And analysis might also explore interpretations not (readily) voiced, whether silent by choice or silenced through threat.

Still one more layer can be added to this interactive triad of creator, artefact, and user. So far, it has been treated at the level of the artefact in the field (see Figure 10.1). Here is the double hermeneutic (from the researcher's perspective) of creators' and/or users' interpretations of organizational artefacts and researchers' interpretations of those interpretations. When the research text is itself the artefact, the triad *entier* becomes the artefact in another triad – that of the researcher, the research manuscript, and the reader of that text (see Figure 10.2). This introduces a third hermeneutic (Yanow 2009): as the creator becomes the researcher-author of the text, the user becomes its reader or reviewer, interpreting the researcher's interpretations rendered in that text of users' interpretations of artefacts created by someone else. For that matter, to the extent that researchers can identify an artefact's creator and his/her intended meaning, we are in the realm of four hermeneutics: creator's, user's, researcher's and reader's.

Particular methodological questions arise concerning establishing the authorship of an artefact and its intended meaning. When working with organizational images (as with some written

creator [1st hermeneutic]	**artefact**	**user** [1st hermeneutic] **researcher** [2nd hermeneutic]

Figure 10.1 The analytic triad during fieldwork (with 1st and 2nd hermeneutics)

Note: The 2nd hermeneutic – the researcher's interpretation of others' interpretations of field material (the 1st hermeneutic) – begins in the field, developing during desk- and textwork.

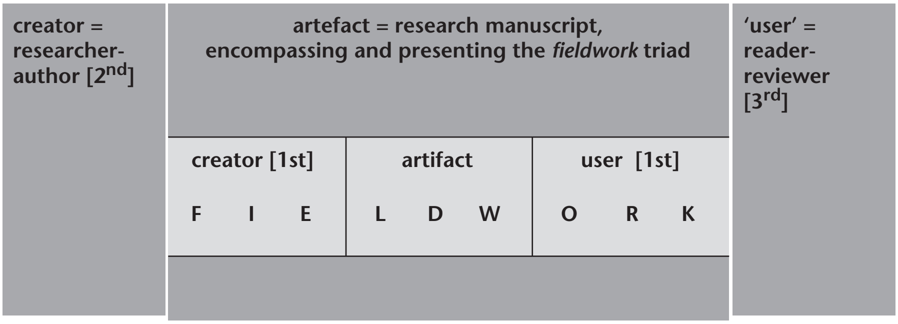

Figure 10.2 The nesting of artefacts and interpretations: 1st, 2nd and 3rd hermeneutics, from the researcher's perspective

Note: That readers' and other users' constructed 'texts' of others' authored texts are not, and cannot be, prescribed, delimited and controlled by those texts' creators is amply in evidence when we consider journal reviewers' readings of submitted research manuscripts, part of the dissemination phase of textwork.

artefacts), it may not be possible to identify their creators or *their* intended meanings for it: unlike modern fiction and poetry, such 'products' are often not signed. Indeed, authorship may be attributable to a team or some other group. In such a case, can meaning be attributed to the organization as a whole (or some unit within it)? Can a researcher claim, for instance, that an image used in an organizational publication represents the values of that organization, especially when the initial creator and/or adopter of that image cannot be located to attest to its (then) intended meaning? From an interpretive methodological perspective, Kirshenblatt-Gimblett's view concerning reading images for their broader, cultural meanings (see third epigraph above) once again comes into play. It is not necessary to identify the specific wizard-behind-the-curtain producing cartoons, photographs, films, and the like in order to assert intended meanings and attribute these to the collective or some part of it. Meaning is understood to be constructed collectively – intersubjectively – such that intended meanings are held by groups (epistemic-interpretive communities) and reflect their collective values, beliefs and/or feelings. Artefacts are not studied in isolation from other artefacts and other evidentiary genres; asserting intended, collective meaning is made possible by supporting evidence from other sources and, as with all analysis, a logic of argumentation that stands up against contradictory evidence. Conflicting interpretations held by other groups are also asserted, analytically, and supported through similar argumentation.

In my study of the Israel Corporation of Community Centers (1996), for example, I became confident that a statement about the meaning of their buildings' design elements written by one member of the founding board, a copy of which I found in correspondence files, reflected the meaning intended by the entire organization on the basis of his board membership, the board's role in developing the organization, and corroborating evidence from other sources (including observation, participation, interviews and other documents). Other evidentiary sources established other interpretive communities' conflicting interpretations of the same elements; my research manuscript brought these into conversation with each other. Historical analyses of visual materials where authorship is not always clear proceed similarly. In other words, members' interpretations are not necessarily uniform, nor are they necessarily identical with the researcher's. Meanings, whether authored or constructed, are inferred on the basis of mapping the organization for various, including contending, evidentiary sources and for the intertextual evidence these might yield or generate (Schwartz-Shea and Yanow 2012: 84–89), brought into conversation with each other for comparison, corroboration and refutation.

Locating meaning(s) II: not just looking – touching, phenomenology and body proxies

Studying visual materials puts us not only in the realm of hermeneutic interpretation. Because most, if not all, of the organizational objects and images we study are intended for *use*, we are also in the realm of phenomenological interpretation – analysis that engages the lived experiences of organizational members in and with those artefacts. We are looking, then, not only at aesthetic experiences, but also at pragmatic ones: visual analysis might include the feel of material objects as we heft and handle them, move them about and walk through them.

Note the use of 'we'. When it comes to the material world, 'we' researchers use our own bodily and other experiences (emotive, aesthetic) as proxies for the 'we' of human responses presumably shared with the inhabitants of, and visitors and onlookers to, the organizations we study (where we as researchers are somewhere between those statuses, balancing strangerness with familiarity in our search for understanding; Agar 1996 [1980]; Yanow 1996: 19–21; Schwartz-Shea and Yanow 2012: 29). This poses a conceptual-methodological problem for research projects conducted in keeping with realist-objectivist ontological-epistemological presuppositions, in which the researcher seeks to determine an artefact's meaning, objectively, in an a priori fashion (rather than 'bottom up' from the perspective of those who live and interact with it in everyday ways, including, at times, the participating researcher). This problem is especially evident in studying one particular constellation of visual materials: the built spaces that are the settings for organizational activities.

Here, phenomenological experience is key: researchers' experiences of spatial artefacts, along with those of situated members, become central to interpretive processes, as researchers and their bodies are the primary 'instrument' in sense-making[13] – at least in drawing initial, provisional inferences. Moving through organizational space, the researcher not only sees it but also 'feels' its meanings with, on and through his/her body, including aesthetic, emotional and other dimensions – attending, in other words, to 'pathos' and 'ethos' as well as 'logos' (Gagliardi 1990a; see also Strati 2003). The same process holds for office decor, dress, the ambience of a room or a meeting, and other visually observed materials in the organizational repertoire. Even though provisional sense-making would commonly be checked with situational members, drawing on 'body knowing' puts us irrevocably outside the realm of objective knowing.

In sum, the distinction between looking only for intended meaning in authored visual 'texts' – or even 'the real story' behind them – and looking for potentially multiple possible meanings they might have for a wide range of organizational actors has implications for how a researcher uses methods. Moreover, what can be studied visually are not only objects and images, but also events, acts and interactions that use and engage physical materials. Language, too, has visual dimensions: literally, in the sense of the graphic design of posters, flyers, graphs, and suchlike that are posted on office bulletin boards or included in print materials, something that Tufte (2001 [1983], 1990, 1997) has focused on at length; figuratively, in the form of nonverbal language – kinesics (hand and facial gestures), proxemics, personal 'decor' (dress, jewellery, eyeglass frames, hairstyle, etc.), and personal characteristics (physiognomy; skin quality, e.g. marked, smooth; hair, eye and skin colouring; height; weight; sex, etc.). Such a wealth of organizational material can be studied visually that it is difficult to provide a compendium of types. Equally complex is the question of where in the organization to look, but here we can be somewhat more systematic.

Turning to methods: systematic ways of looking

> Considering the tool-dependent nature of human reasoning and the ability of 'knowing,' the representational view of human action … should be complemented with the acknowledgement that the use and making of these tools are inherent parts of human action itself.
>
> *(Van Herzele and van Woerkum 2008: 446)*

> An image is a social fact that may be applied as evidence to the task of historical or social analysis.
>
> *(Morgan 2009: 9)*

Listing visual elements for researchers to attend to in organizational settings is enticing, but impossible, as the range of artefacts (objects, mostly, but also events, etc. – anything that can be observed and studied visually) is innumerable, and perhaps inadvisable, given the temptation to use it as a checklist rather than as a set of potentialities whose realization is a function of the research context. Nonetheless, because this is an understudied area in organizational studies, such a suggestion of where and how a researcher, especially one who has never undertaken such a project, might look to find things that might constitute visual materials and, therefore, potential data for visual analysis might be useful.

From the perspective of designing a research project, different procedural logics suggest systematic ways of looking for visual artefacts that exist independently of the research project ('found objects') or that might be generated for research purposes. I organize these according to four procedural logics. The first three of these engage visual materials that a researcher might find in the research setting and/or generate him/herself to make a record of these 'found objects'. The fourth adds materials that researchers might ask situational members to generate. Table 10.2 includes examples for each. All four schemas are fairly basic, having been composed imagining a reader who has rarely, or never, contemplated visual methods, although I hope they might be of use to other researchers, as well. These might also be incorporated into a project that is not primarily a visual study.

'Geographic' logic. Entering a new research setting and moving through it, researchers can attend to an organization's 'geographic' features, beginning with mapping the organization's external physical plant and its relations, visual and proximal, to neighbouring buildings (for extended discussion, see Yanow 2013b). Inside the building, mapping can note spatial allocations of offices and roles, paths most and least travelled, interactions, and so on. Spatial allocations link organizational roles with power and status dimensions; mappings depict these graphically: the segregation of types of work and roles, for example, by location within a building and on a floor; departments or roles rendered 'invisible' by locational contrast with occupants of more prominently sited spaces. Similarities to or contrasts with neighbouring spaces may illuminate community–societal relations, power and status. And mapping may show up particular features of inter-organizational and network relations, whether between headquarters and dispersed sites or within an industry.

The geographic metaphor, then, references not only attention to 'topographical' and other spatial dimensions, but also to 'mapping' as a method. These can be literal maps, sketched out; photographed or videotaped paths of movement (e.g. Iedema *et al*. 2010); computerized movement maps (Bjerrum and Fangel 2012); narrative 'sketches' (e.g. 'ethnographic mapping', see Oliver-Velez *et al*. 2002; although an image can encompass and convey many more details, more quickly, than a word text; and unlike a videotape, at least with contemporary publishing techniques, a sketched image can also become part of the research report); or some other form.

Table 10.2 Logics of enquiry

Logic	*Where to look*	*Examples*
1. *Geographic*		
a. external	approach from the point of arrival	bus or tram stop, street or sidewalk leading to the main and other entrances, parking lot
	immediate surroundings	visual and proximal relationship of building design to design of neighbouring buildings [other enterprises, governmental agencies, residences; sight lines, similar or contrasting building and landscaping materials, design fit, setbacks]
	landscaping	number, height, colour, density, quality of plantings, or their absence; relationship to walkways, driveways
	parking lot	relationship of designated spaces to entrances [main, side, back]; the archetypal parking lot spaces reserved for organizational elites in close proximity to entrances versus more egalitarian spatial treatments
b. internal	hallways	floor-plans, usage maps [patterns of movement, who interacts with whom; e.g. Iedema *et al*. 2010]
	departments, offices, and roles in relation to each other across and within floors	elevations, layout of offices [the segregation of different work activities by labour type (e.g. Pachirat 2011: chapter 3); e.g. 'dirty' work relegated to the basement; organizational leaders on the first or top floors, depending on national cultural contexts (Yanow 1993: 311); workers' cafeteria sitings relative to executives' dining rooms]
2. *Organizational design*		
a. individual	non-verbal communication elements	dress and uniforms, personal 'decor' [jewellery, eyeglass frames, hair style], proxemics, etc.
b. interpersonal	interactions	schematic 'mappings', noting who collaborates with whom, who is bypassed [ignored, 'shunned']
c. group [department or other division]	meetings, interactions	schematic 'mappings', noting who initiates contact, who responds, who is sidelined, etc. [e.g. Bales' 1950 interaction process analysis coding method]
	planning offices, engineering and product design, other design practice-focused units	actor-network theorizing, other analyses exploring the role of boundary objects in mediating interactions [as epigraph to Section II suggests; see also e.g. Ewenstein and Whyte 2009]
d. intergroup	inter-departmental interactions	work flowcharts [adding time and timing to interaction processes]
e. organization	organizational charts	formal authority and responsibility relationships [which might contrast with other mapped observational data]

f. inter-organizational	systems flow charts	mapping interdependencies, information flows, and other such relationships
g. societal	wide range of 'low data' [Weldes 2013]	fiction, poetry, commercial films [including documentaries], political and other cartoons, paintings, etc. that depict, and comment on, organizational life [e.g. Panayiotou and Kafiris 2010]
3. *Data genres*		
a. objects	the full range of non-human artefacts that populate organizational life and which are used in practices	reports, including their photographs and graphic representations of facts, also treated as visual objects in their own right; analysed using STS [science and technology studies] or ANT [actor-network theory and its 'actants'] approaches [e.g. Barad 2003; Latour 1987; Orlikowski and Scott 2008; Suchman 2005]
b. acts	acts and interactions that have visual components [e.g. at meetings, ceremonies, in ordinary everyday work]	NASA-produced videos of the moon trips depicting astronauts' movements as they searched for a misplaced tool and interacted with engineers in Houston, analysed at the Institute for Research on Learning [Palo Alto, CA] by researchers studying organizational learning and other processes
c. language	signage; words used with visual images; non-verbal organizational language	photography, film/video, and/or drawing to study kinesics [facial and hand gestures], proxemics, posture and personal decor; non-verbal categories can be usefully extended, metaphorically, to include the rhetorical vocabularies of built space [Yanow 2013b], branding and logos [Hatch and Rubin 2006; Mortellito 1960; Ohlins 1989; Schroeder 2008], and other organizational phenomena
4. *Research phase*		
a. fieldwork	organization-generated materials	photographs and other materials for internal or promotional use, graphic displays of information, etc.
	researcher-generated materials	maps, diagrams, sketches or other graphic renderings, photographs, videos, etc.; walk-alongs that yield sketched or computer-drawn maps of movements, paths, etc. [e.g. Bjerrum and Fangel 2012; Ciolfi 2009; Jones *et al.* 2008; Kusenbach 2003; Pink 2008; Stavrides 2001]; shadowing
	member-generated materials, at researcher's invitation	photographs, videos/films, pen/pencil/crayon drawings, and other 'projective techniques' that capture members' views of activities, space use, and other aspects of organizational life, including related power, status or other issues [see, e.g., Pink 2007; Shotter and Katz 2006; Warren 2008]; 'photo-elicitation' techniques [Hinthorne 2012]
b. deskwork	using visual means to prompt and further analysis	sketching meetings, floor arrangements of work and tasks [Pachirat 2011], tabular data displays; studying photographs, films
c. textwork	data displays	drawings, sketches, photographs, maps, reproductions of original materials

Organizational design logic. Organizational 'building blocks', from individuals to groups to the organization as a whole, along with intermediary levels – interpersonal relations, inter-group relations, inter-organizational relations, and the broader socio-political context – can be used to structure observation and analysis. Whether the organizational design is a classic bureaucratic hierarchy or a flatter, more flexible 'amoeba', this approach can suggest various systematic foci. Any of these might enable power, powerlessness (Kanter 1993 [1977]), and status analyses, especially when compared with the geographic mappings described above.

Data genres logic. Visual materials are often multi-modal, and focusing on different genres of data suggests a range of data types to look for, as well as different analytic approaches:

- *objects*: the full range of non-human artefacts that populate organizational life. Adapting Latour (e.g. 1987) on following 'facts', organizational researchers might follow objects as an organizing device for a systematic study (e.g. mapping the objects used in a particular practice being studied; see Nicolini 2009 on the similar rhizomatic method);
- *acts*: visual methods of analysis also engage what people do, how they do these things, with whom, and with what, as in the expansion of Burke's pentad, described above;
- *language*: visual materials often use words alongside images, and the layout of a word-based document often has a visual (pictorial, designed) character. Non-verbal analytic categories – kinesics, proxemics, posture and personal decor – can also be useful in analysing recorded images or extended, metaphorically, to other organizational phenomena.

These three genres might be crossed with either of the previous logics. What kinds of objects, for instance, might be observed in particular geographic locations in an organization? What sorts of observable acts and interactions are found at what levels of the organization?

Research phase logic. At different phases of a research project, researchers might identify or generate different kinds of analytic visuals to analyse or present data:

- *Fieldwork*: Researchers commonly seek out *organization-generated materials* that (re)present the organization and its concerns visually, using one or more of the previous logics or some other system. *Researcher-generated* materials, such as sketches, photographs and/or films, and other visual recordings, are created during observational time or when making fieldnotes. De Rond (2012, min. 4:21 ff.), for example, reports taking one photograph of the field surgical team every 15 seconds or so, totalling over 1,000 photographs in the hospital alone, which he then used in interacting with team members to explore what was happening in a given moment of interaction and practice. Other methods include kinds of walk-alongs that social (human) geographers use to understand situational members' views of the spaces they inhabit, literally or figuratively (adding 'footwork' to the research phase taxonomy; Hall 2009). Researchers might accompany organizational members, learning their pathways and translating these into sketched maps or rendering them with computer graphics. This is a broader, 'upscale' technological version of the shadowing introduced by Wolcott (2003 [1973]), which is focused on a single individual and which can also be usefully 'translated' into visual renderings of paths traversed, persons encountered and acts engaged.

  Third, researchers might solicit *member-generated materials*, using 'projective techniques' in which members create their own representations of organizational life. These include giving members cameras, in what Wasson (2000) calls the 'roving camera' technique used for 'desk tours' and shadowing. Less 'naturalistic' and more interventionist, 'photo elicitation' techniques in which members are asked to respond to visual stimuli introduced by the researcher (a photograph, for instance), thereby generating data that the researcher can use in analysis (Harper 2002), might be appropriate in some research arenas or for some research questions.

- *Deskwork*: Researchers might also find various sorts of visual modes useful in analysing their data. Drawing maps, sketching interactions, or working up tables or other modes of graphic display can themselves trigger analytic insight (e.g. Pachirat 2011); some ethnographers use photographs to enable subsequent analysis.
- *Textwork*: Researchers may usefully present data in visual form in their research texts, reproducing organization- or member-generated materials (assuming permissions have been obtained or that images are in the public domain) or their own analytic graphics (such as the two hand-drawn maps used by Manderson and Turner (2006) to document movement in a designated space). Especially for ethnographic and other word-based, interpretive modes of analysis, which rest heavily on detailed descriptions of field experiences that take up lots of page space, a picture or other graphic rendering truly can be 'worth' a thousand words: much can be conveyed in the condensed format of visual renderings. Their use in traditional book and journal dissemination is limited only by current publishing technologies, and these are changing to keep up with multimedia techniques. Three things should be kept in mind in using such data displays. Design is crucial, requiring attention to more (and less) successful modes of rendering data (see Tufte 2001 [1983], 1990, 1997), as well as to the ontological presuppositions implied by the design vocabulary of graphic displays (Drucker 2011), discussed above. Second, such displays do not stand on their own – they need captioning, and the text needs to explain the work they are doing for the author's argument at that place in the manuscript. And third, their use entails ethical and legal issues, which space limitations preclude me from engaging. Suffice it to say, I am fully aware of the irony that a chapter on visual study has not a single image itself – in this case, due to permissions costs, as well as spatial limitations; but see also Van Veeren (2011) for another aspect of the ethical concerns.

Table 10.2 presents the four logics just discussed, with examples. I have not sought to encompass the full range of different visual modes and their analysis, each of which has its own semiotic and rhetorical vocabularies (on photography, e.g., see Becker 1998; Dougherty and Kunda 1990; on film, Iedema 2001; on painting, Morgan 2009; on built spaces, Yanow 2013b; on tables and charts, Drucker 2011; Roam 2011; and other chapters and references in this volume), as well as writings specific to each methods genre, e.g. semiotics. I have also engaged only those visual materials produced by organizational members or researchers, excluding the broader range of socio-cultural materials that might be studied for what they say, through visual means, about widespread assumptions concerning work and organizations.

Although the treatment of research methods presented here might suggest that visual material must constitute the sole focus of a study, both methods and materials lend themselves to projects whose focus lies elsewhere. I would hope that such researchers might consider that the meanings central to their analyses may also be being conveyed through visual means. Analyses of visual materials can be interwoven with other sorts of data and theoretical questions (see, e.g., Goodsell 1988, 1993; Mitchell 1991, 2002; Pachirat 2011), and a researcher pursuing an interview- or document-based project – the 'high data' of most organizational analyses – might also ask him/herself if visual elements – the 'low data' (Weldes 2013) – could also be worth exploring. For researchers accustomed to word-based studies who are not certain how to begin to contemplate the visual, a step taken by Forester (1999) might be helpful. Observing planners, whom he usually interviews, in action, he decided to stop listening for a moment and focus, instead, on what they were doing (which was pointing to one spot on a map and then another). It is an exercise that might prove useful as a pathway into the topic.[14]

Methodology redux: performing power, persuading of status

To link the methods discussion of the previous section back to methodological issues, I want to call attention to what might seem an unnecessarily articulated commonplace: that researchers cannot always bring back from the study setting the pre-existing artefacts – 'found objects' – whose visual properties and organizational implications, meaning(s) and/or significance they wish to assess. Workplace artwork, office decorations, built spaces, uniforms, and the like usually remain (or should) *in situ*, with the exception of mass-produced items intended for distribution, such as annual reports, posters, and other such 'organizational souvenirs' intended to travel beyond the organization's domain. What researchers commonly do bring back from the field are self-generated reproductions of primary source materials, created for research purposes: photographs, video-recordings, sketches, diagrams and/or detailed, descriptive 'word paintings' – more commonly called fieldnotes – of what they have seen and, perhaps, handled or used or touched. (They might also bring member-generated materials produced at the researcher's request for research purposes, discussed previously. Smells – e.g. in researching the perfume industry – and tastes – in studies of cuisine – require other sorts of 'recordings'; see, e.g., Endrissat and Noppeney 2013; Riach and Warren 2011; Gomez *et al.* 2003.)

Methodological consideration, then, also has to engage the notion that, whereas, in the field, researchers are observing, perhaps using, and interacting with originals, during deskwork and textwork phases, they are likely to be working with reproductions in various forms. Although both originals and reproductions can entail selectivity and composition in the framing of a shot or the making of a sketch, the researcher's use of self-generated images of events, interactions, etc. may mask the ontological issues discussed above concerning the character of the reproduction, in the researcher's eyes, as mirror or as interpretation of what it depicts. Methodological attention must, therefore, be paid, in advancing knowledge claims, to the assumed reality status of what those materials contain or (re)present.

This links to the hermeneutics of ownership and questions of power. Berger (1972) explores the ways in which issues of status and power played out, historically, in the commissioning and ownership of paintings, as well as in what was depicted in them.[15] From portraits backed by landscapes to paintings of galleries (e.g. Gainsborough's *Mr. and Mrs. Andrews*; Panini's *Picture Gallery of Cardinal Valenti Gonzaga*; Berger 1972: 106, 86), canvases displayed their owner's possessions and, thereby, (relative) status and power. Adding another dimension to the creator–'text'–user triad, in intersecting with status, ownership and display, brings identity issues into the analytic domain. Cooper (1976) found this relationship in homes, which reminds us that the creator-designer and owner-inhabitant are not always identical. Berg and Kreiner (1990) explored these concerns in corporate headquarters, seeing not only their design and building materials but also the identity of the architect or firm selected to design them as symbolic of status and other power dimensions, linking to organizational identity and image. The reputation of the architect selected, in other words, has a halo effect, redounding on the occupant. Whether it works similarly for a successor occupant is an empirical question worthy of study.

Similar expressions of status and power are enacted through the acquisition and display of original artwork and its provenance (consider masterpieces and antiques), posters of renowned works of art (Yanow 1996: 167, 172–173), and office furnishings (their design and materials, quality of execution, size and quantity, and the space they command; Becker and Steele 1995; Ciborra and Lanzara 1990; Doxtater 1990; Hatch 1990; Steele 1981). Organizational manuals stipulating the precise dimensions and amounts of furnishing types by member rank render these relationships explicit. Dress also enacts such values (Pratt and Rafaeli 1997; Rafaeli *et al*. 1997), as do programmes and services made available to prospective clients and customers (such as the ballet courses offered to the children of rurally located development towns in Israel so that, as one of the organization's founders put it, 'the youngsters of the poor have an equal opportunity to be exposed to today's cultural activities as are the youngsters of the Tel Aviv residents'; Yanow 1996: 181).

Depictions and other visual materials, then, have both performative and persuasive dimensions, of which viewers tend to be more and less aware, depending on the genre. In the conflict between words and the visual data of deeds – between 'do what I say' and 'do what I do' – the power of the latter to compel belief in its greater truthfulness should not be ignored. We tend to consider pictures compelling in this way, but graphic displays can be equally persuasive, and even more subtly so, as we tend to miss the reality suppositions embedded in them (Drucker 2011). Because of visuals' immediacy and our interpretive capacity to bypass their translation into words, which would tie language to reason, these power dimensions may be overlooked.

Concluding 'observations'

Despite its dominant logocentrism, manifested in interviewing, document analysis, and the written presentation and dissemination of research, organizational analysis includes a long tradition of observational, participatory and ethnographic research that has not only looked at what people do and listened to what they say about what they do, but has also closely observed what they do things *with*, and *where* – objects, the physical artefacts of the material world, and their settings. Hermeneutics, phenomenology and other meaning-focused approaches – the interpretive dimensions of sense-making – treat artefacts as symbolic representations of what is meaningful to their creators and 'users', attending to similar and contested meanings. Visual analyses of things visual are not only a matter of aesthetic appreciation; the visual plays a key role in communicating other sorts of meaning. The idea that 'sight' (as with other observational modes) is always mediated by the figurative lens of prior knowledge and phenomenological experience lays the groundwork for a methodology for analytic sense-making of things studied visually, including relationships of status, power, powerlessness, and the like, which are expressed and conveyed in visual, and visible, form.

Constructivist-interpretivist research, in which the researcher is present, in both research and narrative, to one degree or another, might be analogized to the drip canvases of Jackson Pollock, which retain traces of the artist's motions in time and space (Hatch and Yanow 2008). This analogy itself suggests that the movement arts might provide a source of insight for the visual study of visual materials. Ballet and text-based drama work with fixed 'scores' – written music plus Labanotation; the play script – by contrast with a more free-form dance and improvisational theatre (as well as Renaissance music and some forms of jazz), which have little or no written plan of action or record. Organizations' visual materials – photographs, films, paintings, cartoons, built spaces, and so on – present the researcher with a fixed 'score', but our challenge is to work out the 'notations' specific to each genre such that we can understand the types of meaning these various elements can embody and convey, in the context of the polysemic character of their organizational manifestations.

To conclude, then, on an ontological-epistemological note: can we study visual materials without reifying or essentializing their meanings? We have rejected the notion that words transparently designate what they represent. Let us not lose sight (*sic*) of the fact that images are no more transparent than words! In thinking about multiple meanings from a constructivist ontological position, the point is clear: meaning does not reside in the object itself, but is created – constructed, if you will – intersubjectively, through use and reuse. Organizational meanings are not independent of this process. An object may exist independent of its analysis – the sherd lying buried under 2,000 years of rubble – but its human, social – indeed, organizational – significance is called into being as evidentiary material for a study only once the research question is shaped and put into play in the research. Moreover, although interviews and documents also 'reproduce' and frame individuals' views of organizational matters, there is something in the verisimilitude of photographs, videos, and even drawings and sketches and in the relative immediacy with which we grasp their meanings that can lead a researcher to forget that these, too, are framing devices: interpretations from a particular point of view, which highlight and occlude at the same time. Even when intending to render a 'faithful' account of their observations (Yanow and Schwartz-Shea 2013: 438), researchers can develop blind spots concerning the interpreted character of visual 'found objects'. Keeping Burke's pentad in mind can help foreground the artefactual – created and interpreted – character of visual materials.

Finally, I hope that the renewed attention to visual studies of visual materials will not commit the counter-sin to what it corrects. Things visual do not have lives independent of other senses, other acts, other language. Whereas breaking out of our logocentrism is a welcome move, we should be admitting all of our sense observations into the realm of scientific enquiry. Meaning-making and its communication are multi-modal; and we would not be advancing our research processes in isolating and privileging the visual while ignoring its concomitant modalities. I hope we can add visual materials and methods to our analytic repertoire without losing the others.

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Notes

1 For some exceptions, see, e.g., Gagliardi (1990b); Kunter and Bell (2006); Rafaeli and Pratt (2006); Warren (2008). This point has also recently hit the popular management literature (see Roam 2011). The ignoring of visual materials is paralleled in the ignoring of spatial evidence, which might be considered a subfield of the broader category of visual materials; see Bell and Davison (2013) for a discussion of the point in general; and Yanow (2010) for its manifestation in spatial studies.

2 For exceptions, see, e.g., Iedema *et al.* (2010); Kenis *et al.* (2010); Wasserman and Frenkel (2011); Weir (2010); Yanow (1998) on spatial design; Berg and Kreiner (1990); van Marrewijk (2010); Yanow (1993) on building materials; Hatch (1990) and Panayiotou and Kafiris (2010) on furnishings and decor.

3 On Dr Gilbreth's contributions, see Krenn (2011). It is also worth looking at the films of documentarian Frederick Wiseman, many of which are, in effect, organizational and/or workplace or work practice studies (e.g. *Titicut Follies*, *High School*, *Hospital*, *The Store*, *Boxing Gym*; see Grant 1992).

4 For an interesting discussion of this 'ocularcentrism', see Kavanagh (2004).

5 As I say, for heuristic purposes. In research practice, the three are not as distinct as this typology might suggest; indeed, analysis often begins even before the researcher has entered the field, and it continues during fieldwork engagements and on through textwork. Van Maanen (2011) has recently added 'headwork' to fieldwork and textwork, which positions deskwork in a broader locational setting and, perhaps, scope. Wilkinson (2013) contributes 'legwork', in reference to the preparatory phase(s) during which desired field research is set up. And then there is 'footwork' (Hall 2009).

6 'Sometimes words written in a painting designate specific things, and images vague things; or, just as well, the opposite' (author's translation). Much of Magritte's work toys with the tension between image, language and representation, including the well-known 'This is not a pipe' (or *Ceci n'est pas une pipe*) canvases, 'This is not an apple' (*Ceci n'est pas une pomme*), and 'This is a piece of cheese'. See also Foucault's discussion (1983) of Magritte's work.

7 That is, 'subjective' is an epistemologically descriptive term, referencing meaning to a specific subject, not the pejorative one often invoked to criticize field and other qualitative or interpretive research for lacking in 'rigour'. Drucker (2011: 24) draws the distinction between observer-independent (objective) and observer-codependent (subjective) phenomena. For an intriguing argument that holds the primacy of sight (or visual metaphors) responsible for Enlightenment (seventeenth- to eighteenth-century) ideas about the possibility of objectivity, see Kavanagh (2004: 446–449). For more on the epistemological meanings of 'objective' and 'subjective', see Yanow (2013a).

8 And she shows graphic displays incorporating ambiguity and instability – 'expressive metrics and graphics' that 'reinsert the subjective standpoint of their creation' (Drucker 2011: 14, 20).

9 These included post-structuralist and Lacanian views. As Kirstie McClure (personal correspondence, 21–22 February 2012) notes, the debate over intentionality versus context also marks theories of intellectual history or the history of ideas.

10 This formulation parallels an older, realist-objectivist view of communication, with senders, signals, channels and receivers, and mis-communication attributable to 'noise' in the system (for an interpretive critique, see Putnam and Pacanowsky 1983).

11 Which is where researcher-as-human-proxy for organizational members and others comes in.

12 E.g. Roam (2012) identifies six building blocks of data representation, analogous to parts of speech: charts (adjectives of number); flow charts; timelines (tense: past, present, future); portraits (nouns: who, what); Venn diagrams; and maps (prepositions: position of objects in space).

13 Kavanagh, quoting Arendt, attributes to Bergson the understanding that the body is 'the primary site of lived action' (2004: 454). Van Maanen (1996) makes a similar point with respect to ethnography in general.

14 I am indebted to Merlijn van Hulst (personal communication, 26 July 2012) for this example and point.

15 See also Christian (1997) on links between managing and paintings.

References

Agar, M.H. (1996 [1980]) *The Professional Stranger: An Informal Introduction to Ethnography*, 2nd ed., New York: Academic Press.

Austin, J.L. (1962) *How To Do Things with Words*, Cambridge, MA: Harvard University Press.

Bales, R.F. (1950) *Interaction Process Analysis*, New York: Addison-Wesley.

Barad, K. (2003) 'Posthumanist performativity: Toward an understanding of how matter comes to matter', *Signs: Journal of Women in Culture and Society* 28(3): 801–31.

Barthes, R. (1967) 'The death of the author', trans. R. Howard, *Aspen* 5–6. Available at www.ubu.com/aspen/aspen5and6/threeEssays.html#barthes (accessed 19 July 2012).

Becker, F. and Steele, F. (1995) *Workplace by Design*, San Francisco: Jossey Bass.

Becker, H.S. (1998) 'Categories and comparisons: how we find meaning in photographs', *Visual Anthropology Review* 14(2): 3–10.

Bell, E. and Davison, J. (2013) 'Visual management studies: empirical and theoretical approaches', *International Journal of Management Reviews* 15(2): 167–184.

Berg, P.-O. and Kreiner, K. (1990) 'Corporate architecture: turning physical settings into symbolic resources', in P. Gagliardi (ed.) *Symbols and Artifacts: Views of the Corporate Landscape*, New York: Aldine de Gruyter, 41–67.

Berger, J. (1972) *Ways of Seeing*, London: British Broadcasting Corporation and Penguin.

Bertoin Antal, A. (2012) 'Visual methods and arts-based interventions: social entrepreneurship in Israel', *in Visio/inspire*. Available at http://moodle.in-visio.org/mod/resource/view.php?id=417 (accessed 1 June 2012).

Bjerrum, E. and Fangel, A.B. (2012) 'Reinventing ethnographic practise: the use of ethnographic methods in organisational development', presented at the International Conference on Organisational Learning, Knowledge, and Capabilities, Valencia (25–27 April).

Burke, K. (1945) *A Grammar of Motives*, New York: Prentice-Hall.

——(1989) *On Symbols and Society*, edited and with an Introduction by Joseph R. Gusfield, Chicago: University of Chicago Press.

Christian, D. (1997) *Art de Diriger et Art de Peindre*, Paris: Editions DIFER.

Ciardi, J. (1959) *How Does a Poem Mean?*, New York: Houghton Mifflin.

Ciborra, C.U. and Lanzara, G.F. (1990) 'Designing dynamic artifacts', in P. Gagliardi (ed.) *Symbols and Artifacts*, NY: Aldine de Gruyter, 147–165.

Ciolfi, L. (2009) 'Mapping lived place', presented at the Spatial and Network Analysis in Qualitative Research Euroqual Conference, European University Cyprus, Nicosia (25–27 November).

Cohen, P. (2009) 'Danish cartoon controversy', *New York Times Topics* (updated 12 August). Available at http://topics.nytimes.com/top/reference/timestopics/subjects/d/danish_cartoon_controversy/index.html?emc=eta2 (accessed 1 August 2012).

Cone, F.M. (1960) 'Symbology in advertising', in E. Whitney (ed.) *'Symbology': The Use of Symbols in Visual Communications*, Hastings House, NY: Communication Arts Books, 69–86.

Cooper, C. (1976) 'The house as symbol of the self', in J. Lang, C. Burnette, W. Moleski, and D. Vachon (eds) *Designing for Human Behavior*, Stroudsberg, PA: Dowden Hutchinson and Ross, 130–146.

Danjoux, I. (2013) 'Don't judge a cartoon by its image: interpretive approaches to the study of political cartoons', in D. Yanow and P. Schwartz-Shea (eds) *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*, 2nd ed., Armonk, NY: M.E. Sharpe, 353–367.

de Rond, M. (2012) 'Welcome to Bastion: warzone ethnography with the combat surgeons', video from photographs, published by Cambridge University (27 June). Available at www.youtube.com/watch?v=F0Ytealqv2g (accessed 31 July 2012).

Dougherty, D. and Kunda, G. (1990) 'Photograph analysis: a method to capture organizational belief systems', in P. Gagliardi (ed.) *Symbols and Artifacts: Views of the Corporate Landscape*, New York: Aldine de Gruyter, 185–206.

Doxtater, D. (1990) 'Meaning of the workplace', in P. Gagliardi (ed.) *Symbols and Artifacts: Views of the Corporate Landscape*, NY: Aldine de Gruyter, 107–127.

Drucker, J. (2011) 'Humanities approaches to graphical display', *DHQ: Digital Humanities Quarterly* 5(1). Available at http://www.digitalhumanities.org/dhq/vol/5/1/000091/000091.html (accessed 4 June 2012).

Endrissat, N. and Noppeney, C. (2013), 'Materializing the immaterial: relational movements in a perfume's becoming', in P.R. Carlile, D. Nicolini, A. Langley and H. Tsoukas (eds) *How Matter Matters: Objects, Artifacts, and Materiality in Organization Studies*, Oxford: Oxford University Press, 58–91.

Ewenstein, B. and Whyte, J. (2009) 'Knowledge practices in design: The role of visual representations as "epistemic objects"', *Organization Studies* 30(1): 7–30.

Ferguson, K.E. and Turnbull, P. (1999) *Oh, Say, Can You See? The Semiotics of the Military in Hawai'i*, Minneapolis: University of Minnesota Press.

Forester, J. (1999) 'Reflections on the future understanding of planning practice', *International Planning Studies* 4(2): 175–193.

Foucault, M. (1983) *This Is Not a Pipe*, with illustrations and letters by R. Magritte, trans. and ed. J. Harkness, Berkeley: University of California Press.

Fuenmayor, R. (1991) 'Truth and openness: an epistemology for interpretive systemology', *Systems Practice* 4(5): 473–490.

Gagliardi, P. (1990a) 'Artifacts as pathways and remains of organizational life', in P. Gagliardi (ed.) *Symbols and Artifacts: Views of the Corporate Landscape*, New York: Aldine de Gruyter, 1–38.

——(ed.) (1990b) *Symbols and Artifacts: Views of the Corporate Landscape*, New York: Aldine de Gruyter.

Goffman, E. (1979) *Gender Advertisements*, Cambridge, MA: Harvard University Press.

Gomez, M.-L., Bouty, I. and Drucker-Godard, C. (2003) 'Developing knowing in practice: behind the scenes of haute cuisine', in D. Nicolini, S. Gherardi and D. Yanow (eds) *Knowing in Organizations: A Practice-Based Approach*, Armonk, NY: M.E. Sharpe, 100–125.

Goodsell, C.T. (1988) *The Social Meaning of Civic Space*, Lawrence: University Press of Kansas.

——(ed.) (1993), 'Architecture as a setting for governance', Theme issue, *Journal of Architectural and Planning Research* 10(4) (Winter).

Grant, B.K. (1992) *Voyages of Discovery*, Urbana, IL: University of Illinois Press.

Gruber, R.E. (2011) 'The woman behind the Polish Jewry Museum', *The Jewish Daily Forward* (12 August). Available at http://forward.com/articles/140908/the-woman-behind-the-polish-jewry-museum/ (accessed 16 August 2011).

Hall, T. (2009) 'Footwork: moving and knowing in local space(s)', *Qualitative Research* 9(5): 571–585.

Harper, D. (2002) 'Talking about pictures: a case for photo elicitation', *Visual Studies* 17(1): 13–26.

Hatch, M.J. (1990) 'The symbolics of office design', in P. Gagliardi (ed.) *Symbols and Artifacts: Views of the Corporate Landscape*, New York: Aldine de Gruyter, 129–146.

Hatch, M.J. and Rubin, J. (2006) 'The hermeneutics of branding', *Journal of Brand Management* 14(1/2): 40–59.

Hatch, M.J. and Yanow, D. (2008) 'Methodology by metaphor: ways of seeing in painting and research', *Organization Studies* 29: 23–44.

Hinthorne, L. L. (2012) 'A picture is worth a thousand words: Using the visual interpretation narrative exercise to elicit non-elite perceptions of democracy', *Field Methods* 24(3): 348–64.

Iedema, R. (2001) 'Analysing film and television: a social semiotic account of *Hospital: An Unhealthy Business*', in T. van Leeuwen and C. Jewitt (eds) *The Handbook of Visual Analysis*, London: Sage, 183–204.

Iedema, R., Long, D. and Carroll, K. (2010) 'Corridor communication, spatial design and patient safety: enacting and managing complexities', in A. van Marrewijk and D. Yanow (eds) *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 41–57.

Iser, W. (1989) *Prospecting: From Reader Response to Literary Anthropology*, Baltimore, MD: Johns Hopkins University Press.

Johnson, G. (2007) 'Sleights of mind', *The New York Times* (21 August). Available at http://www.nytimes.com/2007/08/21/science/21magic.html (accessed 10 February 2012).

Jones, P.I., Bunce, G., Evans, J., Gibbs, H. and Hein, J.R. (2008) 'Exploring space and place with walking interviews', *Journal of Research Practice* 4(2), Article D2. Available at http://jrp.icaap.org/index.php/jrp/article/view/150/161 (accessed 22 February 2010).

Kanter, R.M. (1993 [1977]) *Men and Women of the Corporation*, NY: Basic Books.

Kavanagh, D. (2004) 'Ocularcentrism and its others: a framework for metatheoretical analysis', *Organization Studies* 25(3): 445–464.

Kenis, P., Kruyen, P.M. and Baaijens, J. (2010) 'Bendable bars in a Dutch prison: a creative place in a non-creative space', in A. van Marrewijk and D. Yanow (eds) *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 58–73.

Krenn, M. (2011) 'From scientific management to homemaking: Lillian M. Gilbreth's contributions to the development of management thought', *Management & Organizational History* 6(2): 145–161.

Kunda, G. (1992) *Engineering Culture*, Philadelphia: Temple University Press.

Kunter, A. and Bell, E. (2006) 'The promise and potential of visual organizational research', *M@n@gement* 9(3): 169–189.

Kusenbach, M. (2003) 'Street phenomenology: The go-along as ethnographic research tool', *Ethnography* 4(3): 455–85.

Latour, B. (1987) *Science in Action: How to Follow Scientists and Engineers through Society*, Cambridge, MA: Harvard University Press.

Magritte, R. (1929) *Les Mots et les Images*. Pages from the artist's notebook on exhibit in 'Magritte: Das Lustprinzip', Albertina Museum, Vienna, 9 November 2011–26 February 2012.

Manderson, D. and Turner, S. (2006) 'Coffee house: *Habitus* and performance among law students', *Law & Social Inquiry* 31(3): 649–676.

Mitchell, T. (1991) *Colonising Egypt*, Berkeley: University of California Press.

——(2002) *Rule of Experts*, Berkeley: University of California Press.

Morgan, D. (2009) 'Painting as visual evidence: production, circulation, reception', in R. Howells and R.W. Matson (eds) *Using Visual Evidence*, Maidenhead, UK: Open University Press, 8–23.

Mortellito, D. (1960) 'Symbology and the corporate image', in E. Whitney (ed), *'Symbology': the use of symbols in visual communications*, Hastings House, NY: Communication Arts Books, 103–14.

Nicolini, D. (2009) 'Zooming in and zooming out: a package of method and theory to study work practices', in S.B. Ybema, D. Yanow, H. Wels and F. Kamsteeg (eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*, London: Sage, 120–138.

Ohlins, W. (1989) *Corporate Identity*, London: Thames and Hudson.

Oliver-Velez, D., Finlinson, H.A., Deren, S., Robles, R., Shedlin, M., Andia, J. and Colon, H. (2002) 'Mapping the air-bridge locations: the application of ethnographic mapping techniques to a study of HIV risk behavior determinant in East Harlem, New York, and Bayamon, Puerto Rico', *Human Organization* 61(3): 262–276.

Olivetti, D. (1960) 'Symbology in international industry', in E. Whitney (ed.) *'Symbology': The Use of Symbols in Visual Communications*, Hastings House, NY: Communication Arts Books, 41–48.

Orlikowski, W. J. and Scott, S.V. (2008) 'Sociomateriality: Challenging the separation of technology, work and organization', *Academy of Management Annals* 2: 433-74.

Pachirat, T. (2011) *Every Twelve Seconds: Industrialized Slaughter and the Politics of Sight*, New Haven, CT: Yale University Press.

Panayiotou, A. and Kafiris, K. (2010) 'Firms in film: representation of organisational space, gender, and power', in A. van Marrewijk and D. Yanow (eds) *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 174–199.

Pink, S. (2007) *Doing Visual Ethnography*, 2nd ed., London: Sage.

——(2008) 'An urban tour: the sensory sociality of ethnographic place-making', *Ethnography* 9(2): 175–196.

Pratt, M.G. and Rafaeli, A. (1997) 'Vested interests: dress as an integrating symbol', *Academy of Management Journal* 40: 860–896.

Putnam, L.L. and Pacanowsky, M.E. (eds) (1983) *Communication and Organization: An Interpretive Approach*, Beverly Hills, CA: Sage.

Rafaeli, A. and Pratt, M.G. (eds) (2006) *Artifacts and Organizations*, Mahwah, NJ: Lawrence Erlbaum Associates.

Rafaeli, A., Dutton, J., Harquail, C.V. and Lewis, S. (1997) 'Navigating by attire: the use of dress by female administrative employees', *Academy of Management Journal* 40: 9–45.

Riach, K. and Warren, S. (2011) 'Cultural osmologies: smell in the workplace', presented at the Critical Management Studies Conference, Naples (11–13 July).

Richardson, L. (1994) 'Writing: a method of inquiry', in N.K. Denzin and Y.S. Lincoln (eds) *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage, 516–529.

Ricoeur, P. (1971) 'The model of the text: meaningful action considered as text', *Social Research* 38: 529–62.

Roam, D. (2011) *Blah Blah Blah: What to Do When Words Don't Work*, New York: Portfolio/Penguin.

——(2012) 'When words don't work', *TechNation*, (US) National Public Radio, original broadcast 15 May 2012. (Accessed 22 May 2012 at http://itc.conversationsnetwork.org/shows/detail5295.html, no longer available.) Cf. 'Dan Roam: What to Do When Words Don't Work', The Commonwealth Club of California: San Francisco (broadcast 31 January 2012). Available at www.commonwealthclub.org/events/archive/podcast/dan-roam-what-do-when-words-dont-work-13112 (accessed 8 April 2013).

Rosen, M. (2000) 'You asked for it: Christmas at the bosses' expense', in M. Rosen, *Turning Words, Spinning Worlds: Chapters in Organizational Ethnography*, Amsterdam: Harwood, 93–116.

Schroeder, J.E. (2008) 'Visual analysis of images in brand culture', in B.J. Phillips and E. McQuarrie (eds) *Go Figure: New Directions in Advertising Rhetoric*, Armonk, NY: M.E. Sharpe, 277–296. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=941431 (accessed 30 January 2012).

Schwartz-Shea, P. and Yanow, D. (2009) 'Reading and writing as method: in search of trustworthy texts', in S. Ybema, D. Yanow, H. Wels and F. Kamsteeg (eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*, London: Sage, 56–82.

Schwartz-Shea, P. and Yanow, D. (2012) *Interpretive Research Design: Concepts and Processes*, New York: Routledge.

Shotter, J. and Katz, A. (2006) 'Making a practice visible from within the practice: a dialogically-structured "social poetics of inquiry" in health care settings', presented at the 2nd Organization Studies Summer Workshop on Re-turn to Practice, Mykonos (15–16 June).

Stavrides, S. (2001) 'Navigating the metropolitan space: Walking as a form of negotiation with otherness', *Journal of Psychogeography and Urban Research* 1/1. http://courses.arch.ntua.gr/stavrides.html (accessed 3 December 2009).

Steele, F.I. (1981) *The Sense of Place*, Boston: CBI Publishing Co.

Strati, A. (2003) 'Knowing in practice: aesthetic understanding and tacit knowledge', in D. Nicolini, S. Gherardi and D. Yanow (eds) *Knowing in Organizations: A Practice-Based Approach*, Armonk, NY: M.E. Sharpe, 53–75.

Suchman, L. (2005) 'Affiliative objects', *Organization* 12: 3379–99.

Taylor, C. (1971) 'Interpretation and the sciences of man', *Review of Metaphysics* 25: 3–51.

Tufte, E.R. (1990) *Envisioning Information*, Cheshire, CT: Graphics Press.

——(1997) *Visual Explanations: Images and Quantities, Evidence and Narrative*, Cheshire, CT: Graphics Press.

——(2001 [1983]) *The Visual Display of Quantitative Information*, 2nd ed., Cheshire, CT: Graphics Press.

Van Herzele, A. and van Woerkum, C.M.J. (2008) 'Local knowledge in visually mediated practice', *Journal of Planning Education and Research* 27: 444–455.

Van Maanen, J. (1996) 'Commentary: on the matter of voice', *Journal of Management Inquiry* 5: 375–381.

——(2011) 'Ethnography as work: some rules of engagement', *Journal of Management Studies* 48(1): 218–234.

van Marrewijk, A. (2010) 'The beauty and the beast: the embodied experience of two corporate buildings', in A. van Marrewijk and D. Yanow (eds) *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 96–114.

Van Veeren, E. (2011) 'Captured by the camera's eye: Guantánamo and the shifting frame of the Global War on Terror', *Review of International Studies* 37: 1721–1749.

Warren, S. (2008) 'Empirical challenges in organizational aesthetics research: toward a sensual methodology', *Organization Studies* 20(4): 559–580.

Wasserman, V. and Frenkel, M. (2011) 'Organizational aesthetics: caught between identity regulation and culture jamming', *Organization Science* 22(2): 503–521.

Wasson, C. (2000) 'Ethnography in the field of design', *Human Organization* 59(4): 377–388.

Weir, D. (2010) 'Space as context and content: the diwan as a frame and a structure for decision-making', in A. van Marrewijk and D. Yanow (eds) *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 115–136.

Weldes, J. (2013) 'High politics and low data: globalization discourses and popular culture', in D. Yanow and P. Schwartz-Shea (eds) *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*, 2nd ed., Armonk, NY: M.E. Sharpe, 228–238.

White, J.D. (1992) 'Taking language seriously: toward a narrative theory of knowledge for administrative research', *American Review of Public Administration* 22: 75–88.

Wilkinson, C. (2013) 'Ethnographic methods', in Laura J. Shepherd (ed.) *Critical Approaches to Security: An Introduction to Theories and Methods*, London: Routledge, 129–145.

Wolcott, H.F. (2003 [1973]) *The Man in the Principal's Office: An Ethnography*, updated ed., Walnut Creek, CA: AltaMira Press.

Yanow, D. (1993) 'Reading policy meanings in organization-scapes', *Journal of Architectural and Planning Research* 10: 308–327.

——(1996) *How Does a Policy Mean? Interpreting Organizational and Policy Actions*, Washington, DC: Georgetown University Press.

——(1998) 'Space stories; or, studying museum buildings as organizational spaces, while reflecting on interpretive methods and their narration', *Journal of Management Inquiry* 7: 215–239.

——(2000) *Conducting Interpretive Policy Analysis*, Newbury Park, CA: Sage.

——(2003) *Constructing 'Race' and 'Ethnicity' in America: Category-making in Policy and Administrative Practices*, Armonk, NY: M.E. Sharpe.

——(2009) 'Dear author, dear reader: the third hermeneutic in writing and reviewing ethnography', in E. Schatz (ed.) *Political Ethnography: What Immersion Brings to the Study of Power*, Chicago: University of Chicago Press, 275–302.

——(2010) 'Giving voice to space: academic practices and the material world', in A. van Marrewijk and D. Yanow (eds), *Organizational Spaces: Rematerializing the Workaday World*, Cheltenham, UK: Edward Elgar, 139–158.

——(2013a) 'Neither rigorous nor objective? Interrogating criteria for knowledge claims in interpretive science', in D. Yanow and P. Schwartz-Shea (eds) *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*, 2nd ed., Armonk, NY: M.E. Sharpe, 97–119.

——(2013b) 'A semiotics of built space', in D. Yanow and P. Schwartz -Shea (eds) *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*, 2nd ed., Armonk, NY: M.E. Sharpe, 368–386.

Yanow, D. and Schwartz-Shea, P. (2013) 'Doing social science in a humanistic manner', in D. Yanow and P. Schwartz -Shea (eds) *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*, 2nd ed., Armonk, NY: M.E. Sharpe, 433–447.