

# Left and right in TV news images in Japan and the UK

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## Abstract

Directional preferences in moving images are primarily theorized as deriving from ‘cultural’ factors, principally the dominant language’s reading/writing direction. This study examines the origins of this notion and positions it within recent analytical thinking. In order to expand the context of analysis it draws in research from neurology and practical knowledge of typical production tools. Two manifestations of directionality — camera panning movements (pans) and soundbite gaze direction — are compared, data is drawn from two countries, Japan and the UK, where directional conventions may differ. Results suggest there is a limited degree of support for the hypothesis that reading/writing direction is linked to directional preferences in television news image creation, but the processes involved may be subconscious rather than conscious and analysts should therefore be wary of attributing semiotic significance to these variations, of ‘over-reading’ manifestations of directionality in news images.

**Keywords:** directionality, laterality, camera motion, panning, soundbites, UK, Japan, television news

## 1 Introduction

The starting points for this study were *Reading Images*’ discussion of lateral composition in connection with the ‘information value of left and right’ (Kress & Leeuwen, 2006), and the work on cultural directionality by Oyama and Jewitt (Oyama, 2000; Oyama & Jewitt, 2001). This paper attempts to add depth to theoretical considerations of the significance of lateral directionality, left and right, by analyzing the strands of reasoning which have led to current understanding as extant in the works mentioned. It is also intended to contribute to debate on

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whether the ideas of visual social semiotics can be applied as usefully to the moving images of television news as to other types of images. If, as is argued, the images of television news are found to be outside the reach of such theories then work can begin on assembling an approach specifically tuned to furthering the understanding of this type of visual communication.

This paper attempts to shed light on these theoretical issues by comparing manifestations of left and right in two advanced post-industrial societies with very different cultural backgrounds and national traditions, Japan and the UK. No specific readings of left and right are offered, instead, this paper attempts to add important contextual information to the debate which will allow others to assess the effectiveness and applicability of social semiotic interpretations as they now stand. My argument is the perhaps familiar one that without an appreciation of a broad variety of factors – morphological, physiological, cultural and technical – that are in play during the creation of images, the would-be analyst may be only seeing part of the picture.

The social semiotic approach to analysis of visuals (epitomized in the works mentioned above) proposes interpretations of left and rightness related to what Halliday refers to as the progression from GIVEN to NEW in utterances, from what is already known, obvious or understood towards new information, suggesting that such implications can also be discovered in images through the shared feature of directionality – leftward or rightward flow – and that manifestations of such flows can be similarly interpreted. What is proposed here is to interrogate the thinking inherent in this approach and evaluate its appropriateness as an approach to video, televisual and filmic images. *Reading Images* only makes brief mention of moving images (Kress & Leeuwen, 2006, pp. 258–65), instead concentrating primarily on still images and arrangements of still images, this paper will demonstrate why the moving images dealt with here require an approach attuned to their particular nature, they are not simply still images to which the additional property of movement has been added on, they are, in terms of directionality at least, a theoretically distinct type of thing.

Manifestations of directionality in two types of televisual images are compared; certain types of camera panning movement (pans) and short interviews and ‘soundbites’ (bites), taken from news programming in Japan and the UK, these are both defined below. Japan, as will be shown, has a more flexible attitude to reading/writing (RW) direction, and as regards directionality in expressive action overall, than does the UK (the relation is more complex than the oppositional dichotomy occasionally propounded), and as such one would expect the visual semiotic

resources which are theorized as encoding meanings of GIVEN and NEW under the influence of RW direction to be distributed differently. As the results (secs. 4 & 5) show, there is variation in the distributions, but this seems to be not solely linked to RW direction.

### ***1.1 'Left' and 'right' are special***

This paper concentrates on lateral directionality, left and right, because of their particular character, outlined here. The directions 'up' and 'down' can be defined universally (at least, as far as human life on planet Earth) in terms of references to gravity, 'towards the centre of the planet' being, roughly speaking 'down,' the direction working against gravity being 'up.' Likewise, 'front' and 'back,' forwards and backwards, can be defined with reference to the human body with its well-defined physiological front and back. 'Left' and 'right' however pose a particular problem relying as they do on a distinction between the two more or less identical halves of bilaterally symmetrical objects, human beings, rather than on some external natural feature (Gross & Bornstein, 1978). The type of directionality we define using the terms 'left' and 'right' is thus qualitatively different to the up/down and backwards/forwards axes and has been a ready subject for philosophical, cultural, religious and scientific speculation.<sup>1</sup>

The literature on directionality in human beings is diverse, studies have investigated fields of human activity from mathematics (Zebian, 2005) to portrait painting (Tyler, 2007). This study makes use of notions of left/right in reference to televisual images and this section offers a brief outline of how directionality in images has been viewed by important theorists. The association in modern academic writing of differences in the perceptual weights of pictorial left and right with reading (and by extension writing) direction goes back to the work of Swiss art historian Heinrich Wölfflin (1864–1945) who suggested in *Gedanken zur Kunstgeschichte* (Wölfflin, 1940, pp. 82–90) that the right side of a painting is 'heavier' because 'we have a tendency to read over the things on the left quickly in order to come to the right side where "the last word is spoken"' (quoted in Zettl, 1973, p.128). Wölfflin equates the reading of linguistic material with the 'reading' of images and suggests directional commonalities. Studies of media aesthetics inherited much from this earlier thinking on the visual arts, though Herbert Zettl's own comments on left and right are non-committal; he points to the various interpretations that have placed on them as 'a source for confusion and debate'; the right

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1. In order to avoid excessive repetition this paper uses the following abbreviations: LR (left to right) and RL (right to left), L/RHS (left/right hand side) and TB (top to bottom).

hand page of a magazine spread commands more attention, as does stage-right (audience left), and the right-hand side of a picture is ‘heavier’ or ‘conspicuous.’ As far as television is concerned, he seems to follow Wölfflin and is quite categorical; ‘[w]e tend to pay more attention to an object when it is placed on the right side rather than on the left side of the screen.’ (ibid.)

As Wölfflin uses the notion of *reading* an image (thus implicitly inheriting the *reading direction* of one’s natural tongue), so the idea of a directional flow in language has contributed to thought regarding image directionality in the social semiotic approach. When pictures or layouts make significant use of the horizontal axis, positioning some of their elements left, and other, different ones right of the centre (which does not, of course, happen in every composition), the elements placed on the left are, it is suggested, presented as (using Halliday’s terminology, discussed below) GIVEN, the elements placed on the right as NEW (Kress & Leeuwen, 2006, pp. 180–1).

Social semiotic theory, and the relationship with linguistics it consciously draws upon, is more developed than Wölfflin’s more instinctive reading and it is worth looking at more closely. The terminology of NEW and GIVEN is adopted from Halliday’s Functional Grammar, which concerns itself primarily with understanding *linguistic* communication; there are insights to be gained by taking a moment here to unpack the thinking implicit in its adoption for use in analysis of *visual* communication:

1. Human communication begins with speech;
2. speech unfolds over time;
3. in spoken communication generally, GIVEN (what is already known or shared between speakers) **temporally** precedes NEW (information added anew) (Halliday & Matthiessen, 2004, p. 89). This is generally true of both English and Japanese (Teruya, 2007, pp. 50–1).
4. Writing represents recorded speech;
5. writing unfolds over space;
6. in written communication GIVEN precedes NEW **spatially**.

It thus follows that;

7. In LR writing systems, such as English, GIVEN will be to the left of NEW and in RL systems, for example Arabic, they will be spatially reversed.

For the time being it should be noted that there are relationships in two separate dimensions, temporal and spatial, implicit in social semiotic thinking on directionality. This is important for the study of moving images which often manifest a complex of both temporal features – particularly shots which incorporate camera

movements such as pans and zooms – and spatial features – the composition of the single frame or fixed shot. Thus when considering directionality in moving images it is beneficial to be aware of their mixed nature, they are both ‘speech-like’ and ‘writing-like’; we should be alert to the necessity of using appropriate analytical tools and careful to be precise in distinguishing types of directionality (see sec. 5).

Lastly, it is important to acknowledge that images are the product, in most cases, of conscious human action, it is thus useful to bring into the analysis an understanding of directionality in humans — inherent neurological, morphological and physiological asymmetries — and, the possible influence of the tools used to create these images. So, in an effort to broaden the basis of the visual analyses presented here this paper also draws on work concerned with the form and functions of the human brain and body, in particular McManus (2002) and the journal *Laterality*<sup>2</sup>. By doing so the intention is to make clear the view that studies of human activity, such as the creation of the communicative images considered here, ought ideally to be grounded in an understanding of human capacity.

## ***1.2 Directionality in television***

Academic interest in directionality in television images has tended to concentrate on the potential effects on viewers of lateral asymmetries rather than on their causes. From the mid-1970s to the early 1980s there was a brief period of greater interest in the televisual image (as ‘image’ rather than as ‘content’) and a variety of approaches were made to putting ‘television aesthetics’ on a more scientific basis, to offer justifications for the ‘craft knowledge’ of television production in terms of the increasing understandings of human perception and cognition that resulted from new techniques capable of investigating brain function with greater accuracy and certainty. The aim of many of the studies carried out on this period was to inform production. For example, Tiemens (1978) investigated the positioning of presidential candidates in televised debates prior to the 1976 US Presidential election. Then, bringing in theoretical knowledge of the potential significance for the viewer of placement of visual elements on either left or right was able to discuss how practitioners might employ this knowledge in production design in order to achieve (or avoid) the communicative effects identified.

The work of Nikos Metallinos and Robert Tiemens during the 1970s mark the high tide of interest in compositional elements of the television image (Metallinos, 1979, 1980, 1996; eg. Metallinos & Tiemens, 1977; Tiemens, 1970, 1978). However,

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2. *Psychology Press*, ISSN: 1464-0678

results tended, rather than to elucidate the effects of different lateral compositions, to point to the complex interactions between ‘size, color, shape, vectors (directional forces), and how individual subjects perceive these qualities’ (Metallinos & Tiemens, 1977, p. 32), leading to a loss of interest. Many of these work employ a methodology which uses specially designed footage, often news-like, as experimental stimuli, as a way to investigate the potential effects of minor changes in visual composition, lighting, speaker posture or camera angle (see Mandell & Shaw, 1973). Given the predominance of behaviouristic thinking at the time, this must have seemed to be a reasonable approach to breaking down the experience of viewing the televisual image into manageable ‘elements,’ yet this experience stubbornly refused to be neatly untangled, and interest in such an approach had waned by the 1990s. Discussion of laterality re-emerged with the work of Kress and van Leeuwen in social semiotics, mentioned above, and the creation of the journal *Visual Communication*.

This paper attempts to further the discussion started by social semiotics by taking a holistic view of the production process and looks at television as the results of the actions of culturally embedded, and culturally competent, physical human beings using real objects (tools) in the real world.

## **2 Biology, culture and tools**

The cultural objects this paper considers (television images) are the products of human activity, it is thus sensible to ground this discussion of directionality as broadly as possible with the assumption that a general, shared human biology is the point from which one must proceed in order to be able to discuss local, cultural phenomena with any degree of confidence. Much human productive activity involves three elements: ‘Human beings’ embedded in a ‘cultural context’ using ‘tools.’ The following sections reflect this framework and look at directionality in physical human beings, the tools used in television production, and the cultural contexts in which this activity routinely takes place.

### **2.1 Human asymmetries**

While human beings are, and as far as available evidence goes, always have been predominantly right-handed, the preference for handling utensils with the right-hand is not the only type of lateral asymmetry they demonstrate. Human physical lateral symmetry is superficial, the arrangement of internal organs is asymmetrical as are the shapes of the organs themselves, even when paired left and right

(McManus, 2002, p. 84). Likewise, the two hemispheres of the brain show asymmetry of function, though exact details are still the subject of considerable debate. This asymmetry of brain function can be seen to affect, in a significant and relevant way, how human beings interact with space in everyday life. This section discusses one phenomenon proceeding from brain function asymmetry, '(pseudo)neglect.'

Certain types of brain injury can result in a condition known as 'hemispatial neglect' (or simply 'neglect') which affects perception. Patients so affected 'tend to ignore everything on their left side even though they can see the same things perfectly clearly if their attention is drawn to them' (Ramachandran et al., 1999, p. 303). What seems perhaps unusual is that neglect occurs more, and more severely, in cases of damage to the right brain. The precise mechanism at work in neglect, and in the imbalance in its occurrence, is still unknown but it has been suggested that damage to the right-brain impairs attentional functions concentrated there (Deutsch & Springer, 1997, pp. 199–203).

The brain function asymmetry implied by neglect has repercussions for us all. Even healthy individuals are seen to exhibit a condition with similarities to neglect; known as 'pseudoneglect,' this is the tendency of physiologically normal individuals to pay excessive attention to the left-hand field of vision. Pseudoneglect has real-world consequences: people are more likely to bump into things on their RHS (Turnbull & McGeorge, 1998), and affects artistic and cultural expression and appreciation: The balance point in pictures is often shifted towards the left, names for pictures often refer to things in the left foreground, and actors prefer stage-left<sup>3</sup> (audience's RHS) when attempting to get on unnoticed (McManus, 2002, p. 193).

From the neurological point of view, there can be seen to exist a species-wide tendency to over-emphasize the left visual field. This fundamental 'neurological layer' of influence, which can be seen to affect potentially all human perception and interaction, is overlaid with other layers, themselves complex and significant, after all, brains belong to people and people belong to cultures.

## **2.2 Culture**

All human beings, with their various asymmetries, are pre-existed by the culture into which they are born, the particular features of an individual's cultural milieu can have further profound effects on the way they interact with the external world.

For those acculturated into a literate society, the written word — the 'defining marker of civilization' (Robinson, 2009, p. 1) — is an important bearer of cultural

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3. Note the inconsistency with Zettl's statement above, thus perhaps the confusion.

knowledge. What we can read affects what we know of the world and where we place ourselves within that world. Perhaps surprisingly though, reading affects not just our propositional knowledge of the world but also our perception of that world. There is evidence to suggest that how we (literate humankind) interact with the world around us is in some degree affected by the predominant reading direction of our home culture. Comparative work in the field of cognitive science on readers of LR languages, mainly English, and speakers of non-LR languages, Hebrew, Hindi, Urdu, and Japanese, has demonstrated variations, not always consistent, in the strength and direction of laterality across a broad variety of tasks, visual preferences and areas of perception (eg. Ishii, Okubo, Nicholls, & Imai, 2011; Kazandjian, Cavézian, Zivotofsky, & Chokron, 2010; Tversky, Kugelmass, & Winter, 1991; Vaid & Singh, 1989).

Chokron & Imbert (1993) compared French and Israeli subjects in a line bisection task and found that French-speakers, that is LR readers, tended to place the subjective centre of a line to the left of its actual centre whereas Hebrew-speakers, RL readers, showed the opposite tendency. English speakers seem to exhibit *strong* LR preferences. Ishii et al. (2011) carried out visual preference and line bisection tests of Japanese and English speakers; Japanese speakers were found to prefer RL directionality in images of static and mobile objects but both sets of subjects showed similar levels of leftward bias in the line bisection test. Results from pointing tasks comparing individuals from LR and RL cultures consistently suggest that the LR dimension is more dominant for English speakers. (Fuhrman & Boroditsky, 2010; Tversky et al., 1991)

One's cultural milieu affects one's perception and use of space. This influence is channeled via the medium of reading/writing, habituation to reading in a certain direction seems to influence the way space is *scanned* even when not reading/writing. Chokron & Imbert (1993, p. 222) suggest that 'scanning direction and moreover reading habits may play a role in space utilization,' if this is so we should also expect construction of spatial artifacts and mobilization of directionality as a semiotic resource to be similarly affected.

Thus, onto the neurological layer of influence – exemplified by the phenomenon of pseudoneglect – we might add a layer of cultural influence, primarily exemplified in RW direction, both of these pre-exist the individual.

### **2.3 Tools**

Now let us take one of our acculturated, literate human beings and put them to work as a television camera operator. Most television is made using fairly



standardized equipment, a competent camera operator will be able to pick up and use a variety of common video-cameras within minutes as they all tend to function in a similar way and have their controls laid out in similar fashion. There are ways in which the shape of this technology may affect content.

Referring to television image production as science is going too far, however, television production is to a great extent a matter of manipulating complex technological apparatuses; it is, as well as being embedded in its local culture, part of a worldwide culture of science and technology. Editing machines, video tape recorders and cameras are the complex fruits of decades of scientific and engineering activity, their form has emerged from scientific habits of mind with largely European origins. These are habits of mind shared by the four Japanese companies, Sony, Panasonic, Ikegami and Hitachi (Abramson, 2003) which produce the majority of professional television production technology.

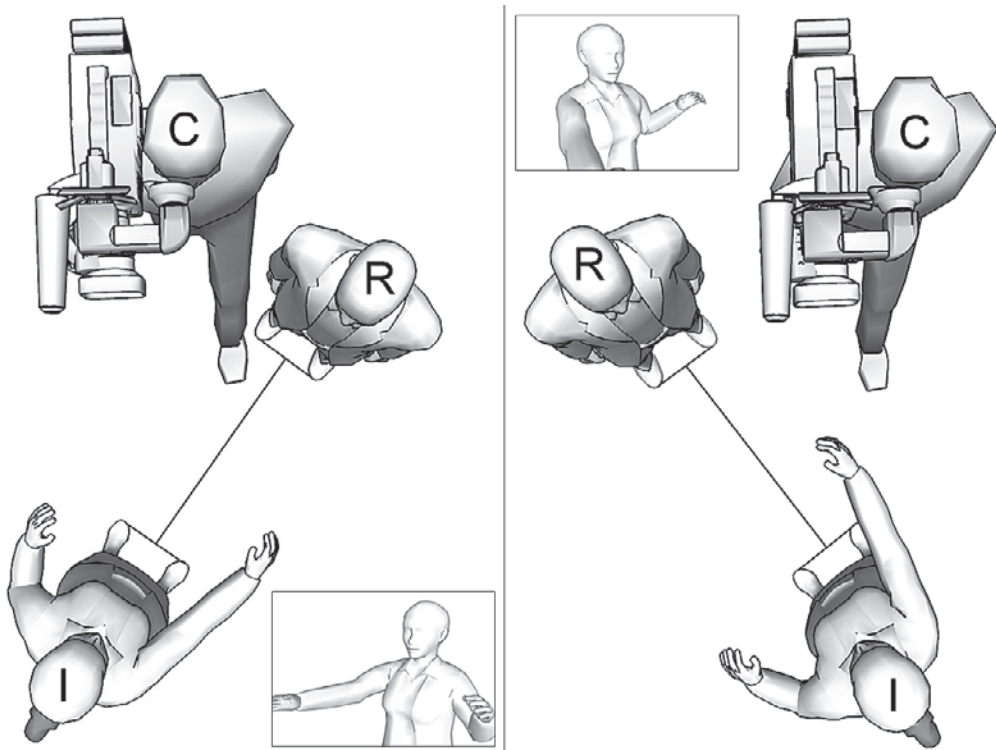
The predominant idea that LR motion is equivalent to progress in time can be seen materialized in many features of technology, for example, video tape moves over the play or record head in a LR direction (Millerson, 2001, pp. 132–3) and on editing equipment buttons to mark the start and end of edits are arranged with the ‘in’ (start) button to the left and the ‘out’ (end) button to the right.

The configuration of parts – body, lens, viewfinder – that is now standard on all broadcast electronic news-gathering (ENG) cameras of the type used in news production goes back to the first mobile video-camera, the ‘Handy-Looky’ introduced by Ikegami in 1962.<sup>4</sup> It should be noted that a result of this configuration is that, when mounted on the shoulder, the camera effectively blocks the right hand portion of the camera operator’s field of vision. This makes it easier for the camera operator to communicate with a reporter or producer if they are visible on the camera operator’s LHS (see fig. 1). It might reasonably be expected therefore that interviews where the speakers faces left will predominate.

Having said this, experienced ENG crews are well aware that for the purposes of editing it is wise to alternate between left-facing and right-facing positions, especially when taking vox-pops, this helps to avoid contiguous cuts being overly similar and perhaps looking like a jump-cut when edited. As television image creators generally try to balance left and right *within a story* we can perhaps only expect any directional bias to appear at the aggregate level.

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4. Ikegami website: [www.ikegami.com/milestones](http://www.ikegami.com/milestones), last accessed 7 Oct 2021



**Figure 1:** The configuration of reporter (R), camera operator (C) and interviewee (I) shown in the left-hand image is the natural default, allowing as it does clear visual and verbal communication between C and R. The configuration shown on the right illustrates how the camera blocks this channel if the positions of R and C are inverted. Small insets show the image of the interviewee as seen by the camera.

### 3 Directionality in Japan and the UK

Japan and the UK, while they can now both be considered advanced post-industrial societies, arrived at their present states along very different routes. The UK, geographically at the western edge of Europe, is firmly part of the predominating Judaeo-Christian European tradition, while Japan on the eastern edge of Asia is part of another area with strong regional commonalities, those of the Sino-centric Buddhist/Confucianist cultural area. While these two civilizations share much in terms of science and technology, their 'communicational cultures' are very different; the following section outlines the nature of linguistic directionality in the UK and Japan.

### 3.1 Writing

Japan's first encounters with the written word, in the third century (Rogers, 2005, p. 50), would have been with Chinese in its TB-RL mode, this inherited mode predominated in Japan until relatively recently. LR writing in Japan arose under the influence of the encounter with works from other cultures which took place during the Edo (1603–1868) and early Meiji (1868–1912) periods. The writing of Japanese underwent what Yanaïke refers to as an epochal change around this time (Yanaïke, 2003). The postwar years of US occupation (1945–52) further strengthened the position of LR writing, and in the last quarter of a century the internet, which is almost exclusively lateral (LR or RL), has further contributed to LR becoming an acceptable, if not the preferred, RW mode for Japanese. These historical changes have led to a very broad definition of 'normal' RW direction in Japan, far broader indeed than that seen in the UK.

Like the Japanese, 'English' speakers were in a position to adopt an already well-developed writing system through encounters with a more advanced culture. The alphabet which forms the basis of the writing system of English is adapted from that used by the ancient Greeks, in turn adopted from the Phoenicians. This was originally written, it seems, RL, and after a period of transition when *boustrophedon* style (alternate LR and RL lines) was used, LR writing had become predominant by the Hellenistic era (c.3–1 BCE).

### 3.2 Directional contextuality

This section looks further at directionality in the UK and Japan and particularly at the issue of *consistency* in directionality. Oyama (2000) suggests that, under the influence of writing direction, the ordering of image sequences and the flow of time within the single image may, in Japan, be the reverse of that found in Anglophone countries.

[T]he visual directionality of right to left is prominent in Japanese visual representations, while British examples have a tendency to realise the visual directionality of left to right. Each directionality correlates with the scriptorial directionality of its language, the traditional way of writing Japanese and that of English. (Oyama, 2000, apx. 8)<sup>5</sup>

This simple dichotomisation is an oversimplification. As will be seen, in Japan,

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5. This article, published in the *Journal of Intercultural Communication* (Online: [www.immi.se/intercultural/nr3/oyama.htm](http://www.immi.se/intercultural/nr3/oyama.htm), last accessed 14 February 2014) also makes up a significant part of Oyama (2001), in collaboration with Carey Jewitt.

where directionality is unstable, context plays a singularly important role. Furthermore, the notion of ‘the traditional way of writing Japanese’ needs careful examination.<sup>6</sup> Writing direction in Japan is far from fixed; it tends to vary with the age of the writer and the nature of the written matter. Cook (2001, p. 5) suggests that LR-TB is now ‘normal’ for writers of Japanese and this may be so. Further complexity arises though if we consider that ‘normal’ *reading* direction may be different again; books are published in both LR-TB left-bound, and TB-RL right-bound formats. These formats can sometimes even be found within a single book.<sup>7</sup>

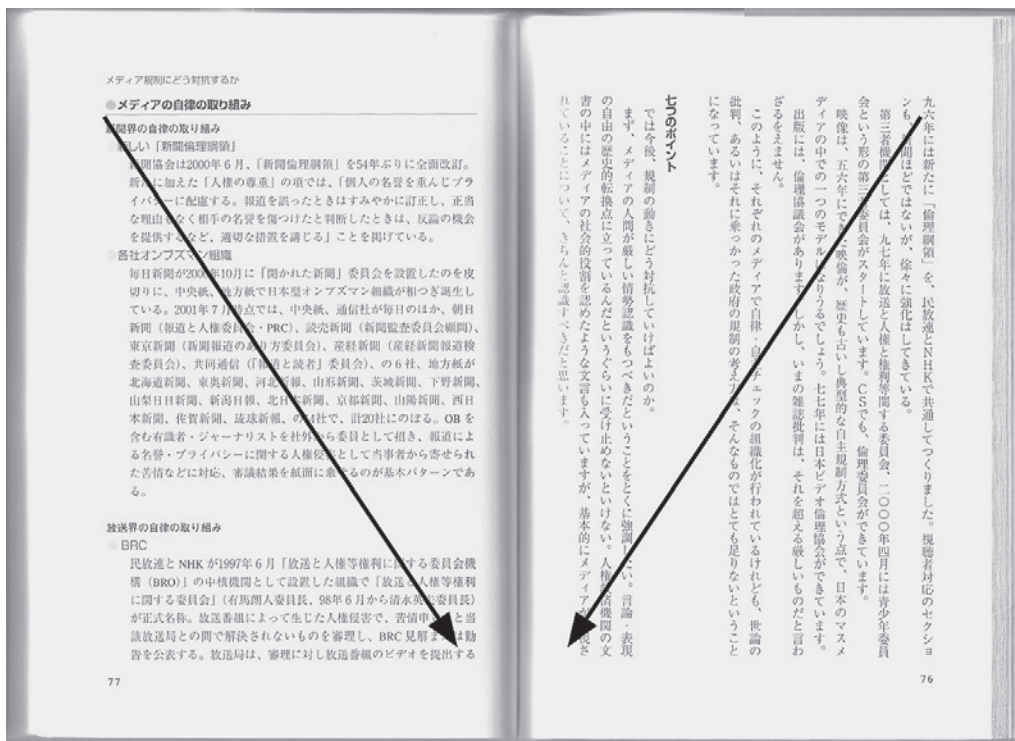


Figure 2: Different writing/reading directions on opposing pages of single spread of same book. Arrows show reading direction. (Hara et al. 2001, p.76-77)

6. Yanaike (2003, p.23) argues that RL writing is in fact TB writing where the columns are only one character tall. This is possibly so but the net effect is that one has to read the resulting text from RL. For readers of Japanese, Yanaike’s series of short articles in *Toshoh[Books]* (Iss.627–640, June 2001 to August 2002) provides a fascinating and detailed history of changes in Japanese writing direction.

7. Publishers’ industry bodies do not publish details of the proportion of LR and TB books published, neither do the libraries I have contacted record whether books are printed LR or TB in their catalogues.

Left and right in TV news images in Japan and the UK



**Figure 3:** Vehicles showing RL writing direction.

a — Enoki-take, b — A full sentence with grammatical elements, *shōryū no mirai wo kangaeru*,

c — Kojin M.T TAXI, d — Dai-2 Tsuru-maru.

Sources: (a) and (b): Tefutefu truck fan site: [tefufu.jp/bbs/index2.cgi?page=123](http://tefufu.jp/bbs/index2.cgi?page=123) - accessed 22 Nov 2011 (offline as of Feb 2014), (c) and (d): Author's photographs.

A single spread from *Media Regulation, and Terrorism and War Reporting* is shown in fig. 2; the text on the left page, additional information complementing the content of the main text, runs LR-TB, the text on the right-hand page, part of the main text, is laid out to be read TB-RL. Readers of Japanese will regularly encounter both layouts, along with texts which assume an even greater flexibility.<sup>8</sup>

The examples shown on the sides of the vehicles in fig. 3 all read RL, consistent (except for fig. 3 (d)) with the 'directional environment', the front of the vehicle being the 'front' of the text. Flexibility of reading/writing direction extends beyond merely options for the arrangement of the elements of Japanese writing, RL text can also appear in Roman script, as the taxi in fig. 3 (c) shows. Directionally flexible attitudes to the relationship between text (in the broad sense) and space are not simply therefore the sum of acceptable ways to write Japanese. Fig. 3 (d) shows RL

8. *Media Kisei to Tero, Sensō Hōdō*, Hara et al. (2001).

text, the boat's name (*Dai-2 Tsuru-maru*), reversed in relation to the direction of motion of the boat, it is impossible to know whether this was done on purpose or as the result of the creator's misunderstanding of the 'normal' relationship between text direction and vehicular motion. Nevertheless, it serves at least to illustrate the complexity, in some cases difficult even the native user, of text-space relationships in Japan.

In short, a reader of Japanese has to be prepared to read texts which run in both horizontal directions and from top to bottom.<sup>9</sup>

### 3.3 Summary

There is probably some validity to Oyama's generalized conclusion that use of horizontal space is different in Japan and Britain but that it is different in way that is *consistent* and *opposite* is open to question.

Clearly, like horizontal directionality, horizontal distribution of space also differs in [British and Japanese] cultures. The Japanese [...] realizes given in the right and the new in the left. The British [...] realizes given in the left and new in the right. Different kinds of visual semiotics operate in the context of Japanese and British representations. Oyama & Jewitt (2001, p. 154)

A plain statement of cultural opposition like this is probably not justified given the state of our empirical knowledge. Nachson & Hatta (2001) confirm that directional tendencies in English speakers tend to be more consistent than for speakers of Japanese, and other languages with variation in RW direction. The furthest we might go is perhaps to observe that there is far more freedom for the image-maker in Japan, who regularly encounters and can choose LR, TB and, on occasion, RL composition, whereas the same cannot be said of the designer or layout artist working in an Anglophone country, where an image sequence, or text, designed to be read RL might be deemed at least 'unnatural.' The cultural difference in directionality between the UK and Japan might therefore better be summarized as 'consistent LR' versus 'inconsistent.'

## 4 Pans and bites: BBC and NHK news images

The remaining portion of this study looks briefly at two manifestations of directionality in television news images: firstly, the direction of panning shots and, secondly,

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9. As if to complete the set of possible writing directions, interested readers can view the shop sign for *Kyoto Kimono Workshop* with text that runs from bottom-left to top-right, using the following link to Google Maps: [bit.ly/kyotokimono](http://bit.ly/kyotokimono).

the orientation of speakers in soundbites. The images used for analysis are taken from the news output of the BBC, based in the UK's strong LR culture, and NHK whose Japanese cultural context is directionally inconsistent and may have RL tendencies.

#### **4.1 Methodology**

Recordings of BBC and NHK news programming were made, BBC during the period April 2010–Jan 2011 and NHK in Summer 2007. Both sets of programmes were recorded on a rolling week basis to avoid any concentration on specific stories, all recording was finished before analysis started. The time periods were chosen to avoid major news events which might have skewed coverage in any specific direction. The month around the UK General Election in May 2010 was excluded. All live material was excluded from analysis, as was such non-news material as sports, weather reports and forecasts, headlines and 'teases.' Foreign news stories were also excluded as this type of coverage often consists of footage originally shot by foreign broadcasters and delivered by news agencies. The corpus of images thus consists of edited video packages covering domestic news in Japan and the UK.

In order to arrive at comparable sets of data, and given that measuring the absolute frequency of occurrence of the coded phenomena is not an objective of the study, it was decided to code only enough BBC material to match the counts found for the NHK data. NHK material was coded for pans and bites first, then complete stories from the BBC material were coded sequentially in date order until data counts were roughly matched.<sup>10</sup> All packages were viewed and panning shots and soundbites identified and coded; pans were coded for type (*motivated* or *volitional*, below) and for direction, bites for direction only.

#### **Definitions: Pans and Soundbites**

For the purposes of this study a 'pan' was defined as a cut which showed primarily lateral motion created by the rotation of the camera around a more or less fixed spot. A pan is distinct from a lateral motion created by physically moving the camera laterally while keeping the lens pointing in the same direction, these 'crab' moves are seldom encountered in news images.

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10. This procedure was far from ideal. However, while a principle of fair use for academic work has been established in Japan, it is effectively impossible to put into practise without falling foul of measures designed to prohibit the bypassing of copyright management technologies built into modern video recording systems. It is thus, at the moment, difficult to obtain copies of current Japanese news programming which are readily amenable to modern analytical methods.

The direction of portrayals of speakers in soundbites (bites), defined as all cuts where the video showed the speaker speaking *and* the audio used was the words being spoken, was taken from the gaze direction of the speaker. Cuts taken from situations, such as press conferences, where gaze direction tends to shift were not coded, neither were interviews where the speaker (often in a remote studio or live location) spoke directly to camera. Where stories used a number of cuts taken from the same interview only the first was coded.

#### **4.2 A typology of pans**

In addition to the exclusions outlined above, some pans were also excluded; while panning shots share the defining attribute of lateral motion their significance does not derive from this. Lateral motion, while physically similar for all panning shots, cannot be considered equally meaningful in all pans. This study is interested in *the choices made by camera operators when creating a panning shot*, it thus focusses on ‘volitional’ pans; shots *not* created under the influence of the objects they portray, that is, they are primarily the product of pro-active creative choices made by the camera operator. These contrast with ‘motivated’ pans. There may be nothing in the visual content of the images to distinguish one type from another, typing is down to the analyst in their capacity as an individual capable of understanding and reflecting on the visual material they encounter, the categorization is therefore largely subjective.

#### **I Volitional pans (V-pan)**

V-pans can often be identified by asking oneself the question: Would it make any difference, in either the understandability of the visual content or the aesthetic quality of the resulting image, if the pan had been the other way around? For a V-pan the answer will likely be ‘no.’

Also included here are pans in which the camera operator has used something in the environment, often a passerby or passing car or bus as an *opportunity* to pan; here the motivation for the existence of the pan is the camera operator’s but the direction is largely dictated by elements in the environment. Pans instigated by the creator in order to add some visual interest to an otherwise static scene should be included here also; for example, images panning over text in static documents or newspapers, or audio-recorders playing back taped conversations.

#### **IIa Motivated pans (M-pan)**

Here the panning movement is primarily due to some property (though not



necessarily always ‘bigness’) of the portrayed object, it is external to the image creator, motivated by the portrayed. Of the two classes of pans (‘volitional’ and ‘motivated’), these are the more numerous, I propose a specific term for pans which follow a moving subject, the ‘follow’ pan (MF-pan), because of its commonness.

### **IIb Motivated Follow pans (MF-pan)**

Often camera operators need to capture an image of an individual in motion, perhaps walking into an office or emerging from a car. Following the said individual will often result in a pan, however, the motivation for the movement lies with the moving subject rather than with the camera operator whose primary aim is to capture a relatively clear and stable image of the subject, if possible, correctly framed, exposed and in focus.

With the F-pan the motion here is introduced by the camera operator to maintain the subject centered in the frame, its intention is to *immobilize* the subject (relative to the viewer) rather than to impart or express motion.

### **III Mixed types**

Not all pans fall neatly into one of these idealized types; for instance, the fairly common image which consists of a pan over a line of text enabling the viewer to read along. Here the motivation for the existence of the pan can be argued to be internal to the camera operator (there are few lines of text so long that they will not fit into a static frame if sufficiently wide), yet the direction of the pan depends on the reading direction of the text, the motivation for the directionality of the pan (or ‘tilt’ for vertical text) is external.

The primary aim of this typology of pans is to draw attention to the variety of semiological possibilities which tend to be subsumed beneath formal similarity, the types suggested here are open and malleable but their origin in notions of motivation and choice are important.

## **4.3 Results**

The procedures above resulted in the data described in table 1. The frequency counts for pan and bite direction data are graphed for comparison in fig. 4. Overall, the BBC uses far fewer V-pans; approximately 11 per cent of NHK cuts were V-pans, this figure was under 4 per cent for the BBC. NHK’s images are in general more mobile than the BBC’s. NHK images show a more or less equal distribution of LR and RL pans whereas the BBC is perhaps more under the influence of reading direction; pans from BBC packages showed a tendency towards LR directionality

with roughly 60 per cent of pans moving LR. NHK pans were almost evenly divided between LR (n=36) and RL (n=34).

Data for bites, representing the direction faced by individuals shown in soundbites, showed the same tendencies as the pan data; the BBC images, created in a strong LR cultural context, show a tendency to portray speakers facing right, whereas NHK images show a slight leftward tendency.

**Table 1:** Pan and soundbite direction data summary for NHK and BBC

	Pans		Bites	
	NHK	BBC	NHK	BBC
stories	26	84	26	33
total cuts	595	1826	595	680
coded cuts	70	70	60	68
LR n (%)	36 (51)	43 (61)	28 (47)	39 (57)
RL n (%)	34 (49)	27 (39)	32 (53)	29 (43)

Taking a simple mean for both broadcasters' pans and bites we can see that LR directionality was slightly prevalent, 56 per cent of all pans were LR as were 52 per cent of bites. Given the limited amount of data it is difficult to say whether this adds up to an overall LR bias or not, such a small bias could well be down to chance.

Overall, these results seem to fit the general hypothesis that directionality in the visual communication of television news images may well be under the influence of reading direction, strongly LR in the UK and significantly freer — thus



**Figure 4:** Charts illustrating variance in distributions of LR and RL pans (a) and LR (right-facing) and RL (left-facing) soundbites (b) in news programming on NHK and the BBC (figures show actual counts). a — Pans, b — Bites

freer to approach a neutral balance between LR and RL — in Japan. However, it must be stated that these results are drawn from an inadequate sample and that firmer conclusions should await figures based on more extensive data.

## 5 Discussion and Conclusion

These results lend support to the argument for a connection between RW direction and the directionality chosen by image creators for certain visual texts. Given the shortcomings in the corpus and the rudimentary nature of the analysis it is probably better to avoid drawing any further conclusions, however, there is much to discuss. The following section offers some speculative points for further thought.

At the beginning of this paper the need for precision of thinking when considering the directionality of moving images was pointed out, it has perhaps become apparent that in dealing with two sorts of images which apparently partake of directionality, pans and bites, this study has been guilty of exactly the imprecision warned against. The following paragraph explains why the notion of directionality, interpreted as a semiotic resource carrying meanings of GIVEN and NEW, may be inappropriate when considering certain types of images, such as the pans dealt with here.

**Table 2:** *Image types and directionality*

Image Type	Type of Directionality		Example
	Internal	External	
still	fixed	fixed	Photograph or painting
mobile still	fixed	variable	Text or image on vehicles (or other mobile medium)
moving	variable	fixed	Fixed-frame television or film image
mobile moving	variable	variable	Television & film images with pan/tilt/zoom

### 5.1 Pans: *Expressive irrelevance of directionality*

Pans are ‘mobile moving’ images, that is, they are *moving* images in the sense that their visible content moves, and they are also *mobile* in the sense that their framing and orientation to the world can change. These types of images possess two types of directionality, ‘internal’ and ‘external.’ Internal directionality refers to the arrangement of elements within the frame, external directionality to the relationship of the frame to the world. Each of these types of directionality varies, either being fixed or variable, across image types; tbl. 2 shows a categorization using these

terms of some of the types of images mentioned in this study. In order to carry out consistent analysis one needs to ensure that one can identify exactly what *sort* of directionality one is dealing with and what the appropriate theoretical tools are.

This study has considered the external directionality of pans. Before moving on let me briefly recap the thinking inherent in *Reading Images*' discussion of directionality and communication; GIVEN precedes NEW temporally in speech and spatially in writing. For pans, which develop over time, perhaps the critical aspect is the *temporal* order of the portrayed elements — what is shown at the start and at the end of the pan — rather than the direction of the movement itself. When a camera operator constructs a pan, the progression from the starting image to the final image is an arrangement made primarily in time, the direction of the pan (unless some external restraint or stimulus, such as a written or spoken script necessitates otherwise) will depend largely on the initiative of the image creator, often pans in both directions are created and the choice of which to use left to the editor.

Thus for pans, directionality — a spatial phenomenon rather than a temporal one — should not be conceived of as a consciously mobilized semiotic resource. Variations therefore are not significant, except perhaps as an indicator of subliminal directional tendencies within a culture.

## 5.2 *Bites: Internal directionality*

On the other hand, the soundbites considered are described in terms of their *internal* directionality, their external directionality usually being fixed. They are in this sense closer to still images, and indeed the notion of 'composition' – under which rubric *Reading Images* (Kress & Leeuwen, 2006, pp. 179–85) places directionality – is more usefully applicable to these images than it is to pans. The effects on bite directionality of the three layers of influence discussed might be summarized as follows:

**Neurological** Both UK and Japanese image creators will, assuming the influence of pseudoneglect, pay more attention to their left-hand field of vision. This should mean more interviewees placed screen-left facing to the right.

**Cultural** UK image creators may have a strong preference for LR directionality in line with dominant English language reading/writing direction, Japanese image creators may have a weak RL preference.

**Tools** Television production technology may have a slight inbuilt bias which tends to produce more RL facing interviews than LR.

At this stage it is impossible to gauge the effects from the posited layers of influence

outlined and to reach an accurate understanding of how they interact and result in the preferences observed. Image creators will often make a conscious decision to have speakers face one way or the other for ease of later editing, overall though, camera operators in the UK tend to decide to have them face LR whereas their Japanese counterparts tend to decide to have them face RL. Of the influences discussed, which may lay behind these tendencies, reading/writing direction seems the obvious candidate for further attention.

**Table 3:** *Layers of influence and results summary.*  
(<sup>†</sup> Possibly influencing bites only)

<b>Influences</b>	<b>Japan</b>	<b>UK</b>
Neuro-biological (pseudoneglect)	LR	LR
Culture (read/write direction)	Free (weak RL)	Strong LR
Tools	RL <sup>†</sup>	RL <sup>†</sup>
<b>Summative outcome</b>		
Pans	no preference	LR preference
Bites	weak RL	strong LR

### 5.3 Reflection

As with the investigation of any cultural phenomenon there exists significant difficulty in distinguishing cause and effect, linkages are often circular and self-reinforcing. Culture is both the result of human activity and the arena in which that activity takes place. The creators of the realistic images of television news create images that ‘look natural,’ however, what ‘looks natural’ is a result of what we are used to seeing presented as ‘looking natural’; in other words, television news images look like that because that’s what television news looks like.

However, these news images are texts and texts (of any sort) are the results of a process of production which inevitably leaves its marks on content; television news images thus bear the imprint of the circumstances of their creation as well as being a record of the creative choices of the camera operator. While the separate skeins that make up the particular circumstances of creation of any one image may be near impossible to pick apart for closer inspection, we can at least, by bringing in generally applicable knowledge regarding tendencies in human perception, cognition and behavior, begin to see a way to separate out conscious (thus semiologically significant) communicative actions and those actions which result from

unperceived internal and external influences. This is necessary to avoid ‘over-interpretation,’ looking for meaning where there is none, misconstruing the results of mechanics as attempts at expression.

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