

ERGONOMI X FILES - THE TRUTH IS IN THERE?

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What is captured within a photograph? How, and by whom, should such information be extracted and interpreted? Conference attendees will be invited to consider and discuss a selection of images. They may wish to consider the photographs in terms of the ergonomic questions illustrated, as celebrations of people undertaking useful work, or just simply respond to them as historical records of a moment in the shift of a person at work.

Introduction and context

One hundred and seventy years ago in 1826 Nicéphore Niepce, made the first recorded photograph. The exposure time of 8 hours would, however, limit such images to landscapes and architectural subjects. In 1851 the “wet plate” process made it possible to make negatives and photographs in daylight with exposures of less than a minute. The technology demanded prompt attention to the image before the plate dried and thus mobile coating/developing wagons were developed. Roger Fenton took his horse drawn “Photographic Carriage” to photograph the Crimean War (1854-6) and Mathew Brady recorded the American Civil War (1861-5) with similar equipment. The exposure time, now down to 10/15 seconds, virtually restricted these pioneers to static subjects. However, their staged, behind the lines, images of troops and gun crews or their recording of the aftermath of battle, the dead and the destruction, can be as disturbing as those taken on roll film 80-100 years later.

Photographs - The X factors

The photographers of our twentieth century wars, conflicts and police actions, Robert Capa, Larry Burrow, Lee Miller, Don McCullin, George Roger, Weegee and so many others, had the advantage to stop action as film speed increased and instantaneous lighting became portable. These attributes were then packaged and made available to all. Organizations could record their successes, for example the building of HMS Sans Pareil (1857) or hand assembling “Standard” motor cars early this century (Royal

Commission 1985). The endings of eras were also captured as people observed, and walked by, soon to be forgotten, activities. Macdonald & Tabner (1986) recorded the last days of Smiths Dock and Forsyth (1986) and Konttinen (1983) the last working Tyneside communities. Were these images made and reproduced as a matter of record only or to support debate and argument? This presenter was, by the 1980s, using fast film to support his activities.

“Photographs furnish evidence. Something we hear about, but doubt seems proven when we’re shown a photograph of it. In one version of its utility the camera record incriminates... In another version of its utility, the camera record justifies. A photograph passes for incontrovertible proof that a given thing happened. The picture may distort; but there is always a presumption that something exists, or did exist, which is like what’s in the picture.” (Sontag 1978)

If the photograph captures all that is apparent in an instant in time then the true interpretation of that photograph, to reconstruct the original reality, requires time and experience. Ergonomists adopt a dynamic viewpoint, they need to view the movement frozen in the image. Captions and titles can provide orientation and context but so can the experience that the photographer incorporated into the image. Later the viewer adds their experience and understanding. Ergonomists viewing images made by a Consultant Ergonomist in pursuit of his work can be expected to focus on different aspects than, for example, fellow workers of the subject or consumers. What is the correct interpretation, what is the truth of the situation? These questions are asked when viewing a dramatic newspaper photograph or by managers and judges looking at the work of an ergonomist.

When a continuous cycle of events associated with, for example, the word processing of a document by a keyboard operator, is stopped, split into a series of discrete images and attention focused on one. Is this truth or is the image, shown without context, the sub-truth that we all associate with phenomenon we do not understand. Do we ergonomists have the confidence and ability to interpret images of work or are we just able to understand some of the artefacts of real life? What are the “X” factors? What is truth?

“All photographs are ambiguous. All photographs have been taken out of a continuity.... Yet often this ambiguity is not obvious, for as soon as photographs are used with words, they produce together an effect of certainty, even of dogmatic assertion.... The photograph, irrefutable as evidence but weak in meaning, is given a meaning by the words. And the words, which by themselves remain at the level of generalisation are given specific authenticity by the irrefutability of the photograph. Together the two then become very powerful; an open question appears to have been fully answered.” Berger and Mohr (1982).

References

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