

Television producers have had to learn the hard way about the effect that flashing lights can have on people with epilepsy, migraine and similar health conditions. **Adam Christie** wonders why web design is till such

A pain in the eye

I WAS asked to look at a new website that went “live” this morning. The short task wrote off an entire working day for me. I spent several hours sitting quietly, in the dark, waiting for the effects to wear off.

It wasn’t that the content of the site was so bad – but the design had consequences which the developers obviously had not foreseen.

The appearance of the site was very 2001 – but it was too good for itself. The site included continually moving Java images in the top left corner – and they set off a migraine for me.

For some people, migraines mean very intense, severe headacheds. For others, the effect is visual disruption.

My migraines cause a “strobing” effect which seems as if it is moving from bottom left to top right across the field of vision in my left eye.

Sometimes, this process can take a few minutes. On other occasions – such as today – it can take several hours to clear. It is usually when the process is slow that it is followed with a “blinding” headache.

These headaches did not start occurring until I was in my mid 20s. They do not happen often, but when they do, they are exceedingly disruptive.

They are aggravating, because they are unpredictable and prevent me

from reading and writing – working, in other words.

It took me a few years to appreciate the cause. Sometimes, it can be simply seeing black and white lines, usually close together. In bright summer sunshine, a very quickly glance at the grid of a crossword puzzle may be enough to start the effect. On other occasions, it has been ironing shirts with narrow candy stripes, usually dark blue and close together.

This time, it was the repeated “vortex” effect of white graphics against a dark blue background.

However much I tried not to look at them while I was reading the other words on each page, I was conscious of this perpetual movement in the top left corner of my field of vision.

Also, the continual movement kept pulling my eye away from the text I was trying to read carefully. I was aware of another image appearing as I tried to focus on the text. A migraine was developing.

For me, most migraines are more irritating interruptions than painful acute periods of illness, but that is not the same for other people. But I am not alone in finding that one visual “disturbance” can cause another.

In the mid 1990s, television producers covering awards

ceremonies and other “after dark” news events were faced with the implications of flash guns firing very quickly and erratically.

Such lighting effects could provoke very serious fits and siezures for people with epilepsy.

The consequence is that many television news organizations have a policy that viewers must be warned about the possible effect before any footage of such events is screened.

Web designers have, it seems, still much to learn.

Michel Ferrari, of the Leiden University Medical Centre in the Netherlands, confirmed for an event organized by the American Headache Society and the World Health Organization in 2000, that migraines that cause visual disruption without headache pain are not uncommon.

“But there is a rare form of migraine called migraine aura without a headache, which may last for 20 minutes or an hour without a headache,” he said.

About one person in 10 has migraines at some stage of their life and between 20 and 30 percent of those also experience such auras, Dr Ferrari said, but they do not necessarily have them all the time or every time.

Specialists such as Dr Ferrari think that the debilitating general impact of headaches and migraines is often misunderstood by doctors, because by the time someone can get to the doctor to tell of the problem, it has passed.

Another finding presented at the 2000 conference has potentially significant implications for web designers.

A study from Finland revealed that 20 percent of four-year-olds have suffered from disturbing headaches. Although migraines were not specified, web designers would do well to remember that the visual disruption caused by a migraine may be disproportionately distressing for a child.

Just as many training journalists can easily forget that the layouts of newspapers and magazines reflect a substantial – if informal – understanding of the science of visual perception, so too those designing the “look” of websites should study the topic – and learn from it.

Websites – or at least their contents – may frequently be good for an individual’s health or wellbeing, but such responsibilities lie with the writers. A designer should never let a site threaten anyone’s health.