

Nothing lasts forever.

a paper presented by

Per Sandén

Archive material is protected in vaults and fireproof rooms in temperatures and a humidity fit for a given material. But the degeneration process can never be stopped it is an ongoing process that eventually will break down the original to an unrecognizable substance.

All carriers such as paper, celluloid, magnetic tape and a few other materials will eventually get destroyed by the process, which is continuously going on in the material itself.

Archives around the world are strenuously involved in a process to try to stop a natural process. What in fact they are doing, at the best, is to delay the degradation process. It can never be halted, cause nothing is eternal.

What we can do however is to preserve the content by copying the material into something without losing too much in quality.

Today this something is most likely to be in a digital format on a CD or DVD or hard drives and alike.

These carriers are by no means unaffected by the same degeneration as any other media carrier. But they can conserve the quality of the original document, the resolution, the contrasts and the depth unachieved by any other carrier.

It is too early to determine the length of their lifespan since they are quite new in existence and therefore are not tested under a longer period of time.

Using other carrier such as microfiche for instance, which still some archives or collections are using, is like going from the ashes into the fire.

Photographic material, microfiche for example, has got a far much shorter life span than that of paper and therefore constitutes an outdated format in as far as preserving information is concerned.

CD, DVD, hard drives and alike represents today a far more reasonable format than any other when it comes to preservation of the original content.

Of some reason a few archives or document storages are disqualifying these carriers because media on them also can deteriorate, as they grow older.

Certainly a valid statement, which could call for some reflections.

The media or information on such hard drives hardly degenerate, if something it gets totally lost. But how such a carrier behaves during a longer period of time is difficult to say since they came into existence fairly recently which is why no comprehensive and scientifically acceptable test has been made with regard to their consistency.

It is true that when a hard drive breaks down a lot of material is at risk at the same time. And hard drives break down, just like any other technology.

Today though more material than ever is retrieved from so called crashed hard drives, and a sensible archive keeps not only one but several backups since the multiplication of backs ups does not suffer any deterioration in

quality. Which is the case for instance when copying videotapes, photographs and microfiche.

But what is perhaps more serious in as far as photographic material is concerned is that the two major companies such as Kodak Eastman and Fuji does not produce some of the film stock any longer, Kodak for instance is closing down its production of microfiche film because very few customers are demanding them.

By today any continued development of microfiche archiving should have come to an end and such archives that does not understand the seriousness of the case will soon face the music of not being able to use sometimes high investments into a system doomed already when purchased. Like the ostriches burring their head in the ground, does not help unfortunately.

Hard drives are being developed. What used to be created with revolution disks is becoming disks with no moving objects at all, so called Solid state disks eradicating mechanical problems that made hard drives break down.

Digital storages are also coming down in price. At the end of May 2009 the price of hard drive space is 0,0003 Mb per US \$. In late December 2008, the price was 0,0005 US \$ per Mb, for the older version of hard drive with revolting disks.

Digitization shortens the periods during which the original document is handled outside the environment in which that particular material is most suitably stored.

The digital representation of the original is sometimes very difficult to distinguish from the original, when it comes to paper documents it is a bit easier but when it comes to photographic material it is more difficult and getting even more as the pick up chips in the cameras and scanners getting more end more developed.

By no means can this exclude the importance of the originals but it can protect the originals and make them last longer in today's globally intoxicated environment and in the hands of human beings, the single most dangerous factor in the life of a document.

There are examples in the history of archives without having to refer to the library and archive in Alexandria, which was destroyed approximately 2.000 years ago, that archives get destroyed, war, fire, flood, sabotage etc. They all constitutes illustrations to the fact that contents in archives should be copied somehow.

Until just recently, this has been a complicated procedure, which has not always given an acceptable result.

But in today's computerized world this is no longer a technical problem, but an issue of human resources to scan, digitize all that material.

But if this process is not started, the information contained in archives will never be secured for a couple of generations to come., maybe the single most important task of an archive. There will never be completely secure archives.

The traditional archive nomenclature, developed for hundreds of years ago, is a complicated system, which requires archivist many years of studies to comprehend and use.

This system is based on the assumption that the researchers shall get to know the structure tree through which the original document can be found in the storage in the cellars of the archive.

The document is given a code, which tells the archivist almost everything about the document concerned. When and by whom it was created, where about, some of its content and where in the storage it can be found. If when the document is brought up from the cellars, it turns out that it does not answer the questions raised by the researcher, another document is hunted down and brought up into the light until the researcher or customer or who ever is satisfied.

Traditional archivists are trained for many years in order to acquire the knowledge and master the nomenclature of analog archiving. Typically, archives in the third world cannot train staff members in such fields and universities are few and sometimes lack such resources.

In that light the digital archiving has made quick intrusion. Rather than having highly trained staff in the traditional and education intensive analog archiving, many are establishing digital archive where documents are scanned and made available to the public through a web site.

The search capacity of the digital archive is way much faster than that of a traditional archive and the key words can be many more and printed as well as hand written documents can be searched optically recognizable in a computer so that the content of the document can be scanned to its content as well.

Digitized documents are much easier to find through a database system with searchable entries. These do not necessarily have to be based on actual visible content but be constituted by interpretations that could be regarded as the most common and logical descriptions of the document or the document content the researcher is looking for.

The identification of the document in the archive is no longer necessary to be based on the complicated nomenclature developed from the Middle Ages. They could simply be a numerically progressive number given to a document as it is received and entered into the search engine and placed in the storage of the archive.

