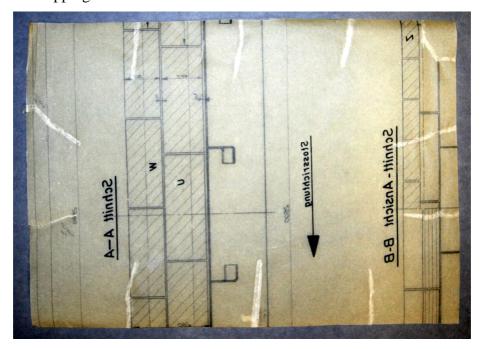
## **Seminar on the Conservation of Transparent paper**

I had recently the opportunity to attend a seminar on the conservation of transparent paper. It was taught by Hildegard Homburger, a German private conservator, who specialises in the conservation of tracing paper. It was held at the Paper and Textile Conservation studios of Museum of Scotland in Edinburgh. Due to its popularity the course was run twice with two groups of 8 conservators each.

Many conservators, both working at archives and in art galleries, face the challenge of treating tracing papers since it is a type of paper that we often encounter as support of architectural drawings and various preparatory drawings of artists. It is a very fragile support, which it is often damaged mechanically and chemically.

Hilda opened the seminar by introducing us to the different production methods of tracing paper. Paper is formed by a network of fibres. The cellulose fibres themselves are transparent but because they are surrounded by air the light is scattered and the paper appears opaque. By replacing the air between the fibres with a material with similar refractive index to cellulose the light is transmitted making the paper to appear transparent. In order to achieve this effect there were mainly three methods in the history of paper making, the impregnation of the sheet with a material such as linseed oil, poppy seed oil, starch, varnish etc, the treatment of paper with acid followed by a bath of alkali, and through extended beating of fibres.

After the introduction we were given samples of architectural drawings on tracing paper, which were torn in places around the edges. Light-weight Japanese paper and isinglass adhesive were provided in order to practice on repairs. Isinglass is produced from the bladders of certain species of fish. When heated it makes a highly viscous adhesive, which can be further diluted to the appropriate consistency. The technique used was as following, thin strips of Japanese tissue were cut to size, the adhesive, kept always on a hot plate, was brushed to the surface of the strip which was then placed on the area of the tear. A piece of Reemay was put on the top and using the fingertips we were applying pressure for a few minutes. Then a piece of blotter and light-weight were placed on top and the repair was left to dry. The pressure with the fingertips was used in order to facilitate contact of the repair strip with the support and avoid cupping.



Verso of sample showing the different repairs tested.

In addition three more types of adhesives were tested, BEVA 371, Filmoplast R and Archibond. All three are heat-activated adhesives. The repairs with the first two proved successful but the repair with Archibond did not produce a strong bond and the repair soon failed.

Another treatment, often used in the past on tracing papers is lining. Although the tutor noted that she is not practicing it any more, there are cases that the paper is so fragile that lining is the only solution. We had the opportunity to practice lining on samples of architectural drawings using a light-weight Japanese paper and wheat starch paste. The primary support was wet thoroughly and was placed face down on a Melinex sheet. Small losses and tears were infilled and reinforced with the use of pulp of transparent paper. The lining was pasted with wheat starch paste on a sheet of Melinex and then transferred to the verso of the object. The lined object was placed between felts and left under pressure.



Verso of the lined sample

It was an extremely useful seminar, which combined theory of the different manufacturing processes and various techniques used in the conservation of transparent paper as well as practice of these techniques on real examples of tracing paper. It was also a good opportunity to discuss with different conservators from various institutions the problems they face and the solutions they apply according to their needs and the resources they have. I would like to thank the North West Federation of Museums and Art Galleries for funding me to attend this seminar. I have already started applying the knowledge gained on my everyday work in the treatment of tracing papers but also to other types of papers.