

nontoxicprint art & science

ARTSCHOOL_SAFETY ABOUT-NONTOXICPRINT COLORLAB

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Collagraph

Drypoint and Monoprint

<https://www.nontoxicprint.com/drypoint.htm>



above:

mark-making comparison: collagraph (white marks) | photo etch | open bite



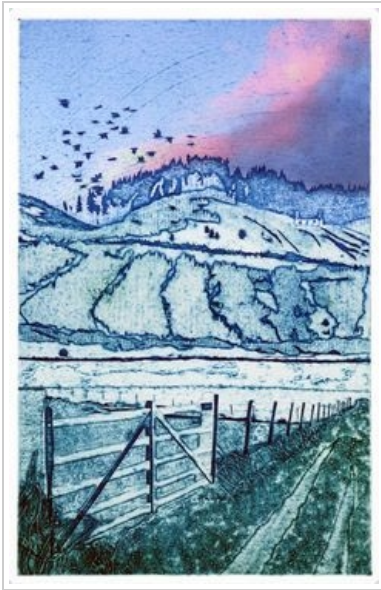
detail of a deeply etched intaglio print
assemblage by Frank Stella
private collection, Germany

The collagraph is a low-tech printmaking medium which traditionally allows intaglio prints to be generated without the use of acid or tar-based resist solutions, whilst providing a full range of mark-making opportunities.

Essentially, the medium explores the possibilities to 'construct' and shape intaglio printing plates upwards, rather than just by incision, as well to build images by assemblage of discrete elements in a collage-kind of way.

Acrylic paints and mediums, often mixed with carborundum or texturing mediums, are the most common mark-making media in the collagraph, and substrates such as primed sheets of card board or plexiglass are commonly used as a cheaper alternative to metal plates, although these can also be used.

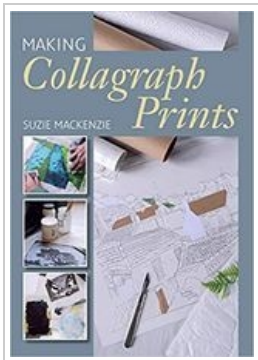
Photopolymer Plates (Intaglio Type) are also particularly well suited to a hybrid approach, where photo intaglio works are finished through additive work in the collagraph manner.



by Suzie Mackenzie
<https://www.mackenziefineart.co.uk>

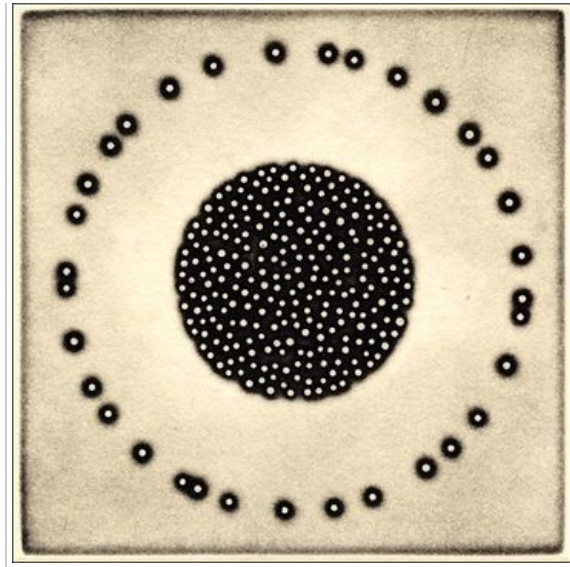
Collagraph and chine colle (2016) 33 x 20.5cm, varied edition of 20.

This unexpected moment really stopped me in my tracks; not only the colours of the sunset but its shape, perfectly echoing the mature forestry on the hill and the curves of the new plantation below while the jackdaws came in to roost.




[Making Collagraph Prints Paperback](#) – November 1, 2019

Collagraph printmaking is an accessible and environmentally friendly way of making striking



Eunice Kim
 Five Elements (Metal), collagraph
[artist's website](#)

Introducing Akua Carborundum Gel for Printmaking



prints with a unique texture. At its simplest it is a method of printing from collaged plates; at its most sophisticated, it is an innovative and exciting experimental medium. This book is a guide to the technique, with step-by-step instructions for creating and printing simple plates for the beginner, as well as tips, ideas, and directions for those with more experience.

'Susan Rostow, inventor of Akua inks introduces her latest Akua creation, Akua™ Carborundum Gel. Akua Carborundum Gel is a plate-making medium used for producing collagraph printmaking plates. This ready-to-use plate-making gel offers a reliable medium that delivers fine, sharp detail and a uniquely textured surface that yields rich, velvety areas of color.'

More craft-oriented printmakers utilize texturing media such as fabrics, scrim, or sandpaper as sole additions to their plate construction, but the possibilities for plate construction or the combination of aquatint and collagraphic overpainting are potentially much broader than this, once the basic process has been understood.

The medium can be regarded as one of the earliest forms of nontoxic printmaking practice. It's use by artists is wide-spread, and the potential of this method as both a professional printmaking medium as well as a form of contemporary expression is often undervalued and has the potential to be explored further, especially due to its accessibility and easy integration with other polymer-based forms of printmaking (e.g. Intaglio Type, or Acrylic Resist Etching).

Many of Keith Howard's nontoxic printmaking innovations contain aspects of collagraphic printing (hybrid relief and intaglio printing; plate making through construction).

Edinburgh Printmakers were one of the first professional studios to promote the Collagraph as a major nontoxic form of contemporary art printing, and Carborundum printing (a form of calligraphy) has a history going back to the early 20th century.

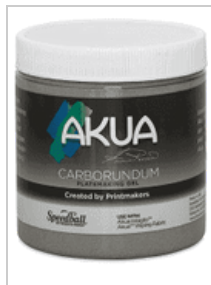
Calligraphy is particularly useful for use in the setting of an artist's studio, due to its creative immediacy, accessibility, and control, whilst less common in professional print editing environments, due to the often seemingly more limited scope of the more fragile calligraphy plates for replication and commercial printing.

The medium emphasizes artistic expression over reproducibility, although collagraphs can easily be used for larger and more commercial print editions through transfer into digital media, Intaglio Type, or metal etching.



different grades of carborundum grit (silicon carbide) are mixed with a binder, PVA glue, or acrylic medium to make your own carborundum medium. Painted onto a plate, and printed in the intaglio manner, this work yields rich expressive blacks in the print, resembling deep aquatint, or mezzotint effects.

This safe, easy and accessible technique is highly recommended, as mark-making is as direct as painting.



a Carborundum product that is ready mixed.
(Akua Carborundum Gel)



Susan Rostow working with Akua carborundum Gel

Collagraphy (sometimes spelled **collography**) is a **printmaking** process in which materials are applied to a rigid substrate (such as **paperboard** or **wood**). The word is derived from the **Greek** word **koll** or **kolla**, meaning **glue** and **graph**, meaning the activity of **drawing**.

The plate can be **intaglio**-inked, inked with a roller or paintbrush, or some combination thereof. Ink or pigment is applied to the resulting **collage**, and the board is used to print onto **paper** or another material using either a **printing press** or various hand tools. The resulting print is termed a collagraph. Substances such as **carborundum**, **acrylic texture mediums**, sandpapers, bubble wrap, string, cut card, leaves and grass can all be used in creating the collagraph plate. In some instances, leaves can be used as a source of pigment by rubbing them onto the surface of the plate.



A collagraph printed by re-using materials from the atelier: tarlatan, carborundum, sandpaper, and thread

Noemí Carrau (Nacasona) - Own work

This etching is a collagraph printed by re-using materials from the atelier: tarlatana, carborundum, sandpaper and thread.

(Wikipedia)

Different tonal effects and vibrant colours can be achieved with the technique due to the depth of relief and differential inking that results from the collagraph plate's highly textured surface. Collagraphy is a very open printmaking method. Ink may be applied to the upper surfaces of the plate with a **brayer** for a **relief print**, or ink may be applied to the entire board and then removed from the upper surfaces but remain in the spaces between objects, resulting in an **intaglio** print. A combination of both intaglio and relief methods may also be employed. A **printing press** may or may not be used.

References

- Brenda Hartill and Richard Clarke (2005). *Collagraphs and Mixed-Media Printmaking*.
- Robert Adam and Carol Robertson (2008). *Intaglio: Acrylic-Resist Etching, Collagraphy, Engraving, Drypoint, Mezzotint*.
- Mary Ann Wenniger (1981). *Collagraph Printmaking*.
- Clare Romano and John Ross (1980). *The Complete Collagraph: The Art and Technique of Printmaking from Collage Plates*.
- Donald Stoltenberg (1975). *Collagraph Printmaking*.

Collograph tutorial



INKING UP A COLLAGRAPH PLATE- SHORT VERSION



Collagraphs

*By Angela Babin, M.S., Michael McCann, Ph.D., C.I.H.,
and Devora Neumark*

Collagraphs

Collagraphs are prints produced by using a collage of different materials glued onto a rigid support. A wide variety of materials and adhesives can be used in making collagraphs.

Hazards

1. Rubber cement, a common adhesive used with collagraphs, is extremely flammable and most rubber cements and their thinners contain the solvent n-hexane which can cause damage to the peripheral nervous system (hands, arms, legs, feet) from chronic inhalation.
2. Epoxy glues can cause skin and eye irritation and allergies.
3. See the Solvents section for solvent hazards found in adhesives.

4. Spraying fixatives on the back of collagraph plates to seal them can involve risk of inhalation of the solvent-containing spray mist.
5. Sanding collagraph plates which have been treated with acrylic modeling compounds or similar materials can involve inhalation of irritating dusts.
6. A wide variety of other materials with varying toxicities can be used in making collagraph plates.

Precautions

1. Know the hazards of materials used. Obtain the MSDSs from the manufacturer.
2. Use the least toxic materials available. In particular use water-based glues and mediums (e.g. acrylic medium) whenever possible. Some rubber cements are made with the solvent heptane, which is less toxic than n-hexane, primarily because peripheral neuropathy is not associated with its use.
3. Use dilution ventilation (e.g. window exhaust fan) with small amounts of solvents and large amounts of acrylic medium (due to the presence of small amounts of ammonia). For highly toxic solvents or large amounts of solvents or other toxic chemicals, use local exhaust ventilation (e.g. slot hood, enclosed hood, etc.). A window exhaust fan can be used if set up only 1-2 feet away.
4. Use spray fixatives in a spray booth that exhausts to the outside, or outdoors.
5. Wear gloves when using epoxy glues.
6. Wear a NIOSH-approved toxic dust respirator when sanding collagraph plates.