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ASK THE EXPERTS

Product Profiles: Obsolete Art Supplies



Ancient Egyptian paint box

Ask the Experts: “One of my teachers has been talking about art supplies that aren’t in use any more, and it got me thinking about why some techniques or supplies just become obsolete. Why would they just stop making an art supply?”

A: Materials and techniques sometimes do fall out of favor, become unavailable or get incorporated into newer methods and processes. Art includes a spectrum of practices from conservative to experimental, and while some, like fresco, have endured through the centuries, inevitably others have not survived the test of time. Even now, we are seeing declining use in some categories as preferences, standards, demands and availability evolve.

Extinct or unavailable

Some raw materials used by earlier artists have simply become entirely unavailable. This is due to scarcity of raw materials, evolving manufacturing processes, or sometimes changes at the geopolitical level. Some pigments have become unavailable over time when a single global source, like a mine or rare earth deposit,

becomes played out. It’s not always the case that every last bit has been mined or gathered; sometimes, after a period of productive extraction, the material becomes less pure or lower in quality. The cost of further extraction can also increase over time, making it commercially unfeasible to continue the enterprise.

Manufactured or synthetic products can become temporarily scarce or permanently unavailable if a single, global source stops production. Some synthetic colorants may be the unique creation of one lone manufacturer, and if that source shuts down or discontinues production, the entire supply may dry up. This is particularly true if a proprietary formula or patent is in force.

One interesting material which was dominant at the start of the 20th century but extinct by the 21st due to waning demand is drafting cloth. This stiff, calendared (pressed) fine linen was preferred for technical drafting. Over several decades, drafting cloth was replaced by rag vellum, a high quality smooth paper, and then by mylar, a polyester film. Old stock of drafting cloth is eagerly sought by scale model ship builders, who favor the crisp, fine fabric for miniature sail cloth.

Health and Safety

Some materials have fallen out of use due to associated health and safety risks. The most well known example is lead white pigment. For centuries, lead white was in heavy use for all painting applications, despite the well understood health risks, because it performed so well, and because there were few alternatives. Lead white supports fast drying in oil paints, produces durable films and imparts desirable handling properties, but is easily taken up by the body and stored in tissues, accumulating over time to dangerous or deadly levels. Eventually, the

use of lead was banned in house paints, and production of lead pigment went into sharp decline. Artists increasingly eschewed lead paints in favor of titanium white, a much safer alternative.

In addition to toxic colorants like lead and mercury pigments, some materials fell out of favor because they were dangerous to prepare. Fossil and semi-fossil resins like copal and amber were once commonly used in varnishes for both artistic and industrial paints, but production of this type of varnish involved melting resins at high heat into boiling oils heated near the point of combustion. Even professional workshops acknowledged the major risk of fire and injury associated with resin-oil varnishes. When the region that is now the Democratic Republic of the Congo, sole source of Congo copal, became independent of Belgium, the raw material became unobtainable for industrial production, and synthetic alkyds were widely adopted in its place. Today, some traditional artists and musical instrument makers still produce small quantities of amber varnish, but doing so requires extreme caution and specialist skill.

Moral and Ethical Considerations

Market forces can be dramatically shaped by the attitudes of society and consumers. If manufacturers and artists become unwilling to use a material because of how it is sourced or produced, that material can fall out of common use. Mummy Brown pigment, derived from Egyptian mummies and other deceased remains, declined sharply in popularity as artists became aware of its true origin. While not totally verified to have been of animal origin, historical Indian Yellow has been the subject of concern over animal cruelty since some accounts claim its source to have been elephant urine, stained by a force-fed diet of mango leaves. Mummy Brown and Indian Yellow sold today are modern formulations which imitate the original, extinct colors.

Animal-derived art materials are becoming increasingly uncommon in the modern studio, as concerned artists have access to many high quality alternatives. Products like casein and hide glue have been all but replaced by synthetic polymers which combine ease of preparation with better permanence. Man-made filaments now offer virtually the same performance as the best natural hair

paint brushes, with significantly better durability. Synthetic alternatives also exist now for the few remaining animal-based pigments like Ivory Black.

Ease of Use, “New and Improved”

Many older, traditional materials are less convenient than modern replacements, requiring special preparation in advance of when they will be needed. Modern supplies are often easier to prepare, if not ready to use right from the package. Painters before the mid-20th century prepared canvas by either mixing a ground according to old recipes, or by first coating the stretched fabric with a gelatin-like glue, then applying lead-based white oil paint. Canvases prepared in this way were not ready for use for weeks, and many artists would make them months in advance. Lots of artists simply purchased prepared canvas instead. The introduction of acrylic dispersion painting ground (Acrylic Gesso) made it possible to quickly and easily prime canvases in-studio with no separate sizing, no waiting period and no flammable, toxic fumes. Acrylic-primed canvases are also ready to use almost immediately after they are dry. This convenience and ease of use has made oil-priming relatively rare today, although some artists do still prefer oil-based grounds.

While arguably not superior to materials like linen and hemp, cotton duck became the most popular type of artist's canvas after the mid-20th century Abstract Expressionists adopted it for its availability in wide dimensions and low cost. Cotton canvas hasn't rendered linen obsolete, but it has largely replaced linen and hemp fabrics in most studio art. Interestingly, while newer, highly durable synthetic polyester canvas has been available for years, cotton still remains the preferred flexible support among most artists.

Options for Traditional Artists

Artists who prefer or require traditional materials often still have options, though sourcing some products can be challenging. Quality and authenticity can be irregular, especially when materials are adapted from non-art supply sources. A product called copal resin is still sold as incense, for example, but this is not the same material that used to be available prior to 1960. Copal Varnish sold as a

dental supply no longer actually contains semi-fossil resin at all.

Where possible, art supply producers strive to fulfill demand for traditional materials. A number of artists, skilled crafters and conservation specialists still need access to supplies that are uncommon in most studios. When a particular material does become completely unavailable, or extremely difficult to obtain, it's often possible to adapt a modern substitute which serves the same function. Alkyd-based painting mediums and synthetic resin varnishes can be used in much the same way as oil-resin products. Acrylic and PVA sizings can replace animal protein glue sizings in virtually every application. And, where pigments and colorants are concerned, artists have gained much more than they have lost in diversity, utility and permanence with much better availability and value.

Some mediums and techniques "go extinct" even though the raw materials are still available, like Spirit Fresco, an attempt at executing something close to true fresco painting with volatile solvents, wax and resin instead of water. A few mediums, however, have seen a revival after long periods of abandonment. Encaustic (painting with molten wax), a practically extinct ancient medium, has re-entered the modern studio largely due to Jasper Johns' flag series. Modern encaustic is a reverse engineered method, however, using modern materials and tools. The precise technique practiced in Rome and Egypt, however, is lost to history.

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