

Essay by
Carolyn Fraser



the politics of **ink**

LESSER-KNOWN INGREDIENTS OF PRINTERS' INK:
VOLATILE ORGANIC COMPOUNDS, ADDITIVES,
OILS, SOLVENTS AND MONOCULTURES.

It was August when I first moved to Northeast Ohio and the corn was high overhead. It was a mystery to me—city-born and bred—how it was harvested or what it was all for, but the greater mystery was in the neighbouring fields: bushy crops, low to the ground. If you don't know what it is, a new acquaintance told me, it's soybeans.

Printing ink is the dispersion of pigment through a vehicle, traditionally a vegetable-based oil. The art of ink-making is in the proportion and types of pigments and vehicles used, the ability to finely crush the pigment using precision-made three roll mills, the judicious addition of driers, varnishes, and solvents. No one ink suits all papers or presses: letterpress inks are transferred by pressure and require the ability to transfer thinly and cleanly without pulling or picking the paper fibres. Unfortunately, the demise of letterpress in the commercial market was also the demise of inks specifically formulated for letterpress. Hence hoarding among old-time printers of particular cans of "real" letterpress ink, long discontinued.

Promoters of soy-based inks claim their products as a move away from the high VOC-emitting petroleum-based inks of the past. However, even the most cursory research by this non-scientist suggests that this is a marketing furphy at best. Traditional letterpress inks were made with linseed oil, a vegetable product derived from the flax plant and were pigmented with carbon black, created by burning natural petroleum gas. Modern inks, including soy-based inks, contain additives including petroleum-derived solvents and driers. A quick look at the MSDS sheets for contemporary soy-based inks reveals that most soy inks are mixes of soy and linseed

oils, petroleum distillates, organic and inorganic pigments, synthetic resins and waxes.

Printing is a polluting industry. At the industrial level, huge quantities of electricity, wood pulp, water, and solvents are consumed in the production of printed materials. Small-scale letterpress shops such as my own may feel somehow less culpable in that we consume so much less power (or none in the case of iron handpress printers), use recycled or hand-made paper stocks and employ soy-based inks. For many small letterpress businesses, promoting their environmental impact awareness is as much a part of marketing their business as promoting their artisanal practice.

But the environmentally conscious consumer is wrong to believe that soy-based inks absolve the printing industry of negative environmental impact. In 2009, 93% of soy in the US was grown from genetically-modified seed sold by food giant Monsanto.* The dangers of agricultural monocultures are well-known, and extend throughout the food chain. Soy, like petroleum, is a fuel. Weighing the environmental impact of petroleum against that of the industrial food complex is far beyond my capabilities. But I do know this: that by adopting the benign-sounding rhetoric of soy as "natural", letterpress printers lose on two fronts. We become dupes of an industry greenwashing us, and we lose sight of a key element of craftsmanship: that we can take control, learn how things are made and make our own. It's hard, but not impossible. **1**

*Peter Whoriskey, *Monsanto's dominance draws antitrust inquiry*, *The Washington Post*, November 29, 2009.

VOLATILE ORGANIC COMPOUNDS

Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects. Concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors. VOCs are emitted by a wide array of products numbering in the thousands. Examples include: paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions.

Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.

Source: United States Environmental Protection Agency

epa.gov/iaq/voc.html

CAROLYN FRASER is a letterpress printer in Melbourne, Australia. She is of strong opinion that setting type has meditative qualities and it is one of the surest ways to learn how to edit one's own writing.

girlprinter.com