A Taxonomy of Printing Processes and Sales Volumes for the United States
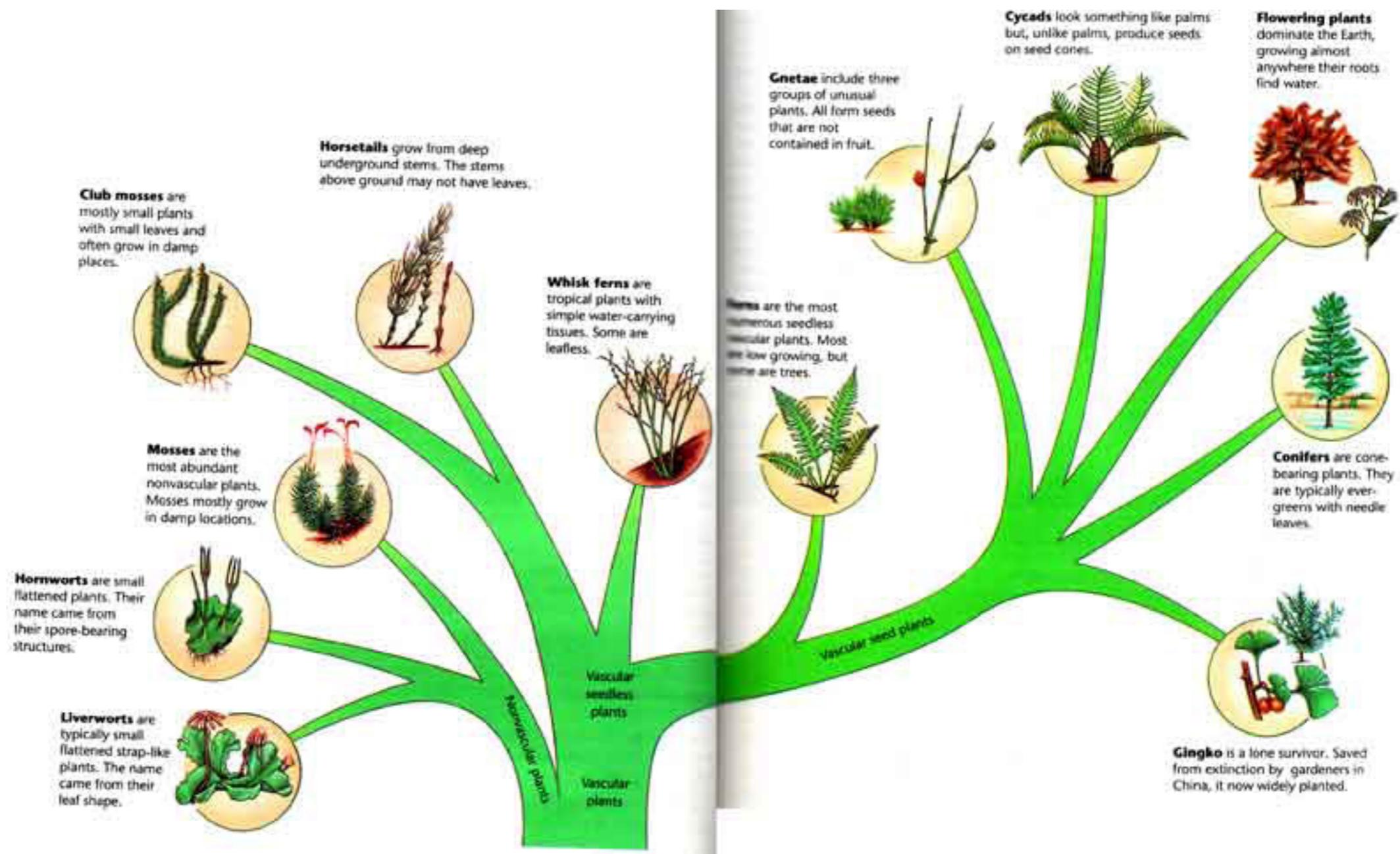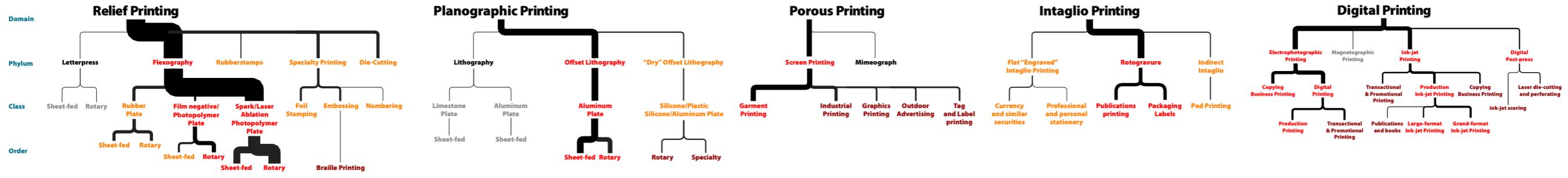
International Conference
for Graphic Communication Educators
July, 2015

Cycads look something like palms but, unlike palms, produce seeds on seed cones.

Flowering plants dominate the Earth, growing almost anywhere their roots find water.

Gnetae include three groups of unusual plants. All form seeds that are not contained in fruit.

Horsetails grow from deep underground stems. The stems above ground may not have leaves.

Club mosses are mostly small plants with small leaves and often grow in damp places.

Whisk ferns are tropical plants with simple water-carrying tissues. Some are leafless.

Ferns are the most numerous seedless vascular plants. Most are low growing, but some are trees.

Mosses are the most abundant nonvascular plants. Mosses mostly grow in damp locations.

Conifers are cone-bearing plants. They are typically ever-greens with needle leaves.

Hornworts are small flattened plants. Their name came from their spore-bearing structures.

Liverworts are typically small flattened strap-like plants. The name came from their leaf shape.

Gingko is a lone survivor. Saved from extinction by gardeners in China, it now widely planted.

Nonvascular plants

Vascular seedless plants

Vascular seed plants

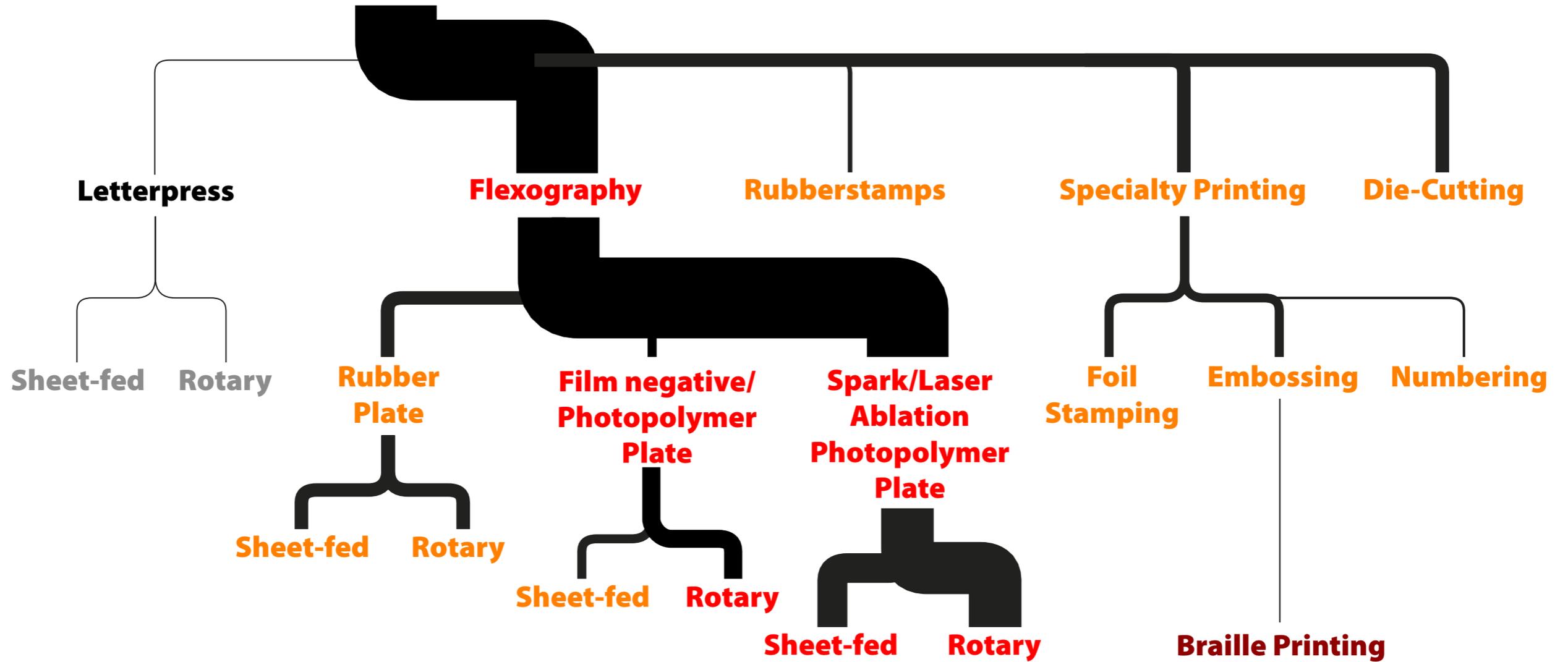Vascular plants

I decided that we needed
a taxonomy for the printing industry.

…one that provides information about industry segments and also shows each segment's value to the economy.
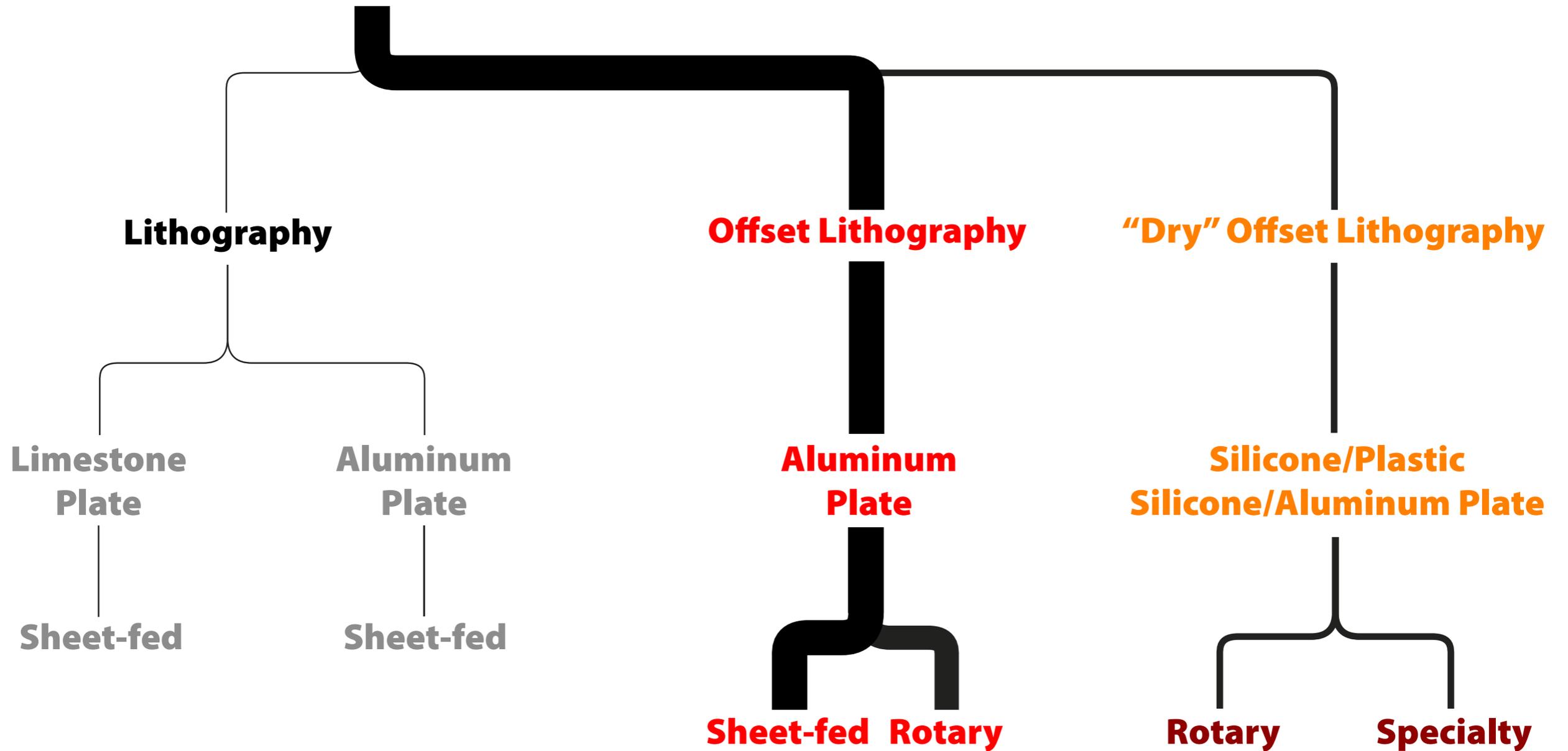
THE TAXONOMY OF PRINTING

Domain | **Phylum** | **Class** | **Order** (row labels at left)

Relief Printing

- **Letterpress**
  - Sheet-fed
  - Rotary
- **Flexography**
  - Rubber Plate
    - Sheet-fed
    - Rotary
  - Film negative/Photopolymer Plate
    - Sheet-fed
    - Rotary
  - Spark/Laser Ablation Photopolymer Plate
    - Sheet-fed
    - Rotary
- **Rubberstamps**
- **Specialty Printing**
  - Foil Stamping
  - Embossing
    - Braille Printing
  - Numbering
- **Die-Cutting**

Planographic Printing

- **Lithography**
  - Limestone Plate
    - Sheet-fed
  - Aluminum Plate
    - Sheet-fed
- **Offset Lithography**
  - Aluminum Plate
    - Sheet-fed
    - Rotary
- **"Dry" Offset Lithography**
  - Silicone/Plastic Silicone/Aluminum Plate
    - Rotary
    - Specialty

Porous Printing

- **Screen Printing**
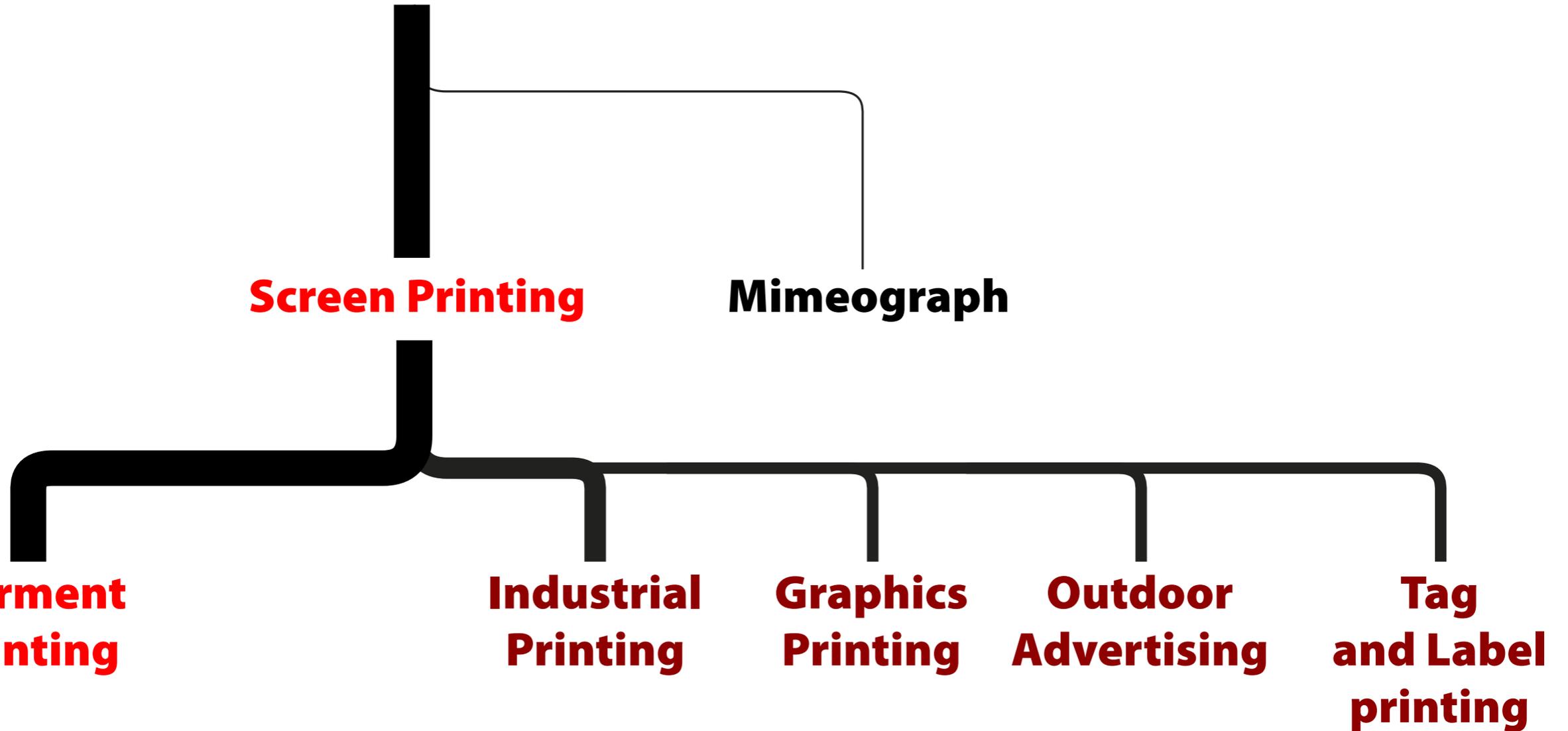 - Garment Printing
  - Industrial Printing
  - Graphics Printing
  - Outdoor Advertising
  - Tag and Label printing
- **Mimeograph**

Intaglio Printing

- **Flat "Engraved" Intaglio Printing**
  - Currency and similar securities
  - Professional and personal stationery
- **Rotogravure**
  - Publications printing
  - Packaging Labels
- **Indirect Intaglio**
  - Pad Printing

Digital Printing

- **Electrophotographic Printing**
  - Copying Business Printing
  - Digital Printing
    - Production Printing
    - Transactional & Promotional Printing
- **Magnetographic Printing**
- **Ink-jet Printing**
  - Transactional & Promotional Printing
  - Production Ink-jet Printing
    - Publications and books
    - Large-format Ink-jet Printing
    - Grand-format Ink-jet Printing
  - Copying Business Printing
    - ink-jet scoring
- **Digital Post-press**
  - Laser die-cutting and perforating

Legend: Line thickness indicates sales volume in US$ for 2014: ——— $5B or less — $5-10B — $10-20B — $20-30B — $30-40B — $40-60B

Color Red = very common process; Orange = common process; Brown = less common process; Black = uncommon process; Gray = seldom used, or used only as an art process

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  - Embossing
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  - Numbering
- Die-Cutting

Planographic Printing

Lithography

Offset Lithography

"Dry" Offset Lithography

Limestone Plate

Aluminum Plate

Aluminum Plate

Silicone/Plastic Silicone/Aluminum Plate

Sheet-fed

Sheet-fed

Sheet-fed Rotary

Rotary

Specialty

Porous Printing

Screen Printing

Mimeograph

Garment Printing

Industrial Printing
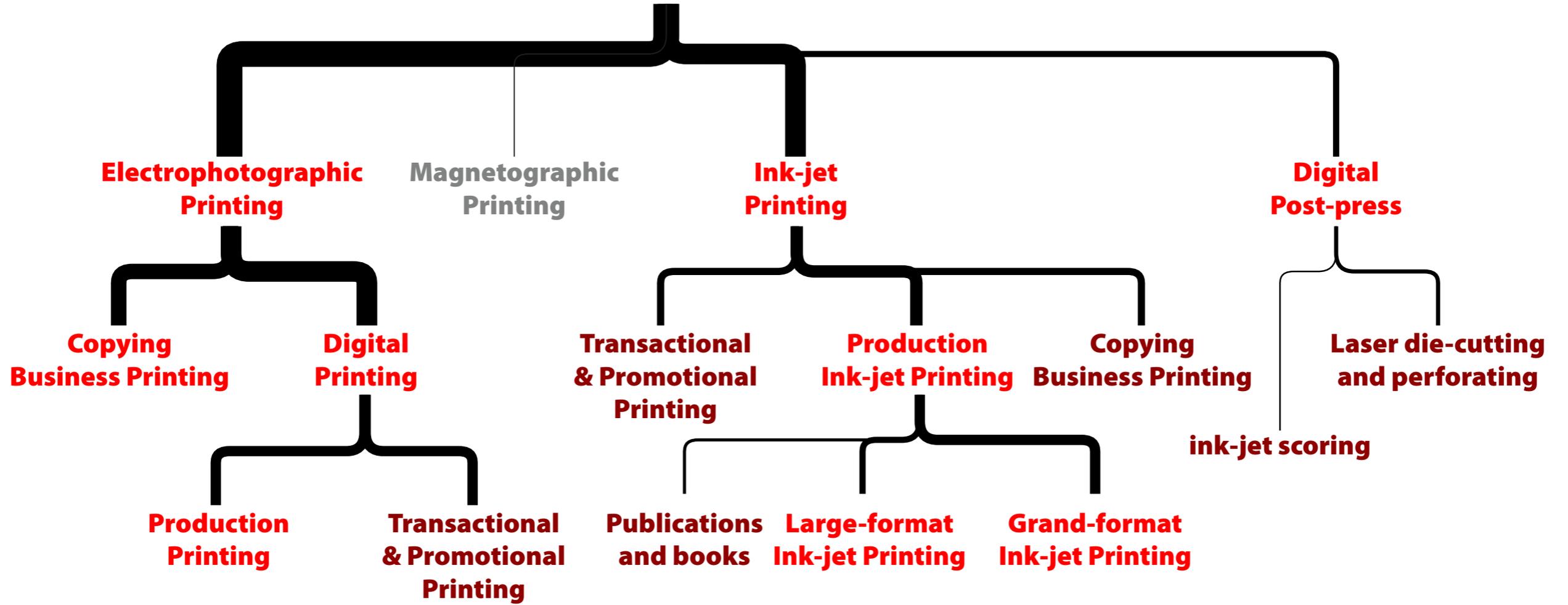
Graphics Printing

Outdoor Advertising

Tag and Label printing

Intaglio Printing

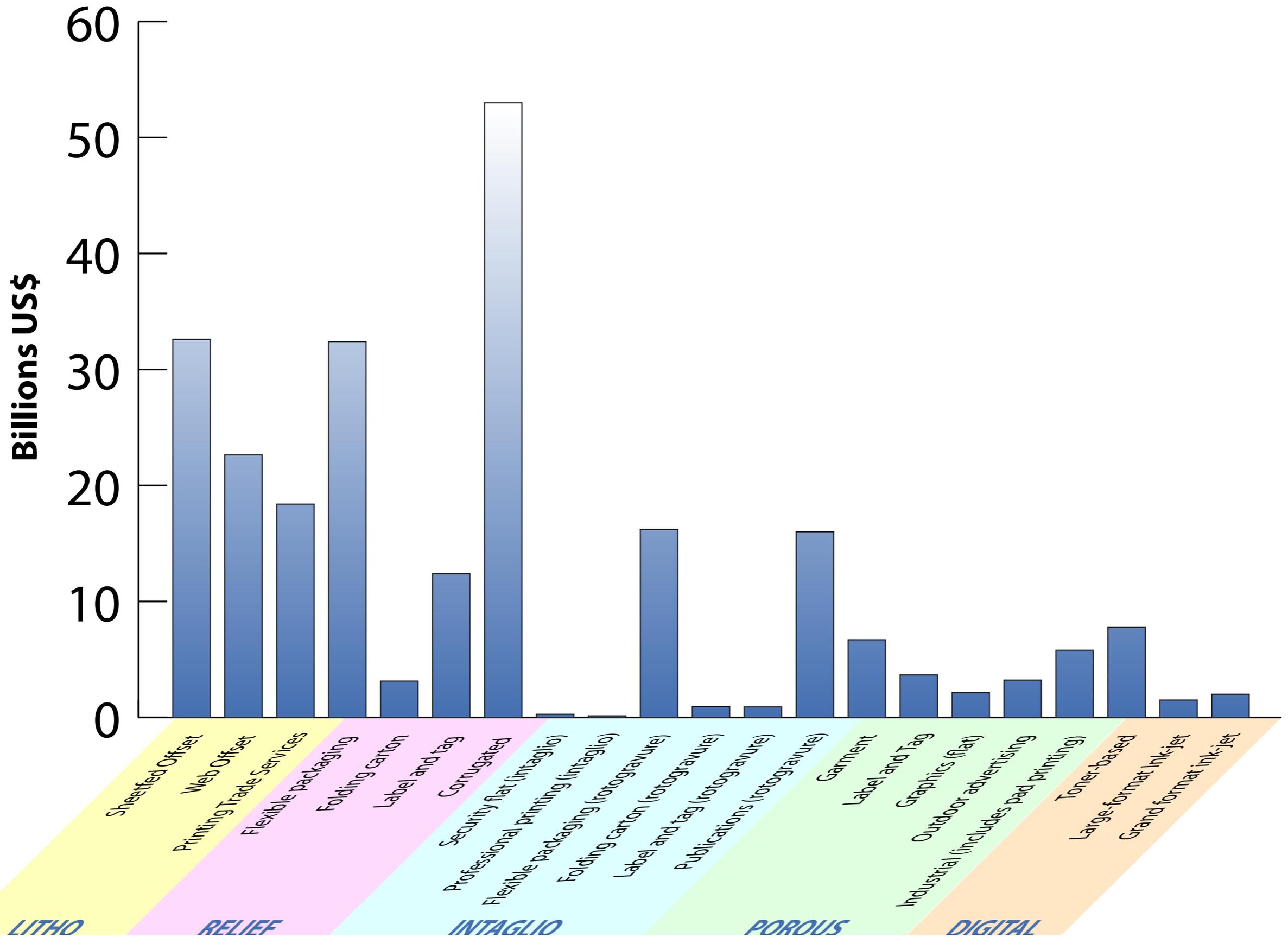- **Flat "Engraved" Intaglio Printing**
  - **Currency and similar securities**
  - **Professional and personal stationery**
- **Rotogravure**
  - **Publications printing**
  - **Packaging Labels**
- **Indirect Intaglio**
  - **Pad Printing**

Digital Printing

- **Electrophotographic Printing**
  - **Copying Business Printing**
  - **Digital Printing**
    - **Production Printing**
    - **Transactional & Promotional Printing**
- **Magnetographic Printing**
- **Ink-jet Printing**
  - **Transactional & Promotional Printing**
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- **Digital Post-press**
  - **Laser die-cutting and perforating**
  - **ink-jet scoring**

Sales Volume of Printing Processes 2014

Data can be interesting or it can be… just data.

Thank you

Brian P. Lawler

Associate Professor

Graphic Communication Department

California Polytechnic State University

San Luis Obispo