Appendix A

Glossary

90° element — A pop-up element that displays best when the page is half-open. This type of element usually consists of cuts and folds with no extra pieces glued on.

180° element — A pop-up element that displays best when the page is fully open. This type of element usually consists of extra pieces glued to the page. Commercial pop-up books commonly use this type of element.


anchored point — A point on a corner of an element’s plane that attaches to a base plane of the element.

angled element — An element that has its folds or seams at an angle to its parent fold. For examples, see Figure 4.7.

angled step — An angled step is a 90° angled pop-up element consisting of two cuts, and two outer folds that are not parallel to the parent fold. See Figure 4.6.

attached plane — Extra, usually flat piece of paper placed on another element. See Figure 4.9.

base page — The page available to place pop-up or movable devices. The two sides of an opened book or piece of paper. See Figure 4.3.
**base plane** — The plane(s) on which a pop-up element sits. Most pop-up elements have two base planes, a right base plane, and a left base plane. See Figure 4.13.

**battledore** — A small book for children made of heavy cardboard, and used during the 18th and into the 19th centuries. They usually contained an alphabet and religious texts to teach reading.

**beak** — A beak is a $90^\circ$ angled pop-up element consisting of one cut, and two outer folds that meet on the parent fold. See Figure 4.6.

**boat** — A $180^\circ$ parallel pop-up element that uses connections on each side of the parent fold to bend paper into a boat shape or cylinder. See Figure 4.8.

**Bookano** — One of S. Louis Giraud’s names for the first pop-ups that he produced. See also *living models*.

**box** — A $180^\circ$ pop-up element shaped like a box. This element may also be made with a top, or a pointed top like a house, and can be made in angled or parallel forms. See Figure 4.7

**carousel book** — A book that may be opened and tied back on itself, with paper connections between the pages to produce a 3D effect. Also called a *star book* for the shape of the book when opened. See Figure 3.8

**chapbook** — A cheap book made from folded sheets of paper, and often illustrated with wood-block prints. Developed in the mid-17th century and produced through the 19th century, these were the equivalent of the mass-market paperback and were sold to adults and children by traveling peddlers.

**coil** — A $180^\circ$ pop-up element consisting of a spiral cut out of paper, with one end glued to each side of the page. See Figure 4.8.

**cut** — A slit made in the paper to produce a pop-up element, particularly a $90^\circ$ element.
device – A movable mechanism, that may be a single element, or a whole connected series of elements.

dissolving picture – See transformation.

Editor Window – The window in Popup Workshop on which the user draws, and that serves as the pattern that is later printed, cut, folded and glued to produce a pop-up. There may be multiple Editor Windows, one for the base page and one for each added piece. See Figure 5.1

element – Pop-ups consist of one or more elements, simple forms that themselves will open and close. For a taxonomy of elements, see Figure 4.5.

emblem book – A children’s book in which artifacts, animals, plants, etc. stand for some moral quality. For instance, a book may be a symbol of education, or a bee of industriousness.

flap – An extra sheet or piece of paper cut and attached to a page, or a cut made in the page, so that it may be lifted to reveal what lies underneath. See Figure 3.4.

flap book – A movable book that consists of flaps that the reader can lift. A flap book has only flap devices. These are often books for small children.

fugitive sheet – A page that has been separated from its original book, or printed separately from a book.

gatefold – A page inserted in a book that is wider than the book, and is folded into the book to fit. Sometimes the page is folded as a panorama, and may be glued on the back to provide the effect of a small book attached to the edge of the page. See Figure 4.2.

gutter – The fold down the center of an open book or card. See Figure 4.3.

harlequinade – An early type of flap book, first published in about 1765, in which the page is divided into four flaps. Also called turn-ups or metamorphoses. See Figure 3.5.
**hornbook** — A wooden paddle, to which was pasted a page of text, usually an alphabet and some religious texts, covered with a thin sheet of horn, and used as a beginning children’s reading book in the 17th and 18th centuries.

**inverted element** — A pop-up element that has reversed folds, valley folds where one would expect mountain folds and vice versa. This inversion often arises when the element is placed on a mountain fold or a seam which folds in the same direction as a mountain fold, instead of a valley fold. In the case of a v-fold, the inverted element occurs when the V is reversed.

**level** — When elements are placed on top of one another, they produce levels. The base page is said to be at level 0. See Figure 4.12.

**lift-up** — Another name for a *scenic*.

**living models** One of S. Louis Giraud’s names for the first pop-ups that he produced. See also *Bookano*.

**metamorphose** — The name for a *barlequinade* in the United States.

**mix and match book** — A book in which the pages are cut into flaps, allowing the reader to select a part of an illustration from each page.

**mountain fold** — A fold that folds out toward the viewer. See Figure 4.3.

**moveable** — A term for either a *moveable book* or a single element.

**moveable book** — A book that differs from the usual flat page format. This may take the form of attached devices that are moved by the reader or automatically move when the book is opened, or the actual form of the book may be different from the usual cover with pages.
**moving arm** — A pop-up element in which some part of the pop-up displays an animated motion. See Figure 4.10.

**novelty book** — A name for any book that is of unusual format or design. This includes movable books, and may also include other books such as board books, cloth books, and books that convert into toys.

**OA** — A shorter term for *origamic architecture*.

**origamic architecture** — Pop-ups produced by cutting and folding a single piece of paper with no gluing. They are usually 90° pop-ups. See Figure 4.16.

**packaging company** — A company that produces books and sells them to publishers. Often used for pop-up production as they have specialized knowledge and facilities.

**page** — In this dissertation, the term ”page” refers to what is usually termed a *double truck* in publishing, that is, facing left and right pages on each side of the gutter, taken as a unit.

**panorama** — A book that folds out into a long zig-zag form. See Figure 3.7.

**paper doll book** — A movable book in which the object is to dress a paper doll in various clothes. Paper doll books may consist of a doll and clothes to cut out, or the head of the doll may be placed in slots in the page, or be visible through a hole cut through all the pages.

**paper engineer** — The craftsman who designs pop-ups and other movable devices, particularly for professionally produced books and cards.

**parallel element** — A pop-up element in which the folds and seams are parallel to the parent fold. For examples, see Figure 4.7.

**parent fold** — The fold across which a pop-up element is placed, in order to produce motion. The parent fold may be the gutter. See Figure 4.13.
peep-show – An accordion-folded book (or device) that pulls out to provide depth and has a small viewing hole. Elements of a scene are arranged inside to provide a 3D view. See Figure 3.9.

plane – A face of an element. One flat side. Many elements have two planes, on the right and left sides. See Figure 4.13.

platform – An element that produces a flat surface on which an attached plane may sit to make a table-like device. See Figure 4.7.

pop-up – A device or element that opens automatically when the book is opened, and that produces a 3D object.

pop-up book – A movable book that contains at least one pop-up. It may also contain other movable devices.

pull-tab – A paper tab that when pulled or pushed produces motion in a device or element.

revolving picture – A circular form of transformation.

scenic – An early precursor of the pop-up, in which the 3D effect is produced by multiple levels, that may be raised by a pull-tab or ribbon. Also called a lift-up. See Figure 3.10.

seam – The line along which pieces are glued in pop-up elements.

slot book – A book that has slots in the pages into which paper pieces may be placed. For instance, paper dolls may be placed into scenes in a house shown on the pages.


step – A step is a 90° pop-up element consisting of two cuts, and two outer folds and a center fold that are parallel to the parent fold. See Figure 4.6.
tent — A tent is a 180° parallel pop-up element consisting of a tent-shaped piece that is glued onto the page at opposite sides. See Figure 4.6.

toilet book — A children’s emblem book produced by Grimaldi in 1821. Flaps were used to convert toilet items such as mirrors and combs into illustrations of the virtues they represented. See Figure 3.6.

Tool Area — The area of the Editor Window in Popup Workshop with buttons to choose an action. It is divided into three smaller Tool Areas.


transformation — A picture that transforms into another picture by means of sliding panels. See Figure 3.11.

tunnel book — See peep-show.

turn-up — See harlequinade.

unanchored point — A point in a pop-up element that is not part of one of the base planes of that element.

v-fold — A v-fold is a 180° angled pop-up element consisting of a piece that is glued onto the page at the two bottom sides, that are placed at an angle. See Figure 4.6.

valley fold — A fold that folds in, away from the viewer. See Figure 4.3.

Viewer Window — The window in Popup Workshop that contains a 3D representation of the current work.

volute — A device in a moveable book, consisting of a rotating wheel, that may point to, or uncover information, or serve as a calculating device. See Figure 3.1

wheel — See volvelle.