Appendix IV: A Selection of Resource Material

A. The World of Puzzle Inventors and Collectors

Partly because of the review of mathematical games and puzzles in Appendix IV of **MfGS1**, the guest editor was invited to attend the eleventh International Puzzle Party in 1991. This is an annual event. In recent years, it is held cyclically in North America, Asia and Europe. The founder of the I.P.P. is **Jerry Slocum**, a retired aircraft executive who lives in Beverly Hills.

There are actually three parties in one. Typically, the Exchange Party takes place on a Saturday afternoon. This is open only to puzzle inventors who have pre-registered, and they come with enough copies of their latest brainchild for exchange with the others.

The Magic Party is a buffet dinner on Saturday evening. This is called the Magic Party because many puzzle people are also professional or amateur magicians. Even before the dinner, various members are showing off their new tricks, right at individual tables so that the audience has a close-up look. After the dinner some formal magic presentations are performed on stage by professional magicians.

The General Party commences on Sunday morning. Many companies which manufacture and distribute puzzles have display tables, as do individual inventors. The whole floor is a glorious mosaic of wood, acrylic, glass and other material in the most ingenious configurations. Those of us who do not have the privilege of attending the Exchange Party finally get to see what is brand new.

Apart from the main events, the I.P.P. provides a wonderful opportunity to renew acquaintances or meet those previously known only by reputation. There are also guided and unguided tours to local puzzle stores. The guest editor was thrilled to have received an invitation to visit the Slocum home.

It consists of two houses, only one of which is for normal domestic purpose. The main floor of the other houses Jerry's library of over 3000 puzzle books, and serves as his workshop. One of Jerry's specialities is the collection of ancient and old puzzles, which require exquisite care in their handling and preservation.

Most of Jerry's collection of over 20000 puzzles are in his puzzle museum upstairs. Many are prominently displayed on shelves or in glass cases. Others are systematically filed away in drawers and folios. No word can describe the place. One simply has to be there.

In 1993, the guest editor attended the thirteenth I.P.P. at Breukelen, the Netherlands, along with Daniel van Vliet and Matthew Wong, on our way home from the Problem-Solving Workshop in Russia. At the party, Jerry was inducted into the new Puzzle Hall of Fame, along with **Nob Yoshigahara** of Japan and **L. E. Hordern** of the United Kingdom.

Prior to the party, Jerry had established the **Slocum Puzzle Foundation** as a charitable and educational corporation. Its purpose is to educate the public on puzzles, their history, development and use in various cultures of the world. The Foundation will actively support the use of puzzles for education. It has published a *Directory of Puzzle Collectors and Puzzle Sellers*, containing useful information as well as addresses of collectors, retail puzzle shops and mail-order sources for puzzles.

Nob Yoshigahara, principal organizer of the twelfth and the fifteenth I.P.P., is another person whose puzzle collection numbers over 20000. He is the most prolific puzzle designer in the world, and runs a large puzzle company in Japan. Nob edits an informative and humorous newsletter *puzzletopia* which appears at irregular intervals, surprising and delighting friends when they receive it unexpectedly.

Mike and **Conni Green**, two of the organizers of the fourteenth I.P.P. in Seattle, run a specialty store called **Puzzletts** in that lovely city. They have recently introduced **The Great Puzzle Saga**, a quarterly mail-order catalog through which they present puzzles they have found from around the world. Many of them are in stock in their store. Puzzletts recently opened a page on the internet's world wide web. The address is http://puzzletts.com. Mike and Conni also offer to locate puzzles people have heard about but cannot find themselves. Their long-term plan includes no less than a puzzle theme park!

B. Jerry Slocum's Puzzle Taxonomy

Jerry has developed a systematic classification of puzzles. It is reproduced here with his kind permission.

Mechanical Puzzles

1. **Put-together Puzzles**
   - Two-dimensional Assembly Puzzles
   - Three-dimensional Assembly Puzzles
   - Miscellaneous Put-together Puzzles
   - Matchstick Puzzles
2. **Take-apart Puzzles**
   - Trick or Secret Opening Puzzles
   - Secret Compartment Puzzles
   - Trick Locks and Keys
   - Trick Matchboxes
   - Trick Knives
3. **Interlocking Solid Puzzles**
   - Figural
   - Geometric Objects
   - Three-dimensional Jigsaw Puzzles
   - Burr Puzzles
   - Keychain Puzzles
   - Miscellaneous Interlocking Solid Puzzles
4. **Disentanglement Puzzle**
   - Cast Iron and Sheet Metal Puzzles
   - Wire Puzzles
   - String Puzzles
   - Miscellaneous Disentanglement Puzzles
5. **Sequential Movement Puzzles**
   - Solitaire Puzzles
   - Counter Puzzles
   - Sliding Piece Puzzles
   - Rotating Cube Puzzles
   - Maze and Route Puzzles
   - Miscellaneous Sequential Movement Puzzles
   - Mazes and Labyrinths for People
6. **Dexterity Puzzles**
   - Throw and Catch
   - Rolling Ball Puzzles
   - Maze Dexterity Puzzles
7. **Puzzles Vessels**
8. **Vanish Puzzles**
9. **Folding Puzzles**
10. **Impossible Objects**
11. **Other Mechanical Puzzles**

Mathematical and Logic Puzzles

- Arithmetical Puzzles
- Magic Squares Puzzles
- Geometric Puzzles
- Logic Puzzles
- Other Mathematical Puzzles

Word Puzzles and Riddles

- Rebus Puzzles
- Anagram Puzzles
- Word Square Puzzles
- Acrostic Puzzles
- Charade Puzzles
- Crossword Puzzles
- Riddles
- Conundrums
- Other Word Puzzles

Visual Puzzles

- Hidden Image Puzzles
- Optical Illusion Puzzles

Computer Puzzles

- Text-only Puzzles
- Graphical Puzzles

C. More Resource Material

In **MfGS2**, less effort will be made to identify sources of puzzles. This is partly because a much wider selection is now available, and partly because there are reliable places where one can get them. Apart from the Slocum Puzzle Foundation and Puzzletts, **Bits and Pieces** also has a very good mail-order catalog.

There is one source, however, whose products are not available elsewhere. Quite a number of items from **Kadon Enterprises** were featured in **MfGS1**. More will be presented here, because the guest editor considers their products of the highest physical, aesthetic and intellectual quality. **Kate Jones**, the same Kathy Jones who contributed an article to **MfGS1**, will not compromise by cutting cost. Thus direct mail-order is the only option to keep prices affordable.

From time to time, Kate distributes products for other people. Often, they are individuals who have essentially single products, and must rely on a more secure distribution network. Kate is always willing to encourage their efforts. Kadon has acquired the puzzle set **Kaliko** reviewed in **MfGS1**.

Kate also handles products of exceptional value which are not readily available. A most exciting example is **Perplexing Poultry** by Pentaplex of the United Kingdom. This puzzle is a fanciful rendition of the famous non-periodic tilings of **Roger Penrose**. They come in black-and-white or in colors. Each set consists of many tiles of two shapes, a "fat" chicken and a "skinny" one. They interlock in unbelievable **Escher** style.

Under licensing from Pentaplex, Kadon manufactured two other sets in **The Penrose Universe**, called **Penrose "Kites and Darts"** and **Penrose Diamonds**. Then they developed their own **Collidescape** and **Puzzling Pentagon**, all based on the Penrose tilings. Two other related sets are **Rombix** and **Rombix Jr**.

Kadon's polyomino series also includes the **Octominoes**, 369 pieces plus 6 monominoes which tile a 51 x 58 rectangle. Actually, this item no longer appears in their catalog, but inquiries may be made regarding possible special order. For the first time, polyiamonds and polyhexes are offered, in **Lamond Ring** and **Hex Nut**. A smaller set called **Hex Nut Jr** is also available.

Stockdale Super Square, rviewed in **MfGS1**, is based on the McMahon squares. Two other variations have appeared in **Multi-Match I** and **II**. The corresponding triangular versions are called **Trifolia, Multi-Match III** and **IV**.

A triangular version of the famous game of Hex is now available from Kadon. It is called **The Game of Y**. In this two-player game, each tries to connect to all three sides of a triangular board. There is a companion book called **Mudcrack Y & Poly Y**.

There is one more item from Kadon which must be mentioned. It is a classroom set called **Combinatorix**. It consists of many colorful wooden tiles in the shapes of squares, equilateral triangles, hexagons and isosceles right triangles. The three manuals contain numerous exploratory activities using these tiles. It is ideal for group investigations.

Many of Kadon's puzzle sets fall into the *Put-together* category, mostly in two-dimensions. A very imaginative three-dimension puzzle is Nob Yoshigahara's **Pineapple Delight**. It is really the pentominoes but in cylindrical form, to be assembled inside a glass. The pieces look good enough to eat.

The guest editor got another outstanding puzzle from Nob Yoshigahara. It consists of seven rectangular blocks in a wooden box. After they are dumped out, it is quite easy to put six of them back in. There is apparently no room at all for the seventh. It is a very bewildering paradox.

Another puzzle along this line is **Dragon's Egg**. It consists of a box containing four wooden pieces, each with a few hemispherical cavities on its faces. When they are dumped out, three marbles show up, but although there are enough cavities for all, one marble seems to persistently stick out of the box.

In the *Take-apart* category, two recent puzzles are **Escape from Alcatraz** and **YOT**, both available from the Slocum Puzzle Foundation. In the former, a metal ball is literally behind bars, and the object is to spring it from captivity. In the latter, there is a silver dollar partly visible inside a circular container which has a handle. The object is to get the money.

The *Interlocking* category consists primarily of puzzles called burrs, the smallest of which has six pieces. Two expert craftsmen are **Stewart Coffin** and **Bill Cutler**. The latter won a design contest with his **Blockhead**, now available commercially under the mysterious name of **Sneaky Squares**! It consists of four plastic blocks in a box. They can be dumped out quite readily, but it takes some doing to get all four back in. The underlying principle here is different from two apparently similar puzzles mentioned earlier.

Puzzletts offers an outstanding selection of *Disentanglement* puzzles. **Oskar's Disks**, available from Kadon, consists of two wooden circular mazes intertwined with each other. From the same inventor, **Oskar van Deventer** of the Netherlands comes the more widely available **Oskar's Cube**. It is an ingenious three-dimensional maze which projects into three planar mazes, the "mouse" being the point of intersection of a triple-cross which sticks out of the hollow box.

The *Sequential Moves* category is dominated by the Rubik-type puzzles, and **Cubes International** has added to its offerings which were reviewed in **MfGS1**. The most exciting new family is the puzzle balls of **Uwe Mèffert**. Two of them feature Disney characters while a third features Sonic and Tails of Sega video-game fame. **Christoph Bandelow**, who *is* Cubes International, has written a solution manual for this puzzle, including the mathematics behind it. The booklet has so far been published in seven languages. Other companies which still make Rubik-type puzzles are **I-Development Institute** of Hong Kong and **International Puzzles & Games** of Taiwan.

Called the best *Dexterity* puzzle in decades, the **Elverson Bottle** is sealed and contains a wooden ball. The latter must be manipulated into the neck of the bottle around a wooden stick which has indentations and protrusions. It is available from the Slocum Puzzle Foundation.

The **Impossible Bottle**, also available from the Slocum Puzzle Foundation, has a wooden arrow passing through two tiny holes on the side of a Coke bottle, much smaller than the head and tail of the arrow. Despite careful examination, the guest editor has still not discovered how it is made.

To conclude this review, mention must be made of the fantastic computer puzzles from **Soleau Software**. Winner of the 1995 Shareware Industry Awards for Best Entertainment Software, **William Soleau** designs non-violent strategy games and challenging puzzles at varying levels of difficulty. The prices for upgrading from the shareware versions to the full versions are very reasonable.

D. Addresses:

Stewart Coffin,
79 Old Sudbury Road,
Lincoln, MA 01773.

Bill Cutler Puzzles,
405 Balsam Lane,
Palatine, IL 60067.

Bits and Pieces,
1 Puzzle Place, B8016, Stevens Point,
WI 54481-7199.

Cubes International,
An der Wabeck 37, D-58456,
Witten, Germany.

I-Development Institute, B.V.I.,
P.O. Box 24455, Aberdeen,
Hong Kong.

International Puzzles and Games,
3/F, #192, Sec. 2, Chung Ching Road,
Taipei, Taiwan.

Kadon Enterprises,
1227 Lorene Drive, #16,
Pasadena, MD 21122.

Puzzletts,
24843 144th Pl. S.E.,
Kent, WA 98042.

Slocum Puzzle Foundation, 2
57 South Palm Drive,
Beverly Hills, CA 90212.

Soleau Software,
163 Amsterdam Avenue, #213,
New York, NY 10023.

Nob Yoshigahara,
4-10-1-408 Iidabashi,
Tokyo 102, Japan.