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THE VIDEO MASTER'S GUIDE TO

PAC-MAN™

BY JIM SYKORA & JOHN BIRKNER

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BLIP! ZOW! KA-BAM! ZING! KA-BLOOIE!

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THE ROAD TO NEW HIGH SCORES IN THE
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GAME IN THE HISTORY OF AMERICA!

THE VIDEO MASTER'S GUIDE TO PAC-MAN™

by
**Jim Sykora and
John Birkner**

Illustrated by Dusan Krajan

THE VIDEO MASTER'S GUIDE TO PAC-MAN™
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INTRODUCTION

"Boy, have I found a great video game! There's this little man that runs around a maze 'eating' dots and getting chased by monsters. All you have to do is avoid the monsters while eating as many dots as you can."

Sound familiar? If you are one of the millions of Americans who have been introduced to the notorious PAC-MAN, chances are your first encounter was similar to the one described above. Perhaps you stood in front of that "awesome" PAC-MAN board inserting quarter after quarter, determined to break the 5,000 mark. After practicing many backbreaking hours, you finally reached that feverishly sought-after score. Satisfied with your accomplishments, you relinquished PAC-MAN to its next confident challenger. You have "mastered" this game called PAC-MAN, or so you think.

Although it is a relatively recent creation of Midway Manufac- turing Co., PAC-MAN has rapidly become an everyday house- hold word. As it turns out, PAC-MAN is not a game for kids only. Instead, it has become a challenge for all, from the very young to the very young at heart. It can be found virtually every- where, from video arcades to major airports and, yes, even in grocery stores.

A PAC-MAN fan can meet all kinds of people while waiting his turn: small children who can hardly reach the controls, business executives awaiting the next flight, and housewives taking a break from the drudgery of grocery shopping. It seems that wherever one goes, there is a PAC-MAN to be found. An ad- dict of the game need never be far away from PAC-MAN, although, as one will soon discover, he or she must first survive the lines that tend to congregate around it.

You may be asking yourself, "If the game is as simple as it seems,

why are so many people investing hours of their time and countless quarters playing? Is there no challenge involved?"

The truth is that mastering PAC-MAN is not as simple as it may first appear. Consistently high scores require a great deal of concentration and planned strategy. Although it may be a step in the right direction, 5,000 points is merely a small sample of the heights that may be achieved by a person desiring true mastery of the game.

To date, and to the best of our knowledge, the highest score achieved has been 3,214,270. This score was accomplished by John Birkner, the consultant and coauthor of this book. The strategic patterns included in this book were developed by him and can easily be used by novice players interested in developing their game. To be sure, complete mastery of the game has been work for Birkner, as it will be for anyone who truly desires to gain control over his or her game. Many hours–not to mention quarters–must be invested in achieving sometimes meager improvements in one's score.

Although it cannot be guaranteed that a person can read this book once and easily attain a score of 3 million, careful study and practice of the patterns and strategies that follow should help any avid PAC-MAN player improve his or her best score. Consistent practice of these patterns should eventually lead to scores much higher than the reader dreamed possible.

Before beginning your adventure with PAC-MAN, you should first learn what you can or cannot get away with. You must run the pattern smoothly for it to work as indicated. The beginner will usually find it difficult to immediately begin playing at a high skill level. Practice is important in PAC-MAN in order to refine your technique. The ability to guide your way smoothly through the maze is essential. Learning to do this is an ability you will acquire through practice.

This book has been written to be helpful to players of all skill levels. For the beginner, it presents a basic explanation of the game. For the advanced player who reaches the ninth key, the patterns in this book can be mastered in a short time period and are extremely effective in clearing the game board.

One of the more difficult aspects of the game for any skill level

is enduring the struggle to attain the next level on the board. While we cannot promise that there will be no struggle, this struggle should be shorter if the advice and strategy in this book is followed. Your road to the top will become an enjoyable experience.

PAC-MAN BASICS

FIG. 1. Game board layout.
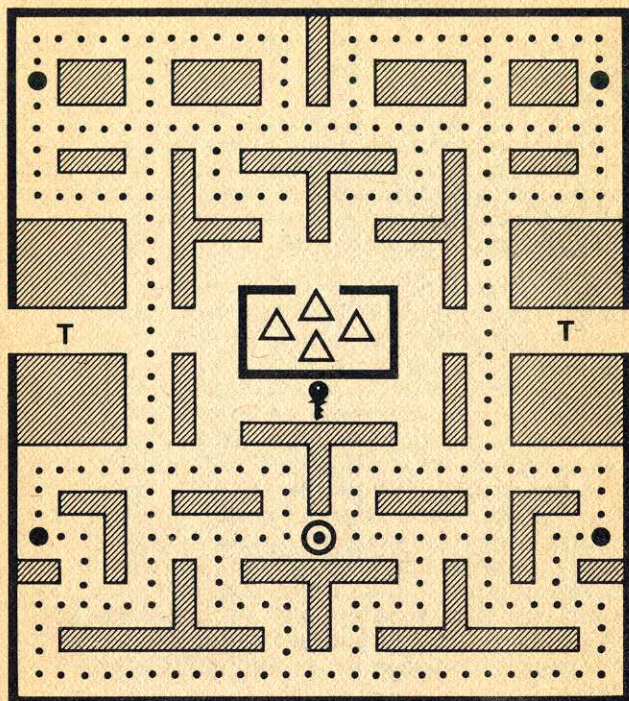
- · –dots to be eaten by PAC-MAN
- ● –energizers
- T –tunnel
- △ –monsters
- ⊙ –PAC-MAN
- (FR) –fruit

1
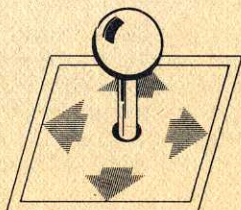
The Game Board

Before attempting to master any of the patterns in this book, the reader must first become familiar with the basics of the game. After a player has inserted his quarter in the machine, a maze filled with 240 dots appears on the PAC-MAN screen (see Fig. 1). There also appears a yellow "man." This "man," which is controlled by the player, is known as PAC-MAN. The player uses the control stick located below the game board to guide PAC-MAN through the maze. As he travels through the maze, PAC-MAN "eats" the white dots that he encounters.

From the outset of his journey, the player discovers the obstacles he must overcome. These obstacles, in the form of four "monsters," present quite a challenge to the player. These monsters differ in color and characteristics, thus creating different challenges for PAC-MAN. The red monster, named Shadow, is the most aggressive and should be watched with care. The pink monster, Speedy, is the fastest of the four. Although Speedy generally does not chase PAC-MAN for too long at any given time, he does tend to enter PAC-MAN's general area often. The third monster, Pokey, is the least aggressive. He will not attack any of the energizers. Bashful, the fourth and final monster, is pale blue. He is somewhat shy and often tends to back away from PAC-MAN. This knowledge can be used to the player's advantage in certain situations. For example, if PAC-MAN becomes trapped between Bashful and one of the other monsters, the player should direct his PAC-MAN toward Bashful.

If you are being chased by two monsters and have a choice to go one way or the other, look at their eyes. If one of them is looking away from you, you will fare better by going in its direction.

If one of the monsters overtakes PAC-MAN, PAC-MAN will fold up and disappear and the player will lose one of his men. Although some PAC-MAN machines allow a different number of men, most of them provide the player with three. If a player manages to achieve a score of 10,000 or 20,000 (depending on the individual machine), a bonus man is usually awarded.

In addition to PAC-MAN and the four monsters, the game

board is equipped with four larger blinking dots (see Fig. 1). These are located in each of the four corners of the game board and are called energizers. These energizers should be used by the player to increase his score more rapidly and to overpower the monsters. Each time PAC-MAN "eats" an energizer, he is awarded 50 points and becomes more powerful than the monsters. In the earlier stages of the game, after PAC-MAN has eaten an energizer, all of the monsters turn dark blue. At this point, PAC-MAN is safe momentarily and may "eat" any of the monsters he encounters. (Point values for these conquests will be discussed later.) A player should not think, however, that a monster is permanently destroyed once he has been eaten by PAC-MAN. The monster is instead recreated after his eyes are sent back to the center box and soon rejoins his "comrades" in the pursuit of PAC-MAN. In later stages of the game, this energizer can be used by the player to force the monsters to retreat.

On either side of the game board and directly across from the center box are two tunnels (see Fig. 1). During the course of a run through the board, PAC-MAN and/or the monsters may enter the tunnel and reappear on the board through the other tunnel. Use of these tunnels is important to a player's strategy, especially if a mistake is made while running a pattern. If a pattern is broken in the early stages, the player can use the tunnel to his advantage by leading the monsters into the tunnel. This will enable the player to put PAC-MAN at an advantage by either escaping the monster and/or reaching an energizer. On later boards, if an energizer is attacked immediately after a run through the tunnel, the monsters will back up through the tunnel and go through the other side.

Once a maze, or board, has been cleared of the dots and the four energizers, a new board will be presented on the screen. Although the layout of the board remains the same throughout the game, each successive-level board has characteristics that differ from those of previous boards. For example, the speed of PAC-MAN and the monsters increases with each successive board. From the ninth key on, however, PAC-MAN travels at a reduced speed, making it more difficult to clear the board.

In addition to the changing board characteristics mentioned

above, each successive board is represented by a particular fruit. This fruit symbol can be found in the lower right-hand corner of the board and is placed to the left of any previous fruit symbols (see Fig. 1). Twice during the course of PAC-MAN's journey through the board, the fruit will appear in the center of the board. If PAC-MAN manages to "eat" this fruit while it is lit, the player is awarded points. These are **bonus points** and are important to achieving a high score. A player should not, however, risk losing his man in his attempt to "eat" the fruit. (Point values of each of the different fruits will be discussed in the section on scoring.)

Object of the Game

Once a player has become familiar with the layout and activity of the game, his objective becomes clear. He must "beat" the machine by "eating" all the dots on the game board. Use of the energizers to increase point totals and to avoid being conquered by the monsters should be part of the player's overall strategy. The player should also attempt to increase his point total by "eating" the fruit that occasionally appears in the center of the board. Once cleared, new game boards will continue to appear until the player has lost all of his PAC-MEN to the monsters or until the game's limit is reached.

Scoring

	Points
Dot	10
Energizer	50
First blue monster	200
Second blue monster	400
Third blue monster	800
Fourth blue monster	1,600

In order for a player to achieve the highest possible score, he must become familiar with the point values of the various "conquests" and then use this knowledge to increase his score. Each of the 240 dots that is "eaten" by PAC-MAN is worth 10

TABLE 1
Length of Time of Blue Monsters
for Slow and Fast Games

Fruit Symbol	Slow Game (seconds)	Fast Game (seconds)
Cherry	6	6
Strawberry	6	3
First orange	6	2.5
Second orange	3	2.5
First apple	2.5	2.5
Second apple	6	1.5
First grape	2.5	5
Second grape	1.5	2.0
First bird	1.5	1.5
Second bird	5	1.5
First bell	2.0	3.0
Second bell	1.5	1.5
First key	1.5	1.5
Second key	3.0	0
Third key	1.5	1.5
Fourth key	1.5	0
Fifth key	0	0
Sixth key	1.5	0
Seventh key	0	0
Eighth key	0	0
Ninth key	0	0

points to the player, and each of the four energizers has a point value of 50.

As was stated previously, when PAC-MAN eats an energizer, he enables himself to conquer the monsters, which will have turned blue. A player is awarded bonus points, which double in value, for each monster that is eaten. In other words, the player will receive 200 bonus points for the first blue monster, 400 for the second, 800 for the third, and 1,600 for the fourth. These bonus points are also important to achieving a high score.

A player can also obtain bonus points by "eating" the fruit each of the two times it appears in the center of each board. Table 2 outlines the fruit in order of appearance in the game and the point values assigned to each.

Through experience, a player will develop his own technique for obtaining these bonus points. As he becomes more familiar with the action of the game, he will learn how many and which of the blue monsters are within his reach while running particular patterns (see Table 2). It should be stressed that patience and practice are keys to the mastery of the game.

Game Speeds

PAC-MAN machines can be set for slow-speed games or fast-speed games. It is possible to determine prior to inserting money the speed of the machine by observing the activity on the attract mode. If PAC-MAN is eaten in the bottom left-hand corner **above** the energizer, the game is set at **slow speed.** If, on the other hand, PAC-MAN is eaten **below** the energizer, patterns for the **fast** game should be used. If a player observes that PAC-MAN is being eaten in the **lower right-hand corner** of the board, he should be alerted to the fact than an uncommon **"New Chip"** game is being used. In a case such as this, the player should refer to the chapter entitled "'New Chip' Play."

The patterns included in this book are outlined for use with the slow game. For a fast game, the player should refer to Table 3 on page 8. This table makes reference to the specific patterns used in this book and indicates which pattern(s) should be used at each level of the fast game. Where more than one pattern is listed, the patterns must be run in the order listed.

TABLE 2
Point Values of Successive Fruit Levels

Fruit Symbol	Name	Points Awarded When Fruit Is Eaten
	Cherries	100
	Strawberry	300
	First orange	500
	Second orange	500
	First apple	700
	Second apple	700
	First grape	1,000
	Second grape	1,000
	First bird	2,000
	Second bird	2,000
	First bell	3,000
	Second bell	3,000
	First key	5,000
	Second key	5,000
	Third key	5,000
	Through ninth key	5,000

TABLE 3
Patterns To Be Used for Fast and Slow Games

Fruit Symbol	Slow-Game Patterns	Fast-Game Patterns
Cherry	A	B + C
Strawberry	B + C	B + D
First orange	B + C	E + F
Second orange	B + D	E + F
First apple	E + F	E + F
Second apple	E + G	E + H
First grape	E + F	E + J
Second grape	E + F	E + F
First bird	E + H	E + K
Second bird	E + J	E + K
First bell	E + F	E + K
Second bell	E + K	E + L
First key	E + K	E + L
Second key	E + K	E + M
Third key	E + L	E + L
Fourth key	E + L	Z (Ninth)
Fifth key	E + M	Z (Ninth)
Sixth key	E + L	Z (Ninth)
Seventh key	E + M	Z (Ninth)
Eighth key	E + M	Z (Ninth)
Ninth key	Z (Ninth)	Z (Ninth)

"Stand-Up" Versus "Sit-Down" Machines

PAC-MAN machines can be found in either "stand-up" or "sit-down" models. Since there are advantages and disadvantages of each model, the player must decide for himself which model he is more comfortable using.

The most obvious advantage that a "sit-down" model has is, of course, that the player can sit. This becomes even more important once a player begins to achieve high scores. High scores often take hours to obtain, which makes comfort a necessity. Another advantage of the "sit-down" model is that because the coin slot is located on the side of the machine, the player cannot accidentally hit the slot, causing a malfunction.

The "stand-up" model, which is generally more common than the sit-down model, has some advantages of its own. It provides a better overall view of the board because the board is angled up. If a "stand-up" model is preferred, it is often possible for the player to find a high bar stool on which to sit, thus allowing him the advantages of the "stand-up" model as well as the comfort of sitting.

GETTING READY FOR
THE PAC-MAN CHALLENGE

Keys to Success

By this time, you may be anxious to begin your adventure with
PAC-MAN. However, a few more tips are necessary in order to
better prepare you for the challenge ahead. We first recom-
mend that a player spend some time playing PAC-MAN with-
out the use of the patterns. This will enable him to experience
first hand the activity that has been described in this book as
well as to learn how to manipulate the control stick for turning
corners, reversing direction, and so on.

The key to success is based on three factors: concentration,
memorization, and patience. The patterns included in this book
have been proved successful. In order for them to work to the
player's advantage, however, they must be run exactly as out-
lined. This requires a great deal of concentration and memori-
zation on the part of the player. While remembering the pat-
terns is important, it is also important that the player be alert
to the action on the board and that he remember what has
taken place. Distractions, however brief they may be, often
cause a player to miss part of a pattern. If the player does
make a mistake while running a pattern, he should not give up
the game for lost. Rather, he should be patient, take his time,
and look for opportunities to clear the board freehandedly.
There is no time limit for clearing a board. Once the board has
been cleared, a new one will appear, and the patterns will work
again.

Getting Comfortable

Comfort is essential to successful playing. If the player intends
to spend much time practicing his game, he should first find a
game room in which he feels comfortable. Room temperature,

layout, and crowd capacity are all important factors that should be considered. As much as possible, a beginning player should avoid crowds, as this tends to break concentration.

We also recommend that if you are playing at a "stand-up" model and if you plan to spend some time practicing, you should, if possible, sit on a high stool. This will help you to avoid some of the fatigue that occurs from extended play. In addition, once you are seated (standing) comfortably in front of the machine, you should find a spot where you feel totally relaxed and comfortable and where you can easily see all of the action on the board.

Beginning the Game

John Birkner recommends that a player insert his quarter in the left coin slot if it is operable. It has been his experience that the right slot tends to malfunction more often. Birkner also recommends a practice that he calls the "Two Quarter Theory." At the start of the game, a player should insert two quarters in the machine. He can then play the first player and use the second player as a hiding or resting spot.

Once a player has inserted his money and the board appears, the game begins. The player should cup the ball of the control stick in his fingers rather than grasping it with the palm of his hand. This will help him to keep his hand relaxed and free of excess tension. Generally, it is more comfortable to keep the other hand resting comfortably on the machine. The player should be careful, however, not to bump or jar the machine, especially near the coin area, as the machine may malfunction.

Using Intermissions

Brief intermissions are provided the player at various points in the game. There are a total of five of them, and they occur after a player has cleared the strawberry, the first-apple, the first-bird, the first-key, and the fifth-key levels of the board. During these breaks, the machine plays a tune, and the monsters put on a "show" for the player. These intermissions are important to the player and should be used as a time of rest. It is recommended that the player step back from the machine, stretch, and, most importantly, RELAX. Once a player has

reached the level of the fifth key, there are no more intermissions. Thus, if a player has not used to his advantage the intermissions provided, he will probably become tense and fatigued before he has completed the game.

Escaping the Monsters

Developing the ability to avoid and/or escape the monsters is important to a player's success. One important thing to remember is that straightaways should be avoided, especially if PAC-MAN is being followed closely by a monster. If being pursued closely in a straightaway, PAC-MAN will almost always be overtaken, especially at the more difficult levels of the game.

Certain areas (see Fig. 2) of the board provide more safety to PAC-MAN and should be used whenever possible to avoid being overtaken. The monsters will not follow PAC-MAN into these areas. They may, however, approach the area from the sides or the top or bottom. Thus, care should be taken not to remain in the area long enough to become trapped but to use the area as a means of escape.

Another strategic area, called the resting (or hiding) spot (see Fig. 2), is located at point A. Although this spot does not offer an advantage pointwise, it can be used as a temporary escape. In the earlier stages of the game, PAC-MAN can remain on the spot indefinitely. In later stages of the game, however, the player should exercise caution in using this spot, as there is a chance that the monsters will attack in this area. Use of the resting spot is effective only when used at the beginning of a pattern and will result in a break in the pattern. Therefore, once a resting spot is used, the player must "free-hand" the remainder of that particular board.

Learning From Others

As with the development of any other skill, becoming a master PAC-MAN player involves more than following the patterns outlined here. Experience and advice from others also help a player develop his own technique. These patterns have been proved effective and should be used as a starting point. After a player has become comfortable with these patterns, he may

Fig. 2. Escape areas.
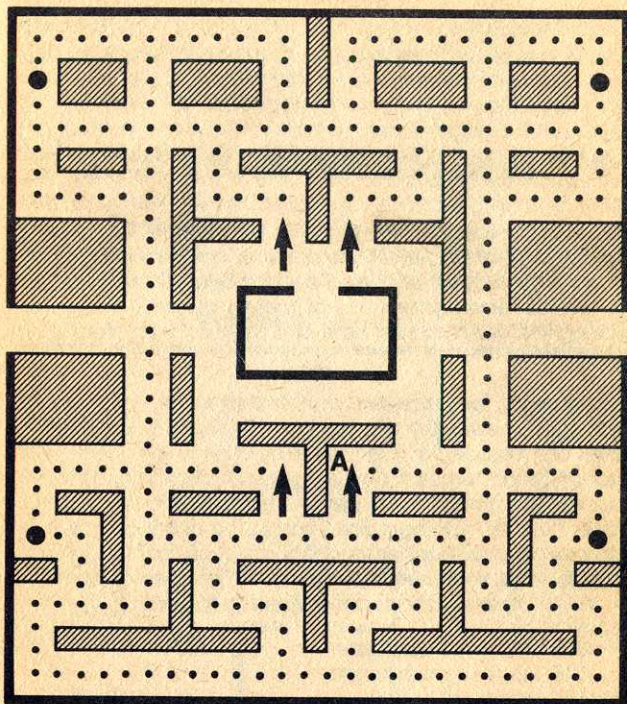
↑ –escape areas
A –resting (or hiding) spot

discover ways of altering them and increasing his score even more.

A serious PAC-MAN player will also find it to his advantage to spend some time watching others. By doing this, he will often learn new patterns that can be incorporated into his own game plan.

PATTERNS FOR PAC-MAN SUCCESS

The use of predetermined patterns is the key to developing high-level skill at PAC-MAN. The patterns included in this chapter were developed and used by John Birkner in his quest for the world's record score. Use of these patterns will save an aspiring PAC-MAN master time and money in developing his game.

The following patterns are outlined as simply as possible, making them easy to understand for any skill level. Explanatory notes are included in the Figure legends where necessary. Each of the patterns is shown in a series of diagrams so that it is easier to memorize and to use. The patterns should guide the player from his starting point through the entire board. They also include opportunities for obtaining bonus points. On each pattern series, the player's starting point has been designated by an "X." Other notations are defined as follows:

    ULE–upper-left energizer
    URE–upper-right energizer
    LLE–lower-left energizer
    LRE–lower-right energizer
      P–Pause
   FR–Fruit
      X–Starting point for each diagram
      △–Blue monster

Pattern A

Pattern A was designed to clear all the dots except those around the energizers. It is the only pattern that does not clear the entire board. The purpose of this is to give the player a feel for the game. The remaining dots can be cleared from the board by concentrating on the four energizers. The player should guide PAC-MAN toward the LRE first. From there, PAC-MAN should travel to the URE and then continue across the board to the ULE. After the ULE has been cleared, PAC-MAN should then travel downward to the final energizer, the LLE. This pattern also makes provisions for "eating" the fruit, which has been identified as (FR) on Diagrams 2 and 4 of Pattern A.

Pattern A, Diagram 1

Pattern A, Diagram 2

Pattern A, Diagram 3

Pattern A, Diagram 4

Pattern B

Pattern B is used as the beginning of the strawberry, first-orange, and second-orange levels. This pattern **must** be run before running Pattern C or D.

Pattern B, Diagram 1

*Pattern B is the only pattern that does not pick up both fruits. The player will only be able to get the first fruit. This feature was intended to make the pattern as simple as possible, while at the same time enabling the player to score a large number of points by eating blue monsters.

Pattern B, Diagram 2

*After eating the ULE, it is possible, as shown in Diagram 2 of Pattern B, to eat three blue monsters. The player must then reverse to pick up the fourth blue monster.

Pattern B, Diagram 3

Pattern B, Diagram 4

Pattern C

This pattern is a continuation of Pattern B. For this reason, the starting point of the pattern is at the ULE.

Pattern C, Diagram 1

*After eating the URE, the player will be able to eat three blue monsters if he follows Diagrams 1 and 2 of Pattern C exactly as outlined.

Pattern C, Diagram 2

Pattern C, Diagram 3

*After eating the LRE, the player may want to attempt to eat a few more blue monsters before completing the pattern. The "C"-pattern setup does not include eating monsters after eating the LLE and LRE energizers unless the player is willing to gamble. (This can be done by pausing before you eat the LRE, waiting for the monsters to come into range.) This strategy will, however, get the player through this pattern so he is able to move on to higher-level boards.

Pattern D

As with Pattern C, the player must run Pattern B before attempting Pattern D. Again, this is the reason that the pattern begins at the ULE. This pattern is similar to Pattern C. The only major difference is found in the area around the URE. This pattern is also designed to clear the board in the simplest possible manner. At this point, you can decide whether you want to clear the board or attempt to eat more monsters. By pausing at the LRE and the LLE, you can build up your score.

Pattern D, Diagram 1

Pattern D, Diagram 2

Pattern D, Diagram 3

Pattern D, Diagram 4

Pattern E

Since this pattern is the basis of numerous boards, it is important that a player perfect his execution of this pattern. This pattern, like many others, is designed to clear all the dots with the exception of those around the energizers. (Refer to Pattern E, Diagram 4 to determine which dots should remain after the pattern has been run.)

It should be noted that once a player reaches the second bell

Pattern E, Diagram 1

board on the slow game or the first bird board on the fast game, he may encounter difficulty with the successful execution of Pattern E, Diagram 3. Timing must be exact in order for Pattern E, Diagram 3 to work. If the player experiences difficulty here and is unable to perfect his timing so as to escape all monsters, he should consider substituting Pattern E, Diagram 3A for Pattern E, Diagram 3.

The following patterns must be preceded by Pattern E in order to run successfully: F, G, H, J, K, L, and M.

Pattern E, Diagram 2

Pattern E, Diagram 3

Pattern E, Diagram 3A

Pattern E, Diagram 4

Pattern F
Pattern F, Diagram 1

*In the LRE section, PAC-MAN should eat two of the blue monsters and then retreat upward to the URE section of the screen.

**At this point, the player should wait for the monsters to come close to the energizer. Once the monsters are within range, PAC-MAN should attack them simultaneously. After this has been accomplished, as shown in Diagram 2 of Pattern F, PAC-MAN should then eat the one blue monster marked 2A. PAC-MAN must then move toward the ULE section of the screen.

Pattern F, Diagram 2

*Once again, PAC-MAN must wait for the monsters. When they are within range, PAC-MAN should eat the one that comes closest as well as any others that go down the left straightaway.

**Wait for attack. By practicing, the player will learn which blue monsters he will be able to eat before clearing the board.

Pattern G
Pattern G, Diagram 1

Pattern G, Diagram 2

*In this pattern, it is possible, after eating the LRE, to eat all four monsters in the areas indicated in Diagram 2 of Pattern G.

**This area is critical in that the player, as the controller of PAC-MAN, will find that he will have one monster in front of PAC-MAN and one behind him. It is very important to keep heading toward the energizer and not panic or become impatient. The player will be able to eat the monster in front after eating the energizer and then be able to eat three more monsters before they change colors. The areas of the monsters are found in Diagrams 2 and 3 of Pattern G.

Pattern G, Diagram 3

Pattern G, Diagram 4

*It is again possible to eat all four monsters if the player runs the Diagrams 4 and 5 of Pattern G as shown.

Pattern G, Diagram 5

Pattern G, Diagram 6

*As in the previous notes, it is again possible, as shown in Diagram 6 of Pattern G, to eat three monsters in the tunnel.

Pattern H

This pattern has been kept very simple and does not contain much scoring with the energizers. By pausing at each energizer, you may obtain additional monsters en route.

Pattern H, Diagram 1

Pattern H, Diagram 2

Pattern J*

Pattern J, Diagram 1

*There is no Pattern I. The authors simply felt that it might be confused with Pattern 1, so they skipped to Pattern J.

Pattern J, Diagram 2

Pattern J, Diagram 3

*This pattern again allows for high scoring by providing for PAC-MAN to eat all blue monsters found on Diagram 3 of Pattern J.

Pattern J, Diagram 4

*At the URE, it becomes the player's decision as to how many monsters he feels it is safe to pursue. This decision must also be made at the LLE.

Pattern K
Pattern K, Diagram 1

*At this point, the player must "jab" PAC-MAN at the two dots and then retreat to the LRE, continuing up to the URE.

Pattern K, Diagram 2
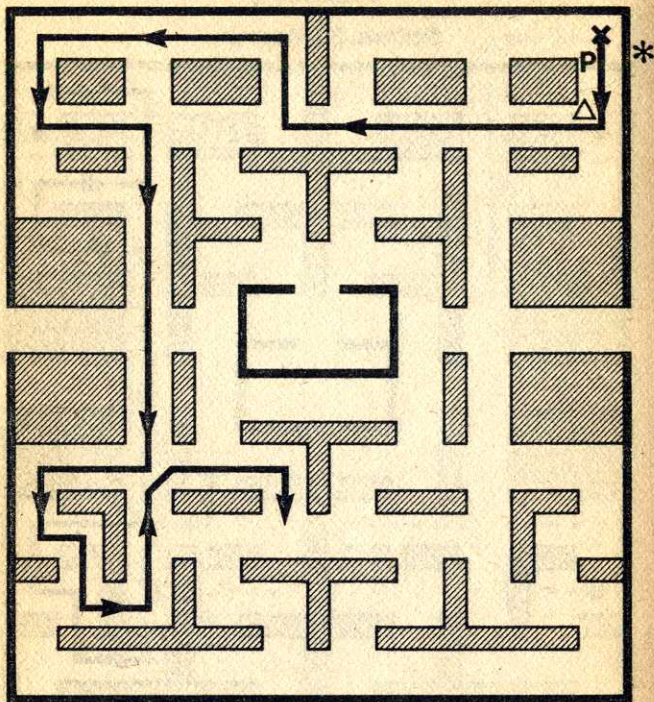
*The player should wait here for the monster. Only one will be attacking at this point. PAC-MAN must eat him when he is close and then proceed to the ULE, eat this energizer, and proceed down to the LLE. The player must make sure to enter from the top on the LLE to keep the red pursuer in the tunnel. Once this has been done, clearing the dots should be simple.

Pattern L

Pattern L, Diagram 1

Pattern L, Diagram 2

*The player should stall in this position and wait until the red monster comes close, at which time PAC-MAN should eat the monster and proceed to the ULE.

**The player should wait here for either two or three monsters and attack at the last moment. If done correctly, the player should be able to eat at least three of these monsters.

***The player should wait at this point until the monsters come close before attacking. After the attack, the remaining dots can be cleared.

Pattern M

An important change occurs at this stage of the game. It is no longer possible to achieve points by eating monsters. They do not turn blue but continue to pursue PAC-MAN even after the energizers are eaten.

Pattern M, Diagram 1

*The player must be extremely careful at this point. Accuracy is essential. The red monster will encounter PAC-MAN at this point. The player should be able to get the dots and then back up and eat the remaining dots in the corner if he is extremely careful.

Pattern M, Diagram 2

*PAC-MAN should enter the tunnel here for the second time and then go to the LLE from the top.

**If the red monster attacks the energizer at the LRE from the top, PAC-MAN should retreat and go to the top of the LRE and clear the dots. If the monster does not attack, the pattern should be followed as diagrammed.

Pattern Z (or Ninth-Key Pattern)

This pattern has been designed to be more simplified than any other pattern. If followed exactly as designated, the pattern should guide the player through the board and enable him to obtain both keys. Once a player learns this pattern, he will be able to run this pattern 232 times. We have found that the machine will malfunction after 240 keys, or approximately 3,200,000 points.

Pattern Z, Diagram 1

Pattern Z, Diagram 2

Pattern Z, Diagram 3

Pattern Z, Diagram 4

Pattern Z, Diagram 5

*The major fact about this pattern that a player should note is the stall at the point indicated. At this point, the player must allow the monster to clear before directing PAC-MAN downward.

Pattern Z, Diagram 6

EXPANDING YOUR PAC-MAN SKILLS

Developing New Patterns

Once a player becomes confident of his abilities, he may begin to develop new patterns that are consistent with his individual technique. The key to the success of any pattern is to clear the middle of the board before venturing to the outside. The pattern should clear the entire board, leaving the four corners and their energizers. Then an attempt can be made by the player to obtain any bonus points. After this has been achieved, the energizers can be used to conquer the monsters, thus obtaining bonus points. In order to obtain as many bonus points as possible, the player should also strive to "eat" both fruits that appear on the board.

Developing new patterns is an individual technique accomplished through trial and error. Once a player has run a pattern that successfully clears the board, he should reuse and alter it until he achieves a reasonable number of points. If, on the other hand, the pattern does not appear to have the potential to improve the player's game, he may decide to abandon its development and begin working on another one.

Tournament Play

PAC-MAN has become such a popular game that often a PAC-MAN master will have the opportunity to participate in tournament play. If you find yourself faced with this challenge, there are several things you should consider when preparing to meet the challenge.

Environmental conditions may be quite different from those you are accustomed to, especially if the tournament is not held in a game room. In addition, machine conditions may be

different. For these reasons, you should always check for glare on the machine before you begin to play. If there is glare on the game board, you should have the right to request that the machine be moved to eliminate the problem. As there are different modes (speeds) on which the machine can be set, always check the machine on which you will be playing to determine the mode of your particular machine.

Turning the Machine Over

Currently, the highest score the PAC-MAN game board will show is 999,990. However, this is not the highest possible score a player can achieve. When a player exceeds the 999,990 mark, the machine automatically records it as the high score, and the player's score returns to zero, and the tally begins again.

Ninth-Key Play

The patterns outlined in this book include those for ninth-key strategy for advanced players. Once the ninth key has been achieved, the pattern is very consistent. There is no stalling or "reverse flicks" involved, which tends to make the pattern virtually foolproof. Further examination of the ninth-key diagram should provide an understanding of the strategy involved at this level.

By the time a player has reached this level in the game, he will probably be somewhat fatigued. Intermissions, which provide brief rest opportunities, are no longer provided. The player must now rest between boards.

When the ninth key is being played, it is important that a player's hands be kept dry and free of cramps. Immediately upon clearing a board, the player should release the control stick, dry his hands, and flex the muscles to prevent cramping and fatigue.

Beating the Machine

Although it is possible for a player to play for several hours and to amass an incredible number of points, the PAC-MAN

machine is not without limits. After 240 keys, the machine will no longer function normally, thus creating an impossible situation for the player. At this point, the board divides in half, and the monsters begin attacking from unpredictable locations. Mass confusion occurs, and the game cannot continue. A player who achieves this level has technically beaten the computer.
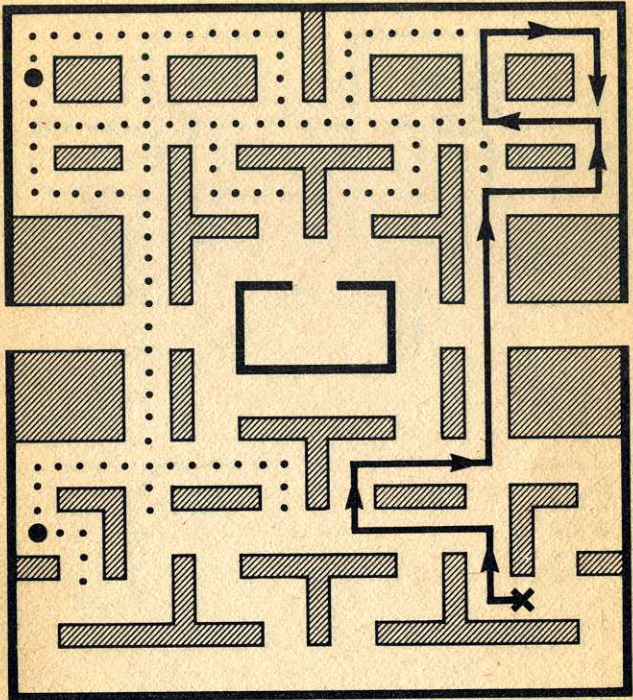
To the best of our knowledge, the world's record PAC-MAN score is held by the book's coauthor and consultant, John Birkner. His best score stands at 3,214,270. Although he has come close to breaking his own record several times, he has been unable to do so because of the machine's "limited" capacity.
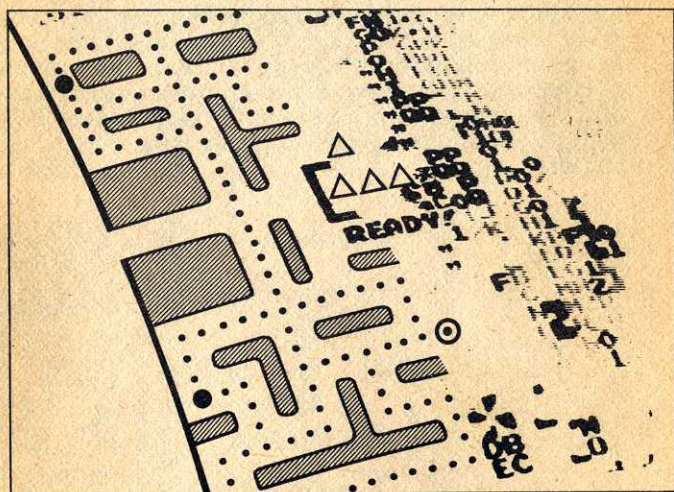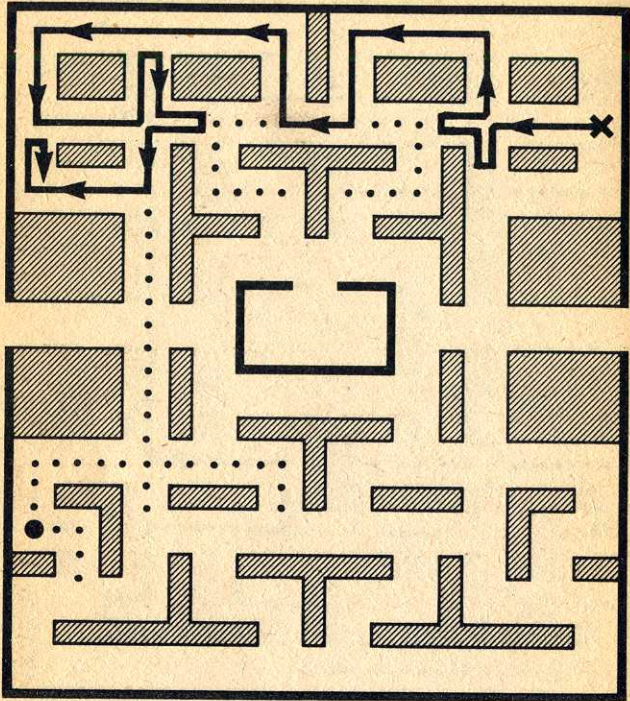
"NEW CHIP" PLAY

On occasion, a player may encounter a game that differs somewhat from those with which he is familiar. This variation of the game, referred to in this book as "New Chip," is uncommon because of the expense involved. However, if you should encounter a "New Chip" board, you will discover that your basic PAC-MAN patterns will not work. The player must make certain changes in his game strategy in order to play this new game successfully. For this reason, patterns for "New Chip" play have been developed and are included in this chapter. It should be noted that although the differences in this board and the more common PAC-MAN boards are obvious, one similarity does exist. The duration that the monsters remain blue once PAC-MAN has eaten an energizer is the same as that on the ordinary fast game.

Pattern 1

With this "New Chip" pattern, no fruits are eaten. As in some of the earlier basic PAC-MAN patterns, this pattern has been designed to give the player a feel for the game. The importance here is for the player to use originality and creativity in his run through the board. A player should be able to obtain more points through successful use of his skills of improvising.

Pattern 1, Diagram 1

Use this pattern on cherry and strawberry boards.

Pattern 1, Diagram 2

Pattern 1, Diagram 3

Pattern 1, Diagram 4

Pattern 1, Diagram 5

Pattern 2

Pattern 2 allows for PAC-MAN to eat both fruits. After this has been accomplished, only the energizers and a few dots should be left on the board. The player should improvise his own patterns to clear the board. On early patterns, the player may wish to guide PAC-MAN to the URE. Later, however, he must go down to the tunnel.

Pattern 2, Diagram 1

This pattern is to be used for the first orange through the third key.

Pattern 2, Diagram 2

Pattern 2, Diagram 3

Pattern 2, Diagram 4

Pattern 2, Diagram 5

Pattern 3

Pattern 3 is the same basic pattern as Pattern Z (or Ninth-key). The player should refer to Diagrams 1 and 2 of Pattern Z for a clearer understanding.

Pattern 3, Diagram 1

This pattern is for use from the fourth key onward.

Pattern 3, Diagram 2

Pattern 3, Diagram 3

After the pattern has been run as indicated in Diagrams 1 and 2 of Pattern 3, the player must entice the monsters into the tunnel in order to clear the remaining dots.

Pattern 3, Diagram 4

Pattern 3, Diagram 5
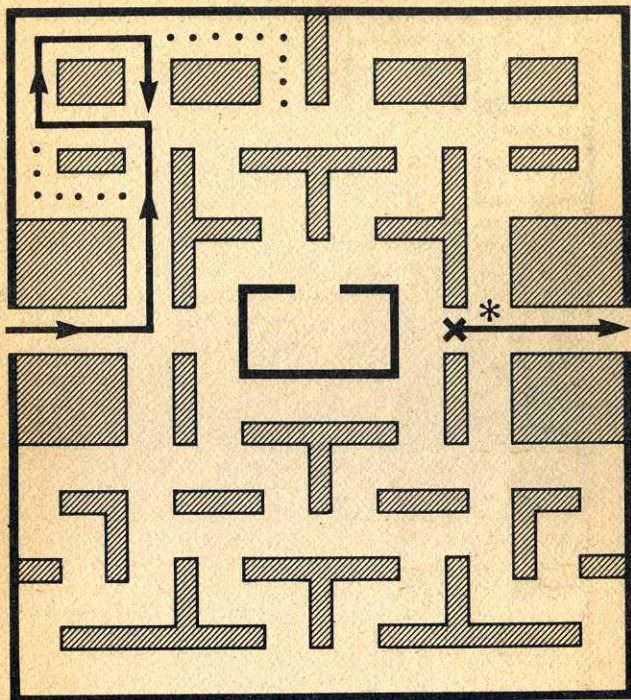
*Once he is through the tunnel, PAC-MAN must immediately eat the energizer and clear the remaining dots. This diagram illustrates this strategy.

Pattern 3, Diagram 6

At the conclusion of this pattern run, the simplest way for a player to clear the board is to follow the monster.

MS. PAC-MAN

Midway Manufacturing Company has recently developed a sequel to the PAC-MAN game called MS. PAC-MAN. At first glance, the game machine appears to be similar to that of PAC-MAN. There are, however, some major differences in the game that make it impossible for a player to use his PAC-MAN skills and strategies.

When the game begins, the player is provided with three MS. PAC-MAN pieces with which to play the game. After a score of 10,000 or 20,000 (depending on the machine being used), a bonus MS. PAC-MAN is awarded the player. The basic strategy of the game is the same as it is for PAC-MAN. MS. PAC-MAN is guided through the maze, earning points by eating the dots and fruits. At the same time, she must avoid the four monsters. The color and characteristics of these monsters are the same as in the PAC-MAN game.

As game boards (mazes) are cleared and other boards appear, the player will notice that there are four basic game boards that appear throughout the game. The first board appears twice, while the second, third, and fourth boards each appear three times. After the third appearance of the fourth board, the third and fourth boards alternate in appearance.

In addition to the above-mentioned changes, other major changes should be noted. First, the speeds of MS. PAC-MAN and of the monsters increase after the first board. Second, there are a total of four tunnels on the MS. PAC-MAN game board instead of the two on the PAC-MAN boards. Although the exact location of the tunnels changes with each game board, there will always be two on each of the sides. Third, there are three (instead of PAC-MAN's five) intermissions, called "acts" in MS. PAC-MAN.

A fourth major difference is related to using the fruit that appears in the center for increasing a player's score. In MS. PAC-MAN, these fruits enter and exit the maze through the tunnels and continue to move around as long as they appear on the screen. In order for a player to earn points on these fruits, he must overtake them while they are in motion. Table 4 provides information on the order of appearance of the fruit and the point values assigned to each level. Once a player has cleared the "banana" board, the cherry board appears again. The point value at this level, however, remains at 5,000 until the conclusion of the game.

TABLE 4
Point Values for Each Fruit Level

Fruit	Point Values
Cherry	100
Strawberry	200
Orange	500
Pretzel	700
Apple	1,000
Pear	2,000
Banana	5,000

MEET JOHN BIRKNER

John Birkner, the coauthor and consultant of this book, currently holds the official world's record in PAC-MAN scoring. Born on December 29, 1963, in Lakeland, Florida, John first became interested in the game in July 1981. After joining the ranks of the "addicted," he began to develop the patterns presented in this book. On January 3, 1982, he exceeded the one million mark; on February 11, 1982, he set the official world record of 3,192,000, which was verified by the film crew of the **PM Magazine** television show.* John feels that he has the potential to break his own world's record. However, he has been unable to do so because of the design of the machines. Once a player has completed 240 keys, the PAC-MAN machine malfunctions, thus creating an impossible situation for the player.
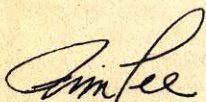
A political science major at Louisiana State University, Birkner began playing PAC-MAN in his spare time. He rapidly became an avid fan and soon decided to strive for mastery of the game. Birkner readily admits that working his way to the top was hard work. Many hours, not to mention quarters, were spent in achieving his goal. While it will take some time for you, the reader, to memorize and perfect these patterns, this book should help to make your trip to the top a shorter and more enjoyable one.

*See affidavit on page 84.

TIM LEE
STORY PRODUCER
PM MAGAZINE
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BANTAM BOOKS:

WE'VE ALL HEARD OF VIDEO GAME WIZZARDS,
THOSE RARE FEW WHO CAN RACK UP
MULTITUDES OF POINTS ON VARIOUS,
ELECTRONIC-QUARTER-GOBBLING MACHINES,
BUT WHEN THE PM CREW HERE IN BATON
ROUGE GOT WIND OF A GUY WHO COULD
ACTUALLY BAFFLE A MACHINE SO MUCH THAT
IT GAVE UP AND BROKE DOWN WE HAD TO
INVESTIGATE! AND SURE ENOUGH...WHAMO,
BANGO..! JOHN BIRKNER DID JUST THAT! ON CUE
IN A LOCAL ESTABLISHMENT, AS IF FOLLOWING
SOME SECRET SCRIPT WHILE OUR VIDEO
CAMERAS ROLLED, THE MACHINE GAVE UP!
WHAT MORE CAN WE SAY–HOW CAN YOU BEAT
A PLAYER WHO CAN SHUT DOWN A MACHINE
WITH OVER THREE MILLION POINTS..?
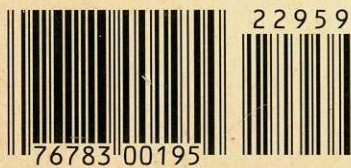
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