Chambergon Battle Logic User's Manual

(2nd Edition | Online Version)

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GETTING STARTED

1. Download the Latest Version of Java

- a. The Chambergon Battle Logic program only runs on computers that have another program, called "Java." Java is free, and most computers can run it. Some table-style computers, however, cannot (e.g., iPads).
- b. To find out whether your computer has Java already installed, go to https://www.java.com/en/download/installed.jsp. That site will tell you whether you have the latest version of Java installed on your computer. If you don't, follow the instructions for downloading and installing it.

2. Download the Folder from http://micahtillman.com/logic.

a. If you're reading this, you've already done that. Congratulations!

3. Unzip the Folder

a. Again, if you're reading this, you've already done that.

4. Make Sure Everything Is in the Same Folder

- a. When you open the folder containing The Program on your computer, you should see:
 - i. ChambergonBattleLogic(v 0 X X).jar
 - ii. "logo.png,"
 - iii. "myCharacter-CaptainLogic.chr," and
 - iv. a bunch of game files named "g000-FreshCopy.cbl," "g001-FreshCopy.cbl," and so on.

5. Run the Program

- a. Double-click on the "ChambergonBattleLogic(v_0_X_X).jar" file, or do whatever it is you do on your fancy computer to open programs.
- b. On a Mac, you may have to give your computer permission to run the program. Macs are much more wary of .jar files than PCs. So, instead of double-clicking on the program's icon, you may have to (1) hold down the Command or Control keys while clicking on it, then (2) select "Run" or "Open," and then (3) tell the computer that you're okay with running the file.

6. Open a Game

- a. Once you have opened The Program, you will be taken to your Game List.
- b. The Game List contains a bunch of square icons, one for each game.
- c. Each icon contains the name of the game, as well as information about the game.
- d. If the icon is blue, you have not completed it. If it is green, you have completed it "at or better than par."
- e. If the icon is yellow, you have completed the game, but took more Cards than par to do so. (That is, any "yellow" game is one you could replay and gain more points if you meet or beat par.)
- f. To open a game, double-click on its icon. (Try to double-click on the "blank" areas of the icon. For some reason, double-clicking on the words in the icon often doesn't work. I have no idea why. I programmed it to work, but it ignores me.)

7. Play the Game

- a. Look for the "Given" Cards and the "Goal"
 - i. Each game will give you one or more cards labeled "Given," and a goal (in the box labeled "Goal"). Your job is to produce a card whose contents match the goal.
 - ii. To produce a card whose contents match the goal, you will need to produce one or more new cards, and fill them with content based on the "Given" card(s).

b. Create New Cards

- i. You can create new cards by clicking the "New Card" button.
- ii. Alternatively, *if* the game is a "Powers On" game, there will be a "Powers Menu" at the top of the window. You can create new cards by selecting a power from that menu, and following the instructions that appear. (Not all games are "Powers On" games.)

c. Fill Those Cards with Content

- i. Once you have created a new card, you can use your mouse to drag pieces into it. The available pieces are in the boxes at the top of the Chambergon Battle Logic window
- ii. You can also copy and paste pieces from other cards into the new card.

d. Justify Those Cards

- i. Every card has to be justified, by saying where its contents come from, and how they were produced.
- ii. If you used a power from the Powers Menu to produce the card, the power will fill in the justification for you.
- iii. If you did not use a power to produce the card, you will enter the justification "by hand."
 - a. In the Card's "From" box, type the number or numbers of the Cards you "used" to produce the contents of the Card you are justifying.
 - b. Separate the numbers with commas.
 - c. Then, in the Card's "Using" box, type the name of the rule/power you "followed"/"used" to produce the contents of the Card you are justifying.

e. Earn Points

- i. In the card you have just produced and justified, click on either the "From" or "Using" textbox (either the text box that now contains numbers, or the one that contains the rule/power name). Then press Enter.
- ii. If the outline of the card changes from being dotted to being solid, the card is justified and you earn points. If it changes from being dotted to being dashed, the card is not justified by what you typed in the "From" and "Using" boxes.
- iii. NOTE: The justification you choose for a card may ultimately be correct, but if the rule/power you cited is not available to someone at your "level," the justification won't work. You have to unlock a power/rule by leveling up to it before you can use it.

f. Win the Game

- i. To win the game, you have to create a card whose contents match the Goal, and type its justification in its "From" and "Using" boxes.
- ii. After typing the rule you used in the "Using" box, press Enter.
- iii. If the card is justified, and all the other cards you created are also justified, then you win. A box will appear that says, "Success!," and tells you how many points you earned.

10. Save the Game

- a. You can save the game you are playing whenever you want.
 - i. Click on the "File" menu.
 - ii. Then click "Save."
 - iii. Alternatively, simply press Ctrl-S or Command-S.

11. Check Your Character File

- a. You can check your progress by clicking on the "Character" menu and selecting, "My Character."
- b. This will force the program to check how many games you've solved and how many points you've earned, and to "level you up" if you've reached the next level.
- c. It will also display your score and level in a pop-up box, so you can revel in your success.

DETAILS ABOUT WHAT YOU SEE ON THE SCREEN

12. The Window's Title Bar

- a. When you double-click on the ChambergonBattleLogic.jar icon, a new window will open.
- b. At the top of the window there is a bar, in which most computers will display one or more icons, in addition to text.
- c. If your computer isn't one that forces title bars to be blank, therefore, you should see your name, the version of Chambergon Battle Logic that you are playing, and the title of the game you are playing (or an instruction to select a game).

13. The Menu Bar

- a. Below the program's window's title bar is the menu bar. It contains the following menus:
 - i. File:
 - a. The "Save" menu option is available when you have a game open, but not when you are viewing the Games List. "Save" allows you to save your progress in a game. (Ctrl-S or Command-S will also save your progress.)
 - b. "Refresh Games List (All Games)" is available when you are viewing the Games List. Use it when you have added a game file to the folder on your hard drive while the program was open. This will force the program to recognize the new game file.
 - c. "Return to Full Games List" performs the same function as "Refresh Games List (All Games)," but is available when you have a game open. It closes the game and returns you to the games list.

- d. "Refresh Games List (Unsolved Only)" is available when you are viewing the Games List. It will show you all the games you have yet to complete, but hide all the games you have already completed. This helps to cut down on clutter.
- e. "Return to Unsolved Games List" performs the same function as "Refresh Games List (Unsolved Only)," but is available when you have a game open.
- f. "Next Game" is available when you have a game open. It will take you to the next game in the list, so you do not have to return to the games list and then find the icon for the next game.
- g. "Previous Game" is available when you have a game open. It will take you to the previous game in the list, so you do not have to return to the games list and then find the icon for the next game.
- ii. Options: This menu will allow you to adjust display options.
 - a. The first three options have to do with manual zooming and repositioning.
 - 1. The default option is to have manual zooming on, but manual repositioning off.
 - 2. When manual zooming is on, simply click on the piece you want to "zoom in" or "zoom out," and press the up arrow (to zoom in) or down arrow (to zoom out) on your keyboard.
 - 3. You will probably never need to use manual repositioning, but if you do, it allows you to move pieces to wherever you want them, and have them "stay there" rather than snapping back into position. The repositioned pieces will still move with the pieces that contain them, but will maintain the same position relative to those pieces
 - b. The fourth and fifth options have to do with setting the size of the Goal Box/Bin. If it is too large, you can "minimize it," and if it is too small, you can restore it to its original size. (Supposedly, anyway. I'm always suspicious of these two options.)
 - c. The last four options have to do with how "cluttered" the game area is. You can turn off the eyes and eyebrows on the Chambergons. You can replace the colors with letters. You can get rid of the "3D" aspects of the Chambergons. And you can turn everything back on, if you liked the graphics fancier.
- iii. Powers: This menu allows you to use automated powers to solve puzzles, rather than doing everything by hand.
 - a. This menu will appear in games that are Powers On, and will disappear in games that are Powers Off.
 - b. Your level determines which powers are available. Your available powers will be seen in the Powers menu, while the powers you have the to unlock will be "greyed out."
 - c. Note: If you have not unlocked a power yet, you cannot use it, even if you were to do everything "by hand," rather than using the Powers menu.

iv. Character:

- a. "Update and Display My Character's Stats." This menu item will force the program to recalculate your level, points, games solved, etc. and then display the result.
- b. "Just Display My Character's Stats." This menu item will have the program read your character file and report the results, without recalculating anything or changing the character file.
- c. "Print Out My Character's Stats." This menu item will create a text file that lists the games you've solved, what types they were, how many points you earned, and so on.
- v. Debug: If you are running a Debug Version of the program, a final menu labeled "Debug" will be visible to the right of the "Character" menu. This menu contains two items: "Start Debug" and "Stop Debug."
 - a. If you select the "Start Debug" item, the program will begin collecting data on itself (i.e., on what it is doing "behind the scenes").
 - b. If you select "Stop Debug," all the information that has just been gathered will be saved to a file on your hard drive (the program will tell you where this "Debug" file is).
 - c. NOTE: The program can only collect information on itself, and on what you are doing inside the program (e.g., clicking the mouse). It can't collect information on your computer's other programs, so if one of your other programs is causing the problem (as sometimes happens on Dr. T's computer), this information will not be available to the Debugging Function. However, the information in the debug file may help Dr. T rewrite the program so that other programs do not interfere with it.
 - d. So, attach the debug file to an e-mail, and send it to Dr. T. He will look at it and try to figure out what the program was doing when it messed up, or when it refused to do what you asked it to do. Then he can use that information to rewrite the program to be more cooperative.

14. The Games List

- a. When you first open the game, you should see a list of square icons. Each icon should have "Game 1," or "Game 2," etc. on it, as well as several lines of other text. Those other lines tell you how many cards you currently have "in play" in that game, how many points you've earned, whether the game is a "Powers On" or "Powers Off" game, etc.
- b. If you do not see a list of game icons, this can be for two reasons. Either you do not have your Character File in the same folder (at the same level in the same folder, not "down a level" or "up a level" in another folder in the same folder) as the ChambergonBattleLogic.jar file, or you don't have the game files in the same folder as the ChambergonBattleLogic.jar file. Move all the files to the same folder, so that you can see them all together in the same window, and then try running the program again.
- c. If a game icon is blue, that means you have yet to solve it. If it is yellow, that means you solved it, but it took you more than "par" cards to do so. If it is green, that means you solved it in "par" (or in fewer than "par") cards.
- d. You can open any game by double-clicking on it, though often you must double-click on

the blank space inside the icon, rather than on the text inside the icon.

15. On a Game Screen

- a. When you open a game, the game icons will disappear and you will be given a new setup.
- d. At the top of a game screen there is a "New Card" button that you can use to create new cards.
- e. Next to the New Card button is a row of "Bins" or "Boxes" that contain pieces you can drag and drop into the cards you create.
 - i. One of the bins, however, is the trash bin. If you drag and drop something into it, it will be deleted.
 - ii. Warning! There is no undo function in Chambergon Battle Logic (unfortunately), so be careful what you delete!
 - iii. Also in the row of bins is one that tells you your current score, as well as one that shows you your goal.
- f. Below the row of bins will be one or more "Given" cards. You have to use the contents of that card (or those cards), as your starting point as you try to produce the piece in the Goal box.

TIPS AND TECHNIQUES

16. Creating New Content/Pieces in the Game

- a. There are five "normal" ways to create new content or pieces in the game.
 - i. To create new Cards, you click on the "New Card" button.
 - ii. To create new Chambergons or Characters, you drag and drop them from the "Bins" at the top of the screen into a Card that you have already created.
 - iii. To create the four hidden Predicate Logic pieces:
 - a. Domes: click on a Chambergon or Character to highlight it and press Ctrl-A or Ctrl-U (or Command-A or Command-U, on a Mac). [The "A" stands for "All," while the "U" stands for "Universal."] More Domes or Bowls can be added to Domes already in place by clicking on them and pressing Ctrl-A or Ctrl-U (Command-A or Command-U, on a Mac).
 - b. Bowls: click on a Chambergon or Character to highlight it and press Ctrl-E (or Command-E, on a Mac). [The "E" stands for "Existential" or "Exists."]
 - c. Square Lenses: click on a Character to highlight it and press Ctrl-L (or Command-L on a Mac). To add two, do this twice. [The "L" represents the 90° angle of the Square Monocle/Glasses.]
 - d. Circular Lenses: click on a Character to highlight it and press Ctrl-O (or Command-O on a Mac). To add two, do this twice. [The "O" is supposed to look like the Circular Monocle/Glasses.]
 - iv. To assign a color to a Character (the little circle guys with the arms and legs), or to the five Predicate Logic Pieces (Domes, Bowls, or Square/Circular Lenses, and Coins): click the piece you want to "fill in," so that it becomes highlighted, then press R (red), O (orange), Y (yellow), G (green), B (blue), P (purple), A (brown, since "B" is already taken), or Z (pink, since "P" is already taken).

- v. To give Clubs to Characters or to Chambergons click on the piece to highlight it, then hit Shift-1 (just like you would do to insert an exclamation mark in a paper). (If you want, you can hit Shift-1 again to give the piece two Clubs, and hit Shift-1 a third time to erase the Clubs.)
- b. There are a number of "shortcut" ways to create new content as well.
 - i. Copy and Paste: If you need two different copies of the same piece, you can copy and paste the piece, instead of using the "drag and drop" technique. To copy and paste a piece:
 - a. Click on the piece you want to copy to highlight it, then press Ctrl-C (or Command-C), just like you would do to copy something in any other program.
 - b. Then, click where you want to paste the piece, and press Ctrl-V (or Command-V), just like you would do to paste something in any other program.
 - c. You can also copy and paste text within/between the Cards' boxes. You can also "cut" text, using Ctrl-X (or Command-X).
 - ii. Morph: If you have a Chambergon, but want it to be a different shape, you can change it.
 - a. Click on the Chambergon to highlight it.
 - b. If it is a Parcel, press "2" to change it into a Paragon.
 - c. If it is a Paragon, press "1" to change it into a Parcel, or "3" to change it into a Pyramid.
 - d. If it is a Pyramid, press "2" to change it into a Paragon.
 - e. ("4" represents Pulsars, which cannot be transformed into other Chambergons in the same way.)
 - f. If it is a Dome, press "6" to change it into a Bowl.
 - g. If it is a Bowl, press "5" to change it into a Dome.
 - iii. Dragging/Dropping a Piece to Apply a Rule: Sometimes you can produce a new shape by going through the motions of applying a rule. The following are examples.
 - a. Conjunction Introduction If you are trying to do Conjunction Introduction:
 - i. Create a new Card.
 - 2. Drag and drop a Parcel into the new Card.
 - 3. Drag and drop a Piece from another Card into the Parcel. This will duplicate the piece and return the original copy to its starting Card.
 - 4. NOTE: This only works if the piece you are dragging into the Parcel was the outermost piece in its original Card.
 - b. Modus Ponens If you are trying to do Modus Ponens:
 - 1. You start off with a Pyramid that has no Clubs and is all by itself in a Card, and second Card whose contents match whatever is in the attic of the Pyramid.
 - 2. Drag the "matching contents" out of their card and drop them onto the attic of the Pyramid. (Make sure your mouse pointer is inside the attic

- of the Pyramid when you drop the piece you're dragging.)
- 3. The program will automatically create a new Card for you, and place a copy of the contents of the basement of the Pyramid into that Card.
- 4. NOTE: This only works if the piece you are dragging onto the Pyramid was the outermost piece in its original Card.
- 5. An arrow will appear on the screen, showing you where the copy of the basement's contents went. To make the arrow disappear, press a key on your keyboard or click on something (even opening a new menu will clear the arrow).
- c. Modus Tollens If you are trying to do Modus Tollens:
 - 1. You start off with a Pyramid that has no clubs and is all by itself in a Card, and second Card whose contents have one more Club than whatever is in the basement of the Pyramid, but otherwise matches whatever is in the basement of the Pyramid.
 - 2. Drag the "matching contents" out of their card and drop them onto the basement of the Pyramid. (Make sure your mouse pointer is inside the basement of the Pyramid when you drop the piece you're dragging.)
 - 3. The program will automatically create a new Card for you, and place a copy of the contents of the attic of the Pyramid into that Card. (It will also "fix the Clubs" of whatever it just put into the Card, following the Modus Ponens rule.)
 - 4. NOTE: This only works if the piece you are dragging onto the Pyramid was the outermost piece in its original Card.
 - 5. An arrow will appear on the screen, showing you where the copy of the attic's contents went. To make the arrow disappear, press a key on your keyboard or click on something (even opening a new menu will clear the arrow).
- d. Disjunctive Syllogism (or "Disjunction Elimination") If you are trying to do Disjunctive Syllogism (or "Disjunction Elimination"):
 - 1. You start off with a Paragon that has no Clubs, and is all by itself in a Card, and second Card whose contents match whatever is in one of the chambers of the Paragon, but have one more Club than whatever is in that chamber.
 - 2. Drag the "matching contents" out of their card and drop them onto the matching chamber of the Paragon. (Make sure your mouse pointer is inside the chamber of the Paragon when you drop the piece you're dragging.)
 - 3. The program will automatically create a new Card for you, and place a copy of the contents of the other chamber of the Paragon into that Card.
 - 4. NOTE: This only works if the piece you are dragging onto the Paragon was the outermost piece in its original Card.
 - 5. An arrow will appear on the screen, showing you where the copy of the attic's contents went. To make the arrow disappear, press a key on

your keyboard or click on something (even opening a new menu will clear the arrow).

- e. Disjunction Introduction (or "Addition") If you are trying to do Disjunction Introduction (or "Addition"):
 - 1. You start off with anything that is all by itself in a Card.
 - 2. Drag a Paragon out of its Bin at the top of the window and drop it into the Card. (Make sure your mouse pointer is inside the Card—but not inside whatever piece is already in the Card—when you drop the piece you're dragging.)
 - 3. The program will automatically create a new Card for you, and place that Paragon into the new Card, with a copy of whatever was in the old Card in its left Chamber.
 - 4. An arrow will appear on the screen, showing you where the new Paragon and the copy are. To make the arrow disappear, press a key on your keyboard or click on something (even opening a new menu will clear the arrow).
- f. Hypothetical Syllogism If you are trying to do Hypothetical Syllogism:
 - 1. You start off with two Pyramids, each of which has no Clubs, both of which are all by themselves in two different Cards, and the contents of the attic of one match the contents of the basement of the other.
 - 2. Drag one of the Pyramids onto the other, and drop it onto the "matching chamber" of the other. That is, drop it onto the attic or basement of the other, depending on which one has the contents that matches the contents of the attic or basement of the Pyramid you are dragging. (Make sure your mouse pointer is inside the chamber you're trying to crush when you drop the piece you're dragging.)
 - 3. The program will automatically create a new Card for you, and place a new Pyramid into it containing copies of the non-matching contents of the original two Pyramids.
 - 4. Two arrows will appear on the screen, showing you where the contents of the new Pyramid came from. To make the arrow disappear, press a key on your keyboard or click on something (even opening a new menu will clear the arrow).

17. Removing Content/Pieces from the Game

- a. Deleting Pieces If you actually want to get rid of a Piece permanently, drag into the "Trash" Bin at the top of the screen.
- b. Crossing Off Cards You can "reduce clutter" onscreen by crossing off Cards. This might help you focus on the Cards that you haven't used yet.
 - i. To cross off a Card:
 - a. Click on the Card to highlight it.
 - b. Press the "X" key on your keyboard.
 - ii. To remove the "cross off" from a Card:

- d. Click on the Card to highlight it.
- e. Press the "X" key on your keyboard.

THE THREE TYPES OF GAME

18. Puzzle-Solving Games

- a. Most Games require you to produce a "goal" Piece based on one or more "given" Pieces.
- b. You know you are dealing with such a Game if there is a Character or Chambergon in the "Goal Bin" at the top of the screen.
- c. Follow the instructions and tips above for such games.

19. "Encoding" Games

- a. "Encoding" Encoding Games
 - i. Some Games require you to translate the Characters and/or Chambergons you are given into code form. (See the *CBL* textbook, section 1.3.)
 - ii. In these Games, you enter the code translation of each Card into the box below the Card that says, "Code on the Back of the Card...."
 - iii. Once you have entered the code for a Card, press enter (while the cursor is still in the "Code . . ." box). If the "Code . . ." box turns white, you encoded the Pieces in the Card correctly. If it turns red, you encoded the Pieces incorrectly.
 - iv. Spacing doesn't matter in the "Code . . ." box, but the order of the symbols you enter does matter.
 - v. Encode Games should have "ENCODE THIS," or something similar, in the "Code..." box of the Game's first Card, but Game Example files often don't.

b. "Decoding" Encoding Games

- i. Some Games require you to translate the code in the box below each Card into Characters and/or Chambergons within the Cards.
- ii. In these Games, you look at the code below each Card, and replicate it in the Card itself, but in the form of Pieces, rather than by typing out a string of letters and punctuation.
- iii. Once you have translated the code into Pieces, click on the box containing the code. If the box turns red, you know you didn't enter the Pieces into the Card correctly. If the box turns white, you know you entered the Pieces correctly.
- iv. Decode Games should have "DECODE THIS," or something similar, in the "Code . . ." box of the Game's first Card, but Game Example files often don't.

20. Activation Games

- a. Some Games require you to figure out how all the various possible activation combinations of the Characters in a given Card would work out to either activate or deactivate the "outermost" Piece in that Card.
- b. These Games require you to add an appropriate number of new Cards, each of which has contents identical to the first Card.
 - i. You know how many Cards to add based on the equation $t = 2^c$, where "t" stands for the *total* number of Cards (including the one given Card), and "c" stands for the

- number of Characters in the given Card.
- ii. "The total number of Characters in the given Card," actually means the total number of differing *colors*. A red Character and a blue Character count as two (since they have different colors), while two red Characters would only count as one (since they have the same color).
- c. To win the game, activations must be consistent within each Card, and all activation combinations must be covered by the Cards.
 - i. All Characters who share the same color within a Card must have the same activation state within that Card.
 - a. If one blue Character is activated in a Card, so must all the other blue Characters in that Card.
 - b. Similarly, one of the orange Characters in a Card is deactivated, so must all the other orange Characters in that Card.
 - ii. If there is more than one Character in the given Card, and those Characters have differing colors, then you must create enough Cards in the Game that each and every one of the possible combinations of activation and deactivation for those Characters are realized in one (and only one) Card.
 - a. See 22.b.i, above, to know how many Cards you will need.
 - b. To make sure that all the activation combinations are covered:
 - 1. Pick one Character color, and make sure all Characters with that color are activated in the first Card, but deactivated in the second, then activated again in the third, then deactivated in the fourth, and so on. ("On 1, Off 1.")
 - 2. Pick another Character color, and make sure all Characters with that color are activated in the first two Cards, but deactivated in the third and fourth, then activated again in the fifth and sixth, and so on. ("On 2, Off 2.")
 - 3. Pick a third Character color, and make sure all Characters with that color are activated in the first four Cards, but deactivated in the fifth through eighth, then activated again in the ninth through twelfth, then deactivated again for the thirteenth through sixteenth, and so on. ("On 4, Off 4.")
 - 4. Continue this pattern of doubling as needed. (Character color #1: "On 1, Off 1." Character color #2: "On 2, Off 2." Character color #3: "On 4, Off 4." Character color #4: "On 8, Off 8." Etc.)
 - 5. If you follow this pattern, all the Characters will be activated in the first Card, and deactivated in the last. You can, however, start with them all deactivated, and "work up" to having them all activated, by swapping the word "On" for the word "Off," and vice versa, in the above instructions. Order doesn't matter, so long as all the combinations show up in at least one Card (and in no more than one Card).

- d. To activate a Piece, click on it, while holding down the Ctrl button (on PC) or Command button (on Mac). To deactivate it, do the same thing.
- e. To check to see whether you have activated all the pieces in a Card properly, click anywhere in the "white space" in the Card, while holding down the Ctrl button (on PC) or Command button (on Mac). If the number at the top of the Card "lights up" green, you have activated the Pieces within it correctly. If it turns or stays red, you activated or deactivated at least one piece within it incorrectly.
- f. If all the Cards in an Activation Game have "checked out," but you aren't getting the "Game Solved" box this is for one of two reasons:
 - i. You do not have the right number of Cards. See 22.b.i, above.
 - ii. You messed up the "activation pattern" described in 22.c.ii.b above.
- g. You know you have an Activation Game before you when the Goal Bin is empty, but is glowing. Also, the Par will be "N/A," or something similar.

21. Combined Games

- a. Some puzzle-solving games require both encoding and decoding. Activation Games are only ever Activation Games, however.
- b. You will never have to worry about activation issues in a Puzzle-Solving or Encoding Game, nor will you ever have to worry about encoding in an Activation Game.

FAQs

1. Why is the outline of this card dotted?

a. That's how all cards start out, so either it's a new card, or it's reverted to its original look.

2. Why is the outline of this card dashed?

a. That's what happens when you press <enter> in one of the card's boxes, but the justification that is written in those boxes didn't check out. Either the "From" box contains the wrong numbers, or the "Using" box contains the wrong rule.

3. Why is the outline of this card solid?

a. That's what happens when you press <enter> in one of the card's boxes, and the justification that is written in those boxes checks out.

4. How many points is each card worth?

a. Ten, unless you are playing an "encoding game," in which case you get 10 for entering the right pieces/justification, and another 10 for entering the right code.

5. Why didn't I get points for this card?

- a. Either you have gone over Par, the Card is a duplicate of an earlier Card in the game, or the card didn't "check out."
- b. Check Par (located in the lower left hand corner of the Goal box). If this card's number is higher than Par, that's why you didn't get any points for it.
- c. Check the outline of the card.
 - i. If it is dotted, you haven't told the program to check the card yet. Click somewhere

- in its "Using" or "From" boxes, and press <enter>.
- ii. If it is dashed, you have typed the wrong justification into the "From" and "Using" boxes in the card.
 - a. Check what is typed in the "From" box (the one on the left). It should contain the number or numbers of the Card(s) from which the contents of the current Card were taken. If there are multiple Cards being "cited" in this box, each number should be separated by a comma from the others. (For example: "1, 2, 3".)
 - b. Check what is typed in the "Using" box (the one on the right). It should contain the name of the rule you used to get the content of the current Card from previous Cards. Did you misspell the name of the rule? Abbreviations are allowed (and encouraged), but did you abbreviate the rule's name incorrectly? Many of the rules have similar abbreviations ("CI," "CE," "CP," "CD," etc.).
- d. If the card's outline is solid, and you're at or under Par, but you're still not getting any points, then either the card is a duplicate of an earlier card in the game, or the card's outline probably isn't actually solid. Click on another card to highlight the other card. Now check the card you're having problems with. Is its outline broken? I thought so. The "highlighting" was making it look solid, when really it was broken. That means the card's contents are not justified by what you typed in the "From" and "Using" boxes (see c.ii.a and .b, above).

6. Why is it saying this rule is wrong? I know logic, and this is justified!

- a. Are you citing the right cards in the "From" box? If so, have you misspelled the name of the rule?
- b. If you have cited the right cards and spelled the rule correctly, the problem probably is that you have not leveled up enough to unlock this rule. See the chart below:

Level 0 unlocks:					
Conjunction Elimination, Conjunction Introduction, Double Negation, Tautology					
Level 1 unlocks:					
DeMorgan's Theorem, Disjunction Elimination (Disjunctive Syllogism)					
Level 2 unlocks:					
Disjunction Introduction, Implication					
Level 3 unlocks:					
Constructive Dilemma, Hypothetical Syllogism, Modus Ponens					
Level 4 unlocks:					
Commutation, Contraposition, Modus Tollens					
Level 5 unlocks:					
Assumption, Conditional Proof, Indirect Proof					
Level 6 unlocks:					
Association, Distribution, Exportation					

Level 7 unlocks:				
Biconditional Equivalence				
Level 8 unlocks:				
Existential Elimination, Quantifier Negation, Universal Elimination				
Level 9 unlocks:				
Existential Introduction, Identity Elimination, Universal Introduction				

c. Occasionally you will encounter a rule that "doesn't work" in Chambergon Battle Logic that would work in another logical system. This is most often occurs with rules involving Clubs and is due to the fact that Characters and Chambergons can only hold two Clubs (at most). Sometimes, however, the restriction in Chambergon Battle Logic's application of the rule is due to the need for narrative consistency. (For example, you always lose a Club if you have at least one and move from the basement to the attic—or vice versa—of a Pyramid. This is because you feel better in your new position. It would be equally legitimate, logically-speaking, to gain a Club, but (i) this wouldn't work with the Chambergon Battle Logic narrative, and (ii) CBL's application of the rule is logically legitimate.)

7. Can I make icons/pieces larger or smaller?

- a. Yes. You can do this in three ways.
 - i. If you double-click on a Card, this will either double its size or halve it, depending on its current state. This is a kind of quick zoom-in or zoom-out. The same thing works on the Goal box.
 - ii. In the "Options" menu, make sure one of the options that says "(Manual Zooming"), is selected. Do not select the one that says, "!(Manual Zooming)." Then, all you have to do is highlight a piece (by clicking on it) and press the up key on your keyboard (to make the piece larger) or the down key on your keyboard (to make the piece smaller).
 - iii. If your mouse has a scroll wheel, you can use it to zoom in or zoom out on any piece you can highlight.

8. Can I copy and paste icons?

- a. Yep. Ctrl-C or Command-C copies. Click on the thing you want to copy first, though.
- b. Ctrl-V or Command-V pastes. Click on the thing you want to paste the icon into first, though. If you have the choice of pasting into a piece with two chambers, put the mouse pointer over the chamber you want the piece to be pasted into.
- c. You can also copy and paste, or cut and paste, the text in the Cards' boxes.

9. Where did the Powers menu go?

a. If the Powers menu has disappeared, this means you are playing a "Powers Off" game. You'll have to do everything "by hand." It's good for you.

10. I solved the puzzle, but the "Puzzle Solved!" window didn't appear.

- a. This might be a glitch, so if the following things don't "fix it," let me know.
- b. Potential solutions:
 - i. Do the contents of the very last card match the contents of the Goal box exactly?
 - a. If not, that's the problem.
 - b. If there are extra cards "after" the card that matches the Goal box, throw them in the trash
 - c. If there is something about the contents of the last card that doesn't match the contents of the Goal box, change it.
 - ii. Is the outline of the last card solid, dashed, or dotted?
 - g. If it's solid, that means the card was justified. Look for any other cards that have a dashed or dotted outline.
 - h. If the outline is dashed, that means the card wasn't justified. Either the wrong numbers are in its "From" box, or the wrong rule is in its "Using" box.
 - i. If there is something about the contents of the last card that doesn't match the contents of the Goal box, change it.
 - iii. Is this an Encoding Game? If so, have you encoded each and every one of the cards?
 - iv. When you opened the game, did a box pop up that said "Rule Required" or "Rule Forbidden"? Have you actually used the required rule? Have you actually avoided using the forbidden rule?

11. An arrow, X, or checkmark has appeared. How do I get rid of it?

- a. To get rid of an arrow or checkmark, click on some piece within the game, or on the menu bar. (Alternatively, you can press any key on the keyboard.)
- b. To get rid of a grey X that is crossing out a card, click on the card and press the "X" key on your keyboard.
- c. To get rid of a smaller X that is crossing out an individual piece or chamber of a piece, see "a," above.

12. How do I get the program to check a card, or to see if I solved the puzzle?

a. Click in any of the textboxes inside any of the cards and press <Enter>.

13. What do I put in the boxes at the bottom of the cards?

- a. In the "From" box, list the numbers of the cards from which you got the contents of the current card. If you only took the contents from one other card, just type its number. If you took content from two or more other cards, separate their numbers with commas.
- b. In the "Using" box, type the name of the rule/power you used to create the contents of the card.
- c. If this is an "Encoding" game, you can also type the symbolic code that represents the card's contents in the box that is right *below* the card.

14. How do I know if this is an encoding game?

a. The Game's icon (in the "Game List") will say so.

15. How do I know if this is a Powers On or Powers Off game?

a. The Game's icon (in the "Game List") will say so.

b. Also, if the Game is Powers On, the Powers Menu will be in the menu bar. If it is Powers Off, the Powers Menu will not be there.

16. How many games to I have to beat/points do I have to earn, to level up?

a. At the moment, this many (though this may change in the future):

	How many points must I earn to reach this level?	In earning those points, how many "Normal" games must I complete?	(How many of the "Normals" must be "Powers-Off" games?)	(How many of the "Normals" must be "Encoding" games?)	How many "Activation" (non- "Normal") Games must I complete to reach this level?
Level 0	0	0	0	0	0
Level 1	1910	20	10	0	0
Level 2	3000	30	15	0	0
Level 3	5500	40	20	0	5
Level 4	8850	55	28	0	13
Level 5	12700	70	35	8	20
Level 6	15500	85	43	15	20
Level 7	19950	100	50	23	28
Level 8	22200	105	53	25	30
Level 9	25800	120	60	33	30
Level 10	28350	135	68	40	30
Level 11	30900	150	75	45	30
Level 12	34300	170	85	51	30

b. Also, the menu items in the "Character" menu will tell you, if you click on any of them.

17. Something isn't working and none of these FAQ things are helping me. What do I do?

- a. As of v. 0.9.10, a new menu is included in "Debugging" versions of the game. (The debugging versions have version numbers that end with "d," like: "v. 0.9.10d.")
- b. Download a debugging version of the program.
- c. Click on the "Debug" menu.
- d. Select "Start Debug."
- e. Do, or try to do, whatever it is that is giving you problems in the program.
- f. Once you have done it, or tried to do it, click on the "Debug" menu again, and select "Stop Debug."
- g. When you select "Stop Debug," a new popup box will appear, telling you that a file with a particular name has been saved to a particular folder on your computer. Attach that file to an e-mail to Dr. T (his e-mail address is his firstnamelastnameATgmailDOTcom).
- h. The file you send to Dr. T contains information on what going on in the program when it got problematic, or refused to do what you asked. From that information, Dr. T may be able to "patch" the program so that it cooperates with you in the future. Thank you for your patience and help!

18. The program won't run/open!

- a. If the program gives you an "Exception" error box when you try to open it, download the "Automatic Debugging" version of the latest version of the program. The "Automatic Debugging" version ends with "da" (e.g., "v_0_10_10da").
- b. Try to open the program again. When the error box appears, look in the folder on your computer where you saved the program. A new file will have appeared there named

- "DEBUG-" In its name you will see today's date and the time at which you opened the program. E-mail that program to me.
- c. If the program opens, but gives you a message about your Character file being missing or corrupted, make sure you've saved your Character file in the same folder as the program. Saving it in another folder that is inside that folder will not work. If it's there, send me an e-mail, and I'll send you a new Character file.
- d. If the program opens and give you no error messages, but no game files appear, this may be because you have not saved the game files to the same folder as the program. (Once again, saving them inside another folder that is inside the same folder will not work.) If the game files are in the folder, then do the following.
 - i. Download the "Debugging" version of the latest version of the program (the one that ends with "d," not the one that ends with "da" or just a number; e.g., use v_0_10_10d, not v_0_10_10da or v_0_10_10).
 - ii. Click on the Debug menu, then click "Start Debug."
 - iii. Click on the File men, then click on "Refresh Games List (All Games)."
 - iv. Click on the Debug menu, then click "Stop Debug."
 - v. A box will appear telling you where the Debug file has been saved. E-mail that file to me. (My e-mail address is my firstnamelastnameATgmailDOTcom).