
Unconventional Book Structures with e bond

Chapter 1 - Unconventional Book Structure

Overview

- E Bond, unconventional book structures, chapter five, segment one, take two. (lively music) - Yay! Hi there, my name is E Bond. I'm an artist and educator and I love experimenting with book forms. In this class you will be learning three interesting and slightly unconventional book forms: the blizzard, the palm leaf, and the dragon scale binding. These structures are both ancient and new and aren't widely taught. They invite so much variety of use, texture, and materials. I'm gonna show you how to use a screw punch, cover boards, sew a stab binding, and use a bone folder. These forms are so fun and wacky they are sure to spark your imagination. (lively music)

Materials

- The materials that you need are a ruler or straight edge, a cutting mat, bone folder, a pencil, an Exacto or scalpel, a utility knife for cutting board, scissors, a triangle or straight edge, scrap paper for gluing. For the palm leaf, you'll need a screw punch or Drimmel, a button or closure, book board for covers, some kind of string, and paper or ephemera for the contents of your structure. For the dragon scale binding, you'll need some kind of thread, this is linen thread, a needle, paper or ephemera for the contents of your structure again, an adhesive of your choice, either a glue stick or double-sided tape, and a small amount of book board is also needed for the dragon scale. And lastly, for the blizzard book, you'll need a strong but flexible piece of decorative paper. You'll find the dimensions for all your paper under the materials tab.

Palm Leaf Book

Preparing Covers

- Palm leaf books are a traditional book form of India, Indonesia, and parts of Southeast Asia. Many of the forms date back as early as the 1400s. Their long, narrow shape comes from the actual shape of palm fronds. So the inside of the pages are usually handwritten on in traditional forms. Also traditionally, the covers are wooden, and there's usually a hole that goes through with a string that keeps the book together. In traditional bindings, they usually have one, two, or three holes. For our palm leaf book, we are gonna use bookboard for the covers and printed cardstock for the inside pages. As you can see, for mine I've glued images down that I've photographed onto a thinner but still flexible cardstock. You can decide how many pages you actually want for your palm leaf. There's no specific number. I think I have about 10. But you will need two pieces of bookboard for your covers, and then I'm gonna cover mine, but you do not have to. You can just use them in its raw state. I'll cover these boards using a lightweight decorative paper that I've painted on. The book that I'm making I've decided the size is gonna be two inches by eight inches. So my covers and my inside book block are the same dimensions. When covering board, you wanna make sure that you start out with size of paper that will cover the board and its edges. I usually leave about 3/4 of an inch around each side. You can eyeball this or you can measure. Okay, now that you have two pieces of paper that you like for your covers, you're gonna be gluing on the opposite side. And we're gonna be gluing our smaller object. It's always kind of a nice thing to remember to glue the

smaller of the things. So we're gonna be gluing the board and then placing it onto the paper. Make sure you have some scrap paper just to keep your surface area clean. I'm gonna start from the middle and kind of work my way out as I'm gluing. And this is just to make sure, it's just a good habit to have. With board it's not as important, but if you were using a really thin paper, it's a good way to make sure you don't ever get any glue on the good side of it. Then you wanna center your board. And possibly bring in your bone folder to burnish it down, lift it up, and burnish going outward, too, from the center. Make sure you don't have any bubbles. Next thing you wanna do is cut your corners. Cutting corners is one of those things that just you get better and better with practice. But essentially what you wanna do is cut a diagonal line on each side of the corners so that when the paper folds up it covers the corners and doesn't leave any bookboard showing. I'll draw the line in for the first one just so you can kind of see how much space you might need. You can use your scissors for this. It's a little easier to kinda pick it up. But if you feel better with using an X-Acto, you can also use a ruler and do that. Okay, so now you have a shape like this. I'm gonna put my scrap paper underneath and I'm gonna start to glue up the sides. I'm gonna glue up the flap of my paper, but because my board is so thick I'm also gonna put some glue on the side of the board, so that it just has a little bit easier time adhering. And then I'm gonna use my bone folder to make sure that it creases right up against the board. When you get to the two ends that are left to be glued, make sure that you use your bone folder to pinch in to the sides so that the paper is flush up against the side of the board. Do this before you glue and finish up your cover. And then you just wanna do that same thing to the other side. And now you wanna do the exact same thing on your other board. I have my covered boards here, but because there's still some space on the other side of the board that is showing, in this particular binding, I'm gonna cut another piece of paper to finish this off because when this binding moves, you might actually see both sides of the cover boards. Now I'll glue these down. Nothing like some matte backgrounds to make some nice covers. So now we're ready to assemble our book. So make sure you've got your screw punch, your closures or buttons, your thread, and your book parts ready.

Punching and assembly

- Before we start punching our holes to assemble our book, first we're gonna make ourselves a template. Traditional palm leaf books have one to three holes, but I like two for a nice balance. I've decided that I might want my holes to be here, so before I start to punch, I'm gonna just make myself a template so that it's easier. I'm gonna cut out a piece of white paper the same size as my covers and book block, which in this case, is two by eight. Okay. Now that I have that, I can really compose where I want these on there, but it's the same thing. And then, I'm gonna use my pencil to just make a mark. Okay. So from here on, now I can use this template when I'm putting the holes in my cover and also into each page of the book. I'm gonna start with a cover 'cause this will be a little bit harder because they're thicker. I'm gonna hold down my template. If you think it's hard to do, you can also use like a binder clip or something for this, but I think I can just hold it down and situate my screw punch right on top of my pencil mark, and then start to press down. If you've never used a screw punch before, you will have to do it more than one time to get all the way through your board. So, just take your time and make sure you just keep lining it up in the same spot. And check it every once in awhile just so you don't go all the way through and ruin your nice cutting mat. At this point, cut an arm's length of string. And remember, you'll need a piece of string for each hole that you've made. Now, I'm gonna start to take one end of my string and feed it through from the bottom of my book all the way through the pages. If you are having a hard time

with this, you can feel free to use a needle to thread your pages through, but I'm just gonna use my fingers. I think my holes are big enough. I'm gonna continue to do this until I get all the way to the top. If your edge gets a little frayed, you can always just snip it and start again. Okay. We've got one edge ready. And you'll notice, I haven't knotted anything yet. I'm kind of leaving it open right now until I get both sides threaded through 'cause it allows you to have some space to move them. If you find it easier, and you're dealing with two holes, to thread them both at the same time, feel free to do that. Now from this point, I'm gonna make knots on the bottom of my book, but then I'm gonna add my decorative elements to the top. This is just an aesthetic choice. You can decide to add closures to the top and the bottom, or just one side, completely up to you. But you do have to make sure you knot the string, of course, at the bottom if you're not gonna use a closure. Just gonna pull some of the excess string toward the top so I don't have so much at the back here to work with. I'm gonna make myself some knots. Thinking aesthetically, it might be really cool to have some kind of big knots, so I'm gonna knot a couple times. Okay, done about four knots down here. And again, I've just kind of done that for aesthetic reasons 'cause I just want it to feel a little chunkier at the bottom of my book. And I think I'm gonna feed these button stone-like objects through the top, and then do the same thing, finish off with a knot. This is the fun part. I mean, you could even stack buttons or closures on top of one another. You don't have to have just one. I think I'm gonna keep mine a little simple. And then, this part, before I finish, the reason you have a lot of string is you wanna make sure that your book is gonna open and will be able to be read. So I don't want to make my knot too far down because then, there'll be no room for the book to open. So, I'm gonna play with it a little bit before I decide like, where I want that knot to really be 'cause I wanna make sure I have enough actual string within the book for it to be able to be opened almost like a scroll. Let's see. I kinda like it when you'll be able to see the pages like this. So I'm gonna give myself at least this much string in my book. Then I'd be able to turn it, flip it. So feel free to make all of these kind of aesthetic decisions before you put your final knots in your string. Take your time and really think about how you want the presentation to be, how the reader will be able to flip through. Okay, I think that's enough string. So now I'll know I can make my knot here. And I guess it's not the end of the world, either, if you make a knot you don't like. As long as it's not too tight, you can always loosen it back up and try again. This is a pretty forgiving book structure. So, I'm going to cut off the little tail on the bottom of my book just so that I don't have the string hanging too long. But on the top, you need to keep this string. And traditionally, you'd see palm leaf bindings kind of just wrapped around like this, and then they'd be put on shelves or be pulled out when they want it to be read. I made another one that is completely different from the one that we just made. I decided to use papers that were different widths, different lengths, even the covers were different 'cause I just wanted to play around with maybe what this form could feel like if everything was not as uniform. So this is a more wacky contemporary version of the palm leaf. I've used a lot of different papers and ephemera, pieces of old writing. And notice how wily it is, too. Like, 'cause I've used only one hole, so the pages even kinda turn sideways. It has a mind of its own, really. But I like the difference in feeling of this as opposed to that one. But it's the same structure. Another cool things about these bindings, because you're able to see both the front and the back of the pages, it would be a nice form where you could even add text to one side, an image to the other, or it just allows for both sides of the pages to be used, too which is pretty fun.

Dragon Scale Book

Stitched binding

- The dragon scale is a traditional Chinese binding that dates as far back as the Tang dynasty. Here are a few examples of the dragon scale binding. It was used as an early attempt to handle the awkwardness of really lengthy scrolls. For your dragon scale, you will need a variety of papers that are the same height, but varying widths. Normally there'd be a piece of bamboo here that was cut in half. What we're gonna use are small bars of book board instead, and sew them to attach. The width of the book board is completely up to you, as long as the height is the same height as the rest of your paper. I've already made another piece of paper as my piercing template, and again, it's the exact same height and width as whatever height and width that you decided your book board was going to be. Using my screw punch, again, or if you wanna use a Dremel or an awl and hammer, I'm gonna start to put the holes through my book board. The sewing we're gonna do is a traditional stab binding, and we will use four holes to sew. Even if the height of your book is taller, make sure that you space out the four holes. Now we wanna make sure that using our template, we make the same holes on the left-hand side of our book. At this point, you really wanna make sure that all your pages are flush to this left side, so you might even wanna pick the book up and really double check. Make sure that all the pages are lined up very evenly on this left side. It's usually helpful to have some kind of clip to keep everything stable while you punch. So I'm just using a binder clip here. Making sure everything's even. Feel free to adjust your clip, but just making sure that you have the paper secure in your other hand while you do it. After that we're ready to sew. You wanna take off your template before you start to sew, (chuckles) and add on the pieces of your book board, making sure that they're lined up with the holes. Grab your needle and your linen thread. Give yourself about an arm's length, and cut it off. We're gonna start from the second hole. If we have four holes, we're gonna start from the second hole, at the back of the book, so I'm gonna have my needle come from behind, up through the top. And I'm gonna leave myself a tail at the back of the book. Maybe, you know, an inch or two is fine. Go around the spine of the book, and back in the same hole. So I'm back in hole two. So now we're going from hole two into hole three. And then we're going around the spine, back into hole three. We're going into hole four, and again, around the spine, back into hole four. Before we leave hole four, we're also gonna go around the bottom of the book, back into hole four. 'Kay. Now we're ready to leave four. And then we go back into three. Up through two. Into one. And then, following that same practice, we're going around the spine, back into one. It's like you're just filling in the spaces. And before we leave one, we're gonna go around the top of the book, back into one. From here, we look like we're done, but if you turn your book over, you'll notice that we still have one more stitch that we have to complete. 'Cause what's nice about this sewing is where you start, you have to end. So what we're gonna do is go back into two, because that's where we started. Be careful not to split your thread as you're going through two, because you've been through there a couple times. Okay, up through two. And then what I normally do is I just slide my needle under the stitch, it's almost just like I'm hooking around, and then I just go right back down into two. And this is only to just get my needle on the same side as the tail. So now I can turn the book over and make a double knot to finish off the stitch. Did one knot, and another. And then you can cut off the excess, take off your binder clip, and see your new creation. My book is blank, there's some type, but you can see that this dragon scale is a wonderful structure, you could have type, you could have image, all kind of content. I wanna show you a few more examples of the same binding. I think this is a good example to show because it is just a mock-up. There's no content in it yet, but it shows how I was trying to figure out what the structure would be. In this case, each page has an equal tab of one inch, so the beginning page is the shortest,

which is around 6 1/4, and then the longest page is 22 inches. So this binding can be used this way to show one full picture that then breaks up into separate content, or like we were using, a more irregular kind of format with the tabs. This middle artist book I haven't bound yet, but has content in it throughout, so I thought I would show you what this one looks like. Pages are different sizes, you'll notice even the height of my pages are different in this one. When I was making this one, I was playing around with the idea of a lot of different materials, and how they would show up on the jagged edge of the book. I'll probably bind this one the same way that I did our model.

Staggered binding

- I love to use this next variation of the dragon scale binding in my own work a lot. I find it super helpful when I have content that is really small in size, or a variation of sizes. This is gonna be a tab glue system, instead of the sewing that we just did. For this next example you see that I have my pages laid out, but I'm gonna pickup a few, just so you can see that all the pages in this book are the same size, whereas in our last book, we had pages that were the same height, but varying widths. So in order to get the same feeling of a tabbed system that the dragon scale employs, we're gonna have to tab each page onto another sheet. So I like to start out with just having a ruler here, and my paper, so that I can start to decide aesthetically how big or small I want my tabs to be. For this example, I decided I wanted each one to be about an inch, and I wanted them to be exact. So, just gonna kind of start to place on my ruler, you know, each inch, an inch between where this page ends, and then where this page ends, and so on and so forth. Just to get an idea of the rhythm of how this book is gonna look. And once I do that, I'm gonna pickup the page, and kind of put a mark where that page should be glued. So I'm gonna do this now, just so you can see the first one. So I really just take my pencil, and put a little mark at the top and the bottom, where this page will be glued down, once I pick it. And let's see. I usually do one at a time, so. The next step of this is that each of your pages need to have a scored mark where it'll make it easier for the page to fold back and forth, and the way I do that is I usually use my 1/2 inch metal jig, and I put it on the left edge of each page, and then take my bone folder, and then just score to put an indentation in that page. It doesn't have to be super hard, you don't wanna like hurt your paper, but you wanna be able to start to let that paper know that it's gonna move back and forth when this is glued. You can even lightly fold it a little if you think that you need a little more, depending on like the weight of your paper. So this would be where our first page begins, so I'll glue that one down. Since this is such a small book, I thought we might as well use our double sided tape for this, so I'm just going to run a line of tape along that little tab that we've just made. So now I'm gonna position this at the edge of the paper, my background paper. Kind of push it down. Can use your bone folder if that makes it easier. And we have our first page glued. And basically you do this for the entirety of the book. So for my second page I'm looking at the pencil lines that I've already put in. If you'd like a little more help with making sure that it's straight, you can always use a 90 degree triangle, and line that up to make sure that you're putting your pages in straight. With larger pages it might be helpful. Okay, so we now we have our first two pages in, and we just keep going from there. And you can decide if you want to make all your marks at one time, and then do all your gluing, or kind of do it like the way I'm doing it, where I'm doing each page, and then just double checking, and then lifting, and making my mark. Either way's totally fine. It's however you work best. When I'm doing really large books like this, I definitely just do like all my scoring at once. All my marking at once. You know, all my gluing, because that way you just get into a rhythm. Let's see, did I like that side? Yeah, I like that side. This paper might need to be... (upbeat music) Okay. Yeah. (upbeat music) Okay. The last page is in.

Once you finish gluing, you definitely wanna put it under weight, especially if you're using glue stick, or a liquid glue like PVA. Let me show you a few more examples of mock ups in books that were made using the tabbing system. A few of these are mock ups I've made for much larger books in the past, but normally I would start with a really small template or mock up to make sure that the book was gonna work. This is also one that was used for a previous book, and you see with this one, I'm trying all kinds of different sizes. So like the first cover opens to then show a bunch of smaller sized pages, and then halfway through the book, you have another large cover, that then reveals another set of equal but smaller size pages. So when you're tabbing in pages, the possibilities are endless, because you get to decide, as long as they're the same height, you get to decide how short or long they all are, and what they do in terms of sequence throughout the book. This last book was the research for my thesis that I found in an old antique shop in Oregon one day. It was a ledger. It looks to be a ledger from a physician, from the early 1900s, I think, but you can kind of tell that he or she was using the same kind of quick tabbing system to keep all of the prescriptions on one page in the book, and it was this easy way of getting to see everything I guess they needed, but it's just a beautiful document in itself, and it was so inspiring, I started to research traditional bindings that were done in the same way, and a professor of mine told me about the dragon scale, which you've been learning today.

Blizzard Book

Folded binding

- The Blizzard Book is named so because it's creator, Hedi Kyle, had a snow day off from work. And during that blizzard, she completely invented this popular form. This binding is made solely from folds, so all you need is your bone folder. First, you will need a piece of paper that is 13 inches high by 29 inches wide. And once this book is folded down, it will be able to house cards that are 3 1/2 by 5 1/2 inches. You wanna have some kind of decorated paper that has a good weight to it so that it can hold your folds and also be able to hold other objects. The first step with the Blizzard Book is really folding the paper into eight equal sections. You can do this many different ways, especially if you've made an accordion book before. So I'm gonna do this way, first, you fold in half. And you really wanna make sure that you're using your bone folder to score really nice good creases. Another thing that I should mention also is that you wanna make sure that the decorated side of your paper is facing the table. The next step is to fold from each side into the center line. And if your paper's a little thicker, you know, really take your time and make sure those folds are nice. So once you have four equal parts, the way I normally do an eight folds is I then turn my two valley folds into mountains, and then I take those folds and fold them into the center line. So now that you have a shape like this, you wanna just fold again into the center your last two flaps. From this point, you should have a shape like this and you just take your center line and then fold it back on itself. Again, I'm just reinforcing all the folds. Okay, so now we have a sheet of paper that has eight equal sections. I'm gonna fold it back up and I'm just dealing with this first fold. At this point, we're gonna take our left side and we're gonna fold into the center. Again, I'm kind of staying on the left side of my center line here so that it's still able to fold. So I'm slight, you know, slightly less than center. And I'm gonna fold that down and do the same with the right side. Now I'm gonna do the same with the bottom. Gonna lift up the two folds that we just made and then, we're gonna continue to make these same folds. Sometimes, what I like to do is take the fold that I've just made, using that as an

example for the side that hasn't been folded yet. It's not like I have to refold that side, but it's nice to see that they're equal. Then, I just let that one fly back up. So I'm just kind of using this to gauge that both of these are equal, and then I make my folds. And then once those are done, keep going. So once you have those folds, you have a piece of paper that looks like this. You wanna forget about the folds on your very first flap and your very last flap, and we'll be dealing with the ones in the center. So whatever way it makes this easier for you, you're gonna be turning those points inward where they were once sticking out. And then, you just fold it up like this. You wanna open your first flap and then, the next fold is simply taking this and folding down. What I like to do when I'm doing this, though, is try to make sure that my center lines stay aligned. It's funny how forgiving the paper will actually be. It kind of will just fold down on its own. And then, you're gonna do the exact same thing for the bottom flap. Just reinforce your folds as you go, though. And then, you continue to do this for all your flaps. When you get to your last one, you wanna just fold over your last flap. I kinda just wanna reinforce those folds. And then, we have our Blizzard Book. So I made this book especially for a set of vintage Redwood cards that I had, and you can see now how they fit perfectly in these little pages. The size that we made is perfect for a 3 1/2 by 5 1/2 postcard. There we go. Next, we're gonna use different dimensions to do the same fold, but it's gonna function as a spine piece where you can then add your own covers. So I have another piece of decorated paper. This time, the size is 8 1/2 by 14. Gonna turn it over so that the decorated side is on the table, and I'll be making my folds looking at it this way. With this, you complete exactly the same folds. First, you fold the paper in half, and then once it's folded in half, you take your right side and then, fold that into the center line. And then, you take the left side and fold that into the center line. And you have four equal pieces. Then, from this point, we take our two outside folds and reverse them, changing them from valleys to mountains. From that point, we take those newly changed folds and fold those into the center line. Make sure you get your bone folder under there and really make your creases. From this point, you have a shape that looks like this. And you take the last two remaining flaps on each side and fold those into the center. Your last step at this point is simply to just take your paper and fold it the opposite way. And from that, you should have eight equal folds. Now, only dealing with this first fold, gonna fold my left and my right corners into the center. You can do this one at a time, or you can do them together, whatever makes you feel more comfortable. Then, do the exact same motion at the bottom of your page. And again, when I'm folding into the center line, I am leaving a slight hair of a space on each side, just to allow for the paper to have a little room for movement when we fold it over like this. Remember, you can also always use the trick that I showed you earlier of using your left side as a guide if you want, just to make sure that the new fold that you're making is fairly even with the other side that you've already folded. So once those folds are made, you've got a front flap and a last flap that you're not gonna bother, but you're going to turn in all of the areas here and here in on themselves. They almost start to do it on their own. Then, you can just fold it up and you have a shape that looks like this. And then, we'll do our last step, where we take the points at the top and the bottom and then, just fold them down. Again, always trying to make sure that that point stays in that center line so that it makes it easier to fold. Once you're done that last part, you now should have a shape that looks like this. Like your first book, but much shorter, because this is just gonna be the spine that holds your content and then we'll add covers. This size Blizzard was made to fit these photographs that I had, but you'll see how they just fit in almost like what I liked about it is I almost felt like they were photo corners that they were sliding into with this shape. And I have enough flaps for about eight photos, but I just put in four for now. So right now, the book looks like this, but then, you still have this area and this area of the book that

you can then use to add covers on. And I thought because this was a photo book, I would actually use another photograph and glue this on as its cover. On the surface, these books that we've made may not seem like they have a lot in common, but they all are really, really flexible containers for such a wide array of content. They exemplify the infinite possibilities of what a book could be.