

INDEPENDENT STUDY: Module 2, Class 15

Welcome to Module 2! These classes are more interactive. As you progress through the transcript or recording, it will benefit you to have a paper and pen to jot down your thoughts or reactions. I am delighted to be able to continue to share this information with you! I am always looking for ways to make these classes better, and if you can think of any way I can improve this experience, please do not hesitate to send me your suggestions ©

Many Seashell Blessings to you! Love, Shell

Please note: The pictures and comments in the transcript and recording below have been gathered over many years and where possible, I attribute them to their original source. If anyone connected with these photographs or comments would like them removed, please notify me and I will be happy to comply.

The mp4 recording for Class 15 is 26 minutes long.

Class 15: Shell #s: 35, 5, 6

Some of you expressed an interest in experimenting with shell reading. As we start Module 2, we will begin that portion of our journey. Since we have only covered 50 shells, this is like working with an alphabet that is missing ³/₄ of the letters. However, over the next few lessons, we can cover some of the fundamentals while I teach you about a few new shells that will assist us with this lesson.

To begin, in a minute, I am going to ask you to look at a couple of shells and please notice your reaction.

You will probably feel one of four ways:

- 1. You will like it and find it attractive.
- 2. You will not like it and it may bother you in some way.
- 3. You may like some parts of the shell, but not other parts.
- 4. You may have no feelings at all.

Alternatively, it may remind you of something, and if so, how do you feel about the thing it reminds you of?

On the next page, I would like you to look at the two shells I have in mind, and make note of your reaction describing how you felt when you looked at each of them.

Ok, please look at this shell and write down your reaction to it.



Now, I would like to do the same thing with this shell.



As we continue with this class, please remember your reactions to these two shells. This will provide the information necessary when we continue with the next phase of this experiment.

Let me tell you a little about the first shell. This is the Nassa Snail, shell #35 in *Ocean Oracle*. These animals travel together in armies scavenging along the ocean bottom. Their numbers are so vast that they climb over the backs of the other nassas to find room to walk. The meaning in *Ocean Oracle* is, "*Machiavellian*; walking over people to get what one wants; believing that the ends justify the means."

Let's dissect this meaning for a moment. The term "Machiavellian" came from my publisher. To understand the connection to this shell, here is a little background on Machiavelli.



Niccolo Machiavelli was a Florentine philosopher who wrote a book called "The Prince". This book is discussed by many politicians because it emphasizes the need for stability in a monarch's reign. During Machiavelli's lifetime, Italy was fragmented, and power was constantly changing hands. In pursuit of stability, Machiavelli suggested some extreme measures because he believed that actions to protect the country are justified no matter how cruel they may be. "The monarch may sometimes be excused for performing acts of violence and deception that would be ethically indefensible in private life."

https://en.wikipedia.org/wiki/Niccol%C3%B2_Machiavelli

http://en.wikipedia.org/wiki/The Prince#Overview more info on Machiavelli and The Prince

According to Machiavelli, the greatest moral good is a virtuous and stable state, and actions, no matter how cruel, to protect the country are justified. It is vital that he do anything necessary to keep his power.

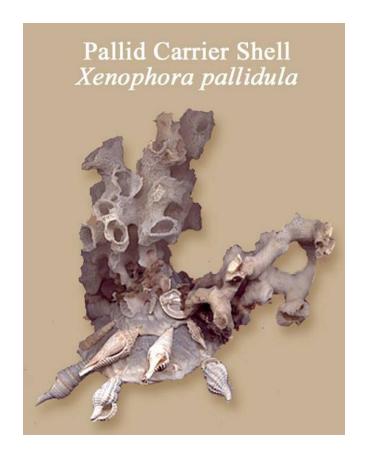
In Ocean Oracle, the meaning for Nassa Snail also contains the statement "The ends justify the means". This represents the sentiment that in pursuit of a goal (the ends), one is entitled to do whatever it takes (the means). Success by any means, even at the expense of morals, is justified. So, if you need to walk over someone to get what you want, that is justified according to Machiavelli. This is the meaning connected to the Nassa snail...do whatever it takes to reach a goal.

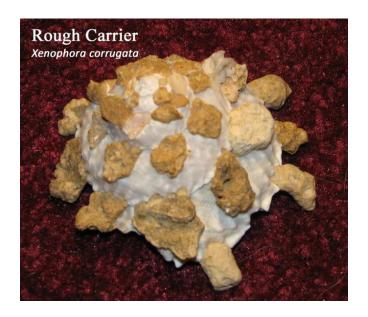
In my recent research, I discovered that this species of Nassa Snail, *Nassarius vibex*, is the best mollusk to introduce to an aquarium because they are scavengers. As scavengers, nobody is better at cleaning and aerating the tank. They live buried in the sand at the bottom of the tank. Once their siphons detect the slightest amount of food in their environment, they rise to consume the decomposed plant or animal waste, and then dive back into the sand aerating it as they return to their underground homes. We could look at this as doing whatever it takes to maintain the aquarium even if it requires eating the waste material nobody else will touch.

http://www.jaxshells.org/0930.htm live Nassa snails

http://reefkeeping.com/issues/2006-11/mg/index.php Don't confuse your Nassa Snails.

Let's leave the Nassa for a minute, and move on to discuss the second shell in our experiment. To do so, let me introduce a family this time...the Carrier Shells.





On the left, you will find one member of this family, the Pallid Carrier Shell. You will note that it is covered with other shells, and is aptly called "the original shell collector." This is shell #5 in Ocean Oracle. The picture on the right introduces the second family member, which is called the Rough Carrier Shell, and you will see that it is covered with rocks. In some books, this is called "the geologist."

In my early studies, it was theorized that these extra shells and rocks served as camouflage. That never made sense to me, and eventually, I found another theory that resonated much more. It was suggested that the additional shells and rocks serve to spread out their center of gravity.

Excerpts from the website below: http://www.captivasanibel.com/page/content.detail/id/500396/Meet-the-shell-collector-of-the-sea--carrier-shells.html?nav=5011

A <u>logical explanation for this shell-cementing ability could be that this collection of shells serves as camouflage</u>. Some animals find their prey by touch. All of the carrier shell's attachments might confuse them. Shells with heavy attachments tend to be top heavy. By strategically placing their collection of attachments <u>they are provided with a broader base making them less likely to tip over, exposing their vulnerable underside to predators</u>. Also, attachments would be of some use in protecting them against drilling gastropods. One theory is that since the <u>shells added extend outward, creating a snowshoe type effect, they may prevent the shell from sinking into the mud.</u> Carrier shells found in different areas of the world have unique methods of decorating their shells; using rocks, live coral, and sponges.

The carrier shell's building methods are intriguing. It's amazing to think that these small creatures can actually select just the right building materials needed, materials that are the perfect size, shape, and texture. Attaching these building materials is not as simple as it seems. The carrier shell turns the new material over, twisting it until it is in the exact position required. It uses its head and proboscis to lift the new piece into place, and its foot to raise and lower its shell at the same time. Up to an hour and a half is sometimes spent putting a new

piece in place. Gaps are filled with pieces of sand and debris. Its head and proboscis is used to gently rock back and forth to check the security of the newest piece of armor. Then the mollusk remains stationary to assure a tight bond. With larger attachments this could take over ten hours.

Initially, carrier shells grow at the top or apex of the shell, fastening small pieces of shells with his special glue. As the shell grows, new wardrobe additions are added to the perimeter of the shell. Several Pacific species display incredible patterns. They add mostly whole shells and larger shell pieces to construct the outside trimming layer. The edging material is placed with a downward slope. Mature shells add a final border of shells. Single valves of bivalves and gastropod shells are the construction materials of choice. The shells used in this final layer are roughly the same size and are arranged to form a scalloping effect, protruding from the outer edge of the shell itself.

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The sticky substance secreted by the snail not only holds the camouflage material in place but also reinforces the thin shell.

These mollusks live on mud, and by spreading out their center of gravity, they are less likely to sink in the mud. Each shell or rock is added at the time the animal is expanding the size of its shell. While the new shell material is still in softened form, the mollusk uses its foot to position and hold the new rock or shell in place. As the carrier's calcified shell hardens, the new item is permanently attached. I used the word "item" because the carrier will use whatever it finds in its environment. In a museum, I saw a Carrier Shell with bottle caps on it!



In *Ocean Oracle*, the meaning for the Pallid Carrier is "Finding that what used to come easily now requires hard work." In order to prevent themselves from sinking, these carriers have to work to add items to their shell and these additions could hamper mobility. To address this, I would like you to take a closer look at the Pallid Carrier shell. There is something that I want to point out. Pay attention to the Univalve shell additions, and you will see that every one of them was added with the aperture facing up. And the Bivalves are secured with the interior facing up.

What I hope you noticed is that this is not just a random attachment of these shells. If it were, some of the additional shells would be facing with their apertures down. Since these additional shells may inhibit the carrier's movement, they are oriented facing up to provide less drag. In other words, these carrier mollusks are thinking about what they are doing! Here is a sign of the intelligence of this snail.



Remember the bottle cap I mentioned from the Carrier in the museum? Here is a picture from a calendar that shows another Carrier with a beer bottle cap attached. You are looking at the underside view of the Carrier shell, and therefore, the bottle cap is also added with the opening facing up.

https://en.wikipedia.org/wiki/Xenophoridae source of quote below:

Xenophorids are unusual in that in many of the species the animal cements small stones or shells to the edge of the shell as it grows,

thus the shells of those species are sometimes humorously referred to as "shell-collecting shells".

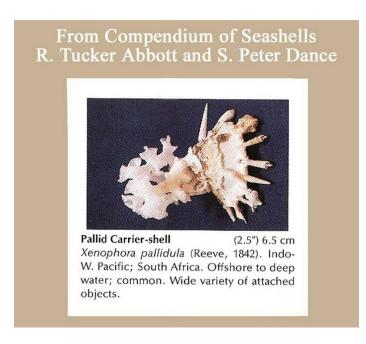
Remember that as the animal grows, its shell will increase in size and the original periphery shells will then appear on the higher whorls. This will result in a Carrier shell having items all over its surface...as you can see with both the Pallid Carrier and Rough Carrier shells.

Speaking of that, now that we have evidence for the intelligence of these snails, let me take a minute to address the glass sponge at the top of the Pallid Carrier. By the way, if this shell looks a little different from the picture in Ocean Oracle, it is my fault. In my travels for teaching workshops, this poor shell took a beating, and part of the glass sponge broke off. A few other shells broke off which I tried to repair, but I no longer tempt fate with this Carrier. I have a smaller, less decorated version that I use for teaching when I travel.



However, when this shell entered my life as a gift from my parents, I have to admit I thought someone in the store got carried away with a glue gun. I have a Compendium of Shells that I use to identify the new members of my seashell family, and when I looked up Carrier Shells, they were nowhere near this flamboyant with their decorations.

Here is a page from my compendium for you to see the shells I found. Just as I was convinced of my hot glue gun theory, I turned the page, and was amazed to see the next Carrier in this book.



My shell could have posed for that picture. That led me to believe that my Carrier shell was indeed untouched from the time it was found in nature, and no glue guns were involved.

Now I was left with a new dilemma. It made no sense to me why the young carrier would want to add this huge glass sponge to the top of its shell. Remember, the top, or apex of the shell would be the earliest stages of its growth. The sponge would have dwarfed the young shell, and certainly would not assist in spreading out the center of gravity. If anything, it would have covered too much territory to be on the periphery, and perhaps even increased the potential for sinking.

I thought this glass sponge disproved the theory that carriers added shells and rocks as a means to prevent them from sinking. If the theory were true, I couldn't figure out why this intelligent young carrier snail would add a sponge that would put its life in peril.

Can you see my problem?

One day it came to me that the glass sponge was not added by the carrier. Instead, once the carrier had reached a more mature size, the glass sponge *added itself* to the top of the Carrier Shell. This accounted for all the facts and kept the theory intact.

Shortly after this epiphany, someone sent me a book called THE SHELL Five Hundred Million Years of Inspired Design. As I opened the book at random, I found myself on the page devoted to Carrier shells.

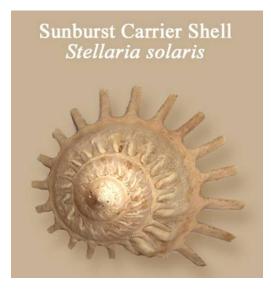
There in black in white, it states "Although carrier shells attach only dead material to their own shell, living ocean dwellers, such as the sponge, coral, or worm cases, grow naturally on the already-attached dead shells." Mystery solved ©

http://seashellsofnsw.org.au/Xenophoridae/Pages/Xenophoridae_intro.htm Carrier shell info

Attachment of foreign objects to the shell is performed by the animal's mantle, a thin layer of tissue in contact with the internal shell surface, that grows the edge of the shell by secreting calcium carbonate in a protein matrix. To add a foreign object to the shell, the animal positions the object at the growing edge, holding it in place with foot and proboscis, and secretes calcium carbonate to cement it onto the growing edge of shell.

Although the carrier does not add items for camouflage, here are snails that actually do make their own camouflage.

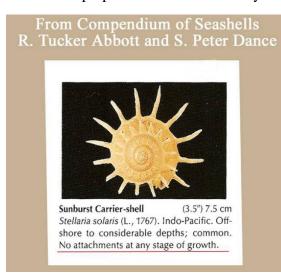
http://www.livescience.com/animals/071031-snail-camouflage.html



Now that you have seen the pattern for Carrier Shells adding some item to their surface, I would like you to take another look at the second shell from the experiment at the beginning of class. It is called the Sunburst Carrier Shell and is shell #6 in *Ocean Oracle*. It is a Carrier Shell too, but do you notice something different about this Carrier?

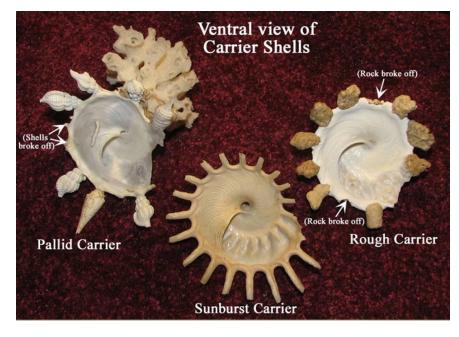
They don't add anything to their shells because they grow their shell with tiny spokes at the periphery spreading out the center of gravity. Since this Carrier lacks any attachments, in my mind, this settled the theory that the shells and rocks on the Pallid and Rough Carrier Shells were not for camouflage. It is all about preventing them from sinking in the mud.

When I showed you the page from my Compendium with all the Carrier Shells on it, did you notice that I removed a shell from the bottom of the page? Now I can explain the reason I deleted this photo. It was because I wanted to prepare the foundation for you to fully appreciate what it says.



Here is the picture I edited out.

It is the Sunburst Carrier Shell. Beneath the picture of the Sunburst Carrier it says, "No attachments at any stage of growth." When I read that simple statement beneath the picture, those words jumped out at me. The fact that it never forms attachments allowed this shell to represent the meaning "Preferring to be alone; avoiding attachments."



With all the attached rocks and shells covering the Pallid and Rough Carrier Shells, you really can't get a good look at these Carrier Shells, and they appear to have no relationship to the Sunburst Carrier. Let me show you these shells from a different perspective.

Let's look underneath the shells where there are no items attached. This is the ventral view displayed in the picture to the left. Do you see the family resemblance for all three shells now? With that background, let's discuss the meaning of the Sunburst Carrier. I call this my loner shell. Attraction to the Sunburst Carrier shell may indicate a belief that equates relationships to pain—from abandonment, or betrayal, or from loss of identity, or self-sacrifice. If past experiences have been unsupportive, subconscious desires to avoid entanglements may result. Remember that this is subconscious, the client may not even be aware of these thoughts. Because the shell reflects a hidden belief, the client may actually be in pursuit of a relationship unaware of this hidden thought pattern.

Let's take a look inside a hypothetical client's subconscious thoughts. Someone she loved in the past may have abandoned, or betrayed her, or may have died which feels like a betrayal or abandonment. The pain is overwhelming. Another hypothetical client working with this shell may have had a different experience. In a past relationship, he may have been forced to compromise his true feelings to remain in that partnership. This inability to be in one's truth created a different type of pain. Either of these situations could leave these clients with a subconscious desire to be protected from another painful situation. Since the source of the pain was the power the partner had to hurt the client, the conclusion is to avoid the potential pain of another partnership. The subconscious belief becomes "I am better off alone."

With that established, let's watch the first client from a conscious viewpoint. She thinks it would be wonderful to find a mate and begins to date. As soon as feelings evolve to the possibility of love, her subconscious says "Are you crazy? Do you know how much this person can hurt you? I'd better protect you from that pain." The client may not realize that she is motivated to push others away. As the relationship crumbles, the client is thinking, "What went wrong?" but her subconscious is thinking "Thank goodness he left! That was close!" To the subconscious, the simple equation is relationship = pain. The subconscious prefers the pain of an early breakup over the torture when the client's heart is totally invested.

In a business partnership, the same subconscious belief impacts the client. The subconscious thought is that being in a relationship will require compromising values which ends up causing pain. This client will be better off self-employed. If he were to enter a business partnership, the subconscious would try to sabotage it as a protective mechanism to avoid a repeat of the pain of compromise. Again, the subconscious will try to sever the partnership quickly to avoid the greater pain when the client is more invested.

When a client is attracted to this shell, the hidden thought is "I am better off alone." Whether in love or business, without the client's awareness, the client is subconsciously seeking to sabotage the relationship.

That said, the point of a shell reading is to uncover hidden beliefs. If this shell is in a reading, it does not mean the client has to spend the rest of her life alone. The Sunburst Carrier wants the client to know that her subconscious self thinks she is better off alone. If the client does not know that she is creating from this belief, the client will not even be aware of her self-sabotage. She will just witness each relationship fall apart without a clue that this is benefiting the part of her that fears the pain a relationship will bring.

OK. Please review this information until you are comfortable with the meaning of the Nassa Snail and the Sunburst Carrier Shell. The information in this class enables us to build the foundation for our next class. Now that you have the vocabulary, we will explore different shell combinations to learn how the interaction of shells produces messages in a shell reading. And we will discuss the meanings connected to your reactions to the shells at the start of this class. All of this awaits you as we explore more wisdom from these two shells in Class 16.