

Agassiz and the Fish

NOVEMBER 16, 2009 | Justin Taylor

Louis Agassiz (1807-1873)

Do you know the story of “Agassiz and the Fish”? It’s a powerful lesson on the necessity of painstaking observation—staring at and studying the reality before our eyes—especially if you apply it to the idea of studying the word of God.

I first heard it in the late 90s at Bethlehem Baptist Church under Tom Steller, who first learned it in the mid-70s at Bethel College under John Piper, who first learned it in the last 60s at Fuller Theological Seminary under Dan Fuller, who first learned it in the mid 40s at Princeton Theological Seminary under Howard Kuist.

Agassiz was the founder of the Harvard Museum of Comparative Zoology and a Harvard professor. The following account was written by one of his students, Samuel H. Scudder, under the title “Agassiz and the Fish, by a Student” (*American Poems*, 3rd ed. [Boston: Houghton, Osgood & Co., 1879], pp. 450-54). Thanks to [David Howard’s site](http://www.bethel.edu/~dhoward/resources/Agassizfish/storybehind.htm) (<http://www.bethel.edu/~dhoward/resources/Agassizfish/storybehind.htm>) for the

reproduction of the original story.

Agassiz and the Fish

by a Student

It was more than fifteen years ago that I entered the laboratory of Professor Agassiz, and told him I had enrolled my name in the scientific school as a student of natural history. He asked me a few questions about my object in coming, my antecedents generally, the mode in which I afterwards proposed to use the knowledge I might acquire, and finally, whether I wished to study any special branch. To the latter I replied that while I wished to be well grounded in all departments of zoology, I purposed to devote myself specially to insects.

“When do you wish to begin?” he asked.

“Now,” I replied.

This seemed to please him, and with an energetic “Very well,” he reached from a shelf a huge jar of specimens in yellow alcohol.

“Take this fish,” he said, “and look at it; we call it a Haemulon; by and by I will ask what you have seen.”

With that he left me. . . . I was conscious of a passing feeling of disappointment, for gazing at a fish did not commend itself to an ardent entomologist. . . .

In ten minutes I had seen all that could be seen in that fish, and started in search of the professor, who had, however, left the museum; and when I returned, after lingering over some of the odd animals stored in the upper apartment, my specimen was dry all over. I dashed the fluid over the fish as if to resuscitate it from a fainting-fit, and looked with anxiety for a return of a normal, sloppy appearance. This little excitement over, nothing was to be done but return to a steadfast gaze at my mute companion. Half an hour passed, an hour, another hour; the fish began to look loathsome. I turned it over and around; looked it in the face—ghastly; from behind, beneath, above, sideways, at a three-quarters view—just as ghastly. I was in despair; at an early hour, I concluded that lunch was necessary; so with infinite relief, the fish was carefully replaced in the jar, and for an hour I was free.

On my return, I learned that Professor Agassiz had been at the museum, but had gone and would not return for several hours. My fellow students were too busy to be disturbed by continued conversation. Slowly I drew forth that hideous fish, and with a feeling of desperation again looked at it. I might not use a magnifying glass; instruments of all kinds were interdicted. My two hands, my two eyes, and the fish; it seemed a most limited field. I pushed my fingers down its throat to see how sharp its teeth were. I began to count the scales in the different rows until I was convinced that that was nonsense. At last a happy thought struck me—I would draw the fish; and now with surprise I began to discover new features in the creature. Just then the professor returned.

“That is right,” said he, “a pencil is one of the best eyes. I am glad to notice, too, that you keep your specimen wet and your bottle corked.”

With these encouraging words he added—

“Well, what is it like?”

He listened attentively to my brief rehearsal of the structure of parts whose names were still unknown to me; the fringed gill-arches and movable operculum; the pores of the head, fleshy lips, and lidless eyes; the lateral line, the spinous fin, and forked tail; the compressed and arched body. When I had finished, he waited as if expecting more, and then, with an air of disappointment:

“You have not looked very carefully; why,” he continued, more earnestly, “you haven’t seen one of the most conspicuous features of the animal, which is as plainly before your eyes as the fish itself. Look again; look again!” And he left me to my misery.

I was piqued; I was mortified. Still more of that wretched fish? But now I set myself to the task with a will, and discovered one new thing after another, until I saw how just the professor’s criticism had been. The afternoon passed quickly, and when, towards its close, the professor inquired,

“Do you see it yet?”

“No,” I replied. “I am certain I do not, but I see how little I saw before.”

“That is next best,” said he earnestly, “but I won’t hear you now; put away your fish and go home; perhaps you will be ready with a better answer in the morning. I will examine you before you look at the fish.”

This was disconcerting; not only must I think of my fish all night, studying, without the object before me, what this unknown but most visible feature might be, but also, without reviewing my new discoveries, I must give an exact account of them the next day. I had a bad memory; so I walked home by Charles River in a distracted state, with my two perplexities.

The cordial greeting from the professor the next morning was reassuring; here was a man who seemed to be quite as anxious as I that I should see for myself what he saw.

“Do you perhaps mean,” I asked, “that the fish has symmetrical sides with paired organs?”

His thoroughly pleased, “Of course, of course!” repaid the wakeful hours of the previous night. After he had discoursed most happily and enthusiastically—as he always did—upon the importance of this point, I ventured to ask what I should do next.

“Oh, look at your fish!” he said, and left me again to my own devices. In a little more than an hour he returned and heard my new catalogue.

“That is good, that is good!” he repeated, “but that is not all; go on.” And so for three long days, he placed that fish before my eyes, forbidding me to look at anything else, or to use any artificial aid. “Look, look, look,” was his repeated injunction.

This was the best entomological lesson I ever had—a lesson whose influence was extended to the details of every subsequent study; a legacy the professor has left to me, as he left it to many others, of inestimable value, which we could not buy, with which we cannot part. . .

The fourth day a second fish of the same group was placed beside the first, and I was bidden to point out the resemblances and differences between the two; another and another followed, until the entire family lay before me, and a whole legion of jars covered the table and surrounding shelves; the odor had become a pleasant perfume; and even now, the sight of an old six-inch worm-eaten cork brings fragrant memories!

The whole group of Haemulons was thus brought into review; and whether engaged upon the dissection of the internal organs, preparation and examination of the bony framework, or the description of the various parts, Agassiz’s training in the method of observing facts in their orderly arrangement, was ever accompanied by the urgent exhortation not to be content with them.

“Facts are stupid things,” he would say, “until brought into connection with some general law.”

At the end of eight months, it was almost with reluctance that I left these friends and turned to insects; but what I gained by this outside experience has been of greater value than years of later investigation in my favorite groups.

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The Pro-Life Two-Step

NOVEMBER 15, 2009 | [Justin Taylor](#)

When thinking through the logic of life, it’s always good to get some good fog-clearing advice.

For example, [Alan Shlemon](http://str.typepad.com/weblog/2009/11/defending-the-pro-life-view-just-takes-a-little-dancing.html) (<http://str.typepad.com/weblog/2009/11/defending-the-pro-life-view-just-takes-a-little-dancing.html>) recently gave a defense of the pro-life position at Central Michigan University and he focused on just two claims:

(1) the unborn is a distinct, living, and whole human being from the moment of conception;

(2) abortion is discrimination: it disqualifies a group of human beings (the unborn) from being valuable because of an arbitrary quality or characteristic.

He then fielded objections from the audience. The vast majority of objections against the pro-life view, he says, come in one of two forms.

They either assume the unborn is not a human being.

Or, they disqualify the unborn from being a valuable human being based on an arbitrary quality or characteristic.

When I hear a defense for abortion, I figure out which category it falls in.

Then, I can show them the misstep by appealing to one of the two claims I defended in my opening remarks.

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The Story of the Bible in Four Minutes

NOVEMBER 13, 2009 | [Justin Taylor](#)

Shai Linne, doing a song from his latest album, [Storiez](http://www.amazon.com/exec/obidos/ASIN/B001HTGKS4/bettwowor-20) (<http://www.amazon.com/exec/obidos/ASIN/B001HTGKS4/bettwowor-20>), at the WorshipGod conference.

Here are the lyrics:

It's the greatest story ever told.
A God pursues foes whose hearts turned cold.
The greatest story ever told.
Restoring all that the enemy stole.
The greatest story ever told.
The glory of Christ is the goal, behold.
The greatest story ever told.
It's the greatest.

Alright check it: let's go back in time, brethren. Divine lessons always keep your mind guessing. The glory of the Triune God is what I'm stressing. The origin of humankind was fine. Blessings were plenteous. God is amazingly generous. Crazy benefits in a state of innocence. God told the man what he could taste was limited. Not long after came our nemesis in Genesis. He scammed well, man fell, damned to hell. The whole human race—he represented it. Fooled by the serpent, man through his work, woman through birth—even the earth ruled by the curses. But instead of a wake immediately. God said her Seed would be the One to crush the head of the snake. Yo, wait what is this? Whoa, a gracious gift! In Jehovah's faithfulness He clothed their nakedness. This was so they would know their Savior's kiss and bliss. But first, many growing pains exist suffering in the worst form, ugly deeds. Eve's firstborn seed made his brother bleed. Indeed things got progressively worse. Every section of the earth is been affected by the curse. And though God's judgments against sin were gory, praise the Lord! It's not the end of the story.

Next scene: man's sin was extreme. God gets steamed, man gets creamed. The Lord is so Holy that He drowned them in the water. Fire in the valley of slaughter – Sodom and Gomorrah. But at the same time, He's so gracious and patient that from one man He created a whole nation. Eventually enslaved by the mentally depraved, they cried out to the only One with the strength that He could save. He brought them out with signs and wonders – satisfied their hunger. Then He appeared on Mount Sinai in thunder. Where He laid down the law for God-ruled government. Commonly referred to as the Mosaic covenant. Sin was imputed. So for man to know he's unrighteous, God instituted animal sacrifices. This was to show our constant need for atonement. And when it came to sin, the Lord would never condone it. And when His people disobeyed and went astray, He raised up prophets and kings to lead them in the way. But they would get foul with their idolatry—wet and wild prophecy—send them into exile. To take their punishment like a grown man. Then with His own hand He placed them back in their homeland. And while in their forefather's land they dwelt, they awaited the arrival of Emmanuel.

After 400 silent years filled with sighs and tears. In Bethlehem the Messiah appears. God in the flesh—Second Person of the Trinity. At thirty begins His earthly ministry. Baffling cats with accurate, exact facts and back-to-back miraculous acts. A stumbling block to the self righteous. But the humbled—His flock, said “There's no one else like this.” He came from heaven to awake the numb. Demonstrated His power over nature, son. A foretaste of the Kingdom and the age to come. But the reason He came was to pay the sum for the depths of our wickedness, our wretched sinfulness. Bless His magnificence! He is perfect and innocent. Yet He was wrecked and His death. He predicted it. Next He was stretched, paid a debt that was infinite. He said that He finished it. Resurrected so the elect would be the recipients of its benefits. Through faith and penitence we get to be intimate. His grace is heaven sent, it never diminishes. Now the Holy Spirit indwelling is the evidence for heaven's future residents who truly represent Jesus, the Author, Producer, Director, and Star of a story that will never, ever end!

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