**I have a Theory….**

By

Bill “The Book” Richardson

I am only an average writer, and I have to rough out these articles first in my head and then on the computer. Generally, about a week later, I go back and reread and edit my ramblings. I bring this up because at least at the time of the first edit, it appears that my fingers still knew how to type the word “pigeon.” However sometime between then and now I seem to have lost that skill. Unfortunately, when one decides to write about pigeons, one tends to use the word quite often.

My wife had a simple explanation; it’s, as she put it, “because you are stupid.” Well, it seemed a little harsh at the time, but later she suggested that I add “pigeon” to the spell checker, which I did. However, in doing so, I misspelled it there and now it likes the bad spelling as well. Of course, her response to that was almost identical to that of my editor, “refer to the first explanation.” My method of taking care of the problem is to place the burden on you the reader. Should you ever see the word “pigeon” spelled “pigoen” you will of course now know the reason. My suggestion is that you cut this out and tape it to your computer.

I thought it would be fun to take a break from breeding methods and discuss the subject of theory development. Not every subject is as fun as every other, and, to you the reader, this may be one of them. Remember the saying, “Give a man a fish and he has a meal, teach a man to fish and he will never go hungry.” Well today, we are going to discuss theory development, and it is very much in line with “teaching a man to fish.” If you know how to develop and prove a theory, then given enough time, you can figure out almost anything.

What fascinates me about many fanciers is that they indirectly use theoretical methods in the race loft and yet they shy away from them in the breeding loft. Breeding and racing must be balanced if the fancier is ever going to reach any level of significant success. I know several fanciers that are great handlers as long as they can buy their way through the breeding side or work others into giving them pigeons. Breeding and racing take the same attention to detail, yet because the immediate glory is with the race team, most fanciers don’t take the time to observe their breeders. If you take the time to look at the long term greats in this sport, they all have one thing in common - a super breeding loft!

When I was younger, I used to go visiting lofts every weekend. I could never handle enough pigeons. I always got the feeling that many fanciers didn’t want to go out and handle pigeons with me, because I knew their pigeons better than they did. Nowadays, many fanciers don’t even bother following me out to their own loft. I was at a loft this weekend and the fancier waived me out the door as he always does. I spent three hours going through several hundred of his pigeons. I actually prefer being left alone because it gives me time to observe and observation is a very big part of theory development. I sort of feel sorry for those fanciers though because they are missing one of the most enjoyable part of racing pigeons.

Only recently, because of time, I have stopped something that I have done for years. I have mentioned in the past that until recently, I handled every pigeon in my loft every day. What I didn't tell you was about study night. I actually put lights in my stock loft so that from October to February I could have study night. Study night lasted from about 6:00 p.m. to 9:00 p.m. every Wednesday. Everyone knows that I want to be left alone on study night. (My wife adjusted a little too quickly because on about the second Wednesday, she locked me out of the house and went to bed. Then I had to wake her up and convince her that it was me. It won't happen again because I have a password: "Pigoen.")

Anyway, on study night, I pick one trait that I want to observe, and then proceed to beat it into the ground. It might be a bone measurement or something involving one feather on the wing, but whatever the trait is, it is compared against every pigeon in the loft. If there are differences, I split the pigeons into separate categories. By the end of the night, I attempt to develop a theory based on what I have observed.

Remember that my pigeons are always very linebred and therefore very similar, so any observation that I might make within my own loft is not enough to base anything on. If one pigeon has it, the chances are good that all or at least many have it. By the same token, because they are so similar, I am often able to discover new traits much faster because I see them over and over.

When I was a very young fancier, one of my teachers told me, "You develop theories within your loft and you either prove or disprove them in everyone else's loft. Just because you think you see it in your pigeons isn't enough to make it a rule."

I have a whole notebook of theories that I have developed. Many are solved and many are not. When I know I am going grading or selecting, I review my notebook and decide what I want to study. I have had many fanciers ask me why I took so long with a certain pigeon; it is usually because I am studying something. I don't think any theory can be solved without at least a thousand unique touches, which moves the fancier from observation to a realistic sample size of the population.

Theories are fun to develop and fun to prove or disprove. Theories will remain just that if they are not somewhat scientifically based. I say "somewhat" because we are lacking a very key aspect to any scientific approach, which is true statistical data on the entire population. Everything we do is based on a sample and samples can be extremely misleading. Even a sample of a thousand can be misleading when dealing with certain traits and conditions. However, for the most part sampling works extremely well.

The other day, I was visiting a student whose race team I am helping with. He wanted to show me a winner from a couple of weeks earlier. When it first hit my hand, my immediate thought was "too thin." The second pigeon was about the same. Then he handed me two that I had raised for him. They were better, but they had been more muscular to begin with. This was a 350-mile young bird race, so I told him that the ones I raised were not quite right, but the first two were just too thin. He passed it off as being a small sample until that night when he went to ship. He caught me at the club and said,

"Man, they were all light." As I explained to him, "Even a daily sample of handling four pigeons can make a real difference."

Here is an interesting thought. As a selector and grader of pigeons, I have personally looked at many thousands of pigeons in the last 30 years, both in my loft and in the lofts of others. Counting all the pigeons I have ever handled, including the ones I have handled multiple times, I probably have handled somewhere around a million pigeons. Of that million, probably ¾ of them have been my own because they have been handled over and over again. For instance, because I am already preparing next year's breeding lists, I have already handled all of my breeders three times today, and it isn't even noon.

When compared to the average fancier, 250,000 pigeons from other lofts is still a very large number of pigeons! How many pigeons do you actually have to look at to have enough statistical data to identify a pattern? Obviously the answer varies, but to prove our theories, we need to be visiting a significant number of lofts.

While the average fancier may frequently handle his own pigeons, he generally handles very few from other lofts. I would be surprised if the average fancier handled 500 pigeons a year that were not his own. Where this is true, the basis for any theoretical solutions is extremely limited simply because observations are limited.

So what are we attempting to observe? The answer is very simple—patterns. Pattern recognition revolves around observation, identification of a repetitive trait. Memory is critical to pattern observation! The longer we can remember something, the more chance that we will see it again before we forget.

When I was a youngster, my mom and I used to play a card game we called Concentration. In this game, all the cards were laid out upside down and in four rows of 13. We would take turns turning two cards over at a time, seeing what they were and then turning them back over again. The point of the game was to remember where the matching cards were located and turn them over at the same time. When you found a matched pair, you received a point. After a while, I almost never lost. In my mind, this game is very similar to how pattern recognition works.

When I believe that I have recognized a pattern, I focus in on it and study it to death. Most of the time, I don't have the information necessary to solve the problem on the spot, so I store the problem to memory, and then I wait for it to occur again. Each time it occurs, I build on my little mental database until I have the information necessary to develop a theory. Once developed, I first test the theory in my own loft and then in the lofts of others.

I am constantly working on a problem in the background of my mind. In fact, I have been working all day today on something that deals with one of De Welche's grandchildren. As we will discuss later on in an article about strategic planning, when there are a lot of facts or variables involved I like to sit down and write them all out and study each one separately. Sometimes I have to understand the relationship between facts or variables before I can actually work on the individual pieces.

My wife and fellow workers think I am a little strange because I can be in the middle of a sentence and then just drift away. When I come back, my coworkers are just looking at me, and they are still waiting for me to answer. (Don't they have a life?) My wife generally wasn't listening to me in the first place. Too bad they can't just tune in, then they would understand that great things really are going on in there. (Ask my wife.) Every now and then, I even rush from the room to write something down. Once, I was so excited I took the rest of the day off just so that I would have enough sunlight to observe something involving eyesign.

When I was 13 years old, I made one of my most significant discoveries about the eye simply because I was handed two pigeons with the exact same trait, back to back, and I was able to make the correlation. However, I had to wait almost exactly 10 years to discover why it was important. Patterns can be that simple to uncover, but the theory developed from the pattern may take years to solve. I have had a number of theories that have taken well over five years to solve. I guess by now you probably understand that developing and solving theories takes a great deal of time and concentration.

With the exception of time, almost everything has a beginning and an ending. Logical chains are no exceptions. When we discover a pattern that we want to explore, we are almost never going to be lucky enough to come in at the beginning of the problem. When we see a pattern, we see the overall design in a set of objects, not the individual pieces. Everything revolves around observation, pattern, question, theory, solution. We have talked about observations and patterns so what is the question? As every four-year-old kid can tell you, the question is usually "why," but it can also be who, how, when, where and what.

We use logic to explore a theory. Generally, theories involve a chain of logic. I look at logical chains as a horizontal line with inductive logic at the left and deductive logic at the right.

Let me take a moment to explain these two types of logic. Inductive logic moves to the right across the chain from a set of known facts to a potential answer. The major problem with inductive logic is controlling where we are going. In a way inductive logic can be sort of strange because it can be based on something that has occurred to predict something that will occur. It is often like driving at night without headlights. The longer the chain of logic, the more chance there is for us to stray off the road. Inductive logic is also a lot like starting at the beginning of a maze.

Deductive logic moves right to left from an answer to discovering the facts that lead up to the answer. It is based on what has occurred. A homicide detective uses deductive logic. He knows someone is dead, but he needs to determine how it happened.

To better illustrate these concepts, let's use an example that is more related to pigeons. Let's say that we have a pigeon that has proven itself to be a winner. Now let's say that we would like to study this pigeon's pedigree to see if we can determine why it is a winner. In reality, this is a perfect example of deductive logic because pedigrees are divergent. We start with the pigeon and then we look at the parents and then we look at the grandparents and so on. At every generational level that are more facts to consider.

At the same time, as we move farther backward through the pedigree, each pigeon is having less of an impact, so we must weigh how far back is too far back.

In the case of inductive logic, let's use the example of pairing two pigeons together. As I am not sure how everyone else does this, I will use myself as an example. When I am pairing pigeons, I am looking to the future. I always produce a vision in my mind of what I think I will get. In my case this tends to dovetail with the previous example of deductive logic. Assuming that I own them or have ever handled them, I think about every parent and grandparent behind the two pigeons that will be mated together, and from their basic setup I determine what is likely to happen. The more linebred, the easier and more accurate this becomes.

Most of the time, we will not come into a logical chain at the beginning or the ending. Why is starting in the middle of a logical chain a problem? When we identify a pattern, we are generally focused in on a single issue or trait. When we address its logical chain, we can either move left or right along its length. As a rule, the pattern we have observed will focus on a trait that the pigeon possesses. It is far easier to break down the components of a certain trait than it is to discover how the component itself fits into an even bigger picture.

Therefore, assuming that we don't accidentally start out at the beginning, we generally start out by moving to the left across the chain using deductive logic. As we move left across the chain, it is often very hard to know exactly how far we follow the facts. (As pointed out in the above example, how far back on the pedigree should we go?) Big pieces are made up of littler pieces and so on. However, eventually, we find what we believe is a starting point. We may have to test the position several times before we actually feel comfortable that we have found a logical beginning. Remember that anything that we might want to examine could actually be broken down to the sub atomic level, so we will need to draw the line somewhere.

I am not sure that everyone uses deductive logic followed by inductive logic or vice versa. However, by pitting one method of logic against another, it is amazing how often the answer comes up differently. It is often very easy for facts to look one way when we are breaking them down and another way when we are building them back up again. When we are done, the core facts or line of logic should almost always look the same no matter which method we are using. If they don't, it is time to go back and reexamine our methods.

From experience, or at least based on the way my mind works, deductive logic is far simpler than inductive logic. Where it is possible, the advantage in using deductive logic first is that it tends to expose at least a general path along the chain of logic. Building future factual relationships using inductive logic is much more complicated than identifying past relationships using deductive logic.

I don't want to leave you with the idea that I have never started with inductive logic. I have actually had to start there several times, but it is much more difficult to manage. On the bright side, even though this method tends to wander, on several occasions, the wandering has lead to several significant discoveries unrelated to the original topic.

Sometimes, you actually do have to start from the beginning. When this happens, I have learned the hard way that it is important to use something I call triangulation. Think of triangulation as being like the legs of a camera tripod or a tetrahedron.

Under inductive logic, for every fact there must be at least three supporting facts that are in agreement with each other. When all of the facts are supported on one level, I build on the next level and so on. Obviously, while I have settled on triangulation, the more supporting evidence the better; however, the more supporting evidence, the more time it takes to build the logical chain.

When I was a very young fancier, one of my teachers told me, "Rules without exception are exceptions to the rule. Rules are easy to make, but exceptions are much harder to understand, and they are meant to make you feel uneasy about your rules." However, if your logic is reasonably tight, it becomes very possible to run down each of the exceptions. If there are so many exceptions that this just isn't possible, then the theory probably isn't much of a theory to begin with.

So what do I want you to take out of all of this? In general, observation is a critical factor in the racing and breeding of pigeons. The more observant you are the better you will become, especially if you have a good memory. Observation is critical to pattern recognition. Pattern recognition is critical to theory development. We must constantly work toward building a factual basis for our theories. To do this, we need to employ inductive and deductive logic. Inductive logic helps identifies a number of facts that lead to a potential future answer. Inductive logic can be complicated because it is difficult to determine which facts to start with. Deductive logic starts with the answer and works backwards to identify the facts. It is generally the easier of the two methods and most commonly, it is the first method used. We can have all of the theories in the world, but we need a significant sample size to prove them out. This takes many visits to lofts other than our own.

Until next week!