#### INTO THE RIDE #103

## Then and Now





1972 Bottecchia 10 Speed

In 1972 I bought my first racing 10-speed, a 21-pound Bottecchia from Italy. The bike was outfitted with tubular tires, Stronglight Crank, Weinmann brakes, and Campagnolo Nuovo Record derailleurs. And after 39 years the bike still works. And I have to ask myself: what have we really done to make bikes better in the last 39 years?

## **Frames**

Frames have gone full circle, the "steel is real" crowd was right; 39 years later, and this bike is still intact. Many retro bikes feature the same lines and materials of this bike. Only a few of the new retro bikes feature lugs, which is odd, because lugged frames were common because of production ease. The butt-welded frame is king in either steel or aluminum and has proven road worthy on our bikes for over 30 years (thank goodness!). I wonder if carbon frames will have such a legacy? (Few have lifetime warranties.) Many believe carbon is the best thing yet, and for frame makes, it may well be. It gives us a chance to sell you another bike maybe 10 to 12 years down the road.

Frame geometry is a bit longer in wheelbase compared to some of today's racing bikes. Overall the design is still relative, and the ride and handling support that. Compared to the Alterra it is short (more on this below).

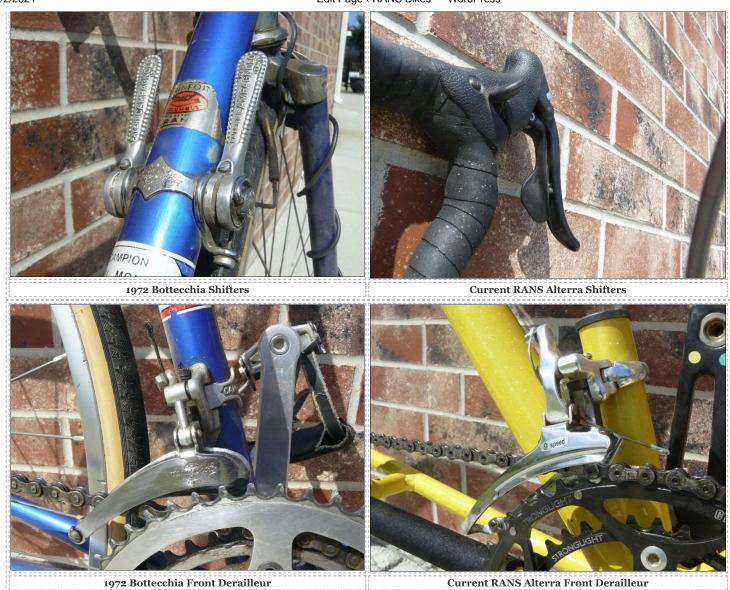
Both bikes use round tubes. Looking at road bikes today, few have the simple round tubes, unless they are vintage or retro attempts. A round tube is still the best for resisting torsion, second in line is the oval, and only if it is not too much of an oval. Anything beyond that is just style and not substance. This makes the Bottecchia frame still relative today.

The Alterra is 7005 Aluminum alloy, butt welded via T.I.G., resulting in a very sturdy but light frame. The geometry is relaxed and longer in wheel base by at least 8". The longer wheel base takes out the harsh ride most experience in aluminum frames. The frame is tight, no bottom bracket sway under hard climbs and interestingly enough, so is the Bottecchia frame. Both frames score well in being good climbers and fast off the chocks. Where the Bottecchia falls behind is in absorbing road shock; the Alterra is much smoother. This of course is a combination of design difference, not specific to wheel base. Other factors include: Seat, body position, and height of handle bars.



# **Shifting Gears**

This is a big area where designers have pushed for advances, and won. The efforts to ramp chain onto sprockets, thin chain to pack in more gears on a cassette, and design sprockets to smoothly shift have all paid off. Indexed shifting started out as a joke. I used to love the down tube shifters, being friction type; it is easy to adjust away noise for misaligned shifts. The problem is you have to take your hands off the handlebars to shift. And it simply takes more time to shift. Riding the Old Italian exposed how spoiled I have become shifting a well-tuned bike. I never thought that was a big deal until my test rides. It was clumsy, but after a few days I was getting better. In the end though, I had to admit, today's bikes have much better shifting, because even with new cables and lined housing, the Old Italian still comes in second here.





# Chain

The chain on the Old Italian is a hefty, 5-speed chain. Back then we were delighted to have 10 speeds. The Alterra has 18 speeds and a much wider gear range. 5-speed chains are heavier, but very sturdy. The new chains should be stronger, as there are claims of better steel available, but in practice, this may be hype. New chains seem flimsy, compared to the old 5-speed. I think when it comes to run-of-the-mill chain, there has been little advancement.

## **Cranks**

Both bikes have Stronglight cranks: carbon on the Alterra, and alloy on the Bottecchia. The old Stronglight crank has no ramps or pins, nothing fancy at all, just a simple crank that has spun at least a trillion times. The bottom bracket on the old Stronglight is the square hole tapered shaft. You can pull all this apart with a simpler crank puller and repack the bearings. You can also adjust the pre-load on the bearings, all things you cannot do on the Carbon Stronglight crank. I doubt that in 40 years the Carbon crank will be around. My Alloy Stronglight stands a good chance of still being useable though. Did we advance in crank design? I think so. Better shifting is the main reason, larger spindles for less power loss, and less weight. The carbon Stronglight weighs right at 1 pound for the whole assembly, including the bottom bracket.



## **Brakes**

My Zero Gravity brakes on the Alterra are amazing. They stop the bike with little pressure on the levers and have a very natural modulation. The Bottecchia has the original Weinmann side pull brakes. The pads have been replaced a few times. Compared to the Zero Gravity brakes you can feel the sponginess of the long reach calipers. In 1972 the Weinmann brakes were not that high end, but the bottom line is, brakes have improved over the last four decades; not in leaps, but short little gripping bursts.



## Wheels, Tires, and Tubes

The bike came with alloy rims, the box type for tubular tires. I developed an innate skill at fixing these light and delicious-to-ride-on tires. But that faded fast, as clinchers improved. Even with 39 years of design development, it is still hard to beat the stock wheels that came on this bike. New wheels have been made from all sorts of fancy materials, but alloy rim, stainless steel spokes, and alloy hubs are still the mainstream wheel design. Maybe some rims are lighter and stronger, if the wheel maker has chosen to use any advances in available alloys; but overall, the wheels are too close to call.

The tires and tubes on both bikes are current. The good news here is that for 4 decades the tire size is available. That in itself is a rare jewel and to be considered for some sort of medal.

## **Handlebars**

On the Alterra are wider drop bars and a much stiffer riser. You feel confident pulling on these bars for any kind of body English you want to throw out there. On the Bottecchia the bars are narrow and the stem is spindly. Even though I don't feel or see any movement, the set up does not encourage me to get crazy. This is probably a good idea, since one thing about aluminum parts is that they do eventually break. So I ride a bit less aggressively on the Old Italian. I also keep asking myself: when or how did this feel comfortable in the first place? The bars seem very low, which they are compared to the Alterra. And being so narrow makes me wonder if I was less wide at one point too. The wider, higher bars on the Alterra are so natural, with much more comfort and control. I am sure if I rode the old bike as much as the Alterra some of this would diminish, but in the end I have to believe we have made slight gains in handle bars.



1972 Bottecchia Handlebars

# Seats/Saddles

There are hundreds of patents on better bike seats. Most all of them avoid the first step to solving the problem. You need to change the bikes geometry to effectively change the seat comfort. Recumbents are proof of this, and our CrankForward line is further proof of this notion. The Bottecchia has a new Brooks saddle, which is far from being broke in. The original saddle I traded back to the bike shop, and slapped on a Brooks. It totally conformed to my body, just like they say a good leather saddle does. After the bike went into less and less use, the original saddle became frail, and eventually fell apart. It is sad, because I doubt if I will ride the new saddle enough to break it in. But the saddle discomfort is how we got here. I was the ripe old age of 28 when, for the first time, I got saddle sores. That discomfort, among other things, inspired me to design the Stratus. Recumbents have been a big part of RANS since that day forward, and will be into the future. The interesting part of this quest was to recreate that feeling the Old Italian gave me from first time I spun up the crank. The first time I spun up the crank on the Alterra, I smiled and realized I had finally eclipsed the Bottecchia.



In the end the experience was a wonderful trip into my personal past, because the bike and I have had many wonderful adventures. A big part of me wanted the Old Italian to score well. But as many first loves go, they earn a place in our lives, but maybe not an everyday place. It was like driving a fully restored vintage car. It still gets you from point A to B, but you find yourself missing all the creature comforts and other improvements that years of design practice have accomplished. As creatures of consumption, we will always want the new and improved. As creatures of habit we will always reach for the things that were a big part of our lives, and hope at least in some form, they are still out there. Until next time, ride safe, and stay into the ride.



# 1972 Bottecchia with RANS Old Style Toe Clips

## **SUMMARY LISTING**

## **Alterra Likes:**

- 1. 18 speeds
- 2. Solid feeling handlebars and stem
- 3. Greater stability due to lower CG
- 4. Seated climbing is exceptional
- 5. Seat on the fly adjustability
- 6. Easy to mount
- 7. Great handling
- 8. Good acceleration
- 9. Good climber
- 10. Smooth ride
- 11. Great power transfer
- 12. Seat comfort
- 13. Riding position
- 14. Easy to mount and dismount
- 15. Light at 18.5 pounds

## **Alterra Dislikes:**

- 1. Less of an aero position
- 2. Shifters
- 3. Unknown how long components will last, all sealed bearings, not serviceable other than replacement

## **Bottecchia Likes:**

- 1. Fairly light at 21.25 pounds
- 2. Able to service all bearings
- 3. Great handling
- 4. Good climber
- 5. Good acceleration
- 6. Better aero position
- 7. Almost all original equipment still working!
- 8. Life time steel frame

## **Bottecchia Dislikes:**

- 1. Slow shifting
- 2. Have to remove hands from handlebars to shift
- 3. Flimsy feeling handlebars and stem
- 4. Hard to mount and dismount
- 5. Saddle is not as comfy
- 6. Multiple riding pains
- 7. Harsh ride compared to Alterra
- 8. Higher CG less stability
- 9. Only 10 speeds

