Mass Loss versus Mass Gain Phenomenon in Nature

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April 18, 2017
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Abstract: It is presented an extremely easy paper to understand to explain that in nature, there are mass gain phenomenon and there are mass loss phenomenon. Clarification is presented so that the nature of these types of phenomenon are well established. This paper utilizes a simple rule of nature concerning physics, the conservation of mass.

In nature, things can get really big if you add more mass than is lost constantly. Think of a human being. I did not start out in life as 6'1" weighing in at 191 lbs, (187 cm/87 Kg). I was extremely small, I was essentially microscopic, as a human egg is .002-.004 milligrams, and .15-.2 millimeters in diameter. To calculate my weight in milligrams it would be 87,000,000 milligrams. Take that and divide it by .004, which would mean I now literally weigh 21.8 billion of myself as an egg. I am at least 21.8 billion times the mass of when I was an egg. How did I get to be so incredibly massive in comparison to my beginnings? I am a mass gain phenomenon when I grew up. I gained more mass than I lost, by getting nutrients into my body. I grew to incredible, almost unbelievable proportions and then I leveled out. Good thing I did not continue growing at that rate I was as an egg to fetus, I would be a good match for Godzilla after a year or two. Every adult human is at least many billions of times larger than they were when they first started out. This is a proven science fact, and has been since long before I was born.

This being said, in nature, since we have cases of mass gain phenomenon such as human growth, we should ask ourselves, are there any observed cases of mass loss phenomenon? Sure! Stellar evolution! Stars start out as very, very large, and lose their mass constantly over very, very long periods of time. Since more mass is lost than is gained at a continuous interval, we should expect these things to shrink to tiny proportions relative to close to their beginning sizes. The Sun, being only 333,000 times the mass of the Earth, can easily lose that mass because it is not being replaced. Conceptually mass loss could continue indefinitely until it completely disintegrates, but that will not happen because it will begin to form a solid iron/nickel core, but more on that later. Using the simple principle of conservation of mass, if a stellar body is massive and loses mass, and does not replace the mass, then it will become less massive. Like taking a bite out of an apple. If you take a bite, the apple will become less massive. Just do not try to put that chewed up part back onto the apple, that would be gross.

So what we have learned here is that if something gains mass faster than it loses it, then it will become more massive. As well, if something loses mass faster than it gains it, it will become less massive. Stars and humans are opposite in that regard, as well are the same in a way. We both constantly radiate, we both require time to do our growing/shrinking, and we are both fantastic, extremely complex phenomenon (which is subjective really, but shared by many people). To conclude, which is the whole point of this paper, have we ever observed a star that has lost the vast majority of its mass? Of course. It can be argued that we are actually standing on one. Earth is the remains of the process of stellar evolution, a mass loss phenomenon. As well, it could also appropriately be argued that if astronomers accept that the Sun will not become much less massive (due to conservation of mass), then they are not in agreement with the very fundamentals of nature, as we actually observe stars that have lost their mass in large amounts, they are called "planets/exoplanets". So they have to do two things, ignore observations of nature, and ignore well established physical laws.