

# IMAGINAL CELLS AND A NEW DAWN

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Imaginal cells are the cells that lay dormant in the caterpillar until the end of its life, these cells have the DNA of the butterfly written into them. I first heard about imaginal cells when my mother was dying of MSA, a degenerative brain disease called Multiple Systems Atrophy. This disease is very rare and caused by a prion\*, the newest prion to be discovered since mad cow disease in fact. For seven years her brain slowly folded in on itself, this slow fade had very painful effects on her body; there were multiple surgeries for broken bones, spasticity to one side of her body and eventually losing the ability to walk, talk or do much other than sit in a chair. When her stomach collapsed and we were told she could no longer take food or water from fear of choking, they gave her 24-48 hours. Once she surpassed this, they gave her another 24-48, again she passed it. This went on for seventeen days. No one, especially not the doctors could understand how her already very frail body was able to hold on so long with no food or water. I knew it was my mothers will to live. I think partly it was out of love for her family and partly fear of the unknown, but either way she did not want to go.

All I could think to do to comfort her during this time was to sing to her the songs I could remember her singing. I sang 'Stand by Me' by Ben E. King, "What'll I do" by Irving Berlin, "Blue Bayou" by Crystal Gayle, and a lot of Elvis versions of gospel songs. This would always bring her heart rate and breathing into a steady pace.

When I wasn't singing to her I was watching nature shows, trying desperately to remember that there was beauty in the world. This is where I learned about imaginal cells, or discs, and the integral role they play in the transformation from the caterpillar to moth or butterfly.

As a child I was taught that the metamorphosis occurred by the caterpillar "becoming" a butterfly. Visual diagrams would depict the inside of a cocoon, the caterpillar hangs upside down and suddenly they sprout wings and antenna. The enormous gut shrinks down and "voila" out pops a butterfly. This is not what happens! The caterpillar doesn't grow wings (in some cases there are prototype wings) but before the caterpillar can transform it must eat 90% of itself and liquify.

When the caterpillar has grown as much as it will grow and begins to get soft and slow, these imaginal cells start to activate. The imaginal cells vibrate a new frequency, one that has written into it the DNA of a life of flight. The caterpillar's immune system notices the different vibration and attempts to fight it off, thinking it's an illness. However, the imaginal cells start to link up and

exchange information. As they form strands and increase in strength the immune system gives up. The caterpillar sheds its final skin.

When the caterpillar molts for the last time, it must digest itself inside the cocoon. Only the imaginal cells and a small part of the nervous system will survive this process. The imaginal cells then use this nutrient rich bug soup to VERY quickly split, multiply and form into the wings, antenna and body of the butterfly. This process usually takes about fourteen days, depending on the species.

An experiment involving shocking caterpillars with tiny jolts of electricity while they smelled certain scents, proved that the undigested nerve system can retain memories that are passed on to the butterfly. When the butterflies avoided those smells after the metamorphosis, they surmised that they must remember the trauma.

It is important to note the symbiosis that exists for these two creatures. The butterfly needs the caterpillar to become itself, just as the caterpillar needs the butterfly to go and mate and lay eggs.

Butterflies are only alive about thirty days and their mission is to mate and lay as many eggs as they can. A lot of the eggs get eaten before they can hatch (sometimes by other caterpillars) and a small percentage actually make it back to the pupa stage.

It's easy for me to see why in those seventeen days I became enthralled in this idea. It explained a lot of the beautiful and grotesque nature I was watching occur in my own mother's body. A war under the skin for the spirit. A liquifying of sorts so she could become a butterfly.

When I think about how scientists say they had to make up this word, imaginal cells, because it doesn't occur anywhere else in nature. I don't think this is quite right. On a micro level, when a woman is born she holds in her all the eggs she will have in this life, and inside of those eggs are more eggs. Is this not the DNA of a new life?

On a more macro level, I believe that we are the imaginal cells. When we connect, when we share our stories and heal together, when we form these strands that reach back and forth in time and space we activate the discs. The discs to bring our consciousness higher and into the butterfly dimension. We too must use the nutrient rich carcass of the dying ways that are no longer serving us to grow our wings and remember that we can fly. Remember that we are beings of infinite love and light and live in the harmony that runs from our spines into the cosmos. From the cosmos to the atoms in our cells and back round again.

Be the imaginal cell.

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\*Prion is a proteinaceous infectious particle. An infectious protein particle similar to a virus but lacking nucleic acid. It is actually a misfolded protein -- which causes a normal cellular protein to change its shape to the misfolded form.