Is the global segregation of star formation rate reversed at Cosmic Noon?

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It has long been known that the dense regions of the local Universe are preferentially inhabited by passive, red, elliptical galaxies, while star-forming, blue, spiral galaxies prefer low-density regions. Beginning with Cucciati (2006), several studies have pointed out to the reversal of this segregation around redshift unity, but there is no consensus yet on this reversal of segregation. I will synthesize the 30+ studies on the topic, and present very recent work on the 3rd data release of the Hyper Suprime-Cam survey on the Subaru 8m telescope. As many, we considered the rest-frame $U–B$ colors to differentiate between star-forming and passive galaxies, and analyzed the surface number densities of these two galaxy classes around of order 1000 clusters and around as many luminous galaxies, at different redshifts up to cosmic Noon (z=1.4). We find little evolution of segregation, meaning that at Cosmic Noon, the distribution of blue satellites is roughly 4 times more extended than that of red satellites. We suspect that part of the debate lies on the definition of environment: global or local, with close pairs subject to greater tidal forces compressing the interstellar gas and producing star formation at cosmic Noon compared to later epochs. I will finish by discussing the prospects for progress to larger redshifts with Euclid.