

2-tuple encoding to HSV

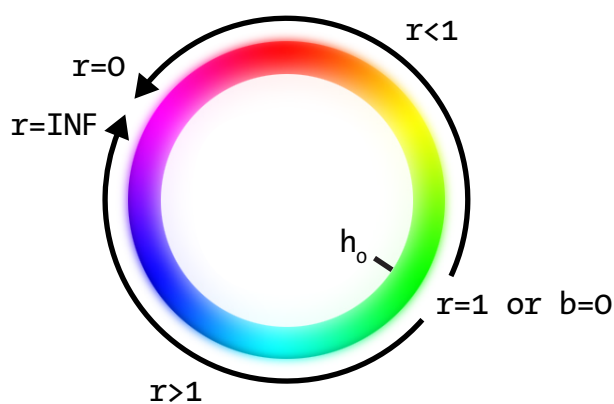
Krzywinski, M., mkweb.bcgsc.ca/tupleencode

A 2-tuple (a, b) is encoded to an HSV color.

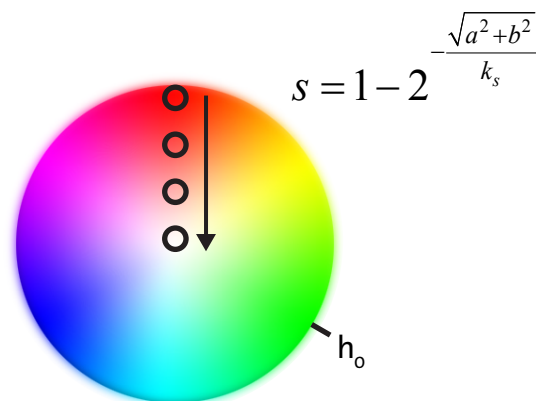
A reference hue h_0 is selected and a hue progression orientation $\text{dir}=-1$ or $\text{dir}=1$. Hue is determined by ratio $r=a/b$.

Saturation and value encode the Euclidian size of the tuple.

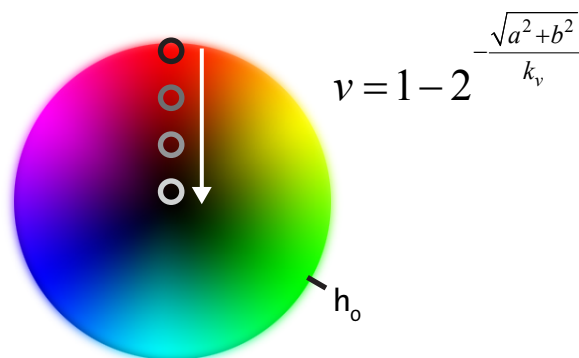
Hue is determined by ratio of components, $r=|a/b|$. Orientation dir controls direction of progression.



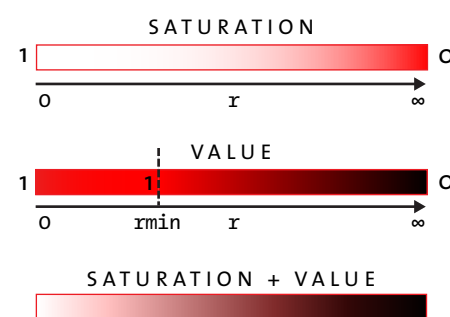
Saturation encodes the size of the tuple.



Value encodes the size of the tuple, independently of saturation.



Rate of saturation and value increase can be independently controlled.



Saturation and Value profiles as function of tuple size and k

