## Colour Language

On the planet kårrot', humans are not the only sapient beings. Octosquids, who are named after their mix of typical octopus and squid features, are an amphibious species which occupy the western hemisphere of the planet. They live primarily in the Western Ocean (placeholder name), one of the two shallow, brackish oceans/seas on the planet. Living on land is uncomfortable for octosquid, and they need to be very close to a water source. Despite this, the advantages of fire (for the octoquid, mainly metalworking) and the advantage of cheap human labour makes the occasional land visit worthwhile. In fact, the most powerful nations in octosquid politics have always been coastal city-states since contact with humanity. An octosquid is about 2.2 meters long. Its natural skin colour ranges from slightly pinkish to greenish grey; when not changing colours, the underside is always lighter than the topside. However, an octosquid's skin colour and texture can change at will. It possesses eight cephalopod limbs, six resembling the octopus' arms (two neat rows of suckers running down), and two resemble the squids' tentacles (cluster of barbed suckers). Unlike both octopuses and squids, octosquid can see the difference between hues. The head is much the same as that of an octopus. It makes up about 3/8 of the octosquid's length at normal size.

Octosquid communicate using a sequence of colours. There are two qualities that determine a 'phoneme': relative luminosity and saturation. These are described by what is called l-gradation and s-gradation. Relative luminosity means luminosity relative to the l-marker, which starts each word (similar to a silence-space between sounds). This marker is always the darkest colour in the word, and it is called black for convenience (despite rarely being black). Like in spoken languages, there is technically infinite space between sounds, but grades are usually numbered. The bullet separates the l-gradation from the s-gradation: 1•0 indicates one l-grade zero s-grade. In all octosquid languages, zero l-grade indicates black and zero s-grade indicates no colour (just black, white, or grey). Zero l-grade always means zero s-grade, so 0•0 is abbreviated as 0. When the s-grade is 0, it and the bullet are not written. How many l-grades and s-grades there are varies by language. The highest l-grade in a language is white. The highest s-grade in a language is a fully saturated colour. A fully saturated colour is always in the middle of the luminosity spectrum. The highest grades are represented by  $\infty$  instead of a number. In some languages a colour is also distinguished by whether it is yellow, blue, or red/green. This is represented by a diacritic on s-grades higher than 0. For example, for 4•3, yellow, blue, or red/green would be represented as 4•3<sup>-</sup>, 3•3<sup>-</sup>, and 4•3<sup>-</sup> respectively. Phonemes are separated by  $\infty$  (except for 0 and  $\infty$  which do not need to be separated).

An example of a word in such as system is  $0@3 \cdot 3@3 \cdot 7@1 \cdot 4@2 \cdot 8$ , the word for 'speaker of a language' (whether signed, written, coloured, or spoken) in Proto- $0@3 \cdot 3@2 \cdot 5@2 \cdot 7$ . It might look something like the picture on the right. The bright blue at the bottom is used as filler space. The picture is read right to left, top to bottom.

All octosquid languages have the following phonemes:

 $0, 1, 2, \infty, 1 \cdot 1, 1 \cdot 2$ 

0 always occurs **only** as the l-marker.

A phoneme chart may look like this (chart of phonemes in Proto-3•3@2•5@2•7):

0	1	2	3	4	5	$\infty$
	1•1	2•1	<b>3•</b> 1	4•1	5•1	
	1•2	2•2	3 <b>•</b> 2	4•2	5•2	
			3 <b>•</b> 3			
	1•4	2•4	3 <b>•</b> 4	4•4	5•4	
	1•5	2•5	3 <b>•</b> 5	4•5	5•5	
					5•6	
	1•7		<b>3•</b> 7	4•7	5•7	
		2•8		4•8	5•8	
			3•9	4•9		
			3•∞			

Grey indicates physically impossible colours, and light grey indicates colours that are not phonemic.

There are no syllables and there is no stress.								