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Effect of language on discrimination between warm and cold color hues.

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Abstract: It has been argued that linguistic color categories, despite their number can vary between languages, are themselves universal and based on physiologically conditioned distinctions. Recently it has been demonstrated that Russians, whose language has separate terms for light and dark blue, discriminate faster between objects of corresponding hues than Englishmen. In our study we tested if language also conditions the physiologically more sound discrimination between cold and warm hues. We compare Russians to speakers of Komi language, where green and yellow make up the same category and there is only one category for blue. Russians outperformed Komi in discriminating between light and dark blue objects as well as yellow and green objects. However Komi were faster in discriminating yellow and green objects than light and dark blue objects. Therefore, language influences discrimination between warm and cold hues, but this impact is weaker than in the case of two cold hues.