## **Postnominal Training for Colors**

As it happens, English color words may be especially difficult to learn, because in English we throw in a curve ball: we like to use color words "prenominally," meaning before nouns. So, we'll often say things like "the red balloon," instead of using the postnominal construction, "the balloon is red."

Why does this matter? It has to do with how attention works. In conversation, people have to track what's being talked about, and they often do this visually. This is particularly so if they're trying to make sense of whatever it is someone is going on about. Indeed, should I start blathering about "the old mumpsimus in the corner" you're apt to begin discretely looking around for the mystery person or object.

Kids do the exact same thing, only more avidly, because they have much, much more to learn about. That means that when you stick the noun before the color word, you can successfully narrow their focus to whatever it is you're talking about before you hit them with the color. Say "the balloon is red," for example, and you will have helped to narrow "red-ness" to being an attribute of the balloon, and not some general property of the world at large. This helps kids discern what about the balloon makes it red.

But, you might wonder, won't a kid figure out that the red in "the red balloon" has to do with the balloon? How is this different? There's a lot of theory that goes into this, but to give you a rough idea, in the first case ("the balloon is red"), kids learn that "red" is the name of a property, like wet, or sharp, while in the second case ("the red balloon"), kids learn that "red" is more like a proper name, like "Tom" or "Heather." Think about it this way: knowing someone's name doesn't usually tell you that much – it's just a label that happens to get attached to them – but knowing whether someone is funny or boring, or whether a dish is mild or spicy, tells you a lot. Funny enough, whether kids learn "red" as something like a name or something like a property, depends entirely on how their attention is directed when they hear it.

That was the idea, anyway, and the prediction was simple: using color words after nouns should make colors far easier to learn, and should make kids far faster at learning them. To test this, we took a couple dozen two-year olds and gave them some quick training on color words. Either we trained them with prenominal sentences (the standard variety) or postnominal sentences (helpful, we hoped). In both cases, we would simply show them familiar objects and say encouraging things like "This is a blue crayon" or "This crayon is green." Then we would test them again, with the same standard battery.

We found that the kids who got the postnominal training improved significantly over their baseline test scores, whereas the ones who got the prenominal training still looked just as confused as ever. Given that previous studies hadn't found much improvement after hundreds of explicit training trials, it was hard to believe that such a simple manipulation could make such a clear difference—and yet, it did!

Which brings me to the simple, take-home point: if you want to make your two-year old the color-naming talk of the party, watch your tongue. It might seem faster to ask Charlie not to pop "the red balloon," but if you want him matching colors with aplomb, best rephrase with, "I mean, the balloon that is red."

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## Postnominal Training for Colors

The duck is yellow.



The car is red.



The bird is blue.



The frog is green.



The flower is purple.



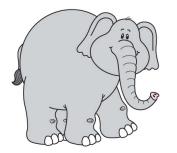
The hand is orange.



## The heart is pink. (



The elephant is gray.



The boat is brown.



The lion is white.



The sheep is black.

