Guide your readers' attention using emphasis!

This document accompanies my tutorial video, "5 Ways to Guide Your Reader's Attention using Emphasis."

We have learned that when telling your science story, you want to guide your reader along on a journey. You set out raising curiosity for the big picture issue and walk the reader straight towards the gap in the literature you are addressing. You motivate and explain your plan to close the gap and then show them what you found out and concluded. But it doesn't end with a well-structured series of logical steps; additional ways to focus the reader's attention on the goal exist.

Deliberate application of emphasis allows you to focus your reader's attention on the crucial information while de-emphasizing those parts that you need to mention but aren't helping the story move along.

Here are five ways to emphasize (or de-emphasize) information in your text:

I. Positioning information within a sentence.

In a sentence, the position that receives the most emphasis is the end. The beginning is the second most emphasized position. And if you want to de-emphasize something, put it in the middle.

EXAMPLES

Other models estimate the strength of a perturbation by **the resulting error in hand position.**

Other models use the error in hand position to estimate **the strength of the causal perturbation.**

The strength of the causal perturbation is estimated by the resulting error in hand position in **other models.** (PASSIVE VOICE!)

II.   Positioning in complex sentences.

In a sentence with a main clause and a subordinate clause or a phrase, the main clause receives the most attention, while subordinate clauses receive less - phrases very little.

But, remember that positioning is still in play, too!

EXAMPLES

While other models use hand position error to estimate perturbation strength, **_our model uses visual feedback._**

(MAIN CLAUSE AND END POSITION ALIGNED)

Our model uses visual feedback to estimate a perturbation's strength, *while* **other models use hand position error**.

(MAIN CLAUSE VERSUS END POSITION - ambiguity)

III. Wordiness

The more words you use on an issue, the more important it appears in a text. Unfortunately, one tends to use a lot of words to explain flaws away. Doing so might lead the reader to overestimate its impact on your conclusion. On the other hand, you might want to add even empty words to prop up the aspects you want to emphasize.

EXAMPLES

While our model uses visual cues, other models estimate the perturbation strength by its resulting error in hand position.

While our model uses visual cues, other models estimate the perturbation strength by **the prediction error** *in hand position* **it causes***.*

While our model uses visual cues, **models of force-field adaptation generally assumed that we estimate** *the strength of the perturbation* **force** *from the prediction error of hand position it causes.* (I think this is overdoing it)

IV. Repetition

Wong et al. "Postsynaptic serine racemase regulates NMDA receptor function" is a textbook example for using repetition throughout a paper to make it impossible to overlook the take-home message. It is stated in the title, the abstract, the introduction, several times in the result section, at the beginning of the discussion, and at its conclusion.

Flaws need to be discussed in the paper, but only in one place. There they should be dealt with conclusively and not mentioned again (and be implicitly taken into account for your conclusion).

V. Buzz Words

Some words carry so much baggage; it doesn't matter where you put them. They will receive attention.

In Judy Swan's lecture onYouTube - the best I've seen on the topic of emphasis - she exemplifies this with the following sentence:

Although Fred's a nice guy, he commits genocide.