Gary Lupyan
Department of Psychology
2 NSF
4 intramural grants from UW-Madison
2 sub-awards from Templeton
...~$1.6 million)
Readability
Believability
Feedback
Some useful tools
“Agreed. We fund only those proposals we can understand.”
Make it easy to read

Jargon
Make it easy to read

Jargon

I used to hate writing assignments, but now I enjoy them.

I realized that the purpose of writing is to inflate weak ideas, obscure poor reasoning, and inhibit clarity.

With a little practice, writing can be an intimidating and impenetrable fog! Want to see my book report?

"The dynamics of interbeing and monological imperatives in Dick and Jane: a study in psychic transrelational gender modes."

Academia, here I come!
Make it easy to read

Jargon is (mostly) not about technical words

Cochlear implants (CIs) have provided a highly significant advancement for children who suffer from hearing loss.

Cochlear implants allow children who are born deaf, to hear.
Best-selling novels are often described as “page turners.” Best-cited papers and best-funded proposals are the same.

They draw readers in and lead them through the story — they flow.

A break in that flow can derail a reader and abruptly change a piece from “page turner” to “re-turner” with a rejection letter attached.
A proposal must convince reviewers that the topic identified in the opening is important and then compel them with the excitement of the questions posed in the challenge. If it fails to do this, it is dead.
When I review proposals I make a “no/maybe” cut by the end of the introduction, and if it’s a “no,” that is irrevocable. I then only read the rest to be able to give feedback on how to improve the proposal for resubmission. A good experimental design can never compensate for boring questions. A “maybe” at that first cut means the questions are exciting, in which case I read the rest to see whether the experimental design is adequate to answer them.
Readability

“If you haven’t told them in the first two pages, you haven’t told them.”
People who read grant proposals: is it my imagination, or is Palatino a more annoying typeface than Arial? (Too bad, it saves a lot of space.)

Are you writing in Word? If you change the line spacing to .95 in Arial you gain a lot of space and it is still legal. Just check that you have no more than 6 lines per inch 😊
Like · Reply · 6 · July 17 at 2:42pm

Doesn't seem to work for me...
Like · Reply · July 17 at 3:11pm

really?.... Format->Paragraph->Spacing->Linespacing = multiple = .95

So I'm new to the grant-writing business, but I kinda feel like the disadvantage of having a hard-to-read, eyestrain-inducing document outweighs the value of a few extra words.
Unlike · Reply · 2 · July 17 at 4:28pm
Table 1: Definitions of terms used

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>A mapping between forms (signals produced by a sender) and meanings (relevent to the intended message).</td>
</tr>
<tr>
<td>Composition</td>
<td>The degree to which a meaning of the whole can be deduced from the meaning of the parts. All languages are composed to a similar degree.</td>
</tr>
<tr>
<td>Theoretic Learning</td>
<td>A information transmission system in which individuals acquire a behavioral grammar by observing a similar behavior in another individual who acquired the same way. Characteristics that are difficult to learn/imitate are selected against. Compositional grammars have been shown to emerge spontaneously when grammars are transmitted via theoreitic learning.</td>
</tr>
<tr>
<td>Redundancy</td>
<td>The degree to which the same message is being communicated with correlated signals. Many grammatical patterns are immediately redundant because their construct information is already known to the recipient, e.g., subject-verb agreement, gender markings. Redundant systems are more compressible.</td>
</tr>
<tr>
<td>Ambiguity</td>
<td>The degree to which a message maps onto multiple meanings. In the linguistic domain, successful communication is achieved by relying on context and pragmatic information.</td>
</tr>
</tbody>
</table>

The results of this project will be integrated in Project 1. The continuous age-structured model in Project 1A will serve as a basis for developing qualitative predictions about the observed distributions and inferred historical language changes. By modeling age-structure patterns that can be gleaned from existing data, we will be able to further explain the mechanisms of selection between competing grammatical variants, e.g., the coding of future tense synthetically or analytically through the mathematical models. The spatial diffusion model from Project 1B will be used to study patterns of linguistic diversity that could plausibly emerge from movements of prehistoric populations with and without selection.

(8) Preliminary Data. We have previously published data showing that languages learned and used in larger populations tend to have more analytically grammars while languages learned and used in smaller populations are more synthetic [1] and the predictions above are motivated by this robust correlation. We have also found that languages in larger populations tend to be less redundant, as measured by Lempel-Ziv (1977) compressions of a parallel test (Fig. 1) and in another analysis of a dozen Indo-European languages for which there exist large-scale n-gram databases and analytical tools, e.g., n-gram search (96), we once again observed that population predicted the redundancy of language spoken by more people tended to be less predictable, e.g., given a word in a Czech speaker can predict word on the next greater combination of an English speaker. This pattern is expected if greater predictability (and hence redundancy) is selected against in more heterogeneous populations, but (presumably) this redundancy may enhance transmission in a small community that lacks normative learners by facilitating learning of the language by children who benefit from the added redundancy [57-60].

Project 2B: A Specific Case of Language Selection

In this project we examine a specific case of language divergence as a strong test of the hypothesis that language within the same region reflects adaptations to environments with different population densities. Humans possess the amazing ability to readily form a variety of different categories, from, categories like "clothing" which require focus on multiple dimensions, to categories like "things that are green," which require selective focus on one property and abstraction across differences. Over time, children become increasingly skilled at engaging in such selective focus on relevant information to the exclusion of irrelevant information—any ability tied to improvements in cognitive control (Hanani & Smith, 2000). Researchers have argued that word learning and labeling may be a key developmental driver of such cognitive control abilities (Kotovsky & Gentner, 1996; Smith, 1992). Evidence from atypical populations supports a connection between language and cognitive control (individuals with language impairments such as autism (Teck et al., 2009) and aphasia (Vigliolo, 1999) often have cognitive control impairments, pointing to the importance of understanding cognitive control processes and their development for understanding common language impairments. Importantly, there is a notable lack of mechanistic explanations for these associations between labels, cognitive control, and categorization that account for both neural and behavioral evidence. Therefore, the purpose of this proposal is to examine relationships between these processes, using low-language—one acquired—effects cognitive control in aphasic categorizers. In particular, to address how the label might support cognitive control and assess the determinants of this relationship, we will (A) examine behavioral and neural interactions between labeling and learning categories that require more or less cognitive control, and (A) assess the internal validity of the mechanisms driving this relationship.

Evidence that labeling drives cognitive control comes from studies of word learning biases in novel noun generalization (e.g., the shape bias). Most nouns share some object category organized by similarity in shape. Even early in life, children learn that objects are similar to each other on the basis of their shape. Recent work suggests that word learning provides the on-the-job training for attention that is the basis for attentional selectivity (Perret, 2004). Perret explored a shift in classification relating to children's changing cognitive control abilities; younger children tend to classify objects based on overall similarity (holistic classifiers) while older children classify objects based on similarity of one dimension (dimensional classifiers) (Sweller & Stuedman, 1977). Perret found holistic classifiers were significantly slower to learn categories requiring focus on one dimension (brightness) to the exclusion of another (size) than dimensional classifiers. However, when they heard novel labels during category learning, both groups learned equally quickly. Thus, labels facilitate children's learning of categories requiring focus on one dimension to the exclusion of others.

Unlike young children, adults can focus on one dimension to the exclusion of others even when not explicitly provided with verbal labels. However, substantial evidence now indicates that labels continue to play an on-line role in cognition of adults (see Lupyan 2012a for review). For example, verbal interference (Lupyan, 2006) and acquired impairments such as aphasia (see Vigolo, 1994 for review) have been shown to produce impairments in categorization by one dimension to the exclusion of other dimensions, suggesting differences in naming relative to differences in cognitive control (Cohen et al., 1980; Cohen et al., 1980; and Lupyan & Miran, in press). Interestingly, Lupyan's Label Effects study (2010) shows that labels for animal names alter online cognitive control. For example, once a person has learned the word “green,” perceiving the color will automatically activate the category label which in turn produces a more categorical perceptual representation of the color via top-down feedback, explaining, e.g., reported difficulties people have in making within-category color decisions (dissociation), e.g., selecting more of one color (dissociation blue vs. green, e.g., Roberson & Davidson, 2005). This view, labels facilitate category learning (Lupyan et al., 2007; Boge et al., 2012) and lead to faster object recognition (Lupyan & Thompson-Schill, 2012) because they selectively facilitate the representation of task-relevant features/dimensions. Together, these studies suggest that, even in adults, labels may play an important role in selectively representing category-relevant dimensions while suppressing representations of irrelevant dimensions. When language is impaired or otherwise engaged this selective focus is diminished. At its essence, categorization requires representing certain properties of an item while (temporarily) overlooking others (Harmon, 2005). In categorizing something as a pillow, we ignore (abstract over) its color. In categorizing something as green, we ignore (abstract over) its shape. Cognitive control—insofar as it is involved in the representation of task-relevant dimensions—may be especially important for learning categories organized along a single dimension—e.g., weight (Lupyan et al., 2012; Shockey, 2010; Ashby & Maddie, 2003). These categories, which we call “low-dimensional,” require learners to focus on one dimension and abstract from others. For example, to categorize an
Believability

THE GRANT CYCLE

HOW IT'S SUPPOSED TO WORK:

WRITE GRANT → GET $ → DO RESEARCH → PUBLISH RESULTS

(REPEAT)

HOW IT REALLY WORKS:

DO RESEARCH → GET RESULTS BUT DON'T PUBLISH THEM YET, CALL THEM "PRELIMINARY RESULTS" → WRITE GRANT TO DO WHAT YOU ALREADY DID

USE $ TO PAY FOR AN UNRELATED NEW PROJECT

OK, NOW YOU CAN PUBLISH RESULTS

GET $
Believability

Pilot data is about making people believe that you’re on to something.

They may disagree with your theory, but hey, data!
Feedback

Get lots of feedback

Take it seriously
What Peer Review Feels Like
(sometimes)

Well, that didn’t seem too bad...
Some useful tools

Organizational
Scrivener for writing

Introduction

Scrivener is an application for composing virtually any type of writing. It is the work of Keith Bowers, himself a writer who had been unsatisfied with all the writing applications he'd used over the years. He decided to teach himself programming and build his own unique writing tool. I and many other writers are very thankful that he did.

After more than two years of work, Bowers and his growing team at Literature & Latte recently released Scrivener 2.0. If you are familiar with the first version, you may not immediately notice any changes to the Scrivener screen, but believe me there are changes. The overview of additions and improvements takes six pages in the new manual. MacAppStore featured a delightful and thorough review of version 1.5 in March. Today we're going to take a look at how Scrivener 2.0 differs from its predecessor, and what that might mean for writers looking for a software solution.

Detailed Overview

(Inset screenshot overview)

I suspect that the allure of Scrivener has been responsible for almost as many people switching from PCs to Macs as the shortcomings of Windows. That was certainly the case with my switch. I recall looking enviously at the Scrivener website from my Windows XP machine. Here was software created by a writer, someone who had faced the same frustrations with other applications I had dealt with.  If Scrivener was not the holy grail of writing applications, it was darn close.
Zotero for references
Words Jump-Start Vision: A Label Advantage in Object Recognition

Bastien Boutonnet¹ and Gary Lupyan²
* Show Affiliations

Author contributions: B.B. and G.L. designed research; B.B. performed research; B.B. and G.L. analyzed data; B.B. and G.L. wrote the paper.


Abstract

People use language to shape each other’s behavior in highly flexible ways. Effects of language are often assumed to be “high-level” in that, whereas language clearly influences reasoning, decision making, and memory, it does not influence low-level visual processes. Here, we test the prediction that words are able to provide top-down guidance at the very earliest stages of visual processing by acting as powerful categorical cues. We investigated whether visual processing of images of familiar animals and artifacts was enhanced after hearing their name (e.g., “dog”) compared with hearing an equally familiar and unambiguous nonverbal sound (e.g., a dog bark) in 14 English monolingual speakers. Because the relationship between words and their referents is categorical, we expected words to deploy more effective categorical templates, allowing for more rapid visual recognition. By recording ERPs, we were able to determine whether this label advantage stemmed from changes to early visual processing or later semantic decision processes. The results showed that hearing a word affected early visual processes and that this modulation was specific to the named category. An analysis of ERPs showed that the P1 was larger when people were cued by labels compared with equally informative nonverbal cues—an enhancement occurring within 100 ms of image onset, which also predicted behavioral responses occurring almost 500 ms later. Hearing labels modulated the P1 such that it distinguished between target and nontarget images, showing that words rapidly guide early visual processing.
Some useful tools

Procrastination
and Distraction
The Internet

Research Paper
The Nuclear Option

Activating this option will block sites for the number of hours you indicate, independent of your Active Days or Active Hours. There is no way to cancel this once you activate it.

Which sites do you want to block?
- ALL websites
- ALL websites EXCEPT those on my Allowed Sites list
- ONLY websites on my Blocked Sites list

What do you want to block?
- The whole site
- Just certain types of content (smartphones)

For how long?
- 1 hour(s)

Starting when?
- Right now
- When my Max Time Allowed has been exceeded
- At a specific time

NUKE 'EM!
Shouldn't you be working?

Have you found StayFocusd useful? Please make a $10 donation!
Thanks!