Like any science, doing nursing research requires writing about it. The better the writing, the more effective the dissemination of the research and its findings. Yet apart from *Nurse Author & Editor*, little literature focuses on writing about research in nursing specifically, and the few handbooks on writing for nurses (eg, Oermann & Hays; Saver; Tornquist) address much more than style. Nonetheless, students in nursing research, even if skilled at writing clinical notes, may need to refine or refresh their mastery of style for writing research papers and dissertations. Their professors may need resources to teach style too.
Here I suggest a principle of English sentence structure as a pedagogical and evaluative tool to address the mechanics of writing for nursing research. In the world of English composition, drawing on the work of linguists (eg, Prince), it is usually spoken of as the given–new or old–new model of sentence structure, or the known–new contract between writer and reader. I draw especially on Williams’ elaboration of the model, which tells us that well-written sentences present two types of information, “given” and “new,” which together inform a logical, iterative sequence that yields what is often called the “flow” of written thought. This model is useful, because most of us intuitively recognize whether or not a text “flows” well, regardless of “grammar.” But few have consciously acquired an analytical model that tests how well writers establish and maintain that written flow of thought.

The given–new model of sentence structure is grounded in the communication of context—the idea that whenever we write, we present contexts that we share with readers. Written words, sentences, and paragraphs create and iteratively re-create those contexts, sequentially establishing, re-establishing, and maintaining them so that they remain in the reader’s mind without interruption of thought. In this article, I apply the model to beginnings; in a future article, I will develop its use beyond that.

THE FIRST SENTENCE

As an example, let’s assume that you are submitting a grant application for a research project, an intervention for a sample of people living with diabetes. You begin your proposal with the project’s background: diabetes is the topic, and the background will justify what you plan to do. Here are two possible opening sentences, each well written. Which would you choose?
According to the CDC, more than 30 million people are living with diabetes in the United States today.

In the United States today, more than 30 million people are living with diabetes.

Now consider the context that each sentence sets. The first sentence begins by referring to the Centers for Disease Control and Prevention (CDC); the second, to the United States at present. The first begins by indicating that a statement from the CDC will follow; the second, that we will learn something about the US today. In the first sentence, the author (you) seems to emphasize the CDC’s announcement; in the second, you introduce a current American situation. Which sentence immediately and clearly guides the reader in the right direction—the direction you want them to go in? Which sentence sets the context best?

Before we answer these questions, it is helpful to consider published examples. Each sentence begins its respective article:

The past two decades have seen extraordinary advances in our understanding of human immunodeficiency virus (HIV).\(^7\)

United States and international guidelines for the treatment of mild persistent asthma recognize three distinct goals of therapy: to relieve and control symptoms, to prevent exacerbations, and to reduce loss of lung function, with minimal side effects.\(^8\)

In 2002, Knowler et al. reported results of a landmark study—a large, randomized, controlled trial comparing a behavioral intervention with medical therapy in the prevention of diabetes.\(^9\)
Note that each sentence sets the context first: the past two decades, United States and international guidelines, the year 2002. In each, the context (the time or place) is familiar to the reader. Next, having established that shared context, the author proceeds to tell the reader something about it: advances in our understanding of HIV, three goals for asthma therapy, and the design of Knowler et al.’s study.

Beginning with a shared context in this way reflects the given–new model as Williams\textsuperscript{6} formulates it:

\begin{quote}
Put at the beginning of a sentence those ideas that you have already mentioned, referred to, or implied, or concepts that you can reasonably assume your reader is already familiar with, and will readily recognize.
\end{quote}

In the three published examples above and the two hypothetical opening sentences for your grant application, nothing has previously been mentioned, referred to, or implied, because each sentence begins its respective document. But each sentence does begin, to repeat Williams’\textsuperscript{6} words, with a concept that we “can reasonably assume” our readers are “already familiar with”: the CDC, the United States today, the last 20 years, the United States and the world, and 2002.

Now we can evaluate the choices for the grant application’s opening sentence. With respect to the first choice, one might argue that NIH reviewers are familiar with the CDC, so why not begin with the CDC as a context that applicants to the NIH and their grant referees share? However, the phrase “according to the CDC” might suggest that you are mainly interested in the CDC’s opinion, contributing perhaps to an ongoing conversation in which the CDC’s statement is one of many sources of information under discussion. That is, the CDC may be a relevant context, but is it the best context to guide the reader toward your purpose? Indeed, why even mention it? The CDC’s information is not what your application
will be about; you are not going to evaluate the CDC’s assertion about diabetes’ prevalence. The sentence that begins with “In the United States today,” on the other hand, establishes a better shared context for the information that will follow: you are going to tell the reader something about what is taking place in the United States. With that context established, you have better prepared your reader for what comes next. The CDC is merely your information’s source; it could simply be a citation at the end of the sentence.

CONTINUING THIS THOUGHT...

Williams⁶, p. 48 supplements the preceding principle with another; together, they constitute a single recommendation:

*Put at the end of your sentence the newest, the most surprising, the most significant information—information that you want to stress—perhaps the information that you will expand on in your next sentence.*

Now, consider again the two possible opening sentences for your grant application. The first ends by referring to *the United States today*, the preferable context that the author and the reader share. But what is the important information about that context that you want to present to the reader? It is the current prevalence of diabetes, which is experienced by *more than 30 million people*. For emphasis, that information belongs at the sentence’s end. Were you to choose the first of your two alternatives, thus defining the prevalence of diabetes as the prevalence *in the United States today*, you would be preparing the reader for several potential possibilities: the prevalence of diabetes in the past as opposed to the present; the current prevalence of diabetes in other countries; or perhaps data from sources other than the CDC for a further discussion of population statistics. Your second alternative, on the other hand, begins with the United States today as your shared context and then provides specific new information about it. This
makes the reader wonder what will be said about those 30 million people living with diabetes. By readying your readers to receive information about that population, it points specifically toward the fact that you will ultimately address some group or groups of those living with diabetes in your grant proposal. In this way, you can proceed easily from your first sentence to the next, smoothing the flow of thought. With this analysis, it is clear that the second opening sentence is surely the best.

**THE REST OF THE PARAGRAPH**

How, then, might you develop the rest of your opening paragraph? Here are two hypothetical versions, adapted from the CDC’s *National Diabetes Statistics Report*; this time, however, I begin not just with diabetes “in the United States today,” but as the CDC gives it for 2015:

*In the United States in 2015, an estimated 30.3 million people (9.4% of the US population) were living with diabetes. This total included 30.2 million adults 18 years of age or older (12.2% of U.S. adults), of whom 7.2 million (23.8%) were undiagnosed. The percentage of those living with diabetes increased with age, and the prevalence of diabetes is higher among ethnic and racial minorities than among non-Hispanic whites.*

*In the United States in 2015, an estimated 30.2 million adults 18 years of age or older (12%) had diabetes. This prevalence increases with age, and it is higher among ethnic and racial minorities than among non-Hispanic whites. Among non-Hispanic Blacks as opposed to whites, it is nearly twice as great (17.7% vs. 9.3%).*

Both examples illustrate the given–new sentence structure: each sentence begins with familiar or shared information and proceeds to present something new about
it. The first alternative begins with the United States in 2015 as the context; the prevalence of diabetes within the US at that time follows (an estimated 30.3 million people, 9.4% of the population). With that prevalence established, the second sentence begins by referring to it as this total, which is next elaborated in greater detail, broken down into the number and percentage of adults with diabetes (30.2 million, 12.2%), including those with diabetes who are nevertheless undiagnosed (7.2 million, 23.8%). These statistics are then further defined by the next sentence in terms of age and racial or ethnic group. Thus, after the first sentence in the paragraph, the beginning of each succeeding sentence recalls what was said at the end of the sentence just before it while at the same time directing us toward something new; the new information that concludes each sentence informs the beginning of the sentence that comes next. After the last sentence in the sequence, the reader assumes that whatever follows will be related to at least one of the populations indicated, though not yet specified, at the end of the paragraph.

This raises a question: How much information does the reader need? In the second version, I have therefore cut much, yet I have added new information. This time, I refer to the US context in 2015 and move to the national prevalence but only for adults. I next begin with the prevalence just mentioned, which is defined in terms of general differences according to age and race or ethnicity (ethnic and racial minorities vs. non-Hispanic whites). The third sentence continues this topic by focusing on the difference between two population groups (non-Hispanic Blacks vs. whites) and specifies their relative prevalence. In the end, this suggests that I will proceed to address the chronic illness of diabetes among non-Hispanic Blacks in some way. Thus the sentences in the two paragraphs above are both sequentially coherent according to the given–new model, but for a grant application, the shorter version might be more helpful.

CONCLUSION
Conversations about writing often touch on the difficulties of beginnings: How does one get started? When researchers write about their research, they already know what has been done and found, so that writing the **Methods** and **Results** is a relatively straightforward task. In the **Introduction**, on the other hand, you have to justify the research, and in **Discussion** section, you must present implications, justifying the research further and likely establishing a context for what might be done next. In all of these sections, the given–new model can shape sentences. It implicitly defines the choices that a writer makes, and it can enable us to evaluate how effective those choices are. But especially in opening paragraphs, it offers a guideline for getting started, and a means of analysis for revision of your beginnings after that.

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