

Write for the Reading System; Talk to the Listening System

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Abstract—Spoken lectures are different from written papers; three major aspects differentiate them: completeness, contractions, and connectives. Minor differences between them include: the long asides that are often put in the middle of sentences of a lecture, and the shorter words and sentences of a lecture. As a result of these and other differences, lectures seem more alive and less formal than written papers.

ISN'T IT boring listening to someone read a speech? The other day I was listening to a preacher droning his sermon. At one point he started reading an epistle; I started to daydream. Suddenly I was jolted back to reality when I sensed a change in the flow of words. He had stopped reading and had started talking to us. Why was this change so startling?

Written and spoken messages are different. Why? Well for one thing when we write, we write for the reading system of the human brain. When we talk, we talk to the listening system of the human brain. They are different. Different areas of the brain are used. They process information differently. So it's possible that they organize the information differently too. We expect to write differently than we talk. When we write we use conjunctions, however, therefore, and so forth. We try to break things up logically so that everything is there—laid out. When we speak we don't do that. When we speak, we use contractions a lot. And we don't use a lot of connectives. We don't always speak in complete sentences either. Sentence fragments are common when we are speaking. Oftentimes we will just connect a bunch of sentence fragments with "and's."

Did that last paragraph read strangely? It should have. I did not write it; it was a direct transcription of my spoken

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words. However, when I spoke that paragraph during a lecture the students did not think it was strange.

Spoken and written dialogue differ in three major aspects: completeness, contractions, and connectives. First, in a lecture, incomplete sentences are common; in fact, we often string together sentence fragments with a series of and's. Often we start off a sentence and then realize that something else should have been said first. In which case, we either truncate the sentence, creating a fragment, or make the other statement, creating a new sentence right in the middle of the original sentence. Second, in a lecture, contractions, such as don't, it's, we've, and we'll, are common. Whereas, in formal writing we spell out all words. Third, in a lecture, we seldom use transitional connectives to link the sentences together; practically the only connective we use is the conjunction "and." For example, the Sermon on the Mount has no transitional connectives, and Lincoln's Gettysburg Address has only one.

Look at that last paragraph: notice the transitional connectives. They signpost the logical connections. Let me rewrite that paragraph using various indentations to show the various levels of depth that the transitions signal.

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It is not accidental that spoken and written material are so different; they are intended to be processed by a different system. As a result, if someone reads a beautifully written paper it will be boring. And if someone transcribed a beautifully delivered lecture it would seem unpolished.

TABLE I
STATISTICAL PROPERTIES OF A TYPICAL BAHILL LECTURE
COMPARED TO A TYPICAL BAHILL PAPER

lecture	readability grade: 4	
paper	readability grade: 12	
lecture	percentage questions: 11%	
paper	percentage questions: 1%	
lecture	sentence types:	
	simple 49%	complex 38%
	compound 5%	compound-complex 7%
paper	sentence types:	
	simple 49%	complex 34%
	compound 9%	compound-complex 8%
lecture	verb usage: passive verbs 3%	nominalizations 1%
paper	verb usage: passive verbs 20%	nominalizations 2%

Playwrights have understood the difference between spoken and written messages for a long time. Notice how Eugene O'Neill changes his style between dialogue and description in *Mourning Becomes Electra*:

CHRISTINE. (tauntingly) If? I think you do love him—as much as you can love! (With a sudden flurry of jealousy) You little fool! Don't you know I made him flirt with you, so you wouldn't be suspicious?

LAVINIA. (gives a little shudder—then fiercely) He didn't fool me! I saw what a liar he was! I just led him on—to find out things. I always hated him! (Christine smiles mockingly and turns away, as if to go out of the room. Lavinia's manner becomes threatening again.) Wait! I don't trust you.

When he is writing, he appeals to the reading system. When his character is talking, he appeals to the listening system.

Here is another example of a playwright changing his style between description to be read and dialogue to be spoken. It is from *Come Back, Little Sheba* by William Inge.

Marie, a young girl of 18 or 19 who rooms in the house, comes out of her bedroom (next to the living room), skipping airily into the kitchen. Her hair is piled in curls on top of her head and she wears a sheer dainty negligee and smart, feathery mules on her feet. She has the cheerfulness only youth can feel in the morning.

Marie. [To chair right, opens pocketbook there.] Hi! Doc. Well, well, how is our star boarder this morning?

Marie. Fine.

Doc. Want your breakfast now?

Marie. Just my fruit juice. I'll drink it while I dress and have my breakfast later.

Doc. [Two glasses to table.] Up a little early, aren't you?

Marie. I have to get to the library and check out some books before anyone else gets them.

Recently I taped one of my lectures on computer architecture. Then I ran some statistical word processing programs (Style and Diction from the Unix system [1]) on the transcribed lecture. Table 1 compares the statistics for that lecture to the statistics for this paper. (It is irrelevant that the lecture and the paper were on different topics. These programs produce similar outputs for any paper I write.) The readability grade is based on the length of the words and the length of the sentences. The purpose of the verb usage statistic is to point out the use of passive verbs and nominalizations (changing a verb into a noun [2]), because excessive use of these forms produces stilted prose. The rest of the statistics are self explanatory.

The most obvious differences are that the lecture contained shorter words and sentences (as shown by the lower readability grade), had more questions, and used fewer passive verbs. These characteristics would make a lecture seem more alive than a formal paper.

You can reread a sentence, but you cannot relisten to a spoken phrase. For this reason good lectures often repeat key ideas. If this were a lecture, I might now say "That last phrase bears repetition, (pause) *repeat key ideas*." I learned this principle of repetition in my first teaching assignment. My first day on the job a grizzled old chief gave me the best advice he knew. "Tell 'em what you're gonna tell 'em. Tell 'em. Then tell 'em what you told 'em."

Auditory processing is different from visual processing. Therefore, when you give a lecture, talk to the students; don't transcribe your notes onto the blackboard. When you give a speech, speak it; don't read it. Speak to the listening system: write for the reading system.

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