## **Podcast 483: How AI Affects Thinking**

## **Episode Transcript**

**Andrew Pudewa:** The problem is in your real life when you need to write something that only you know, if you haven't developed the skills to do that well, your idea is not going to be expressed well.

**Julie Walker:** Hello, and welcome to the Arts of Language Podcast with Andrew Pudewa, founder of the Institute for Excellence in Writing or as many like to say, "IEW." My name is Julie Walker, and I'm honored to serve Andrew and IEW as the chief marketing officer. Our goal is to equip teachers and teaching parents with methods and materials, which will aid them in training their students to become confident and competent communicators and thinkers.

**Julie Walker:** So Andrew, I'm going to read a quote and see if you can guess where it comes from. Ready? "With the rapid development and availability of large language model AI applications, particularly as they apply to the task of writing, do you think people will still see grammar and composition as important things to teach?"

**Andrew Pudewa:** That might be a question someone would type into chatGPT to get its answer to...

Julie Walker: ...its own question!

**Andrew Pudewa:** But I think that is something I wrote.

**Julie Walker:** It is. And it actually came directly from an article that you wrote for our *Arts of Language* homeschool magalog, which of course, link in the show notes. We keep running into this AI question, and so we're going to kind of tackle it head on today as much as we're able to in June, in twenty minutes.

**Andrew Pudewa:** Well things are changing so rapidly, we can only put our foot in the stream at one point and it will be a different water flowing tomorrow.

**Julie Walker:** Exactly right. And of course our theme for the year is how to think. And so the question that I'd like to discuss today or actually ask you and let you talk about it is: How does AI help us think? Or is it a detraction from thinking?

**Andrew Pudewa:** Well, we'll talk about the first part first. I came across a very interesting term, I don't know, maybe six months ago, eight months ago, as a career that is going to be huge. Actually already is, but it's going to be like a whole category of people who are called prompt engineers.

Julie Walker: Prompt, meaning fast?.

**Andrew Pudewa:** No, meaning you can ask good questions or you can tell AI what to do in a very precise way to get a very good result. And I find that very interesting because mostly the prompts are questions. Or they are questions that are also accompanied by instructions.

So "please do this for me." And evidently, the better the question, the better the output, the more specific request,, the more useful what you get from it. And it seems to me that right now the area of maximum effectiveness is kind of in the coding, programming, digital world. So for example, I just heard yesterday a woman saying, well, I asked AI to look at my website and compare it with all these other websites that are similar to my business and give me a list of things that I could improve about my own website.

Julie Walker: Oh wow.

**Andrew Pudewa:** And it did that very well. But then it went one step further, and I said, "can you make these changes on my website?" And is asked for a couple passwords so they could access whatever it needed to change, and it just did it like that. And improved her website significantly in just minutes.

**Julie Walker:** I would be terrified to give my passwords to AI.

**Andrew Pudewa:** Well, I suppose if you were, you could do that, see what happened, and then change your passwords. But that type of thing in that world of coding seems to be growing very, very rapidly, changing the whole nature of the way people in that profession deal with graphics and coding and layouts and flow charts and, and all that stuff.

So, the potential and, and the other thing that I've heard several people say is, remember. AI is the worst that it's ever going to be from now on, right? It's only going increase in its capacities.

**Julie Walker:** It reminds me of a time, Andrew, when you were doing a seminar. You were using MapQuest to get you there. And you called our office and I was there and you said, Julia, I'm in a cornfield. Can you please help me?

**Andrew Pudewa:** Oh, I remember, yes. Other people found their way to the middle of that cornfield and we were, there were like seven, eight cars. Like where is this place? We're supposed to do a class.

Julie Walker: Exactly.

**Andrew Pudewa:** Yeah. That would likely not happen today. But there is that interesting relationship between able, that ability to ask good questions and get a good answer.

**Julie Walker:** And if any of our listeners would go back through our transcripts for 2025, maybe even before, in our podcast, especially when we are talking about how to think, so many times we're talking about asking good questions. And Andrew, you have asked the question of students: how do you think? And then you answer: you imitate your mom.

**Andrew Pudewa:** Right, because your mom know how to get stuff out of your brain: she asks you questions. So trick of being a better thinker is to be able to ask better questions. And we've gone through any number of times the litany of how our nine units and the extensions off those units train that skill.

**Julie Walker:** So we are training students to become prompt writers.

**Andrew Pudewa:** Well, I don't know that we would claim that because it is kind of a specific area, but it will be a rapidly growing area and the better prepared our students are in that habit of being able to ask good questions, the more they'll be able to move into that with success and good results.

On the other side, the whole world of the large language models and text-based content: here, I think we're seeing a lot of problems. The most obvious one that I bump into and have bumped into many times over the last few months is that it is just giving you wrong information. And one of the things that is kind of frightening is that the tone with which it gives you wrong information is as though it is absolutely the right information. It doesn't say, I'm not sure about, but I think.. Because I don't know that it really does think. But it will make a statement and then you check that.

For example, just yesterday it made a statement as a result of some information I was trying to collect that Henry Wadsworth Longfellow was a Catholic writer. Okay, well, I had 99% certainty that that was not true. So then I said, please cite your source for this statement. And it came back and said, oh, I was wrong. Longfellow was not Catholic and then told what he was and Congregationalist, I think. But why is it doing that and what's the problem if you don't have enough general knowledge to filter what it's giving you? You would accept that as definitive and possibly even put that in a paper you writing or a talk you were giving something. You would then be guilty, if you want to use that term, of promulgating incorrect information.

I think for old people like me who grew up without the internet, we appreciate greatly the general knowledge that we carry around in our head because it allows us to at least question the veracity of information that we would get online. And in the old way, when you would do a search for something and you'd get a result on a search engine, you could look at the different sites of where that information is coming from. And I used to teach a whole class on how to evaluate sources and what types of domain names are likely to have better credibility than other types of domain. But see, even that process is now being bypassed. Unless you have the habit of asking it to give its sources on things, a younger person could be completely duped into just assuming everything it says is correct.

So that's one big concern that I have, is that kids are going to start putting "facts" into the things that they produce and then discovering that they were not correct facts when someone who does have the general knowledge will come back at it.

**Julie Walker:** Well, and I just speaking to that, because we've talked about writing across the curriculum and how when you write about a topic, whether it be something that you've researched or something that you knew something about, something that was outside of you, something that was inside of you, you know more about that for having wrestled with these ideas and putting them together. So if you are wrestling with ideas and putting things together that are wrong, it's going to be hard to weed out that cancer that is now part of who you are.

**Andrew Pudewa:** Our Unit 6 is so valuable. I have had so many people tell me it looked really simple, but it was so powerful in training you on that skill of getting information from several different sources and then comparing that and then choosing and arranging those things into the fused outline and writing your paragraphs from the fused outline.

I fear that people, especially young people are going to say, well, why should I bother doing that? The chatGPT already does that. It already takes not just two or three or four, but who knows how many, and it pre-fuses them. So you deprive yourself of that activity of comparing, contrasting, sorting and organizing. And those are some basic thinking skills.

And I have a fear that unless people continue to do our Unit 6 using essentially paper sources that have a credible origin, that skill is not going to be developed in the average student out there in the world. So that's a second problem that I have is it's bypassing some of those core academic writing skills that everyone really needs to be trained in in order to even use the chatGPT derived or produced information?

Well, a third concern I have is we had a guest on, he was a student, a college student, who was actually doing a little research on how his fellow college students were using AI. And he pointed out something that I have since seen confirmed in many ways, and that is generally writing is a combination of finding information, right, collecting it up from external sources or using your own knowledge then formulating an opinion. How is that useful or applicable, or how does that relate to what we're trying to to talk about here? You're adding your personal synthesis into that, and if you allow the AI to do that, and then you put your name on it and say, this is what I think about something, it's maybe disingenuous to whoever reads the thing, but that's not as important as what it's doing to you, which is it's convincing you. It's you convincing yourself that you thought something that you did not think. And that to me is very dangerous.

And we see that in the broader world of information now is people have opinions. They did not create these opinions. They are parroting someone else's opinion, not even because they have enough general knowledge or life experience to have a good reason to agree or disagree. Just because that opinion was spoken more powerfully or more flashy. Can you use flashily? In a more flashy way to see a flashily can be a word? In a way that superficially looks good, but doesn't have the substance behind it. And so that would be a third concern I have.

And then the fourth concern I kind of touched on in that article, but I've since had more experience and more thoughts along this line, which is, yes, you could probably use AI to

generate any kind of reports or research papers or even some creative writing based on pictures. The problem is in your real life when you need to write something that only something from your heart, from your experience, something that's very important to your family or your community, or your company, or whatever. If you haven't developed the skills to do that well, then your idea is not going to be expressed well or effectively, or with excellence, and you will suffer as a result. So by outsourcing the job of writing, we're actually outsourcing the job of thinking things through in a precise way.

And in that article I alluded to a quote by Francis Bacon we've mentioned before on podcasts, but "reading maketh the full man conference, conference a ready man, writing an exact man." And that precision of thought that writing creates for us, and if we don't develop the skill, particularly at a younger age, when we're growing and developing so rapidly, we might never develop that skill. And thereby suffer a deficit of what makes us really human in a way.

**Julie Walker:** I was thinking, as you were sharing this fourth point, of Webster's edict. And of course that is hands on structure and style, hands off content. But that's for the purpose of developing good writers. And as a historian, that was so important to him. If we are outsourcing writing to artificial intelligence, then in a way we're outsourcing our own ideas and then this important thing that we have to write is going to be mediocre at fast.

Andrew Pudewa: Well in, let's say you did something, and your spouse was very unhappy about something you did, and you want to apologize. I have found one of the best ways to communicate touchy things with family members is to write letters to them. And I've written letters to my kids and encourage them to write back. And there's an objectivity, there's a not having to have the emotional impact of a conversation where people just react immediately. Okay, I'll let that sit a little bit. But if you say, please write an apology letter to my wife, or this thing that I, that's not your heart and it's not going to be your heart, and yet that would be a temptation. I fear that this AI thing is almost going to be like a ring of power deal where you could do a lot more perhaps, but there's that dark side of it's not really you. So that would be my third concern is that we will see a decreased emphasis on the teaching of the skill of precise thinking that really only occurs with writing.

I came across a lovely quote. It was a short one. It says "The pen is the tongue of the mind," and that was Miguel Cervantes of *Don Quixote* fame. Of course. But you think about that when we talk, it's hard to think well about what we're going to, because we don't deal with pauses well. So if we're having a conversation, and you just don't say anything for 20 seconds, it's powerfully awkward.

And I actually respect people who will do this. I've noticed Jordan Peterson in conversation, he will have a long, long, what we would call in public speaking, the dreaded pregnant pause, and then he'll say something and you realize he was trying to think through what he was going to say. Boy, that was a long silence. In writing we have all the time we need and we can think the thought, write it, read it, contemplate is that actually what I'm trying to say here to

this person for this reason? And what very often we would say, no, I need a better word. I need to rephrase that. Or I need to actually not say that but come up with something better.

And that skill of being able to think before you commit to the idea is something we really only do when we are writing. Or if we are good writers, then that will carry over into the habit of thinking better before we speak. But a lot of people just talk so they find out what they're thinking.

**Julie Walker:** Well, guilty as charged in many, in many cases. I want to just wrap this up with your concluding paragraph, if I may.

Andrew Pudewa: I hope it's well written.

**Julie Walker:** I'm sure it is. I do know, Andrew, that you contemplated, as you like to say, you steeped on this article for a while.

Andrew Pudewa: Yeah, past my deadline,

Julie Walker: You were past your deadline.

"We at IEW will continue creating and printing paper materials to help you teach your students, not just spelling, grammar, and the mechanics of writing, but also the process of learning how to collect, organize, and articulate thoughts with skill and confidence. In the future, there may be two groups of people, those who rely on technology to simulate thinking, and those who have cultivated and preserved the greater wisdom that comes with exactness in thinking through writing."

**Andrew Pudewa:** Well, that is our plan, isn't it?

**Julie Walker:** That is our plan.

**Andrew Pudewa:** Keep selling paper and hope that the parents and teachers out there who are nose to nose with their 10-year-old, 14-year-old will not fall into the trap of, "Here, just go use technology. Do it the easy way. Spit it out." But no, let's wrestle a little bit because it's the wrestling that builds the mental muscle.

Julie Walker: Amen.

Andrew Pudewa: Okay,

**Julie Walker:** Thank you, Andrew.

Andrew Pudewa: Thank you, Julie.

**Julie Walker:** Thanks so much for joining us. If you enjoyed this episode and want to hear more, please subscribe to our podcast in iTunes, Stitcher, or Spotify. Or just visit us each week at IEW.com/podcast. Here you can also find show notes and relevant links from today's

broadcast. One last thing: would you mind going to iTunes to rate and review our podcast? This really helps other smart, caring listeners like you find us. Thanks so much.