Watch Guide & Analysis *for* **Leveling Up Your Language** *on* **Solutions Watch**

Adam Deng

Hello Corbetteers! This episode of Solutions Watch is the most methodological and abstract in recent memory. Notwithstanding, it also contains a substantial amount of practical techniques. After I asked James Corbett how I could improve my fundamental verbal skills, he was kind enough to invite me to his podcast/show, where, over the course of 65 minutes, we addressed the underpinnings and techniques of…well… improving the verbal: how to read better, understand verbal meaning, and related topics. I'd say 55% of our discussion was ideas-driven (the nature and context of words and language), 35% was solutions-driven, and 10% was tangents and fun.

With my brain unraveled through the conversation, I resolved to distill, summarize, and analyze what I learned. This document is a stepping stone to that goal, as well as a way to lay out the conversation for all of you. Feel free to download it, print it out, distribute it, and so on. I hope it will serve as a useful guide for our conversation, allowing you to pick up on the grand themes, finer points, and open questions addressed throughout. I will certainly be reading and re-reading this document.

In this document I have bolded text, including **6 questions**—the questions I asked to James; **10 ideas**—philosophical declarations and inter-knowledge-field connections; and **8 solutions**—what we can do to improve our verbal skills. Upon re-listening I am tempted to add the occasional aside. These will be italicized, parenthesized, and colored in blue.

No matter your occupation or description—English teacher, literary or languages enthusiast, conspiracy researcher, company manager or worker, student, one who has the same struggles as I do, or anything else—I hope you enjoy our conversation! It is probably not meant to be digested at once—I certainly couldn't. It takes me multiple spaced-out iterations of thinking and analyzing before I can truly comprehend a topic, and it may be the same for you.

[0:00-5:35] **Who is Adam Deng?** MIT Operations Research PhD and MIT '24, Math and AI. Fall 2023 founder of MIT Students for Open Inquiry (MITSOI)—brought 4 speakers. I think about the world in terms of numbers, shapes, and their movement: the "Triplex Mindset." I believe the world can be mathematically represented. My primary goal is to take the world's unorganized and messy data, and structure and distill it to be interpretable, visualizable, and otherwise usable. Website: AdamDeng.com — I came on Solutions Watch to improve my grasp of the verbal space, as this is precisely James'

greatest strength. The verbal is crucial for philosophical and social issues, the law, and strategizing/organizing/diplomacy. It commands a sufficiently broad and important set of fields that I have taken notice.

[5:36-7:03] **Idea 1: Language divided into "Fundamental Verbal" and "Extroverted Verbal."** As I define it, extroverted verbal is the ability to express oneself openly in writing and speaking and make it interesting and varied. It is a presentational aspect of communication. Fundamental verbal is the ability to understand and use words as a basis of reality, involving skills like reading comprehension, dissecting arguments, and deciphering author's intent and subtleties. Fundamental verbal is our topic.

[7:04-7:35] **Thank you to the 8 people who helped/are helping me with the verbal!** The six questions we will address in the episode are ones I asked to many "word people." Eight of them responded, hailing from four continents, giving me suggestions, with a few long calls and a few long essays—so thank you all for your help! (I include James among the eight; we are having the conversation right now.)

[7:36-12:25] **Question 1: Why and how do words resonate with and speak to you?** (I can remember shapes and numbers because I can visualize them, but I forget words all the time.)

When James thinks of words, he does not picture a visual representation of the entity the word describes, but the word itself. Moreover, he sees the world embedded within a linguistic context: words and linguistic relationships.

Collocation is the concept that certain words occur frequently together, creating ideas and phrases, e.g. "crystal clear." This is exactly how most LLMs work: they 'learn' how to generate words by observing collocation coefficients. James sees the world defined through such relationships, which vary by culture and language.

One way to explore collocation is to **Solution 1: learn a foreign language!** The word-to-word relationships will be different; thus, a new language is a different way of interpreting the world through the verbal which offers a robust perspective and allows one to 'patch holes' in one language which one couldn't do in the other. One obvious class of differences is words that exist in one language, but not another. Example: 忘れ物 (わすれもの) = "wasuremono" in Japanese, meaning "lost thing." *(I would've known if I saw it written. In Chinese, 忘 wàng means "forgot" and 物 wù means "item/matter"!)* Grammar and syntax can also differ: Japanese tends to lack pronouns in addressing

people, creating ambiguity and forcing the listener to pay more attention. *(Meanwhile, in Russian, it's the verb "to be", but not the pronouns, that goes missing. "Это правда" = "This [is] true"; "Я китаец" = "I [am] Chinese.")*

Asian cultures differ from Western ones in that their people tend to emphasize context over subject. For instance, when looking at a picture, Asians spend more time at the edges/outer limits, while Westerners focus on the central part. This is a reflection of the languages of the culture.

[12:26] **Open Question** [Semantic Chicken-Egg Problem.]**: Does observing context create language/meaning, or does language create reality/context?** In other words, when we observe something, we find words to describe it. When we use words, we will speak/think/read them into our reality. But which one came first? James argues it's the latter: as we develop language, it directs us to think in certain ways. I believe it's the former: reality is handed down to us, which compels us to generate language to describe our world.

Idea 2: Literature and Linguistics as sibling fields. To me, there exists a separation of literature and linguistics: proficients in one don't often interact with those in the other. Literature is more nuanced, emotional, and expressive, and requires specifically-tailored vocabulary. It's a qualitative pursuit. On the contrary, language-learners engage in more logical exercises: grammar and syntax. There are individuals brilliant in both, like James Joyce, famous for being a polyglot, at one point learning Norwegian just to correspond with Henrik Ibsen. Joseph Conrad learned English as his fifth language. But those are the exceptions to the rule. Generally, those who dive deeply into the nuances of one language want to maintain that richness, and foreign languages put them back into shallow waters.

One who merges literature and linguistics would gain superpowers, as he/she would hold the scepters of the two principal ways of viewing the world—expressive/verbal and statistical/logical. Foreign languages are the key to convergence.

Fun fact: Chinese words form the foundation for Japanese, Korean, and Vietnamese, despite the fact that the latter two threw away Chinese characters.

[17:03] **Idea 3: Language as a sparse filler/describer of reality.** The numerical (or otherwise) complexity of our world is of a fundamentally far higher dimensionality than that of words. Languages not only do not differ in kind (vocabulary, writing system, syntax, etc. are all 'lower-level' differences) because they express

mostly the same concepts and actions; they are also insufficient to express our experiences in their entirety. Foreign languages, especially similar ones, can help "robustify" the space in the sense that words in one language are not so 'lonely' in high-dimensional space, as they would be accompanied by both similar words in the same language and equivalent words in foreign languages.

(After the conversation, I realized I kept calling collocation "co-relation.")

This idea resonates emphatically with James because he is also acutely aware of the insufficiency of language, or disconnect between language and the real world. "Most people think apple is apple, and it's the same thing…but I've always intuitively had that sense…of the difference between the sign and the signified…it is an unbridgeable gulf." *(I am smiling because James has expressed the definition of N, or iNtuitive, in the MBTI/16 Personalities Test perfectly! The obServant person sees things as they exist in the five senses, while the iNtuitive person abstracts them and considers higher-order implications.)* James argues there is no right or wrong linguistic representation; the beauty of languages lies in conveying ideas to others and leading them to understand what you mean, creating a "spark." Adam says this is indeed beautiful, because from the mathematical perspective, it is unfathomably rare for humans to understand each other fully, as we are high-dimensional creatures with different lived experiences and perspectives, but 'reality-space' exists in still much higher dimensionality. In other words, humans are sparse in reality-space. Thus, if we can understand each other, it is as if a miracle happened.

[20:43] I realize that **Idea 4: Language as expression, a statistical/logical structure, or emotional affair are all different facets of the same mechanism.** *(I have no problem with the first two, but struggle with the third.)*

To improve the verbal, **Solution 2: connect a book to other, more familiar fields. Visualize what the author is saying, imagine the author is in front of you and speaking to you, draw diagrams of how characters and ideas connect.**

Also, **Solution 3: don't just read a book once and toss it out. Revisit it, go over certain parts, etc.** This is what I do with code and other technical pursuits. I reiterate and go slowly, line-by-line, until I understand everything. In math and programming, each equation and expression has a fundamental meaning. The same is true with words and sentences.

[22:48] **Idea 5: Words are more than the sum of their parts due to their inter-relations. Idea 6: Language is a graph!** Vertices are words, edges are relationships between words. Adam believes 'graphifying' the verbal allows language to get closer to reality, as both the verbal space and reality can be drawn as graphs.

James draws a strong division between nonfiction and fiction. **Solution 4: For nonfiction, a highlighter helps hone in on specific facts and boosts recall. Second-order highlighting, i.e. transferring and then annotating highlighted parts, helps create a higher-level analysis or reading.** The necessity of recall—James' work revolves around nonfiction—is significant.

For fiction, James is more relaxed: fiction is a work of art, a story of the human experience. Thus, one has different impressions of the same work over time due to one's own life evolution. In a minority of cases, fiction is necessary to illustrate a concept James uses in his work, in which case his approach is similar to nonfiction's.

[26:12-26:28] **Question 2: What is your strategy for extracting knowledge and meaning when you read? Do you pay attention to every word, just a few key words or the beginning and the end?** We just answered the question before I ever introduced it! So we marked it as resolved and went back to nonfiction/fiction.

I am highly formulaic with nonfiction, as expected, but even more so with fiction, because my appreciation for words as words isn't there. Songs resonate with me 95% due to the melody, and only 5% due to the words. No poem has ever moved me.

[27:08-33:10] **Question 3: How do you "read between the lines" to detect implicit intent, subtle emotions, and hidden meanings?**

For nonfiction, subconsciously, James has a preconception of what the author's intent is, which constitutes a filter. For instance, reading from Foreign Policy dot com prepares him for spotting establishment propaganda. Certain words have specific, identifiable meanings, but depending on who is using them, and the context, you know those words are used in specific ways to hit their audience's buttons to direct their opinions in a certain way. **Solution 5: Predict the author's intent and filter words' definitions through that lens, and you'll reveal hidden meanings.**

For fiction, especially in poems, literal words are trumped by evoked feelings, language sounds or literary devices, etc. James hypothesizes that reading between the lines could be like a muscle that needs to be trained. Example: James in 10th grade read

the following story: A farmer suffered a threshing accident and lost both his arms. When he sleeps with his wife, he would wrap his legs around her awkwardly, but cannot hold her. What is the main theme? Eventually, one student says "He's losing his grip on his wife." That was the correct answer: the couple falling out of love, etc. This is the metaphorical manifestation of the literal answer: he could no longer hold her. Once you see that, you are better prepared to see it again.

Solution 6: To read between the lines in fiction, harvest lots of examples thereof and train your brain like a muscle to recognize hidden meaning.

[33:10-35:16] **Question 4: How can I read books and articles faster?** (Actually I'm not slow, but knowing I will have to sit down for hours to read the average 300-page book demoralizes me.)

As long as you're fast enough, you're fine. Also, how fast you need to read depends on what you're doing. If it's a deep read, go slowly and methodically. If you want to enjoy art, don't rush it. Reading speed is like a muscle you can develop. If you need to skim, read the first sentences of paragraphs to decide which paragraphs to read.

Observation 1: The importance of time urgency/deadlines. I often produce my best work when I don't care about time too much, and just prioritize understanding the material, which ironically makes me faster. James cautions that losing time urgency might cause laziness, especially when producing content for the Corbett Report.

[36:56] **Observation 2: Better to draft and iterate than try to get a perfect result.** I need time for ideas to propagate; they don't come at once. Over time, ideas beget ideas, change themselves, etc. Better to allow yourself enough time to 'wrap around' those ideas. It is much easier to build upon a draft than create from scratch.

Adam goes back to the deadline issue, arguing that lack of time pressure allows one to prioritize grasping the core aspects of a project and its related technologies, which spurs lightning-fast developments. *(I am reminded of Lenin's quote "There are decades where nothing happens, and there are weeks when decades happen.")* This happened to me on my undergrad vehicle joint optimization paper.

James responds that practical, right-or-wrong answer-based tasks might fall under the 'don't time pressure so hard' category as they have defined endpoints, but not artistic endeavors, which can drag on forever, because there is no correct answer.

Great musicians intuitively know when to stop: they play or sing a note a certain way, and they know it is right. Nevertheless, it is subjective. **Observation 3: Define your own aim, so that you know when you are done and can stop.**

(James is sounding like a J on MBTI/16 Personalities. J - Judging is more disciplined and time-organized, while P - Prospecting is more spontaneous and go-with-the-flow. I sound a lot like a P in these minutes. As you can tell, the adjectives for the two types are unacceptably inaccurate.)

[43:12-46:08] **Question 5: How can I improve verbal recall?**

James starts to recite "Hap" by Thomas Hardy. Previously, he set the poem to music, trying to find an encapsulating melody and so forth. **Solution 7: Remember words through their context, not the syntactical order.**

[49:09-50:20] **Question 6: How do I increase my overall engagement with and affinity for words?** Answer: Listen to the podcast again. Also, James describes language as mapping reality in a different terrain (than math or otherwise).

[50:13] **Idea 7: Words contain a fundamentally emotional, 'human' component that cannot be replicated with pure mathematics or science.** The difference between AI and humans is that we have the ability to invent from scratch, and AI doesn't. Emotional concepts, like love, cannot be turned into equations.

Certain skills are fundamentally verbal, like writing laws, rallying people to write to legislators or testify on a law. That's why I need to be good at the verbal.

In the modern world, vocabulary is shrinking. James can tell if someone is a reader or not by his/her written work: understanding collocations, presence of particular misspellings, etc.

[54:57] **Idea 8: Humans are not just mathematical, biological robots that can be programmed.** Machines might be able to replicate human outputs to arbitrary precision, but even so, humans have creative imagination: the ability to create something from nothing. AI doesn't. *("co-opt a David Icke term" is inaccurate; I should have said "borrow a ~". Clearly I am not a reader.)* Additionally, AI has no initiative: it relies on humans to program it with commands.

[58:02] James avers **Idea 9: Meaning is created, not discovered.** *(I agree, though this can be challenged.)*

Ludwig Wittgenstein with his "Tractatus Logico-Philosophicus" said that his work is the logical conclusion of philosophy. Then, decades later, he pioneers a new branch of philosophy: language games (courtroom, conversation, etc.). James recommends **Solution 8: Read Wittgenstein to understand language contexts!**

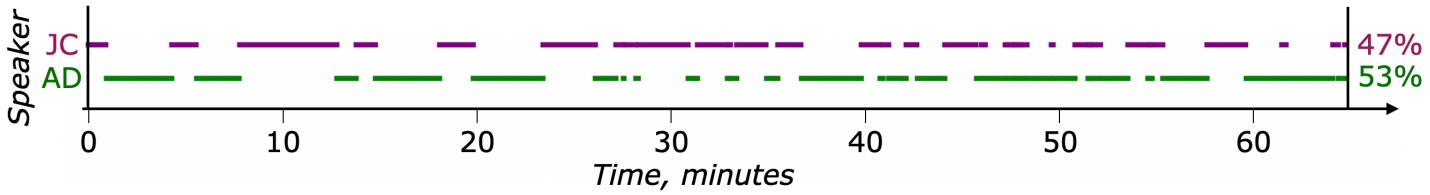
[59:46] I declare **Idea 10: The fields of human experience are more similar than expected. Diverse fields share techniques** (close-reading literature and close-reading code and math equations)**, and the building blocks of different fields are not that different, even if their associations are very different.** *(I will qualify this statement as being true academically, but not street-ly.)*

Putting together the mathematical and the verbal can enable a more robust, powerful set of tools. Summarizing law, strengthening and scaling the freedom movement, optimizing what to read or interact with…these lie at the intersection of both.

And with that, I go back to the drawing board.

Random Fun Mathematical Graph

Speaking time in our conversation! It was virtually 50-50.



Appendix / Lists

Listed consecutively: The **6 questions**, **10 ideas**, **8 solutions**, and **miscellaneous**.

6 Questions

Question 1: Why and how do words resonate with and speak to you?

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Question 3: How do you "read between the lines" to detect implicit intent, subtle emotions, and hidden meanings?

Question 4: How can I read books and articles faster?

Question 5: How do I improve verbal recall?

Question 6: How do I increase my overall engagement with and affinity for words?

10 Ideas

Idea 1: Language divided into "Fundamental Verbal" and "Extroverted Verbal."

Idea 2: Literature and Linguistics as sibling fields.

Idea 3: Language as a sparse filler/describer of reality.

Idea 4: Language as expression, a statistical/logical structure, or emotional affair are all different facets of the same mechanism.

Idea 5: Words are more than the sum of their parts due to their inter-relations.

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Idea 7: Words contain a fundamentally emotional, 'human' component that cannot be replicated with pure mathematics or science.

Idea 8: Humans are not just mathematical, biological robots that can be programmed.

Idea 9: Meaning is created, not discovered.

Idea 10: The fields of human experience are more similar than expected. Diverse fields share techniques, and the building blocks of different fields are not that different, even if their associations are very different.

8 Solutions

Solution 1: Learn a foreign language!

Solution 2: Connect a book to other, more familiar fields. Visualize what the author is saying, imagine the author is in front of you and speaking to you, draw diagrams of how characters and ideas connect.

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Solution 6: To read between the lines in fiction, harvest lots of examples thereof and train your brain like a muscle to recognize hidden meaning.

Solution 7: Remember words through their context, not the syntactical order.

Solution 8: Read Wittgenstein to understand language contexts!

Miscellaneous

Open Question [Semantic Chicken-Egg Problem.]: Does observing context create language/meaning, or does language create reality/context?

Observation 1: The importance of time urgency/deadlines.

Observation 2: Better to draft and iterate than try to get a perfect result.

Observation 3: Define your own aim, so that you know when you are done and can stop.