Expert vs Popular Content: A Comparison of Genre and Medium

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Feliks Zemdegs is a speedcubing legend. In his years of attempting to solve a Rubik's cube in the shortest amount of time, he's set over 100 world records, including more than twenty 3x3 world record singles and averages (WCA, 2024). His experience and expertise in the field clearly sets him apart as a trustworthy source for speedcubing analysis, and in 2017, he put this expertise to work in the form of a blog article titled "What are the limits?" which explores how speedcubing times might improve in the coming years. Yet legend status is hardly necessary to have a voice in the cubing space, as evidenced by SpeedcubingTv host Matthew Mayernik. Ranked 7645 in the world on 3x3, his video titled "What is the Rubik's Cube Human Limit?" in 2023 analyzes this same subject (WCA, 2024). They both ask the same question: "what is the fastest time in which a human can possibly solve a Rubik's cube?" Their approaches to answering this question clearly reflect the unique positions they find themselves in; Zemdegs relies on his personal experience and older, more engaged audience to convey his thoughts, while Mayernik fully utilizes the audiovisual elements afforded to his medium and is able to view the problem from a more detached perspective due to his distance from the problem.

An understanding of the rhetorical situation of these two works is extremely helpful for understanding certain choices each speaker makes. First and foremost, both are interested in analyzing the question of minimum average Rubik's cube times for an audience of speedcubers. Naturally, some similar approaches to tackling this problem will come forth from the basic thought patterns found in this community. Both Mayernik and Zemdegs have observed the state of cubing and the ways times have progressed through its history, and note their unique perspectives on it through their pieces. And notably, though their works are separated by six years, the two both write in a period where new records had slowed significantly, known as a "plateau period". Mayernik speaks in the plateau period before Yiheng Wang would bring down

the average record by half a second, and Zemdegs in the plateau period before Max Park did the same (WCA). Some differences do arise when discussing their intended audiences. Zemdegs' work skews towards an older, more experienced audience while Mayernik's more favors a younger demographic. This is largely due to differences in medium; audio-visual content is easier to consume for children while written analysis requires greater reading comprehension skills and directed focus, qualities found more often adults. Zemdegs also has higher authorial credibility than Mayernik for reasons I've previously mentioned, namely that Zemdegs is a world-class solver while Mayernik is not. While many experienced solvers may be interested to hear what expert insight Zemdegs has to offer, they may not be interested to hear the opinions of someone at or below their skill level in cubing. Thus, Zemdegs' blog attracts older and more experienced cubers relative to Mayernik's video.

These speakers utilize their respective mediums in different ways that highlight their strengths. Zemdegs' blog is a fully written medium. This creates an emphasis on the ideas and structure that very directly reflect Zemdegs' thoughts on this topic, continuing to draw on the uniqueness of his perspective. The tone of this blog is also very casual, creating the impression that Zemdegs is letting the reader catch a glimpse into his mind. That's not to say it isn't logically formulated – Zemdegs clearly communicates the knowledge he's learned about increasing speedcubing times through discussion of history and statistics and objective analysis of these factors. But this is not the most significant part of his appeal; after all, anyone can cobble together a decently plausible argument using facts and history. But Zemdegs has years of cubing dominance to throw weight behind his argument, something very few people, if any, have at his level. This goes back to Zemdegs' targeting of the experienced cuber – he provides a unique perspective that is simply unavailable from ordinary community discussion or individual

reflection. The written word allows Zemdegs to carefully tailor his words to match his thoughts and effectively engage an audience that appreciates this unique perspective. Mayernik, on the other hand, uses many rhetorical techniques that mesh extremely well with the audiovisual medium. The most prominent example of this is combining on screen visuals and text with voiceover. This allows the audience to absorb multiple ideas at once. Mayernik primarily uses this to supplement his thoughts with visual elements that elaborate on what he's discussing without requiring a break in his train of thought. One example of this is with video recording of past world records when discussing the history of world record progression to remind the audience of what these abstract ideas like "human limit" have meant in the concrete terms of past world records (Mayernik, 2017, 0:03). This is consistent with the idea that Mayernik's video is optimizing for ease of consumption: having multiple input streams at once reduces the conscious mental burden by shifting some information – in the example above, the video recording – to subconscious processing, since focus is only conscious of one input stream at a time. He also uses a few "cheaper" techniques like using cliched music and an exaggerated tone of voice to engage the audience without changing the substance of the argument. However, these choices again reflect that Mayernik understands his audience. YouTube viewers tend to be watching for entertainment value more than serious discourse and rigorous argument, so an otherwise equal trade between rigor and entertainment create a net positive benefit for a YouTube audience.

While both authors use different techniques given their different audiences and mediums, the overall structures of both arguments are rather similar. Mayernik and Zemdegs both focus on the human limits of turns per second (TPS) and move count, multiplying the two numbers to create an estimate of minimum average times. Interestingly, they both dedicate most of their time to justifying their chosen move counts and TPS's rather than discussing the implications of their

predictions, demonstrating that both speakers are interested in making their beliefs rigorous and promoting rational discourse in the cubing community. That they both attempt to increase the quality of discussion around speedcubing is much to their credit, and demonstrates that despite their differing audiences, both Mayernik and Zemdegs genuinely care about the accuracy of their predictions. However, they do differ in how they justify their predicted minimum move counts and maximum TPS's, leading to quite extreme differences in their final predictions. Zemdegs, as I've mentioned, leans heavily on his personal experiences in the cubing community at the forefront of dropping world record times to justify his predictions. Over Zemdegs' ten years of cubing, CFOP as a method had improved much more in the TPS department than it has in the move efficiency department. He extrapolates this trend from the past into the future, predicting that move count would reduce at most from 60 to 50 moves, while speed would improve from ~8 TPS to ~11-12 TPS, yielding a final time of just under five seconds. Mayernik takes a very different approach to predicting TPS and move count. Without personal experience to guide him, Mayernik looks towards more objective sources; in this case, record history in TPS maximums and fewest move challenge (FMC) minimums. Recent 3x3 record history had (at the time of Mayernik's video) a relatively modest maximum TPS of around 10, while recent FMC record history had yielded staggeringly low averages of twenty moves. He divides these numbers to get a minimum of two seconds – a number he adjusts upwards to two and a half seconds to account for variability in the luck required to get such quick solves. The difference in optimism here is quite striking: Zemdegs, with an extreme eye on recent record improvement, overfits his experience to the problem at hand to make an overly conservative estimate, while Mayernik, whose distance from the problem prevents him from making the same mistake, fails to understand the lesson Zemdegs discusses on the fundamental trade-off between TPS and move

count that makes simply combining the results from FMC and speedcubing invalid, generating a far too aggressive estimate.

The differences in the formats of these arguments typify trends in speedcubing analysis. Expert-aimed content benefits highly from the use of text to communicate ideas due to the ability to keep language precise, while popular content favors video due to non-verbal informational density and ease of consumption for younger audiences. However, expert-aimed content is more likely to unduly limit optimism due to its lack of perspective on the problem at hand since experts are typically highly focused on recent small-scale gains than overall trends in times. Popular content is largely unable to draw from experience on the cutting edge to understand the fundamental limitations on times, resulting in overly ambitious predictions. There are lessons to learn from expert as well as amateur-aimed predictions, and the perspectives of both Mayernik and Zemdegs uplift the community's discourse and help build a healthier, more open, and more diverse discussion.

Works Cited

Mayernik, Matthew (Director). (2023, February 18). *What is the Rubik's Cube Human Limit?* [Video recording]. https://www.youtube.com/watch?v=geD5_Oc1vpU

World Cube Association. (n.d.). All Records (Single and Average). Retrieved September 12, 2024, from https://www.worldcubeassociation.org/results/records?event_id=333&show=history

Zemdegs, F. (2017). *What Are The Limits?* CubeSkills. https://cubeskills.com/blog/what-are-the-limits