

Dear Reader,

I'll admit, journalists don't always have the full picture, or the whole story. Reporters may exclude or include information from primary sources, but they do so in favor of us, the readers. To catch—and hold—our attention, journalists must know how to read primary sources and efficiently synthesize and translate them into a language that reaches more than the average Ph.D. scholar.

Although journalists do hold the power to wield this synthesis for nefarious purposes, Christian journalists are held to a higher standard in synthesizing and dispensing truth. Christians regardless of their occupation use synthesis in evangelism to different kinds of people. We share the same core message, but we present it differently to make sense to different kinds of people. We will still include the main points, but we may describe and synthesize them differently depending on our audience.

I hope my readers recognize the journalists' necessary comprehension of multiple source styles, and the synthesis involved in reporting on research articles specifically. I also hope my readers can recognize my openness and honesty and respond to my own work, that I would be aware of when my own writing leaves core information out.

Sincerely,

A handwritten signature in black ink that reads "Hope Li". The script is fluid and cursive, with the first letter of each name being capitalized and larger than the others.

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Journalism's role of synthesis

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ENGL 313: Writing in the Disciplines

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“It’s sort of a reporting tactic ... When you want someone to respond, you kind of have to indicate that there might be something negative, and then you get them to engage,” *Washington Post* reporter Emily Heil told sports blog Barstool Sports founder Dave Portnoy in a Sept. 20, 2023 [X video](#), in which she acknowledges she suggested something negative about his company to elicit a certain response. Is this really what journalism is today? Asking a source for comment regarding a possibly negative situation, and weaponizing it against them? Should such an institution with “never assume” as its golden rule and an alleged commitment to the truth use implications to construct its stories? Of course not. However, including or excluding information from primary sources becomes a necessary tool in journalism, especially for journalists reporting on scientific research for the everyday reader. The *Journal of Biomedical Informatics* published a study on artificial intelligence and stress, “An interpretable machine learning approach to multimodal stress detection in a simulated office environment,” which was then highlighted by ETH Zurich in “Detecting stress in the office from how people type and click,” and synthesized by the *Wall Street Journal*’s “How Stressed Are You at Work? Ask Your Mouse.”

Although the *Journal of Biomedical Informatics*, ETH Zurich, and the *Wall Street Journal* all hold themselves accountable to standards of credibility, the latter two tag quantitatively tighter references to their sources than the first. The *Journal of Biomedical Informatics* lists its eight authors and their credentials immediately after the title, like co-author Robert La Marca, the “Chair of Clinical Psychology and Psychotherapy, Department of Psychology, University of Zurich” (Naegelin, et al., 2023). Indeed, this not only follows the standard structure of scientific research articles published after a group of scientists conduct experiments, but moreover establishes an expectation of ethical and trustworthy findings in prefacing the actual study itself with each co-author’s titles and qualifications. ETH Zurich, the

doctorate school that many of the original study's authors attend, refers to study co-author as "Mara Nägelin, a mathematician who conducts research at the Chair of Technology ... at ETH Zurich" (Elhardt, 2023). Although the author excludes all of Naegelin's specific credentials, he still keeps the most primary ones, including her connection to ETH Zurich. This same style of source referencing continues in the *Wall Street Journal's* iteration of the study in which the workplace technology reporter hyperlinks the original study in the second paragraph, and includes a quote from "Mara Naegelin, a Ph.D. student at ETH Zurich, the Swiss Federal Institute of Technology, and one of the authors of the study" (Bhattacharyya, 2023) in the third paragraph. While maintaining its credibility, the *Wall Street Journal*, simplifies Naegelin's background and ETH Zurich's involvement to a couple essential words instead of providing a litany of titles or addresses. Already, the stylistic disparity between the lengthy and specific scientific journal and the summative and concise others is quantifiably different.

In presenting information, the *Journal of Biomedical Informatics* remains comprehensive in its word choice, but the ETH Zurich article communicates more closely to the *Wall Street Journal's* diction. For example, the original research paper describes its sample size as "a total of 90 participants in three experimental conditions [who] were tasked with basic workload throughout the experiment, while intermittently being subjected to work interruptions and social pressure" (Naegelin, et al., 2023). This is the first sentence of the sixth paragraph in the study's introduction, with each paragraph containing around 140 words containing detailed and specific jargon. Compare this to ETH Zurich's take on the sample size as "90 study participants in the lab performing office tasks that were as close to reality as possible" (Elhardt, 2023) and the *Wall Street Journal's* "In the experiment, 90 students performed work-related tasks, including typing numbers into a spreadsheet, making calculations ..." (Bhattacharyya, 2023). The two short-form

articles shorten the information noticeably, and employ diction more accessible to readers with short attention spans, or readers unfamiliar with the scientific process. The *Wall Street Journal* synthesizes the study's introduction and following paragraphs into one sentence that becomes a standalone paragraph in the story, refining its language for the everyday reader.

The *Journal for Biomedical Informatics* writes for a relatively large audience compared to ETH Zurich and the *Wall Street Journal*. The *Journal for Biomedical Informatics* stresses relevance to attract and maintain attention from its readers, but its 15,591 words are not written for a short-form audience as the 814-word ETH Zurich article and the 515-word *Wall Street Journal* story are. The *Journal of Biomedical Informatics*' structure appeals to a specific population of research peers familiar with the standard structure of a scientific paper. The journal's web page includes a table of contents for readers to easily find information or navigate to a specific section, and each section provides detailed explanations in both text and images. Instead of quotes from interviews, the authors reference their sources and citations as footnotes adjacent to their own research, and offer a comprehensive list of references at the article's end. Meanwhile, the ETH Zurich piece is more visually appealing, with pull quotes in a different color, white space to offer visual pauses, and a brief bulleted summary of the key points of the article (see Figure 1) for readers looking to skim information and quickly move on.

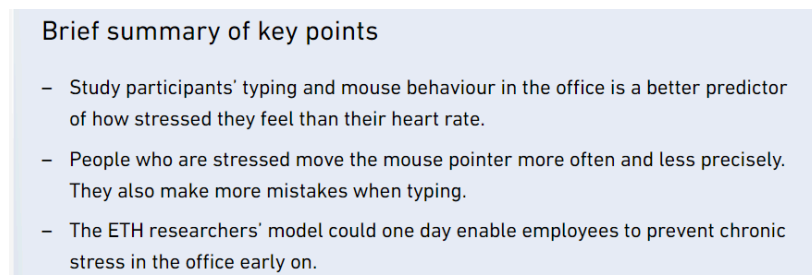


Figure 1

The *Wall Street Journal* story includes elements of both sources as the reporter proves his familiarity with the structure of multiple mediums, including the scientific journal. The *Wall*

Street Journal clearly articulates the core points, while simplifying and consolidating the more mundane details for the everyday short-form reader. The *Wall Street Journal's* website even embeds a "Listen" button for readers to hear the article read aloud to them for three minutes, for increased accessibility. In cutting down around 15,000 words from the original study, the *WSJ* reporter draws interest to the topic at hand that the research study alone could not have.

Although each source consistently maintains its own angle, its intentions differ significantly. The research article includes useful caveats near its end, that the experiment was conducted "with a simulated office environment, artificial stressors and participants that were healthy and predominantly young, Caucasian University students" (Naegelin et al., 2023). This better clarifies the results of the paper, but proves a disservice for readers with shorter attention spans unwilling to read thoroughly to the conclusion of the paper, or readers unfamiliar with the field and structure of scientific research studies. The ETH Zurich article is more versatile, and includes a more concise update that "Results should be available by the end of the year" (Elhardt, 2023). It points to the successes of the research paper to inform prospective and current students, professors, and alumni at the school, which subtly highlights the public relations angle of the story. Indeed, ETH Zurich explains and informs, but it also promotes. Although the *Wall Street Journal* article condenses similarly, it is a far cry from PR. It explicitly names its audience and their interests in the "TECHNOLOGY | ARTIFICIAL INTELLIGENCE" (Bhattacharyya, 2023) slug, and even invites readers to be in dialogue with the study's findings with a comments section at the story's end. This may drive some uninterested readers away, but it efficiently serves to clarify its intentions upfront and signal to its readers what the story will entail..

In other words, *The Journal of Biomedical Informatics*, ETH Zurich, and the *Wall Street Journal* communicate differently with their audiences and among themselves, and the quantity of

information decreases—but is not lost—as it moves from primary to secondary sources. Indeed, journalists in this research reporting may beat exclude specifics and detailed information from the primary sources they cover, but they do so in the interest of their audience, to essentially synthesize the information and attract an audience for the topic at hand, in hopes that their audience can easily access the core content of the primary sources, and perhaps even read the primary sources for themselves. Fundamentally, this harkens back to the Great Commission, in our evangelism as Christians. As we share the Gospel to different kinds of people, the core message is the same, but we may choose to integrate or highlight different facets of the gospel differently depending on the people we speak to. And hopefully, the Lord will work through our words, and our words will spark their curiosity to seek the Words for themselves.

References

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