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Serving Justice Case by Case: Discourse Community Analysis

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Science is a broad topic and contains many subgenres under the topic of "science". The community I have chosen to focus on and write about is the Forensic Science community. Forensic science is the application of the methods of natural and physical sciences to matters of civil and criminal law. I am a Biology Major with a specialization in forensics, and pursuing this community allows me to broaden my knowledge of the community I want to work in. My dad was a key influence in my choosing of the forensic pathway, as he is a police officer and has worked with multiple DNA and crime scene investigators. My future location in the realm of forensic science is unknown to me right now, I am always learning new positions inside of this branch. I feel I am learning towards DNA analytics inside of the lab, but a career in digital forensics entices me. Communication is vital to the forensic community and allows us as scientists to portray our findings in multiple ways to different people with a variety of understandings. Without the multiple ways of communication, the evidence and analysis would never be able to be shown to the outside world.

Forensic science contains a large vocabulary that only forensic scientists would fully understand. This fuels communication between scientists themselves and allows them to use the full words without altering the communication. Dr. Jeffery Lynn, a forensic scientist for over 35 years, and a chair holder in the Forensic Institute of Ohio states, "We are just talking the language of science, our communication is about the case itself" (Lynn). "The language of science" is interesting to me, and I would agree that the world of science had its own language that can seem foreign to people unfamiliar with the studies. Science communication is vital, and helps drive the understanding between scientists, "It is evident that science communication is an important aspect of many science-related careers: Science communicators help foster scientific literacy in the communities with which they work. There is a need for a science communication

component to be included in science degrees and professional development workshops" (Howes). This quote by Dr. Loene Howes shows that an excellence in science literacy helps the communication between multiple scientists to become more proficient. She also states that it is important that these languages are taught to incoming scientists through their degree programs and science workshops. These may include internships, or specific lab groups student scientists are working in. Communication between forensic scientists doesn't always have to be scientific. "We need to make sure we don't step on each other's toes in terms of the case, and always express what we can do to assist one another" (Lynn). While this intercommunication is about the case, it isn't direct about the scientific end of the case. It is extremely beneficial for forensic scientists to communicate what they are contributing to the case so they can bring justice to the correct people.

Communication to people outside the forensic field is almost as important as intercommunication between two scientists. I asked Dr. Lynn is communication varies between an expert in the forensics field and someone in an unrelated field, and he states, "Very much so, all the time in the court room since we testify as expert witnesses, and it's important to verbalize in a way people understand" (Lynn). He uses the example of a scanning electron microscope energy dispersive spectrophotometer, which is a mouthful. The forensic scanning electron microscope energy dispersive spectrophotometer is a chemical microanalysis tool and technique which uses x-rays to detect electrons and allows us to characterize the material. As a forensic student, even I am unsure as to what this means, and I couldn't imagine using this language to a judge or a witness who has even less of a clue than I do. Lynn says, "If we used these words and communication, eyes would just glaze over, and it forces us to use terminology that the average human being would understand" (Lynn). This secures the importance of using "dumbed down"

language, while still expressing the results and findings of the research and case. This is difficult and causes the scientists to have an extreme understanding of all the language involved in forensic science. If you place a forensic scientist in a room with a dentist and a doctor, which are other professions that use the language of science and tell the forensic scientist to describe the tools and procedures he uses, the others won't understand. Lynn expands on this and states, "They won't understand OUR language of science" (Lynn).

Communication between forensic scientist isn't strictly verbal, it also consists of written reports, which allows us to testify in court. A lab report is used to show and express the findings of the research. It must provide procedures, materials, and your results. "A lab report requires all the analyses to be expressed, which is when we use the "sciency" language. We then put an interpretation on it, we offer our test, and we must show what it means" (Lynn). Forensics scientists talk about what they did and what they found, and they interpret that back into the case, and what it means to the reader. Citations are a major component of all labs reports as well. In a case-by-case scenario, forensic science majors rarely ever use citations, as the research we are holding is always original, and new since the cases are rarely ever the same. "If we venture our into the research world to describe how we used a piece of equipment or discover a new methodology to a certain procedure, then it's just like every other science in the fact that it is extremely important" (Lynn). You must provide credit where credit is due, you must show the reader that you weren't the individual to discover the method. Without proper citations you can wrongfully guide readers into the belief that you discovered something. In a laboratory specialized in forensics, citations are very rare, yet forensic scientists can agree that if they are used, they are of the upmost importance.

Specific language is used in all forms of work, and it varies between each individual discourse community. Forensic science is no different and has a variety of specific machines and jargon used within its community. High powered microscopes, atomic spectroscopy, Forensic toxicology, Fingerprint Analysis, Chromatographs are a few of the machines that forensic scientists use that no other profession uses. Specific jargon used consists of abrasion, which is the process of degrading something, Cold hit, which is when a scientist traces the DNA to a suspect from the case, facial recognition, trichomoniasis, etc. Lynn explains "We as scientists develop a certain language, and the mutual understanding of this language between two forensic scientist is what fuels the conversations" (Lynn). The idea of a mutual understanding fueling the conversation is appealing and interesting. I feel this idea relates to all communities, the fact that the occupants in the community understand everything about that community, it allows them to have an educated conversation that may not be fully understood by someone outside of the community. I feel the language personally also separates the experts from the novices. Dr. Lynn says the only separating factor is experience, and how long you've been in the field, which I would 100% agree with. I feel understanding the material and the procedures also allows someone to become a forensic science expert. I would classify graduate students, and senior undergraduate students as more of an expert than I am, strictly because they have been around the material longer, and they know all the procedures of a forensic scientist. So, the combination of experience, and understanding of the material and procedures produces experts in a field.

A common goal is prevalent in all discourse communities, and it drives individuals in the communities to learn and become better at topics within the community. "Based on interviews and ethnographic fieldwork, this dissertation shows how the Office of the Chief Coroner of Ontario (OCC) – whose object is to speak for the dead to protect the living*"* (Leslie). This quote

expresses a common goal of forensic scientists, “speak for the dead to protect the living.” This means the scientists are experimenting and formulating evidence from a crime scene to convict the criminal. Convicting the criminal in turn protects the living, so forensic scientists need to use the materials provided by the dead to protect the innocent. “We are always seeking justice, we have to stay unbiased, and follow the science, and record it accurately. The ultimate prize is to convict the correct people, let the innocent run free, and give justice to the victims” (Lynn). The common goal in the forensic community is simply to make the world a better place. We are tasked with finding and criminalizing citizens, and we are only given microscopic molecules, and minimal evidence. Our goal is hard to achieve and is vital to the safety and prosperity of modern society. Citizens place faith in us to correct convict the guilty, and protect the innocent, and we must use specific forensic techniques to achieve that goal. Not all forensic analysis and convictions are a success, and the community and news broadcasts will harp on scientists and point out what we did wrong.

Feedback is essential to the individual and group success of a community. It’s important to listen, and allows absorb feedback, whether you accept it or not is your choice. “Certainly listen, not all feedback is great, be self-reflective, allow change, none of us are perfect” (Lynn). This quote is deep, and it relates greatly to any field. Always listening, even thought the feedback may not be the best is substantial in the growth between individuals in a certain discourse community. Listening allows people to hear new ideas, apply them to their work, and gain better results. Hearing a better way to carry out a procedure or experiment may drastically affect how fast you get your results, and how accurate they may be. “Little criticisms aren’t mean, and they should be accepted, I’m a manager at my lab and I even accept criticisms as constructive” (Lynn). Even managers, or people high ranking in a community, who normally are

the ones giving feedback are constantly accepting feedback and applying it. The quote by Dr. Lynn stresses the importance of feedback, and the idea that he is a manager accepting feedback really hits hard with novices in the discourse community.

The forensic science community is a vigorous, tough, strenuous community. It requires an insane amount of knowledge, and an out of this world work ethic. "Forensic scientists across a broad array of sub-specialties have long maintained that they can link an unknown mark (e.g., a partial fingerprint or tireprint) to a unique source. Yet no scientific basis exists for this assertion, which is sustained largely by a faulty probabilistic intuition equating infrequency with uniqueness" (Saks). This means that we as a community have used unknown marks to convict humans, and shows how hard the forensic field is. We can take a tire track, determine the car, and figure out citizens with that car, strictly from the tire mark. The quote states "Yet no scientific basis exists for this assertion", saying forensic scientist throw the idea of probability out of the window, since no cases are ever the same, and that is what makes the forensic community unique.

Works Cited

Saks, Michael J., and Jonathan J. Koehler. "The Individualization Fallacy in Forensic Science Evidence." *Vanderbilt Law Review*, vol. 61, no. 1, 2008, pp. 197. https://web.p.ebscohost.com/ehost/detail/detail?vid=0&sid=a7b1705f-17df-4f65-b358-3c2cce5e6ae8%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=31527845&db=lgh

Leslie, Stanley M. M. *Speaking for the Dead: Coroners, Institutional Structures and Risk Management*, ProQuest Dissertations Publishing, 2011. https://www.proquest.com/docview/925644685?accountid=26417&pq-origsite=summon

Howes, Loene M., and Nenagh Kemp. "Discord in the Communication of Forensic Science: Can the Science of Language Help Foster Shared Understanding?" *Journal of Language and Social Psychology*, vol. 36, no. 1, 2017, pp. 96-111. https://journals.sagepub.com/doi/full/10.1177/0261927X16663589?utm_source=summon&utm_medium=discovery-provider&

Lynn, J.J. Interview. Conducted by Michael Becker, 09 November 2021.