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Deduction as Difference: The Role of Atypical Cognition in the Detective Genre

Deprived of ordinary resources, the analyst throws himself into the spirit of his opponent, identifies himself therewith, and not unfrequently sees thus, at a glance, the sole methods (sometimes indeed absurdly simple ones) by which he may seduce into error or hurry into miscalculation.

– Edgar Allen Poe, “The Murders in the Rue Morgue”

By this point, the detective story is so ubiquitous that most readers will have at least some familiarity with the conventions of the genre: an elusive, conniving culprit; a wide array of suspects, each with something to conceal; a victim, found unexplainably dead; and a clever, eccentric detective, who sees through them all. The settings, contexts, and identities change, but a surprising number of devices have remained consistent since Poe’s instantiation of the form with the detective C. Auguste Dupin in 1841. Indeed, mystery scholar George Dove has even made the claim that “in a sense, every detective story is a retelling of Poe’s ‘The Murders in the Rue Morgue’” (9). Dupin’s successors vary in age, race, gender, class, location, and time period, and yet the key to their crime-solving

successes is the same “analytical power” (Poe, “Rue Morgue”): the ability to simulate, and thereby, outwit, the mind of another. Termed “ratiocination” by Poe himself, modern cognitive science knows this ability as theory of mind: the understanding that the contents of others’ minds can differ from our own, and the ability to infer those contents from observing external cues. Again and again, these detectives perform the same feats of observation, intuition, and deduction to determine who committed the crime and why. However, these guidelines of formula and genre have subsequent and often overlooked consequences. To use the “logic of guessing” or abductive reasoning championed by Sherlock Holmes and logician C. S. Peirce (Abrams 79), the predicament is as follows: The case must be solved by the detective, so therefore the detective must be the only person who is able to solve the case. To ensure that the detective is the only person who can solve the case, the detective must be made cognitively different from the other characters. Due to this inherent difference, the detective is thereby isolated and "otherized" from the community. Because the detective is otherized, they then do not form the relationship ties that would allow them to settle down and move on from a life of crime-solving, and thus the cycle re-perpetuates itself. By exploring this cycle, this essay will address representation and identity within the detective genre from a contemporary cognitivist perspective, examining the functional consequences and politicized nature of intelligence

and re-analyzing the signification of disability and atypicality within the detective's narrative world.

Media studies and cognitive science have much to offer each other and indeed are naturally intertwined if we consider that all cultural products that fall under the term "media" arise from human intentions, emotions, and beliefs. As theorist Stuart Hall writes in an introduction to his seminal theory of representation, "Culture, it is argued, is not so much a set of *things* — novels, and paintings or TV programmes and comics — as a process, a set of *practices*. Primarily, culture is concerned with the production and the exchange of meanings" (2). If meanings are given to the external world by human minds, which are then shared amongst other minds to create a system of representations within a culture, then it seems that an analysis of cultural representations would benefit from a discussion of functions of the mind.

To understand the applications of cultural and cognitive theory in the detective narrative, we will first examine the cognitive function that makes detection (and reading detective stories) possible and discuss how the detective's mind constitutes their identity. We will then see how this identity constructs the detective's dissimilarity with and detachment from the world around them. We will conclude by extending these interpretations to our real-world notions of intelligence, atypicality, and disability.

What is Theory of Mind?

Let's say your roommate (or partner, or teenage child) has just come home from a long day at work. As she plops herself down onto the couch and pulls out her phone, you ask, "How are you?", and she responds with, "I'm fine." But what is she actually thinking? You could guess based on what she has just told you: that she feels, in fact, just fine. But you could also hear in the tone of her voice a note of something that betrays what she has told you, something suggesting that she feels upset, or angry, or frustrated. Or you could observe her body language — her slouchy posture could suggest that she is tired, thus the lackluster response, — or her behavior — perhaps she is so engrossed in her phone that she isn't actually thinking about how to answer your question at all, and so she responds with the least cognitively taxing answer so as not to distract herself. You can never know *exactly* what she is thinking, even if she tries her best to tell you (assuming she knows exactly what she herself is thinking in the first place). The best you can do is reconstruct in your own mind an approximate idea of her internal mental state based on the external clues that she provides: what she says and does, and how she says and does them. In other words, you constitute a theory of her mind.

Human capacity for theory of mind (ToM) lies on a spectrum, with people with autism spectrum disorders, who often struggle with and sometimes even lack ToM altogether at one end, and people with social anxiety, schizophrenia, or borderline

personality disorder, who tend to over-attribute mental states to others, on the other (Perner and Lang 339). Neurotypical individuals tend to fall somewhere in the middle of this spectrum. People are not born with the ability to represent others' thoughts and beliefs; we acquire ToM over the course of childhood, with full performance on complex social inferences at around adolescence (Stone et al. 641). It is important to note that ToM does not necessarily involve *accuracy* in guessing others' thoughts, but rather the mere *capacity* to ascribe some sort of mental activity to others based on their behavior (Zunshine 6).

Within cultural and media studies, Hall acknowledges the role of social cognition in his theory of representation: "The expression on my face 'says something' about who I am (identity) and what I am feeling (emotions) and what group I feel I belong to (attachment), which can be 'read' and understood by other people, even if I didn't intend deliberately to communicate anything formal as 'a message', and even if the other person couldn't give a logical account of how s/he came to understand what I was 'saying'" (2). Hall's description of this process bears a striking resemblance to characterizations of ToM, which is appropriate because ToM is, at its roots, an evolutionary adaptation driven by the emergence of social and cultural groups, the same groups that create shared systems of representations.

This adaptation not only allows productive and meaningful human-human interactions but also drives our ability to engage in para-human mental state attribution,

such as anthropomorphizing the feelings of animals or objects, or ascribing desires and beliefs to words on a page or to still frames arranged in sequence. Lisa Zunshine, one of the few scholars working at the intersection between cognitive science and cultural studies, writes that this capacity to represent the minds of others is the critical force that allowed fictional narratives to develop in the first place: “The very process of making sense of what we read appears to be grounded in our ability to invest the flimsy verbal constructions that we generously call “characters” with a potential for a variety of thoughts, feelings, and desires and then to look for the “cues” that would allow us to guess at their feelings and thus predict their actions” (10). Zunshine’s work questions media theory’s neglect of cognitivism and strengthens our understanding of ToM as a meaning-making social practice.

Detection as Theory of Mind

The detective story is a particularly appropriate site for synthesizing cognitive and cultural theory, as unlike other culturally-specified narrative formulas such as the romance, fantasy, or situational comedy, the detective genre relies heavily on cognition as a driving force in its narrative progression. The goal in a detective story is always to discover the culprit and to reveal how, and, most importantly, why they committed the crime. All three of these revelations are brought about by the detective’s singular and

extraordinary acumen for understanding and deducing others' thoughts and intentions.¹

Returning to the epigraph introduced at the beginning of this essay, what Poe is implying, in cognitive terms, is that the detective's ability to solve a case relies wholly on their capacity to essentially become the culprit by simulating his or her mind. For example, in Agatha Christie's *The Mirror Crack'd*, detective Miss Marple uses ToM to identify with Heather Badcock's murderer, Marina Gregg, in explaining the case:

There was that expression on your wife's face and she was looking not at Heather Badcock but at that picture. At a picture of a laughing, happy mother holding up a happy child. The mistake was that though there was doom foreshadowed in Marina Gregg's face, it was not on her the doom would come. The doom was to come upon Heather ... You must imagine what that moment meant to Marina Gregg ... I think she had nursed all those years a kind of hatred for the unknown person who had been the cause of her tragedy. And here suddenly she meets that person face to face. And a person who is gay, jolly and pleased with herself. It was too much for her.

(*The Mirror Crack'd* 203)

¹ There are mystery stories in which the character who takes up the role of the detective is cognitively impaired at ToM tasks, such as Mark Haddon's *The Curious Incident of the Dog in the Night-Time*, in which Christopher Boone, an autistic teenager, attempts to discover who killed his neighbor's dog. It is notable however, that the focus of this novel shifts away from the investigation of the dog's murder, and while Christopher is highly observant, he does not end up solving the case himself, due in part, perhaps, to the fact that his ToM deficit prevents him from representing the emotions and intentions of others.

Miss Marple's primary and persistent clue throughout the novel is Marina's facial expression at this precise moment when Heather is talking to her. Miss Marple's solution to the case is fundamentally based on one moment of "doomed" expression, in which Miss Marple, and Miss Marple alone, is able to read the truth of Marina's feelings, intentions, and actions, accurately revealing how and why she committed the murder. Neither the witnesses nor the inspector from Scotland Yard are able to reach this conclusion, as Miss Marple is uniquely skilled at understanding others' minds.

Likewise, Father Brown, a Catholic priest-turned-detective, describes his method of identifying the murderer as a simulation of the criminal's mental state: "You see, I had murdered them all myself ... I had thought out exactly how a thing like that could be done, and in what style or state of mind a man could really do it. And when I was quite sure that I felt exactly like the murderer myself, of course I knew who he was" (Chesterton 8). The ability to seemingly perfectly represent another's mental state is the skill necessary for arriving at the solution, and while everyone has some ToM capacity, the detective character's abilities far surpass others' in accuracy of representation.

However, despite many shared qualities, not all characters dubbed as "detectives" use theory of mind as the means to their solutions. As literary critic John T. Irwin explains, we must "distinguish the genre invented by Poe in the Dupin tales of the 1840s from stories whose main character is a detective but whose main concern is not analysis but adventure

... with the revelation of a hidden truth simply serving as a device to illuminate the former and motivate the latter” (1). Rather than using keen observation, logical reasoning, and social inference to arrive at an answer, these “adventurer” detectives solve the case almost as an afterthought, while the main focus of the narrative is on action and conflict. In more contemporary media, Hilary Neroni identifies the “biodetective,” who relies primarily on physical, technological, and bodily evidence — including fingerprinting, surveillance, and torture — to identify a culprit (117). The focus for the biodetective is not on discovering a culprit’s motivations and justifications for the crime committed but rather merely on identifying a guilty party. Neroni’s contrasting archetype, the detective of the real, represented by *Homeland*’s Carrie Mathison, solves a case in a manner not unlike C. Auguste Dupin and Miss Marple do, namely that “it is her or his ability to read and interact with other people’s desires and anxieties that leads to success” (129). By constructing a consummate representation of another’s mind, a cognitively-focused detective² succeeds at determining who committed the crime, and crucially, why they did so.

Representing Neuroatypicality

Let us return to the abductive reasoning I introduced at the beginning: firstly, the formulaic conventions of the detective genre dictate that the case must be solved by the

² From this point forward I will use the broad term “detective” only to refer to this uniquely cognitively-endowed detective unless otherwise noted.

detective³ (Cawelti 88). The corollary of this stipulation then is that *only* the detective can be the one to solve the case, otherwise any character in the story could arrive at the solution, and since they rarely do, we can reasonably assume that our corollary is correct. It follows that there must be something inherently different about the detective that uniquely equips them to fill this role. I have suggested that a preternatural theory of mind capacity is this essential differentiator. However, this cognitive atypicality that is the key to the detective's ability to reach the solution frequently occurs alongside psychological drawbacks, ranging from mild quirks, sensitivities, compulsions, or eccentricities to more concerning behaviors such as narcissism, hostility, or mania. This duality has been present since the genre's inception: "What I have described in the Frenchman [Dupin] was merely the result of an excited, or perhaps of a *diseased* intelligence" (Poe, "Rue Morgue", my emphasis). For instance, Christie's Hercule Poirot displays some compulsive tendencies that disability scholar Susannah B. Mintz notes are "preoccupied with orderliness in ways that go beyond a precise style of detecting. Poirot sees dust where it isn't, gets distracted by a spot of grease on his suit ... aligns objects on desks and paintings on walls in absolute straight lines, ... and so on" (6). Mintz likens Poirot to Adrian Monk from USA Network's *Monk*, who is explicitly diagnosed with obsessive-compulsive disorder in the show. However,

³ There are, of course, exceptions to this rule, but the rarity and experimental nature of these exceptions give credence to the established precedent. For a more in-depth analysis of the relationship between convention and experimentation within this genre, see George N. Dove's *The Reader and the Detective Story*.

both characters' compulsive attention to detail seems to ultimately assist in their process of detection, not only in discovering clues but also in observing subtle cues in others' behavior and speech that they can then read and interpret. In *The Clocks*, Poirot reveals the murderer and the motive without ever meeting any of the suspects or examining the scene, relying solely on his uncannily acute powers of observation and inference:

'But why? Where's the motive?' Hercule Poirot looked at me. He wagged a finger.

'So the neighbors' conversation was no use to you, eh? I found one most

illuminating sentence. Do you remember that after talking of living abroad, Mrs.

Bland remarked that she liked living in Crowdean *because she had a sister here. But*

Mrs. Bland was not supposed to have a sister. She had inherited a large fortune a year ago from a Canadian great-uncle because she was the only surviving member of his

family.' (*The Clocks* 237)

The narrator of *The Clocks*, Colin Lamb, a British MI5 agent himself and thus someone familiar with espionage, evidence collection, and lie detection, nevertheless misses the crucial piece of evidence because he lacks Poirot's gifted insight. The idea that Poirot, Monk, and other detectives may be aided by and, in some ways, benefit from what the DSM⁴ would term "disorders" in their hunt for truth is a complicated one. As disability scholar Michael Bérubé explains,

⁴ The Diagnostic and Statistical Manual of Mental Disorders (DSM), published and regularly updated by the American Psychiatric Association, is the current comprehensive inventory of

This linkage of exceptionality with disability may sound strange and to some readers even offensive, on the grounds that such an expansion of the dynamic of disability does violence to the materiality of disability. But [it] is simply a reversal of the more familiar narrative dynamic in which disability is rendered as exceptionality and thereby redeemed—as when Dumbo finds that the source of his shame is actually the source of his power. (Bérubé 569)

In the context of the detective story, Bérubé’s assessment is particularly relevant because it is an inherent feature of the detective to be cognitively atypical and for that atypicality to be the cause of their success. Though the frequency of the strikingly gifted but simultaneously flawed detective trope is quite high⁵, this observation in itself tells us nothing about the function and consequences of atypicality in the detective story. In the next section, we will observe how these atypicalities construct and define a detective’s relationship to their social world.

Consequences of Neuroatypicality

It is not incidental that detective characters are, more often than not, single, childless, and largely solitary, with few close friendships. On the one hand, as Zunshine

medically-defined psychological and psychiatric conditions and includes methods for diagnosis and treatment.

⁵ For an extensive list of detectives with disabilities, see Beyond Rivalry’s blog post “[Crime Fiction Book List: Disabled isn’t Unable.](#)”

argues, the detective's isolation is profoundly functional for preserving the narrative progression in a detective story: "if calculate we must — as, for example, when knowing that one of our pleasant fellow passengers is, in effect, a predator but not knowing which one — we had better have *all* of our attention focused on the problem at hand ... Not an ideal situation for analyzing the feelings of one's beloved" (Zunshine 146). The reader of the detective story, like detectives themselves, must keep track of the motivations and intentions of many characters at once, as each could be the culprit. The reader, though, is not blessed with the detective's skill for ToM, and thus cannot handle the mentalizing required for a romance on top of that required for solving the case. If there are romantic elements in a detective story, Zunshine notes that they are "carefully calibrated so as not to compete with the metarepresentational framing required to process the detective elements of the story" (Zunshine 148).

However, Zunshine fails to address that the detective's lack of romantic or intimate connections serves a functional purpose within the narrative world as well as outside of it. We have determined that the detective possesses a unique and exemplary talent for understanding others, and yet, paradoxically, detectives are deprived of close relationships with others. To be clear, there is nothing inherent about neuroatypicality either within the world of the detective story or in the real world that prevents a person from forming meaningful connections with others. But when the same patterns of relation between the

detective and their community are re-perpetuated over time, it stands to reason that a narrative purpose exists for the detective's disconnection that resides within the internal logic of the genre. The internal differences that allow for both the detective's superhuman ToM capacity and their coordinating neuroatypicalities simultaneously otherize the detective from their peers and their community, thereby prohibiting or minimizing the detective's chance of forming connections or intimacy with others. Reciprocally, the detective's isolation then reinforces their atypicality, creating a vicious cycle of differentiation and disconnection.

Sherlock Holmes is a prototypical example of this phenomenon. Across installations and adaptations, Holmes's character, despite his keen and incisive intuition about other people, is portrayed as eccentric, aloof, and as scholar Sonya Freeman Loftis notes, reminiscent of modern stereotypes about people with autism spectrum disorders. Holmes has no friends besides Watson and his familial relationships are strained and distant. Narrated through Watson's eyes, Holmes is almost disturbingly aberrant: "Holmes exhibits atypical body language that Watson finds it difficult to interpret: because of his inability to decode his friend's expressions, Watson often imagines Holmes as cold and emotionless" (Loftis). But perhaps then it is Watson's (and by extension, the rest of Holmes's neurotypical peers) comparatively deficient ToM abilities that renders Holmes so otherized. Holmes can read every thought and intention in Watson's face and figure with uncanny

accuracy, but Watson struggles to read anything at all in Holmes's. Their relationship is fundamentally unbalanced, thereby reinforcing Holmes's otherness and re-perpetuating his disconnection.

Likewise, Miss Marple, who never married and lives alone, is thought of by her neighbors as nosy and meddling; the vicar's wife first describes her as a "nasty old cat" (*The Murder at the Vicarage* 187). The friends she does have come and go throughout the installments of the series, but their presence is not generally missed or even acknowledged by Miss Marple herself. Instead of having intimate relationships with other people, Miss Marple has an intimate relationship with investigating murders. When her doctor stops by for a regular check-in on her health, he suggests knowingly that to improve her health and happiness "What I'd prescribe for you is a nice juicy murder" (*The Mirror Crack'd* 24). Miss Marple finds fulfilment in her solitary old age by using her sharp intuition and understanding to solve crimes. Taken more critically, "At least in part, then, the disabilities of many detectives perpetuate the metaphorical use of impairment to signify something 'broken' in those characters that solving crime somehow helps to heal" (Mintz 3). Though Miss Marple's "something broken," namely, her advancing frailty and senility, is less obvious than Holmes's, she is similarly excluded and otherized by her neurotypical community, and thus she turns to detection to fill that void.

The detective's isolation is also assisted by the implicit connection between ToM and criminality within the narrative world. As Saunders explains, "The criminal is depicted as the only person in the narrative who equals the detective in mental prowess and agility ... successful criminals, like successful detectives, must excel in reading minds" (173). ToM ability thus for the criminal operates as a means of committing violence and escaping retribution. Though the detective uses ToM in the name of truth and justice, this cognitive likeness between detective and criminal reinforces the similarities between the two, thereby associating the detective with someone to be feared and shunned.

Implications and Conclusions

Is it acceptable to use neuroatypicality as a plot device, constructing both the detective's greatest strength and deepest flaw? The detective story cannot dismiss this question, because "By definition, detective fiction addresses matters of social justice, (in)equality, and cultural conflict; given its basic concern with social order and the interpretation of signs and clues, primarily physical, the genre is well positioned to engage the social model of disability" (Mintz 2). Returning to Stuart Hall's theory of representation, while Hall focuses his discussion on representations of people and things that exist in our world, the detective is a culturally-defined representation without a real referent: compared to the detective of fiction, our real-world police detectives cannot afford to be as independent, nonconformist, or illicit in their investigations; private investigators for the

most part work toward surveillance and data collection rather than deduction and intrigue; and people who fancy themselves amateur sleuths are lucky if they can solve the case of a stolen pen, let alone that of an elaborate murder. The world of the detective story is not our world, and therefore the representations contained within are not necessarily mandated by our conceptions of identity or neuroatypicality. Examining Sherlock Holmes in relation to autism, Loftis writes that “Ultimately, no one representation can ever encapsulate the incredible diversity of the spectrum—and while Holmes is probably an autistic character by most definitions, he is not an autistic person” (Loftis). Rather, Holmes and other detectives like him are constructed as atypical *within* their own narrative worlds, and they can only be compared to their in-universe peers, who are, by necessity, inattentive, obtuse, and un-mindful, in order to preserve the detective’s role as the solver of mysteries.

This does not give detective fiction a free pass to represent cognitive difference through either harmful stereotypes or fetishization. Indeed, Loftis argues that characters like Holmes and *Criminal Minds*’s Spencer Reid can promote harm when taken to be representatives of a real community of autistic people: when “savants are depicted as ‘overcoming’ autism through mental achievement, ... such figures perpetuate a negative stereotype for people on the spectrum” (Loftis) because neuroatypicality is not something to be conquered.

Contemporary American society tends to fetishize intelligence, and particularly savantism, in both real people and fictional characters. There are certainly other types of geniuses who have captured the public imagination (mathematical savants in *Good Will Hunting* and *The Imitation Game*, child music prodigies as in *Amadeus* or any episode of *America's Got Talent*, and more recently, intuitively gifted chess players in *The Queen's Gambit*). But these tropes have not had the same broad entertainment value and staying power, or indeed, the economic success of the genius of detection, and this is perhaps because the detective feels closer and more accessible to us. We may never be tasked with solving an impossible equation or creating a masterpiece, but we must read the desires and intentions of other people every day, in every social interaction. As Saunders explains, our need to decipher what others are thinking is built upon an evolutionary anxiety: "The perspicuity of the detective-hero therefore satisfies our need to believe that human intelligence, if sufficiently keen and well-developed, is sufficient to discover and eliminate threats to human cooperative systems ... [because] ToM has not rendered us fully transparent to one another, evidently, nor erased duplicity from human behavioral strategies" (Saunders 158). Thus, the detective gives us faith that we can be assured in our own judgments: that people are knowable, if one just knows how to look. Our conception of intelligence as it pertains to the detective then is highly social. How much easier would it

be if you knew what he thought of you? Or if you knew what she meant? Mind reading for us, the everyday readers, is always fallible — for the detective, it is unfailing.

Ultimately, the detective character reveals that representations of cognition have material consequences for the character as well as for the reader. In the context of cognitive science and ToM, the detective genre takes on new signification in that we come to understand the detective's unique abilities not as divine or supernatural but as uniquely and innately human. Evaluating media representations in conversation with cognitive science allows us to reexamine the role of the human mind in the stories it creates and shares.

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