

The Scientific Method: A Study

The Cause and Effect of Presumption in Henry James' Early Works

Quantum mechanics describes reality as the superposition of wave functions; these mathematical constructs represent possible states that an entity can assume, and their relative magnitudes quantify the probabilities that measurement will reveal a physical entity to occupy each state. According to the Copenhagen interpretation, the mere act of observation or measurement fixes the state, reducing the measured entity's wave function into a strong preference for the measured state, with strength proportional to the precision of measurement. Like a subatomic particle's temperature, the dynamic personalities of Henry James' characters also balk at the fixation imposed by scientific observation. Unique, variegated, and multidimensional, they defy classification and stereotyping; they represent the superposition of several linearly independent types, the incalculable convergence of many impressions and forms. Despite this diversity in personality and the hopelessness of categorizing it, other members of society inevitably judge and form their own impressions. Once measured, characters struggle mightily – sometimes fatally – to escape the accompanying preconceptions, but their efforts often come too little too late; by the time the nuances of a character's true personality fully emerge, presumption has done its damage.

In Henry James' early novels and novellas, it is always better to experience and judge for oneself than rely on scientific assumptions and mathematical formulae. Hoping to ascertain Osmond's character, Isabel Archer in *The Portrait of a Lady* sounds her cousin Ralph Touchett for background information, claiming, "The more information one has about one's dangers the better." Ralph, however, defends the Copenhagen interpretation: "I don't agree to that – **it may make them dangers**. We know too much about people in these days; we hear too much. Our ears, our minds, our mouths, are stuffed with personalities. Don't mind anything any one tells you about any one else. Judge every one and everything for yourself." Besides discounting the importance of hearsay,

Ralph notes that assumptions carried into a relationship can themselves *create* danger that would not otherwise exist. In essence, Ralph warns us against stereotyping and the “dangers” of misplaced expectations; one’s own experience, according to Ralph, is the most reliable way to judge others. Just as a scientific measurement collapses the wave function, an observation or judgment – whether correct or not – assumes its own personality in the observed. Characters in James’ early literature reaffirm Ralph’s counsel, as their personalities are seldom fathomable through mere theory alone; in *Daisy Miller: A Study*, *Washington Square*, and *The Portrait of a Lady*, scientific classification and mathematical extrapolation not only fail to determine characters’ true personalities but also strain beyond repair the relationships between observer and observed, between scientist and specimen.

The three protagonists of Henry James’ early novellas and novels are realistic, layered, dynamic personalities that resist their observers’ taxonomy and extrapolation.

Daisy Miller defies classification because she does not fit any single stereotype that her scientific student Winterbourne attaches to her. Initially “grateful for having found the formula that applied to Daisy Miller,” Winterbourne later struggles to comprehend the American girl’s flirtatious limbos because they jibe with neither his notion of innocence nor his sense of debauchery. “Was she simply a pretty girl from New York State...or was she also a designing, an audacious, an unscrupulous young woman?” Winterbourne admits to being “puzzled” at the “inscrutable combination of audacity and innocence.” Later, Winterbourne debates the origin of Daisy’s eccentricities, wondering if they “were generic, national, and how far they were personal.” No matter which classification he applies to Daisy Miller, the girl’s subsequent action eludes Winterbourne’s theory; the more Winterbourne struggles to classify Daisy – “innocent” or “reckless,” “engaged” or “not engaged” – the more her social aplomb perplexes him. Contrary to the beliefs of the censorious European-American society around her, Daisy is simply her own natural, naïve self, fond of attention and eager for playful discourse.

Poor Catherine Sloper of *Washington Square* has a similarly natural blend of multiple qualities, but her father Austin Sloper nevertheless attempts to fit mathematical propositions to her daughter's behavior. Neither a rebel nor a slave, Catherine is strong yet respectful, passionate yet patient, prideful yet humble, staunch yet peace-loving; she is neither the weak woman that her father infers from her obedience nor the "lovelorn maiden" that one might deduce in her red dress. "The two things are extremely mixed up, and the mixture is extremely odd. It will produce some third element, and that's what I am waiting to see...It is the point where the adoration stops that I find it interesting to fix," Dr. Sloper connives, formulating his plan as a calculus limit. Unable to reconcile her obedience with her sudden desire to marry someone he disapproves, Dr. Sloper resorts to geometry to ascertain the stronger of her daughter's two seemingly contradictory personalities. "Catherine and her young man are my surfaces; I have taken their measure," he declares confidently, certain that having "passed his life in estimating people...nineteen cases out of twenty he was right." Dr. Sloper has always relied on precise calculations, but he mistakenly resorts to cool reason and scientific measurement to delimit the warmth of Catherine's emotion and personal values.

Although Ralph Touchett is no scientist in *The Portrait of a Lady*, his estimation of Isabel Archer accounts for but grossly underestimates Isabel's dynamic personality. To convince his father that Isabel is worthy of a considerable bequest, Ralph bases his argument not only on the indefinite continuation of his idealistic view of Isabel – "as good as her best opportunities" – but also on a series of calculations: her likelihood of "probably" spending 5000 pounds "in two or three years...probably mak[ing] a part of it to each of her sisters." Daniel Touchett can only concede helplessly, "Well, you *have* worked it out." Indeed, Ralph has calculated Isabel's budget down to her risk of falling prey to a fortune hunter: "That's a risk, and it has entered into my calculation. I think it's appreciable, but I think it's small, and I'm prepared to take it." Lost in his imagination and "calculation," however, is the possibility that Isabel will change – rather, that seeing the world will

change her. Ralph, however sentimental his measurements and “worked out” his calculations, fixates Isabel’s personality and extrapolates it into the future, underestimating its capability for change. Upon returning, Isabel declares that she has changed: “I’ve seen [the world]. It doesn’t look to me now, I admit, such an inviting expanse.” In spreading her wings and seeing the world, Isabel returns a different woman – less eager for new sights, more receptive to the prospect of settling down in marriage. This transformation only corroborates the unpredictability and multidimensionality of Isabel’s character, but it nevertheless shocks Ralph: “Ralph was shocked and humiliated; his calculations had been false and the person in the world in whom he was most interested was lost.” Ralph’s concession reaffirms both the elusiveness of human personality and the fecklessness of our efforts to pin it down with extrapolation and calculation.

As Ralph ominously describes in his counsel to Isabel, the overgeneralized assumptions and mathematical extrapolations that James’ scientific and mathematical observers make of their subjects of study *create* “dangers” that might otherwise not surface. Whether or not the calculations yield correct answers, their mere *computation* is enough to decompose the wave function.

Winterbourne’s relentless classification of Daisy Miller, despite keeping the man in quarters close enough for observation, nevertheless distances him sufficiently far from Daisy to contribute to her isolation and prevent him from saving her from her demise. Instead of *experiencing* Daisy’s presence, accompanying her on her walks, and gratifying her want of discourse, he withdraws out of propriety, displaying even tinges of jealousy. Because Giovanelli is present, Winterbourne deems her “carried off” in an exclusive relationship, even though Daisy never explicitly states any commitment; because Winterbourne examines her and categorizes her as a hopeless coquette, he leaves Daisy’s side and confidence, becoming a passive observer unable to save her from the jaws of society in her time of greatest need. Deserted by Winterbourne and disapproved in European-American circles, Daisy loses both her beloved friend’s guidance and the “esteem” of the “society” around her.

Whereas an unassuming Winterbourne might have accompanied Daisy on her walks and guarded her from ill-advised evening expeditions, the distant observer that he becomes misses his opportunity to save the literally and figuratively isolated young woman from contracting the Roman fever. “From either view of [Daisy and Giovanelli], he had somehow missed her, and now it was too late,” Winterbourne laments, soon thereafter admitting that “he had bothered so much about the right way of regarding Miss Daisy Miller” that he had overlooked the sweet but helpless young woman that would have “appreciated one’s esteem.” Winterbourne’s social consciousness – his constant labeling, his musing, his desire for order and taxonomy, his adherence to traditional mores, his concern for tact, and his measurement of Daisy and the extent of her relationship with Giovanelli – create the exact sort of social isolation that ultimately forsakes – “sacrifices” – Daisy Miller, who lives and breathes on “society” as much as she does on air.

Likewise, Dr. Sloper’s intense study of his daughter manhandles – and eventually shatters – Catherine’s sentiments. Dr. Sloper ruthlessly frames her daughter’s options at their extremes, forcing her to choose between the weakness of total submission and the insolence of utmost defiance: “If you see [Morris], you will be an ungrateful, cruel child; you will have given your old father the greatest pain of his life.” Catherine breaks down into tears, unable to fit her round personality into the square bins that her father creates in hyperbole. Later, having labeled his daughter a weak woman, Dr. Sloper recoils at her inner resolve when he hears her reason, “But if I don’t obey you, I ought not to live with you – to enjoy your kindness and protection.” “This striking argument gave the Doctor a sudden sense of having underestimated his daughter,” leading the Doctor to brush aside the comment with contempt. In forcing Catherine to choose one extreme – one side in the battle between him and Morris – Dr. Sloper mortally wounds Catherine’s love for her father and estranges her forever, regardless of her choice. Like the measurement of a quantum experiment, Dr. Sloper’s calculating measurements of Catherine’s breaking point irreparably damage

a relationship that might otherwise have proceeded stably throughout life. Even when Dr. Sloper categorizes Morris correctly, his calculations impede the marriage sufficiently long enough to break Morris' hope and change his mind. Had Dr. Sloper unearthed Morris cleanly and quickly at the outset, Catherine might have enjoyed a lengthy relationship with her father. Had Dr. Sloper reserved his judgments and bequeathed his full will to Catherine, she might have fulfilled her life with a less hesitant Morris. However, by drawing out the marriage in his hunt for full mathematical proof and his scientific "interest" in the tension between a daughter's obedience and lover's passion, he first forces Catherine into patient passivity before ultimately staring down Morris to surrender. Thus, even though Morris is one of the nineteen out of twenty that Dr. Sloper correctly identifies (Catherine is the twentieth), the correctness of his guess is unimportant; it is the ruthless, relentless *application* of Dr. Sloper's cold measurement that endangers Catherine's relationships and psyche, chilling the warmth previously stoked in Washington Square.

Even though Ralph Touchett has only the purest intentions in mind when he convinces his father to leave Isabel a considerable bequest, his calculations only further enable Isabel's "drop to the ground." In extrapolating the purity and immutability of Isabel's character, Ralph actually increases the danger of their compromise; his generous gift facilitates Isabel's trip around the world and ultimately attracts Serena Merle and Gilbert Osmond to Isabel. If Ralph had only declared his love as his father had advised – if he had only surrendered his "three or four" "convictions" to the true warmth in his heart for Isabel – he might have married her instead of expediting her much unhappier marriage and the pain they both suffer for it. In short, underestimating Isabel's capacity for change, the world's ability to change her, and the appeal of Osmond's "type," Ralph's "calculations" engender and empower threats that would not have emerged had he not made them: a facilitation of Isabel's life-changing travels, and bait to draw fortune hunters to "cage" Isabel.

Through the variegation in his characters and the pains they suffer from misjudging one another, Henry James shows us that judging personality is not a science but an art with consequence. Forming one's impression of another follows neither overarching axioms nor unifying mathematical theory; furthermore, measurement creates its own reality, and the surface extended according to equations often leads its extrapolators over the edge and their relationships into the abyss, contributing as much suffering to the overly studied and unjustly abandoned Daisy Miller as her pernicious malaria.

How should one form an impression? Experience and experiment seem to be the safest source of impression, as James upholds in his essay on "The Art of Fiction." "The power to guess the unseen from the seen, to trace the implication of things, to judge the whole piece by the pattern, the condition of feeling life in general so completely that you are well on your way to knowing any particular corner of it – this cluster of gifts may almost be said to constitute experience... If experience consists of impressions, it may be said that impressions are experience." James advises us as Ralph advises Isabel: We should judge for ourselves, forming our impressions from incident and letting them course through our senses rather than flow from our studies.

Even then, we may judge in error. James absolves nobody; Catherine trusts Morris on instinct but overlooks his love for money, just as Isabel marries Osmond on no experience but her own (and some encouraging from Madame Merle). Nonetheless, Ralph still has a point; there are no rules to impressions, as James reiterates in "The Art of Fiction": "What kind of experience is intended, and where does it begin and end? Experience is never limited, and it is never complete; it is an immense sensibility, a kind of huge spider-web of the finest silken threads suspended in the chamber of consciousness, and catching every airborne particle in its tissue." Indeed, as Madame Merle echoes, "There's no such thing as an isolated man or woman; we're each of us made up of some cluster of appurtenances. What shall we call our 'self'? Where does it begin? Where does it

end? It overflows into everything that belongs to us – and then it flows back again... One's self – for other people – is one's expression of one's self; and one's house, one's furniture, one's garments, the books one reads, the company one keeps – these things are all expressive." Judging for oneself is easier said than done. We may overrate second-hand information as Ralph suggests, but we must also build a context – a "huge spider-web" – around everything we hear and everybody we encounter.

As a "cluster of appurtenances," the personalities we meet not only defy classification but also change in context, forcing us to process both the expressions – the "shell" – of personality and the actions that result from it. "The quiet, dusky cupboard" of deception can still strike even the most observant, but, by judging for ourselves, we at least preclude the dangers of presumption. Catherine's trust in Morris and Isabel's limited exposure to Osmond still disappoint, but James does not mean to declare experience the unconditional victor, especially not with the depth of disguise around Morris and Osmond, who are no shallow creatures in their own rights. No such formula exists. The only formula to forming impressions is that *there is no formula*; there is only experience, and the perseverance to weather reality until one's experience develops. Despite their unenviable fates, it is this experience, painstakingly accrued through trial and error, that gives Catherine and Isabel their hope; Catherine becomes the confidante for the young around her, and Isabel returns to Rome determined to brighten Pansy's future in mind. "Impressions are experience," and it is this vault from which one must draw when forming new impressions and undergoing new experiences. In the end, because neither life nor fiction is mathematical, we must transcend rules, stereotypes, and even the esoteric wave function, opting instead for a more familiar entity: our own experience.