Baroque Science Fiction in Cervantes: A Proposal

Este ensayo propone delinear un concepto de ciencia ficción barroca, partiendo del pensamiento de Luis de Molina, Bruno Latour y William Egginton. La idea principal es enseñar cómo estos pensadores de la temprana y tardía modernidad privilegian la realidad de las acciones y elecciones discursivas de actores concretos con el fin de contrarrestar las maneras en que la física moderna y la metafísica escolástica erigen una distinción entre el conocimiento científico y una realidad estable, pero inaccesible, a la cual se dirige y se refiere el conocimiento científico. De manera similar, el desafío que presenta Cervantes gira en torno al hecho de que no haya ningún terreno epistemológico u ontológico exterior a su ficción en donde se pueda juzgar con certeza los mundos y performances expuestos en las dos últimas piezas de las Novelas ejemplares, "El casamiento engañoso" y "El coloquio de los perros". Al contrario, encontramos diversas perspectivas o aspectos según los cuales se ve y se mide la falta que subyace y motiva toda la acción y su expresión y exposición. Latour llama estos aspectos modos ("modes"), cada uno de los cuales se define como una postura en vez de un paradigma epistemológico.

In *An Inquiry into Modes of Existence*, the anthropologist Bruno Latour assembles a flexible, contingent, and discursively multiple method for scientific inquiry by deconstructing some of modernity's most intransigent myths. Generally accepted oppositions between religion and science, the symbolic and the real, and fiction and truth are understood by Latour as clever and insistent dialectical constructs that obfuscate rather than reveal the active and multiple nature of knowledge and truth and the role of institutional values in their production and circulation. The anthropologist develops his analytical method through what he calls a "pivot table," whose purpose is to identify the fundamental keys, or tones, of distinct knowledge - and existence-producing modes. Arguing that the moderns never were what they/we claimed to be, Latour likens the notion of a stable empirical reality, one that language can approach but not encompass, to the medieval theological idea of metaphysical truth, thus inviting the reader to consider the multiple and contingent nature of

knowledge and truth as well as her active role in bringing them about. In this approach, the notion of a stable and timeless text - never mind the existence of a literary canon - is unveiled as another modern myth, since all textual (re)iterations introduce productive translations and mutations (see Gurd). Accordingly, the role of the literary critic would be to identify and deconstruct the diverse modes through which authors place their texts and readers on distinct trajectories in the search for knowledge and truth. This approach is particularly apt for a work like Cervantes's Novelas ejemplares, which explores, inspects, desecrates, and reconstitutes a wide range of knowledge modes in its socio-aesthetic pilgrimage through the commonplaces - and some not so common - of early modern Iberian literature. The goal of this paper is to locate and analyze some of these modes as presented in the last two novelas of the collection with an eye towards assembling a workable notion of baroque science fiction. This notion will be defined by mapping the intersections between Latour's Actor Network Theory, William Egginton's concept of a "baroque minor strategy," and Luis de Molina's innovations to the Scholastic concept of middle knowledge.

Latour's anthropological deconstruction of modernity aside, recent historical studies of the Spanish Baroque have made significant inroads in bringing Spain into modernity by mapping the use and extension of scientific and technological innovations in Felipe II's imperialistic enterprise, including the founding of the Madrid Academy of Sciences, which included one of the first chairs of mathematics in Europe. As Rachel Schmidt notes, "Philip II, in particular, recognized the need for improved scientific methods and information in order to manage his worldwide empire, and thus both funded and hoarded the innovations and knowledge accumulated under his auspices" (11).2 As works by James Lattis, Mario Biagioli, Rivka Feldhay, and A. C. Crombie and A. Carugo demonstrate, the institutional push towards modern scientific research and education outside of the monarchy comes primarily from the Jesuits, who wage an epistemological and political war on many fronts with the more traditional and residually dominant Dominicans. It is the Jesuits, for example, who embrace, albeit in a strategic and expedient manner, Copernican and Galilean innovations in astronomy and mathematics, most obviously in their use and dissemination of the Gregorian calendar. Moreover, the intellectual commerce between Galileo and the mathematicians at the Collegio Romano is intense; indeed, Galileo is known to have borrowed heavily from three well-known Jesuit philosophers at the Collegio Romano in two autograph treatises (Crombie and Carugo 167). Embracing scientific advancements worked to raise the influence of the Society in monarchical

circles as well as provide a platform from which they could influence scientific thought. However, Copernicus's heliocentric model of the cosmos also presented serious ontological and epistemological challenges to the traditional Ptolemaic worldview and its placement of Earth at the inferior centre of a stable and permanent metaphysical hierarchy, a hierarchy that was translated into asymmetrical racial, cultural, religious, and sexual relations that structured and penetrated every human (and non-human) interaction in medieval and early modern Europe. Recent literary studies have established that baroque Spanish literature is a virtual testing ground where these epochal battles are concerned (Domínguez; Gasta). However, the link between these studies and early modern science has tended to circumscribe itself to a search for scientific tropes in the aforementioned effort to rescue Spain from the margins of European modernity (García Santo Tomás).³

The present essay attempts to carve out a more formalistic inquiry into the ways in which scientific and philosophical innovations in early modernity find their way into the aesthetic creations of baroque authors in either disruptive or defensive fashion. For example, the incorporation of mathematical and cosmological images and tropes in the Lisbon court philosopher Francisco de Holanda's Aetatibus mundi differs radically from what we see in the Spanish diplomat Juan de Borja's Empresas morales.4 Where Holanda's unpublished illustrated treatise weds Neo-platonic geometry to biblical history in ways that challenge Scholastic cosmology and theology, Borja forcefully domesticates the epistemological progressivism of astronomical and geometrical theorems and images by converting them into moralistic expressions of desengaño. Similarly, Pedro Calderón de la Barca's repeated allusions to Tycho Brahe's fluid compromise between Copernican and Ptolemaic cosmologies in La vida es sueño relegate scientific and philosophical innovations to the status of a dream.5

What distinguishes my approach, I will claim, is the reading of emerging trends in scientific thought *through* aesthetic tropes as opposed to seeking the presence of mathematical or optical tropes as evidence of Spain's modernity.⁶ My goal is to situate what is happening in Spanish letters with regard to scientific innovations in a more disruptive fashion by showing how writers such as Cervantes, Zayas, and Calderón - even in the latter's apparent rejection of Copernicanism and its radical implications vis-à-vis the question of free will - recognize and deconstruct from the very beginning what Latour calls the "Double-click" strategy of modern scientific discourse.⁷

Playing on the religious resonance of the term *icon* as it relates to the digital navigation of a computer screen, Double-click for Latour refers to the reality effect that occurs when one opens a digital icon, or link, in the sense that one forgets about all of the algorithmic, technological, institutional, economic, legislative, political, linguistic, et al, *modes* through which the relation between the icon and its digital destination are constructed, delivered, and mediated. Double-click ultimately refers to the idea that direct access to truth, facts, being, etc., is possible *without mediation*, whether we are in the scientific or religious domain (Harman 92). Latour demonstrates how the "materialistic" mediators of knowledge vanish in the movement from icon, or sign, to referent, which extends Slavoj Žižek's understanding of ideological *vanishing* mediators in *The Sublime Object of Ideology* to all modes and registers of knowledge, especially science.⁸

For our purposes, Latour's analysis of the modal multiplicity through which modernity's sense of *the real* is mediated brings his emphasis on actors, relations, and strategic performances into intimate contact with the Baroque as it is understood by critics and thinkers such as Gilles Deleuze and William Egginton. In particular, Latour's emphasis on what he calls Actor Network Theory and the "artificial" or "made" quality of its discursive mediations places his approach in close proximity to Egginton's notion of a "minor strategy," according to the latter's analysis of the Baroque: "what the Baroque's minor strategy does is take the major strategy too seriously; it nestles into the representation and refuses to refer it to some other reality, but instead affirms it, albeit ironically, as its only reality" (*Theater 6*). What I hope to add to this conversation is a sixteenth-century epistemological innovation through which postmodern critics and theorists might inform their theoretical notions of baroque (un)reason, specifically, Luis de Molina's concept of Middle Knowledge.

The aesthetic-philological hypotheses through which critics have explained Cervantes's seemingly out-of-step (or progressive) valorization of ethnic minorities, social outcasts, feminine characters, and, in our case, canine interlocutors, have tended to focus on his Mannerist revisions of Renaissance humanism (Baena) or his anticipation of the baroque arabesques of Wilhelm Gottfried Leibniz (Deleuze; see also Schmidt). Egginton's nuanced psychoanalytical approach combines postmodern theory and biographical research, portraying Cervantes's modernity in ways that are compatible with Latour's paradigm: "Strangely, it seems that Cervantes's unparalleled literary success was forged by a life of almost continuous failure, for the relentless frustration of his youthful aspirations, and the disillusionment he felt at seeing his beliefs deflated by the reality

of his experience, became the engine of his invention of fiction" (Man 92). For Egginton, it is what Cervantes *doesn't* see with respect to the fulfilment and validation of Counter Reformation institutional discourses and values that motivates his aesthetic and epistemological inventions, and not the affirmation of their solidity behind an unstable and contingent veil of appearances. My own work has paralleled Egginton's in the use of tightly framed heuristic exchanges between early modern texts and (post)modern cultural artifacts, in my case, science fiction works by authors and film directors such as Neal Stephenson (Anathem), Rosa Montero (Lágrimas en la lluvia), or Lars von Trier (Melancholia).9 Here, I will limit my Cervantine interlocutors to the aforementioned Bruno Latour and Cervantes's contemporary and fellow citizen of Alcalá de Henares, Luis de Molina. My claim will be that Molina's innovations in the concept of free will, which arise from his understanding of "middle knowledge" (scientia media), offer a robust challenge to both medieval (religious) and modern (scientific) notions of transcendence in his privileging of the role of "secondary agents," i.e., human beings, in the construction and elaboration of knowledge. Molina's subtle, perhaps even philosophically sneaky, paradigm offers an important touchstone for postmodern readings of Cervantes's fiction, especially as it relates to both religious transcendence and an emergent empiricism.

Before proceeding, I will make the case for why a discussion of free will is relevant for understanding the transition from religious to mathematical-physical paradigms of reality. On the religious side, it is well established that divine omniscience tends to threaten, if not completely annihilate, human free will. The philosophical contortions required to carve out a space for indeterminate human action in Scholasticism can be read as a defensive reaction to an intractable problem: the fact that human knowledge of the world is completely subject to God's knowledge and will. Put another way, human and divine knowledge are channeled into separate and unequal epistemological and ontological domains, the one being less ontologically stable and eventually cancelled out by the other. Similarly, according to modern Naturalism, modern scientific modes of knowledge posit an independent natural world comprised, in the words of the scientific protagonist of Neal Stephenson's Baroque Cycle, of "pistons and cylinders, weights and springs to the very top" (682).10 Although scientific knowledge may be motivated and (negatively) affected by a scientist's desire, will, circumstances, etc. - subjective or accidental factors to be minimized, if not altogether eliminated - free will is either absent or accounted for by physical, biological, or neurological forces that are understood as self-sufficient and largely unconscious. Here is where

Latour's modes of inquiry step in to provide flexible and institutionally identifiable analyses of the scripts of both human and non-human agents at the centre of his Actor Network Theory (ANT), which focuses on the myriad discourses and timely performances out of which scientific knowledge is articulated and evaluated. In the words of Graham Harman: "The world is not made up of nature on one side and culture on the other, but only of actors. 'What is an actor? Any element which bends space around itself, makes other elements dependent upon itself and translates their will into a language of its own'" (26). In Latour's approach, the natural world is not described but rather put together and erected by human and non-human actors and agents; thus, the selection and performance of distinct epistemological modes is placed at the centre of his inquiry, although the exact term free will is rarely used.

This is not at all the case with late sixteenth and early seventeenthcentury debates around the topic, where free will is placed in the foreground. To make a long and complicated story somewhat shorter and more simplified, there are actually two predominant schools of thought on free will in Counter Reformation Europe. The more traditional orthodox position is espoused by the Dominicans, who hold that God's middle and free knowledge form a closed and perfect union with his natural knowledge." Here, an individual's actions are limited to abiding by or opposing the will of God. Ironically, as Latour points out, there is just as little room for indeterminate action in the mechanistic world assembled by Isaac Newton's gravitational geometry, or the scientific method of his English contemporary Robert Boyle. Luis de Molina's audacious revision of Aguinas's notion of middle knowledge, on the other hand, does create such a space, which leads to the divisive religious debate known as the De auxilis controversy (Lattis; Feldhay). In the Dominican view, middle knowledge and free knowledge are collapsed into God's decree concerning His true knowledge of man's actions and designs, along with His judgment of whether said actions are the result of efficient or sufficient grace. For Molina, in the meanwhile, there is a logical pause between the elections and actions of secondary agents, on the one hand, and God's decree, on the other. This is a complicated system, so I will take a moment to explain these different iterations of divine knowledge.

Natural knowledge, established in the creation of the world, encompasses God's knowledge of the ways in which the natural world functions.¹² The only exceptions to this explicatory and functional domain come courtesy of miracles, or divine intervention. *Middle knowledge*, which is where Molina intervenes, consists of all of the possible ramifications and permutations in the structural workings of natural knowledge in time. In

essence, and in language that is not dissimilar to that found in theories of Ouantum Mechanics, God's middle knowledge consists of all possible worlds resulting from all possible human elections. Finally, free knowledge concerns God's decree regarding which human elections - and the moral judgments thereof - result in the actual (decreed) world. In sum, although God knows all of the possible worlds, he does not know which actual world will maintain, since it is triggered by secondary agents. For the Dominicans, human election and God's decree are temporally *and* logically simultaneous, which really constrains the exercise of free will. Molina, as stated above, dwells in this logical space, or pause, that is necessary for human will to exist. Although he does not explicitly grant it a temporal extension, his insistence on its existence opens up the possibility of a hypothetical divine knowledge of "contingent conditional futures," as well as the *non-hypothetical* influence of human choices on these same future causal domains (Feldhay 207). This logical space is produced by Molina's attempt to safeguard the notion of free will insofar as God cannot know which actual decision a human actor will make and, thus, which actual world will result from said decision. In broadly Latourian language, the actor's performance of free will in concrete circumstances triggers alterations to the ontological and epistemological networks in which real knowledge is produced, and this includes the moral judgment of human elections and actions. This is also how Egginton sees the baroque minor strategy as a liberating and world-changing operative function in its focus on the reality of aesthetic expression. My proposal for a specifically baroque science fiction is derived from the ways in which Latour, Egginton, and now Molina privilege the reality of discursive elections and actions as opposed to the ways in which both Scholastic metaphysics and modern physics erect an ontological distinction between scientific knowledge and the unattainable but nevertheless more stable reality to which science refers.

And this is the space in which I will situate my discussion of "El casamiento engañoso" and "El coloquio de los perros," beginning with the entertaining and theologically dense conversation between Berganza and Cañizares in which the witch explains the difference between efficient and sufficient grace:

Podrás venir a entender cuando seas hombre que todas las desgracias que vienen a las gentes, a los reinos, a las ciudades y a los pueblos; las muertes repentinas, los naufragios, las caídas, en fin, todos los males que llaman de daño, vienen de la mano del Altísimo y de su voluntad permitente; y los daños y males que llaman de culpa, vienen y se causan por nosotros mismos. Dios es impeccable; de do se infiere que

nosotros somos autores del pecado, formándole en la intención, en la palabra y en la obra, todo permitiéndolo Dios, por nuestros pecados, como ya he dicho. Dirás tú ahora, hijo, si es que acaso me entiendes, que quién me hizo a mí teóloga.... (Cervantes, "Coloquio" 342)

Here Cañizares provides a theologically correct explanation of *sufficient* grace, which is the term used to describe those elections by secondary agents that do not coincide with the will of God, although they fall within His knowledge. However, a curious divorce happens when Cañizares uncouples mass disasters and unexplained, or natural catastrophes, from human guilt, limiting the effects of human actions to what we are probably supposed to take as easily identifiable human weaknesses. She will eventually make it all but impossible to draw such distinctions, but her outline of efficient and sufficient grace is clear enough for us to continue this analysis. Alfred Freddoso explains:

[Dominicans] contend that cooperating grace is *intrinsically* efficacious when good acts ensue and *intrinsically* inefficacious or merely sufficient when evil acts ensue. Molina counters that although actual grace is a supernatural influence on us that inclines and incites us to act well, it is not *in itself* efficacious or inefficacious, but is instead efficacious or inefficacious only because of our free cooperation with it or freely chosen lack thereof. (37; Freddoso's emphasis)

In this view, grace is barely distinguishable, if at all, from the influence of the stars, which allows Molina to unlink the terrestrial judgment of Grace from God's hands and place it in human hands. According to him, our decisions and actions are constitutive of both the sufficient *and* efficacious nature of divine grace, which places the moral judgment of human actions in human, i.e., contingent/stochastic, hands.¹⁴ It is for this reason that the goodness or evil of Cañizares's actions becomes so difficult to judge; indeed, it is not even apparent which of her actions are *real* and which are *imagined* in the fictional account of the *coloquio*.

Let us recall that this theological excursus takes place when the loquacious dog and the gossiping witch are discussing what happens when witches *se untan*. As many critics have noted, Cervantes provides no ultimate or stable terrain on which to resolve the perspectival confusion that circles around the bewitched and bewitching ritual of anointment. Following Latour, however, we can identify several different *modes* through which this experience is elicited. The first description of Cañizares can be related to Latour's *referential* mode, which is the closest register to what we would consider "scientific". In their new book *Medialogies*, David

Castillo and William Egginton note how Foucault anchors this mode in Arnaud and Nicole's Port Royal Logic: "For these thinkers an idea, image, or perception can qualify as a sign of something only if it shows, in addition to the thing it is representing, the relation to that thing as well" (23). In the coloquio it mimics medical diagnoses: "digo que son tan frías [las unturas], que nos privan de todos los sentidos en untándonos con ellas, y quedamos tendidas y desnudas en el suelo, entonces dicen que en la fantasía pasamos todo aquello que nos parece pasar verdaderamente" (342). The coldness combined with the dormancy of the senses corresponds to a sleeping or drugged body, moving the quasi-miraculous, or demonic, flights and portents to the faculty of fantasy. From here Cañizares moves directly into the world of metamorphosis: "Otras veces, acabadas de untar, a nuestro parecer, mudamos forma, y convertidas en gallos, lechuzas o cuervos, vamos al lugar donde nuestro dueño nos espera, y allí nos cobramos nuestra primera forma y gozamos de los deleites que te dejo de decir, por ser tales que la memoria se escandaliza en acordarse dellos" (Cervantes, "Coloquio" 342). According to Latour, metamorphosis is the mode that allows objects and actors to persist in time, while at the same time revealing that concepts such as permanence or substance are actually dependent on change. Persistence in time depends on the object's ability to alter itself in order to maintain itself in changing circumstances. In this case, the witches persist not in spite of but rather due to their mutations into cocks, owls, or crows. But what is truly remarkable about Cañizares's descriptions is the self-conscious scepticism with which she frames them, to the point where she describes the hypocrisy that characterizes her relationship both with herself and her neighbours: "cubro con la capa de la hipocresía todas mis muchas faltas" (Cervantes, "Coloquio" 342). Anthony Cascardi aptly reads Cañizares's discourse through the classical philosophy of Cynicism, concluding that "For the Cynic, the purpose of philosophy was not to establish anything, and certainly not to establish anything for all time, but rather to tear down the assumptions, beliefs, and practices of the established world" (91). For Latour and Egginton, this cynical posture would be seen as a productive destruction that clears the way for a more active and self-aware epistemology.

Before continuing our scientific analysis of the witch's self-conscious description of her vocation, let us recall the overarching structure of the frame tale "El casamiento engañoso" To summarize, a gallivanting soldier is deceived by a social-climbing *pícara* into a marriage that leaves him both physically sick with syphilis and emotionally wounded due to his lingering feelings for "Doña" Estefanía (if that is her real name): "No quise buscarla, por no hallar el mal que me faltaba" (292). Estefanía, for her part, is also

seduced by false appearances in promising herself to a man whom, for all intents and purposes, she serves and enjoys as a husband until their reverie is interrupted by the return of the legitimate owners of the house where they honeymooned. Much like the bittersweet transformation of the brilliant and garrulous Preciosa into the married and silent doña Constanza in the opening story of the Novelas ejemplares, "La gitanilla," 15 Campuzano's engaging narration of his abbreviated marital bliss provides a tantalizing glimpse of how the world might otherwise be under different circumstances, regardless of the fact that it is founded on lies, masks, and deception. However, this contingent and conditional possibility quickly moves into the mundane grotesqueness of Campuzano's syphilitic delirium, which then gives way to his witnessing of Berganza's and Cipión's dialogue, his transcription of the same, and our shared reading of it with the *licenciado* Peralta. As occurs with Cañizares, science gives way to fantasy, which then dialectically clears a path to a bestial realism through a kind of epistemological seduction no less powerful or dangerous than the bewitching hands that capture Campuzano's desire with their alluring prestidigitation: "Yo quedé abrasado con las manos de nieve que había visto y muerto por el rostro que deseaba ver" (Cervantes, "Casamiento" 284). The closest we get to any kind of solid ground, or direct access to reality as defined in Latour's concept of the Double-click, is when Campuzano takes responsibility for his doomed romance: "Bien veo que quise engañar y fui engañado, porque me hirieron por mis propios filos" (Cervantes, "Casamiento" 292); or, his more theologically apt: "a las demás preguntas no tengo que decir sino que salgo de aquel hospital, de sudar catorce cargas de bubas que me echó a cuestas una mujer que escogí por mía, que non debiera" (Cervantes, "Casamiento" 282). Campuzano's movement in the world cannot be unlinked from his free will, which includes of course his decision to give credence to his senses when he overhears what appear to be two talking dogs. What is more, the reader's judgment of this epistemological and ontological predicament also depends on Campuzano's elections, which, together with Cañizares's selfconscious hypocrisy form the problematic bookends of the wedded stories. In short, there is no direct access to any ultimate sense of truth or reality, only the mediations and translations of these less than perfect agent-actors and their canine counterparts. In the words of Jorge Checa, "El motivo de que Cipión y Berganza pongan en segundo plano la cuestión de origen de su hablar racional o discursivo es simplemente la imposibilidad de desentrañarla" (296).

Estefanía's seduction of Campuzano through his desire for something she appears to both possess and conceal prepares us for Cañizares's seduction of Berganza through the dog's desire to know what he is and where he is from. The witch's discourse is too rich to account for in a single essay, but it is worthwhile to continue our analysis of her anointed experiences, or fantasies, or dreams. Once she anoints herself and falls into the trance, or stupor, Berganza becomes afraid. What is notable here is how the witch's silence and the dog's fear coincide, as if the lack of discourse, the dog's terror of the resultant vacuum, and subsequent violence are simultaneous phenomena. The realness of the inert body becomes an intolerable excess once the witch stops speaking, suggesting that the mediation of reality through language, more than providing a direct conduit to reality, functions rather to keep reality at bay. After Berganza drags Cañizares outside by her heels (analogous to Campuzano's being led around by his *calcañares*), the epistemological chaos expands, as the villagers debate whether she has died from her excessive penitence, is enraptured thanks to her saintliness, or has anointed herself as do all witches and is cavorting with the devil. Unlike Don Quijote, where Sancho and Don Quijote come to an uneasy compromise concerning what has happened, or not, in the Cave of Montesinos, or on the saddle of Clavileño, the debate concerning Cañizares devolves into chaos when the witch awakens and starts berating Berganza, only to have the dog bite her in the "luengas faldas de su vientre" (Cervantes, "Coloquio" 345). In reaction to the violence of the dog, the villagers alternately throw holy water on him in recognition of his saintly instincts, or accuse him of being a "demonio en figura de perro" (Cervantes, "Coloquio" 345). All of these religious incantations attempt to penetrate the spectacle to its core, which has already been emptied by the mystified speculation of Berganza concerning the nature of Cañizares: "¿Quién hizo a esta mala vieja tan discreta y tan mala? ¿De dónde sabe ella cuáles son males de daño y cuáles de culpa? ¿Cómo entiende y habla tanto de Dios y obra tanto del Diablo? ¿Cómo peca tan de malicia no escudándose con ignorancia?" (Cervantes, "Coloquio" 344). This last question is particularly interesting in light of free will, since not only does the witch take credit for her sinful actions, she consciously covers them up with hypocrisy. By doing so, the ontological distance that allows God to judge the efficient or sufficient nature of human elections is occupied by Cañizares herself. Even so, the reader can retain the illusion that the power of divine providence is maintained until the villagers debate this very question without being able to reach any sort of conclusion. Then again, the reader may well ask herself how a dog is able to reason in such a complex fashion, which leads to a consideration of Berganza's strange trip to this place.

The dog's physical, spiritual, and narrative voyage has taken us through a large number of discursive modes with great self-consciousness and irony, beginning with the bestiality of his servitude to the butcher Nicolás el Romo, for whom he carried stolen cuts of meat to el Romo's mistress. Here, Berganza is seduced by a different woman into delivering his stolen flesh into "manos sucias," resulting in his master's attempt to kill him, thus providing an elemental structure for the rest of the *novela* as well as the collection as a whole. I am referring to the dilemma of which master to serve, a dynamic that follows him throughout the story. As Berganza moves through a series of increasingly unscrupulous masters to, finally, the self-consciously hypocritical witch, Cervantes rigorously and hilariously displays the complex demands and networks in which the free will and actions of the dog are caught, and how no action or performance comes without consequences, as well as how each act of Berganza creates real effects and ripples in these same networks.¹⁶

Similarly, the dogs exhibit human qualities in the excessive "murmuring," sexual attraction, irrational violence, and discursive pride through which they mobilize and mediate their critical philosophy. It is, in fact, impossible to come to a definitive judgment concerning the beasthuman balance displayed by any of the characters, beginning with Campuzano, whose mental faculties are channelled through his *calcañares*. As I have tried to make clear throughout this analysis, the challenge Cervantes presents arises from the fact that there is no solid *exterior* epistemological or ontological ground from which to judge the worlds and performances displayed in "El coloquio" or the entire collection of *novelas*. Instead, what we have are myriad perspectives or aspects from which to glimpse and measure the lack that underlies and motivates them all. Latour calls these aspects and perspectives *modes*, each of which is defined not as a knowledge-revealing paradigm so much as a knowledge-producing position, or "preposition":

using it (preposition) in its most literal, grammatical sense, to mark a *position-taking* that comes *before* a proposition is stated, determining how the proposition is to be grasped and thus constituting its interpretive key.... Like the definition of a literary genre, or like a key signature on a musical score, at the beginning an indication of this sort is nothing more than a signpost, but it will weigh on the entire course of your interpretation. (57; Latour's emphasis)

In Latour's methodology, there are no less than fifteen modes and thus fifteen prepositional attitudes that the actor can project on the world in the production of knowledge and of course being, some of which include fiction, reference, law, religion, and morality. In acting modally, one does not think in terms of the institutionalized practices of art, or science, law, metaphysics, or good and evil. Rather, the preposition leads to an adverbial posture from which one thinks and performs fictively, referentially, legally, religiously, or morally. It may seem like a minimal difference, but what it means is that one reifies and thus recreates these modes in the act of deploying them to make sense of the world and one's actions therein. Finally, the knowledge produced by distinct modes is subject to distinct conditions of "felicity." According to Harman, "The key principle of Latour's later philosophy is that each mode of existence has its own 'felicity conditions,' its own way of establishing truth, which must not be confused with the conditions applicable to the other modes. Science must no longer be allowed a monopoly on claims to truth" (175). This brings us tantalizingly close to Peralta's disarming assessment of the Coloquio: "Aunque este coloquio sea fingido y nunca haya pasado, paréceme que está tan bien compuesto que puede el señor Alférez pasar adelante con el Segundo" (359). This is a clever assessment because, on the one hand, the purported fictional nature of the story is placed in the subjunctive grammatical mode, thus turning the tables on the fiction versus reality dialectic; and, on the other, the story is judged according to its discursive composition, which introduces aesthetic "conditions of felicity" while underlining the real existence of the narrative as a made thing or artifice. Both rhetorical gestures collapse the barrier between an ostensible reality out there and its discursive description over here.

Returning to the chaos surrounding Cañizares's unturas, we can see how different modes are put into action in the attempt to corral and domesticate the inert body of the hypocritical theologian. Is she medically or referentially - dead, reference being Latour's stand-in for the scientific mode? Is she cavorting with the devil or blessed by angels, in the religiously metaphysical sense? Is she good or evil, in the moral sense? Is she innocent or guilty, in the legal sense? The answers to these questions are far from clear, but, more importantly, Cervantes frames these attempts at knowledge as actions or performances of scientific, religious, moral, or legal modes as opposed to discoveries of a pre-existing and independent reality. They vie for pre-eminence in a competition that is never satisfactorily resolved. George Güntert helps us understand Cervantine irony here when he writes that "Lo característico del mundo cervantino no es, pues, la existencia de diferentes planos ontológicos (material-espiritual; temporal-permanente) sino su coexistencia y aun su compenetración y mezcla" (109). In an essay on "La gitanilla," I call this "implicit structural irony,"¹⁷ and I argue that "a focused appreciation of Cervantes's implicit structural irony can help explain the abrupt and violent endings" of many of the *novelas* (127).¹⁸

For example, when Berganza attacks Cañizares we may pull back and recall that all of these different modes are presented fictionally in a series of frames that are not collapsible or expandable into any kind of overarching coherence, or hierarchy. Indeed, the denouement of this particular scene gives way to Berganza's transformation into the perro sabio who is exploited by a family of gypsies, returning us to the opening tale "La gitanilla." All of the modes just mentioned appear in "La gitanilla" in analogous form. The similarities to "El coloquio" would include the romance between a nobleman and a gypsy girl, although the nobleman becomes the head of a criminal family in "El coloquio" as opposed to the gypsy girl becoming a noblewoman - both being possible conditional future contingents of the star-crossed lover motif. The collusion between law enforcement, scribes, and judges is featured in both tales, along with con games involving livestock. Finally, both tales feature exploited performers whose earnings support the networks in which they move, networks that, in turn, reach outwards towards other matrices, including the nobility. But I would like to move backwards to what can be called points of origin before concluding my essay.

Latour effects a radical - Cervantine even - substantiation of fiction by overturning modernity's relegation of fiction, and art in general, to less real status than other epistemological modes: "As we shall see, this term (fiction) does not direct our attention toward illusion, toward falsity, but toward what is fabricated, consistent, and real" (238). Thus, not only does fiction partake of and produce reality, its specific relation to reality constantly lays bare and reifies its particular "mode of veridiction," which, when extended to other modal domains, works to underline how each and every epistemological mode is subject to its own conditions of felicity. All of which suggests that fiction is more self-conscious, more sentient, or implicitly ironic than other modes, which, rather than exploring, questioning, or rearticulating their specific modes of veridiction, seek instead to plant the roots of their veridiction in the aforementioned independent reality, or Double-click effect. Cervantes makes this very point towards the end of the novela when Berganza narrates the conversation between the four lunatics, all of whom are looking for breakthroughs, or transcendence: the poet with his perfectly composed work that he waits ten years to publish, following a Horatian dictum; the alchemist who believes he is honing in on the philosopher's stone; the mathematician who is looking for the "punto fijo," even as he works on squaring the circle, 19 and of course the *arbitrista*, who thinks he has solved

the financial problems of the monarchy with his program of forced fasting (Checa 313). So what is the problem with these quests, and why do they lead to insanity?

From Latour's point of view, they all embody the epistemological and ontological deadlocks produced by the Double-click mentality, wherein the subject attempts to separate scientific knowledge from the scripts, networks, daily practices, institutional affordances, in the end, the mediations that make said knowledge legible and useful. Cervantes, on the other hand, takes this critique one step further by equating the quest for direct access to reality with insanity, a sickness for which the only cure is mediation. Egginton identifies this same problem in Don Quixote: "Quixote's defining trait as a character is that he cannot split himself... He cannot suspend disbelief; he cannot suspend the performativity of a play or a story" (Man). Egginton goes on to show that Don Quixote is in many ways the antitype through which the reader is taught how to create and navigate fiction in order to model and resolve real world issues: "by connecting and relating ideas to one another; by entertaining and rejecting hypotheticals; by learning to distinguish the real from the imaginary, the existent from the possible, yes, but from the vantage of imaginary and possible worlds, not from a preordained and given reality" (Man). It is notable that Cervantes places the four lunatics scene at the end of the coloquio, which is where the reader would be expecting to encounter some sort of revelation that would help unravel the myriad discourses, interlocutors, genres, mysteries, again, the mediations of the meaning of the dogs' conversation as well as the ontological status of the speakers. Instead, we are led into a room full of lunatics searching for their own transcendence, almost as if we were being led by Lazarillo's blind master to bang our heads against the stone hard realization that the only solution to this puzzle is to engage with the mediated narratives in their own terms.

All of which brings me back around to Molina's elevation of the role of secondary agents. As discussed earlier, Molina's concept of middle knowledge challenges the traditional relationship between sufficient and efficient grace by making both free knowledge and the moral judgment of the same dependent on human choices. There is no way to extract Campuzano's story from his failed marriage and subsequent illness, which color everything that follows. Nor is there an unmediated way out of the *coloquio*, and this goes for all of the intertwined stories, including Cañizares's self-consciously hypocritical *and* theologically accurate judgment of her own beliefs and actions. And this is, perhaps, Cervantes's most Molina-like strategy, placing Cañizares's mini-sermon on efficient and sufficient grace in the mouth of a well-meaning hypocrite, which leads

one to ask whether the theological concept can survive being applied by such a decidedly earthly creature and, if not, then how are we to arrive at a moral judgment of the tale? If a theological dictum is shown to be subject to its own very specific conditions of felicity, its realness and universality come into question.

Given the multiple networks and actors, modes and performances, and the nagging doubt that many of the plots might have turned out differently, the persistent metaphysical truth at the heart of the tale would seem to be that "There is no direct access to reality either actually or in principle, despite the long-cherished dreams of rationalists" (Harman 37). Moreover, given the co-penetration of early modern scientific developments and fictional elements in Cervantes, not only does Cervantes provide a forceful argument for the validity of aesthetic truths, he also demonstrates that any attempt to bracket off a separate and stable reality, whether through science or theology, actually reduces the likelihood of assembling valid and useful knowledge. In the end, the human actors become both the creators and judges of knowledge of the world.

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NOTES

- See my recent essays, "Knowledge (scientia), Fiction and the Other in Cervantes's La gitanilla;" "Eventos ocasionales: La ciencia media y la ficción en Los trabajos de Persiles y Sigismunda;" and my forthcoming "Free Will and Indeterminacy in Cervantes: From Molina to Heisenberg, and Beyond!"
- See also, Navarra Brotons, "Galileo y España" and "Astronomía y cosmología;" Portuondo, Secret Science; Barrera-Osorio, XXX; Goodman, Power and Penury; and Cañizares-Esguerra, Nature, Empire and Nation.
- 3 See my recent review of García Santo Tomás's *La musa refractada. Literatura y óptica en la España del Barroco*.
- See my essays "Signs of the Times," and "1581: Mathematics, Emblematics, and Melancholia."
- 5 In Calderón's La vida es sueño, Segismundo's allusions to the freedom of the "fishes of the sea and the birds of the air" is an obvious reference to Brahe's conservative compromise between Copernican and Ptolemaic cosmologies (102-172).
- 6 Williamsen is the first to model this approach in her book Co(s)mic Chaos: Exploring Los trabajos de Persiles y Sigismunda.

- 7 See also Castillo and Lollini's Introduction, "Reason and Its Others in Early Modernity (A View from the South)," in the volume Reason and Its Others: Italy, Spain and the New World.
- Following Žižek's development of the concept in *The Sublime Object of Ideology*, I write "Knowledge, along with the artistic competence attained through practice and repetition, is naturalized, while the intellectual tools required to take full advantage of the rhetorical game become the patrimony and cultural capital of the members of an emergent sphere of cultural elites" (*Persistence* 74).
- 9 See my essays: "Free Will," "Knowledge," and "1581: Emblematics."
- This is decidedly not the case after Einstein's theory of general relativity (Stapp).
- Thomist interpretations embedded in different institutional settings, with different problems and goals, different ideological frameworks, and different attitudes to knowledge" (197). Later, she specifies that "the Jesuits' main theological objection to the Dominican system concerned the concept of a divine decree embodying both God's foreknowledge and his will. The Jesuits separated God's knowledge from his will. Separate and prior to the decree, the Jesuits contended, God has 'scientia media' by which he knows with a certain and infallible knowledge man's future acts, although these are not yet predestined by his will. To some degree, God's voluntary decree is guided by his knowledge" (205).
- See Freddoso's meticulous presentation of these questions in the Introduction to his edition of Luis de Molina's On Divine Foreknowledge (Part IV of the Concordia).
- According to Gittes, "As a theologian, Cañizares is clearly aligned with Augustine, whose notion that habit becomes necessity is clearly recapitulated here: 'By servitude to passion, habit is formed, and habit to which there is no resistance becomes necessity' (Confessions, VIII.v[10])" (367).
- 14 MacGregor is more succinct: "Molina argued that, intrinsically, God's general concurrence is neither efficacious nor inefficacious. Rather, it is intrinsically neutral and is extrinsically made efficacious or inefficacious by the pertinent secondary agents" (160).
- 15 The "Coloquio" contains an obvious allusion to "La gitanilla" in the history of the gypsy king called el Conde: "Dan obediencia, mejor que a su rey, a uno que llaman Conde al cual, y a todos los que dél suceden, tienen el sobrenombre de Maldonado; y no porque vengan del apellido deste noble linaje, sino porque un paje de un caballero deste nombre se enamoró de una gitana, la cual no le quiso conceder su amor si no se hacía gitano y la tomaba por mujer" (348).

- I would tend to agree with Beusterien's recent animal studies approach, which argues that Cervantes is questioning and problematizing medieval and early modern ontological hierarchies, not just in terms of class but also in terms of race, gender, and ethnicity by planting a more or less reasonable discourse in the mouths of dogs. According to him, Cervantes "destabilizes the terms of human and animal exceptionalism that formed the base of the two generic forms of animal exemplum literature and renders the logic of both as inconsistent and inoperative" (47).
- 17 Egginton has argued for a similar ironic structure in Cervantes: "What fiction permitted Cervantes to do in a way that no author before him managed was to juxtapose ideals and their inevitable disappointment in such a way as to force the reader simultaneously to acknowledge their value and to recognize the comic tragedy of their defeat" (Man).
- 18 Conversely, what we see in studies such as those by Casalduero, Forcione, Avalle-Arce, and Clamurro is a dialectical movement from the mundane and chaotic towards a transcendental, or *authentic*, resolution.
- 19 Navarro Brotons helps develop the historical background for this hilarious scene in his narration of how Galileo offers to come to Spain in 1616 to help solve the problem of determining longitude in oceanic navigation (809-13).

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