♦ Chapter 4

Cervantes's Algorithms: Science, Paranoia and Media Manipulation in *El Retablo de las maravillas*

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It is all the easier to enchain people who have less knowledge. In them, the soul opens in such a way that it makes room for the passage of impressions aroused by the performer's techniques, opening wide windows which, in others, are always closed. The performer has means at his disposal to forge all the chains he wants: hope, compassion, fear, love, hate, indignation, anger, joy, patience, disdain for life and death, for fortune. (142)

Giordano Bruno, *On Magic*

The real enemy of the human race is not fearless and irresponsible thinker, be he right or wrong. The real enemy is the man who tries to mold the human spirit so that it will not dare to spread its wings. (78) Abraham Flexner, *The Usefulness* of the Useless Knowledge

Psychological Manipulation and the Dangers of Artificial Intelligence

In the haunting, and at times disconcerting, documentary *The Social Dilemma* (2020), its director, Jeff Orlowski, sounds the alarm about the psychological manipulation to which we are subjected by the big tech companies that

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control social networks. Through a series of revealing testimonies from former employees and company executives from such platforms as Facebook, Google, or Twitter, the docudrama immerses the viewer in the depths of the psychological manipulation to which these systems and their host companies subject their users. The documentary reveals how, through specific techniques and a careful design that encourages addiction, social networks influence users' behavior for the platform's own benefit. The Social Dilemma is just one of many social and psychological studies that have emerged in the last decade to warn us of the dangers of social networks, artificial intelligence, and the overwhelming increase in fake news that swarm social media platforms. Another important examination is Soshana Zuboff's The Age of Surveillance Capitalism (2019), which reveals the dangers of artificial intelligence and the rise of instrumentarian power through the surveillance carried out by the big tech companies like Amazon or Google who exploit, control, and manipulate consumer behavior. As a new market form that transcends the totalitarian "Big Brother" state by shifting to a new expression of power called "Big Other," this novel form of instrumentarian power predicts the consumer's behavior through sophisticated systems of tracking, then sells targeted ads based on calculated algorithms. As a result, tech companies transform the seemingly innocuous human experience into behavioral data that predicts what we will read, eat, buy, watch, and do, then manages that behavior. In an interview with Zuboff under the suggestive title "The Goal is to Automate Us," The Guardian journalist John Naughton compares the deep transformation in our information era to a similar phenomenon when Johannes Gutenberg invented the printing press in 1439:

Printing shaped and transformed societies over the next four centuries, but nobody in Mainz (Gutenberg's hometown) in, say, 1495 could have known that his technology would (among other things): fuel the Reformation and undermine the authority of the mighty Catholic church; enable the rise of what we now recognise as modern science; create unheard-of professions and industries; change the shape of our brains; and even recalibrate our conceptions of childhood. And yet printing did all this and more. (Naughton)

Considering this comparison among the two of the most pivotal media instruments and transformations in human history, Naughton notes:

[W]e're about the same distance into our revolution, the one kicked off by digital technology and networking. And although it's now gradually dawning on us that this really is a big deal and that epochal social and economic changes are under way, we're as clueless about where it's heading and what's driving it as the citizens of Mainz were in 1495. (Naughton)

In light of Naughton's observations, to talk about artificial intelligence, surveillance, and social media manipulation in the time of Miguel de Cervantes does not seem an anachronistic exercise or a bewildering idea when one considers that the creation of alt-realities and the different psychosocial forms of manipulation carried out by early modern religious and political institutions resemble in purpose and form what is happening today with social media. This coincidentally is also one of the plot lines developed in What Would Cervantes Do? where David Castillo and William Egginton establish similar connections between Cervantes's times and ours in that alternative realities are created through the manipulation of diverse media, which the authors refer to as a medialogy. To expand on Castillo's and Egginton's notion of medialogy and to move beyond it, in the following pages I further explore how media manipulation was carried out from the standpoint of the prevailing (natural) philosophy of the time. As an illustration of the connections I am sketching here, historian Ioan Petru Couliano, an expert on Renaissance magic and its methods to exert manipulation, recognized in the philosopher Giordano Bruno, a figure contemporary to Cervantes, the origins of the new discipline, applied psychosociology. In Bruno's De vinculis in genere (1591) the magician "is the prototype of the impersonal systems of mass media, indirect censorship, global manipulation, and the brain trusts that exercise their occult control over the Western masses" (Couliano 90). Bruno deals with psychological manipulation and the different methods of persuasion to control a crowd and, as a result, De vinculis in genere has become "the written work that deserves to have the real and unique place of honor among theories of manipulation of the masses" (Couliano 89). According to philosophical, medical, and scientific theories of the time, Renaissance magi like Bruno focused on how imagination fostered effective strategies of persuasion that depended on the use of images to manipulate the masses. After Bruno's horrific death, both Reformation and Counterreformation agendas would impose censorship over the perceived "dangerous" faculty of human imagination. However, even as the political and ecclesiastical institutions curtailed imagination, they simultaneously recognized the *imaginatio*'s mighty, irresistible, and instrumentarian power to manipulate individuals, and the post-Tridentine Church subsequently utilized the very same strategies of the imagination to control their subjects' beliefs.²

The dazzling power of the imagination was likewise employed by a variety of disciplines, including the sciences, where such fields as magic and the art of memory depended on the strategic use of imagination. This can be seen in Cervantes's oeuvre as well. As I have explored elsewhere, Cervantes's fascination with the possibility of other worlds is palpable throughout his work, and he advises of the dangers of letting others control us through psychological manipulation.3 Examples abound in Cervantes's works where there is an abundance of characters that frequently manipulate others' behaviors for their own benefit and interests. From the Barber and the Priest in Don Quixote to Chanfalla and Chirinos in *El retablo de las maravillas*, among many others, these manipulators carefully study and predict the behavior of their subjects and transform the human experience of what others see, read, or do by utilizing methods similar to those used today by the tech companies and media organizations mentioned above. At the same time, these characters create altrealities based on the very same techniques practiced by institutions of power during Cervantes's time, that is, through the manipulation of false ideas and memories and the imposition of *phantasms* or mental images conceived by the inner sense of imaginatio. In this essay, I examine how Cervantes dramatizes the power and possibilities of the *imaginatio* and mass manipulation in the *entremés* El retablo de las maravillas (1612) by following the theories and methods available to him that astonishingly resemble those of our time. Interestingly, this line of inquiry reinforces the ideas developed by Castillo and Egginton in their own ingenious reading of El retablo de las maravillas.

Defying the Algorithm: Chanfalla's Ideological Game and Homophily

In Cervantes's oeuvre there is a wealth of manipulative characters whose objectives are to influence and modify the behavior of their "victims" by forcing them to act against the power of their will. Think, for example, of the priest and the barber in *Don Quixote* who create an alternative reality, supposedly an "obra de encantadores" (a work of enchanters) (my translation), meant to force the noble knight to become the *hidalgo* Alonso Quijano again. Similarly, in many of his *entremeses*, Cervantes portrays a parade of compelling and riveting characters who manipulate others mainly for their own economic profit, which reflect the social tensions of the time and serve as a reaction against the established power. In this sense, according to Nicholas Spadaccini, the *entremeses* question an entire system of values because the economic and social transformations are due, mainly, to the increase and development of currency:

Entre otras cosas, esas transformaciones se manifestaron en el desarrollo e incremento del dinero, cuya valoración va a implicar un cambio de actitud ante el mundo y la sociedad, y que, bajo la forma de salario, cambiaría la relación de hombre a hombre [...] estos cambios estimularán el afán de medro y de lucro, y un anhelo por transformar las tradicionales relaciones entre estamentos [...] repertorio de tensiones entre distintos grupos sociales: ricos y pobres, hombres y mujeres, etc. Así que las únicas salidas serán el bandolerismo, la vida picaresca, la prostitución, etc. (18).

Among other things, these transformations are manifested in the development and increase of money, the value of which will imply a change of attitude toward the world and society, and which, in the form of wages, would change the relationship among individuals [...] these changes will stimulate the desire for growth and profit, and a desire to transform the traditional relationships between classes [...] repertoire of tensions between different social groups: rich and poor, men and women, etc. So, the only way out will be banditry, the picaresque life, prostitution, etc. (my translation)

On the grounds of such social transformations, there is a number of characters who unabashedly will manipulate others for economic and personal profit. For example, Escarramán, in *El rufián viudo*, manipulates his victims becoming the best of Cervantine ruffians (Spadaccini 19). In *El vizcaíno fingido*, the prostitutes Cristina and Brígida unscrupulously attempt to gain access to the aristocracy to which the idle male characters, Solórzano y Quiñones, belong. In *El viejo celoso*, Cañizares manipulates Doña Lorenza who herself has been manipulated by Cristina and the old go-between Ortigosa. In *La cueva de Salamanca*, manipulation acquires magical overtones to create the illusion of false knowledge, where the ignorant Pancracio is influenced first by his wife Leonarda and then by the student Carraolano.

There is no doubt that economic advancement also becomes the driving force behind the actions of the disingenuous and deceitful authors in *El retablo de las maravillas*. The story begins with Chanfalla and Chirinos, two *picaros* who own a traveling theatrical show that they present in rural areas. Upon arriving to the village where the action of the story takes place, Chanfalla and Chirinos are asked by the administrative authorities—the *Gobernador*, Juan Castrado, and his daughter Juana Castrada, the mayor Benito Repollo, and the *escribano* Pedro Capacho—to privately show them the spectacle behind the

retablo. After agreeing to perform their play, and driven by the opportunity for financial gain, Chirinos insists that the "authorities" must pay *ante omnia*, that is, before the performance:

La cosa que hay en contrario es que, si no se nos paga primero nuestro trabajo, así verán las figuras como por el cerro de Úbeda. ¿Y vuesas mercedes, señores justicias, tienen conciencia y alma en esos cuerpos? ¡Bueno sería que entrase esta noche todo el pueblo en casa del señor Juan Castrado, o como es su gracia, y viese lo contenido en el tal *Retablo*, y mañana, cuando quisiésemos mostralle al pueblo, no hubiese ánima que le viese! No, señores; no, señores: *ante omnia* nos han de pagar lo que fuere justo. (221)

One consequence is the little matter of payment. If we're not paid in advance you can forget about seeing our puppets. Most worthy gentlemen of the Law, you do have consciences and souls, don't you? It wouldn't do if people were to gatecrash the party tonight at Mr Juan Castrato's (or whatever his name is) and saw the show for nothing, so that tomorrow when we tried to charge the public to see it not a soul turned up. No, no, sirs: ante omnia you must pay us our just dues. (101)

While commercial profit is the motor used by the deceitful protagonists to control their naive audience, it is not the only aim. Like many of the characters portrayed in the *entremeses*, Chanfalla and Chirinos and the rest of the characters belong to the lower strata of the early modern Spanish society where economic and social tensions have created a common idiosyncrasy:

[A]parecen pueblerinos y labradores ricos (*El retablo de las maravillas*; *Los alcaldes de Daganzo*); y, en general, seres marginados como rufianes y soldados apicarados (*El rufián viudo*; *La guarda cuidadosa*); mujeres livianas y maridos impotentes y cornudos (*La cueva de Salamanca*; *El viejo celoso*); ninfas y aventureros (*El vizcaíno fingido*); escribanos oportunistas (*El juez de los divorcios*); y toda una galería de tipos socio-literarios identificables: estudiantes farsantes, barberos cobardes, sacristanes enamoradizos, celestinas, vizcaínos, cristianos viejos, etc. (Spadaccini 16)

There are villagers and rich farmers (*El retablo de las maravillas*; *Los alcaldes de Daganzo*); and, in general, marginalized figures such as ruffians and downtrodden soldiers (*El rufián viudo*; *La guarda cuidadosa*); fickle women and impotent and cuckolded husbands (*La cueva de Salamanca*; *El viejo celoso*); nymphs and adventurers (*El vizcaíno fingido*); opportunistic clerks (*El juez de los divorcios*); and a whole gallery of identifiable socio-literary types; phony students, cowardly barbers, amorous sacristans, matchmakers, Biscayans, old Christians, etc. (my translation)

These are characters marginalized from the economic, social, or intellectual point of view and who therefore present themselves as outsiders of society. Cervantes is especially critical of the intellectual marginalization. As an illustration, in Los alcaldes de Daganzo, three of the candidates to become the mayor of the town, Humillos, Jarrete, and Berrocal, "pertenecen a un mundo donde todo el saber, todo proceso intelectual, resulta sospechoso y dañino" (Spadaccini 71) (belong to a world where all knowledge, all intellectual processes are suspicious and harmful) (my translation). The characters in El retablo de las maravillas are not an exception to the same intellectual prejudices and collective ignorance. To attain their goals, Chanfalla and Chirinos will instrumentalize the value system on which society rests. Indeed, David Castillo and William Egginton highlight a similar form of manipulation carried out by some institutions "propagating manipulative images" (63) of the stereotypical countryside as portrayed by playwrights like Lope de Vega. They do so by seeing the Cervantine entremés as a "critique of the manipulative and co-optive function of the new theater—at least in its most popular Lopean version—in legitimizing and naturalizing the values upon which social divisions rest" (67).

To apprehend the scope of the collective manipulation represented in the *Retablo*, it is consequential to unravel the ideological framework embodied in the *entremés*. As we know, Chanfalla and Chirino's singular performance has a particularity that—and this is where their deceitfulness lies—is at the heart of Cervantes's strategy: they claim that only those who are legitimate old Christians will be able to see the images and wonders that the manipulator Chanfalla is recounting: "que ninguno puede ver las cosas que en él se muestran, que tenga alguna raza de confeso, o no sea habido y procreado de sus padres de legítimo matrimonio" (220) (whatever appears in the puppet show remains invisible to anyone who has the least drop of Jewish blood in his veins, or was born out of wedlock) (100). These conditions, decisive for the development of the plot, are clearly aligned with the social paranoia fostered by the so called "estatutos de limpieza de sangre" (blood purity statutes)

(my translation) and the effects of unjustified suspicions which are but the result of the same values that Cervantes questions over and over throughout all his *entremeses*. Indeed, lurking under the obvious comic storyline in these *entremeses* is a bitter social, economic, and political criticism of society's racial hysteria and deep-seated hypocrisy. Viewed in this way, *El retablo de las maravillas* has emerged, using Eugenio Asensio's words, as "una parábola de la infinita credulidad de los hombres que creen lo que desean creer. Es una estratagema para proyectar la crítica de la morbosa manía de la limpieza, mentira creadora de los falsos valores que envenenaba la sociedad española" (101) (a parable of the infinite credulity of men who believe what they wish to believe. It is a ploy to project criticism of the mania of morbid purity, a lie resulting from the false values that poisoned Spanish society) (my translation).

Therefore, the success of the perpetrators in *El retablo de las maravillas* to carry out the trickery lies in the knowledge they garner about the predisposed behavior of their victims. Chanfalla and Chirinos are able to easily anticipate the manner in which their victims will cling to social values and how they are fearful of certain religious edicts. Hence, for the pair, knowing and anticipating the behavior of their victims becomes a powerful instrument to control the relationships among individuals with apparent tendencies to "bond"—using Bruno's term—with homogenous others. This technique is still in use today by social networks and media companies. In the opinion of Ethan Zuckerman, the director of MIT's Center for Civic Media, "most of today's social networks are predicated on bringing people's offline relationships online" (Pinsker). Such relations are based on the commonalities, systems of beliefs, and social conventions that members of a particular group share—gender, class, religion, politics, age, etc. The propensity to huddle with like individuals is known in sociology as "homophily," but in today's social media world, it has accelerated on a massive scale: "Homophily is an ancient human instinct but Facebook's algorithm reinforces it with industrial efficiency" (Pinsker). Based on the same convictions, ideas, and principles within a strictly defined and homogeneous belief system, social networks manipulate users within a group that shares commonalities. In response to our likes and dislikes, browsing history, and other actions, algorithms manipulate by anticipation the series and movies we watch on Netflix, the books we read from Amazon, or the groups and people to follow on Facebook. Chanfalla's spectacle rests on these very same principles. He experiments with homophily by accurately predicting the behavior of his audience which subsequently forges a bond among them. Chanfalla's production is, just like today's social networks, "bringing people's offline relationships online" by presenting publicly on stage the social, racial, and religious ties that already linked the audience, and which now further solidifies and amplifies that connection.

Regarding these common presuppositions on which homophily tendencies rest, the *retablo* also illustrates Bruno's observations on how exerting control over a group presents less difficulty than over just one person:

In general, it is easier to exert a lasting influence over the masses than over a single individual. Concerning the masses, the vincula used are of a more general kind. In the case of an individual, it is first necessary to be very familiar with his pleasures and his phobias, with what arouses his interest and what leaves him indifferent: "It is, indeed, easier to manipulate several persons than one only." (Couliano 94–95)

Here Bruno notes a crucial element indispensable for carrying out any type of manipulation, that of becoming familiar with the "pleasures and phobias" of the victim in question. In a certain way, this idea reminds us of "the descriptions of the gothic algorithmic daemons that follow us at nearly every instant of every hour of every day to suck us dry of metadata" (Biddle) analyzed by Zuboff. In the story, Chanfalla has studied very carefully the profile of his ignorant audience to successfully anticipate and predict their desired behavior and to carry on effectively his devious spectacle. Upon approaching the village, Chanfalla and Chirinos have maintained a conversation—of which the reader only acquires partial knowledge since it begins in medias res—on the specifics of their play and the way it is going to be performed: "No se te pasen de la memoria, Chirinos, mis advertimientos, principalmente los que te he dado para este nuevo embuste" (215–16) (Don't forget what I told you, Chirinos, about this new hoax) (99). As they approach the village, Chanfalla successfully identifies each of their victims: "Chirinos, poco a poco estamos ya en el pueblo, y éstos que aquí vienen deben de ser, como lo son sin duda, el Gobernador y los Alcaldes" (218) (Chirinos, we're almost inside the town. No doubt those people coming toward us are the Governor with the Mayor and Corporation) (99). Faithful to the stereotypes of villagers-administrators with high pretensions, Chanfalla clearly recognizes in them *el pie del que cojean*, that is, the values that this homogeneous group shares. Chanfalla will use this quick identification and the associated character traits to instrumentalize the victims when signaling the conditions necessary to be able to see the spectacle:

Yo señores míos, soy Montiel, el que trae el Retablo de las maravillas, el cual fabricó y compuso el sabio Tontonelo debajo de tales paralelos, rumbos, astros y estrellas, con tales puntos, caracteres y observaciones,

que ninguno puede ver las cosas que en él se muestran, que tenga alguna raza de confeso, o no sea habido y procreado de sus padres de legítimo matrimonio; y el que fuere contagiado destas dos tan usadas enfermedades, despídase de ver las cosas, jamás vistas ni oídas, de mi retablo. (220)

Sirs, my name is Montiel and I bring with me the Marvelous Puppet Show. [...] it was devised and constructed by the magician Tomfool, who used geometrical and astrological calculations, together with signs, symbols and conjectures that whatever appears in the puppet show remains invisible to anyone who has the least drop of Jewish blood in his veins, or was born out of wedlock. Those afflicted with either of these all too common complaints must just give up the idea of witnessing the wonders, never before seen or heard of, which my puppet show has to offer. (100)

As part of the ideological framework in which the action takes place, Chanfalla knows the peasants' penchant toward certain social and racial prejudices and consequently their obsessive pride for being old Christians, and their fixation on both social legitimacy and *limpieza de sangre*. By taking the character name Montiel, Chanfalla parodically alludes to the known stereotype of the enchanting magician, renowned as a manipulator of magical artifacts. In fact, the character in the *entremés* and in Bruno's work share the same penchant for deep knowledge of their victims:

[T]o gain the following of the masses, like the loyalty of an individual, it is necessary to take account of all the complexity of the subjects' expectations, to create the total illusion of giving *unicuique suum*. That is why Bruno's manipulation demands perfect knowledge of the subject and his wishes, without which there cannot be no "bond" no *vinculum*. [. . .] The greater the manipulator's knowledge of those he must "enchain," the greater is his chance of success, since he will know how to choose the right means of creating the *vinculum*. (Couliano 90–91)

Reminded of the Renaissance phantasmic processes, the necessary conditions for the spectators to see what will be performed on stage are established. Chanfalla's illusory spectacle is based on the ideas and principles that his audience fervently accept, not only as part of society's claims and impositions

but also as the way each of the members of the group wants to be seen and perceived by the rest, thus forcefully changing their own behavior to mold to the expectations of the larger group. This is clearly the case of the *Gobernador* who, on more than one occasion, upon the onset of Chanfalla's spectacle, had to force himself to "see" that which only the others can supposedly witness: "Basta: que todos ven lo que yo no veo; pero al fin habré de decir que lo veo, por la negra honrilla" (229) (That's done it. Everyone sees it but me; I will have to say that I see it too, for the sake of my damned honour) (105). Being the most significant phobia within the group, this "negra honrilla" (damned honor) is thus what allows Chanfalla to accomplish his desired aim. As part of his spectacle, Chanfalla reveals the workings of manipulation through homophily and its internal mechanisms and by doing so, Cervantes unveils the truth by defying the "algorithm" and showing its inevitability.

The Phantasmic Culture of the Renaissance and the Distortion of Reality in the Retablo

In the end, Chanfalla succeeds because he predicts a specific reaction from his audience based on their predisposed social, racial, and religious expectations. As a result, he effectively constructs an illusion based on what he already expects from his spectators to the point that they are unable to distinguish between the reality that surrounds them, and the illusion created on stage. The deception is extended when the Furrier and the company of soldiers unexpectedly arrive in the middle of the performance searching for accommodation. Benito, the mayor, insists that the magician Tontonelo, the creator of the retablo according to Chanfalla, has brought them in as "atontoneleados, como esas cosas habemos visto aquí" (234) (the rest of the hocus pocus I've seen here today) (107). From these words it follows that the images created by Chanfalla—based on the group's common beliefs and their extant knowledge of biblical stories and religious characters—are so real, at least for his audience, that they have become almost hologram-like figures on the stage. The result is an alt-reality, a continuation of the group's experience drawing on their existing convictions and obsessions, as well as the images already fixed in their minds.

The ease with which Chanfalla creates this virtual reality—now imposed upon the reality of the character-spectators—can be explained within the framework of a time when it was a common practice to move mentally through memory and through the spaces of the imagination. Guided by the strategies dictated in the treatises on the art of memory and other phantasmic processes such as magic or eroticism that depended on the use and manipulation of

mental images, a variety of techniques were widely used to control and influence individuals' behavior. According to Couliano, "Renaissance culture was a culture of the phantasmic. It lent tremendous weight to the phantasms evoked by the inner sense and had developed to the utmost the human faculty of working actively upon and with phantasms" (194). In the story, behind Chanfalla's internal mechanisms of manipulation, there are multiple references to a culture that prized strong emphasis on mental images, or phantasms, and the power they could exert on the individual. Within this context, Frederick de Armas has analyzed the links between Cervantes's *Retablo* and the work of three *magi*, Giovan Battista Della Porta, Giordano Bruno, and Giulio Camillo, from the point of view of memory and its phantasmic nature:

The Retablo or puppet show created by Chirinos and Chanfalla is one where the producers must vividly remember and retell its images so as to make the audience believe in their reality as they verbally evoke them into being. Their power over the audience is almost magical. Of course, the audience is given a strong incentive to see and believe the threats against their legitimacy and limpieza de sangre (purity of blood) while Giulio Camillo created a magical construct of cosmic proportions, Chirinos and Chanfalla use the "magic" of the art of memory to deceive. The producers clearly mock the mystical theater of memory, while at the same time relishing in the power of memory images. (53)

Chirinos and Chanfalla thus use memory and its phantasmic processes as a powerful instrument to manipulate their spectators. Important in this manipulation process in an emphasis on *loci*, the placement of the images as well as the sequential order of the scenes narrated (De Armas 53). The narrators intentionally draw on popular or well-known Biblical allusions to enforce the authority of their manipulation: the reference to Samson, the bull, the mice, etc. ⁴By manipulating the significance of images and controlling the narrative order, the characters bring to bear the full power of the *imaginatio* and the complex status of mental images, a topic I will develop below.

These mental images or *phantasmata* were considered the trace in the shape of a mental image that the external world leaves inside us. Lina Bolzoni highlights how images had a physical and intellectual dimension, halfway between the body and the psyche:

There is a rich tradition of classical philosophy and medicine that conceives of images through which we know and remember as *phantasmata*, as something that acts internally but also retains a sensory status. [...] it is easy to imagine how centuries of experience in memory techniques have given scholars some idea of the complex nature of mental images and their capacity to inhabit their creators, to come alive and escape their control. (*Gallery* 131)

Camillo, Della Porta, and Bruno agreed on the "disquieting autonomy" of images and how they "can be controlled, manipulated and utilized, but they can also defy our control" (Bolzoni *Gallery* 141). In this sense, according to Bruno, "the majority of mortals are subject to uncontrolled phantasies. There are only particular professions that demand the voluntary application of *imaginatio* (the poet, the artist); as for the rest of them, the realm of imagination is settled by external causes" (Couliano 92). In Spain, Velázquez de Acevedo, in his *Fénix de Minerva o Arte de memoria* (1626), referred to the phenomenon of the corporeality of images with these words:

[L]a memoria se ocupa y llena con lo que en ella guardamos y con las ideas o imágenes que allí depositamos, diciendo que por no ser corpóreas no pueden ocupar lugar, [pero] lo cierto es que la memoria se divierte y distrae y está restringida al órgano corporal, mediante el cual obra y así se cansa y ofusca y hay unas más capaces y fuertes que otras. (my emphasis) (146)

[M]emory is occupied and filled with what we keep in it and with the ideas or images that we deposit there, saying that because they are not corporeal, they cannot take up space, [but] the truth is that memory has fun and distracts and is restricted to the bodily organ, through which it operates and thus it gets tired and obfuscated and some are more capable and stronger than others. (my translation)

The ability of images to come to life and consequently escape control was also noted in Fray Luis de Granada's *Guía de pecadores* (1555) in which such lack of control was seen as a consequence of the force of mental visualization, a product of the intensity with which mental images were created (Libro II.

Cap. 15. Tít. VII. *De la reformación de la imaginación*). Similarly, the Jesuit Luis de la Puente warned against individuals who were "muy imaginativos" (very imaginative) due to the power of the images they created:

Los muy imaginativos han de estar sobre aviso, porque sus vehementes imaginaciones pueden ser ocasión de muchas ilusiones, pensando que su imaginación es revelación *y que la imagen que dentro de sí forman, es la misma cosa que imaginan*, y por su indiscreción suelen quebrarse la cabeza, y convierten en su daño, lo que tomado con moderación puede ser de provecho. (Cited in Rodríguez de la Flor 119)

Those who are very imaginative have to be on guard because their vehement imaginations can be the cause of many illusions, thinking that their imagination is revelation and that the image they form within themselves is the same thing they imagine, and by their indiscretion they usually rack their brains, and they turn into their own worst enemy such that what is taken in moderation can be of benefit. (my translation)

The fact that so many testimonies cautioned about the impact of the imagination confirms that there was widespread belief that images could be all consuming, which explains why many intellectuals came to believe in their autonomy. Such a notion had been around for centuries. In his views on the phantasmic process, Aristotle writes that mental images, especially in dreams, re-enact and have a life of their own, as if they were performing. Consequently, he highlights the independence and potency of mental images and their capacity to act internally to influence the senses. This corporeality and strength and the dangers that images potentially impose could have dominant and overwhelming effects as they were believed to inhabit other bodily places like the heart. Hence, doctors even treated them as an affliction. Their potentially uncontrollable nature required iconoclastic means to erase or weaken them, the remedy for which can be traced to the *ars memorativa* and its counterpart, the *ars oblivionalis* or art of forgetting.

As the discussions around it show, different groups in society, particularly within ecclesiastical and pedagogical sectors, became acquainted with the power of the mental image and the effects it undoubtedly exerted upon individuals. Institutions began to exploit the power of images to affect subject behavior. As an illustration, in his *Discourse on Sacred and Profane Images*

(1582), the cardinal Gabriele Paleotti, archbishop of Bologna, refutes the Protestant condemnation of Catholicism's widespread use of sacred images in religious settings.6 Instead, in order to prove how images indeed affect human behavior, Paleotti refers to their influence in the classical art of memory to make the point that imagery can both disavow Protestant opposition and enhance Catholic orthodoxy: "As to memory, what shall we say? We know that so-called artificial memory consists mostly in the use of images. Thus, it is no wonder that sacred images refresh the memory all the more" (cited in Bolzoni Gallery 131).7 Inevitably, arguments like Paleotti's influenced Counter Reformation circles in Spain: "The Catholic teachers of memory reappropriate the techniques of the art of their religious enemies and recycle them as useful ingredients of their little theaters of the mind" (Bolzoni Gallery 143) (my emphasis). Therefore, in an exercise parallel to the expansion of the art of memory toward other realms of culture, the initiatives of the Council of Trent advocated for the use of images to indoctrinate and move to piety. This promotion of the use of the image in Catholic practices explains their rise in sermons and meditation practices in Counter-Reformation Spain and will in turn favor the integration of iconography in the arts and literature. Through paintings, engravings, cartelas, catechisms, and other objects in Spain and the New World, the Catholic Church in Spain conceded a significant role to the visual strength of images.

According to Fernando Rodríguez de la Flor, the use of the image will also be reinforced thanks to the artificial systems of memory and its relation to Christian sermons and meditations. The greatest proponent of meditations was Ignatius of Loyola, the founder of the Society of Jesus, whose *Spiritual Exercises* was devised as a means to indoctrinate their acolytes on how to contemplate Church teachings and devote themselves to the institution's principles:

In the spiritual practices of the Jesuits, the phantasmic culture of the Renaissance is revealed in all its power for the last time. Indeed, education of the imagination represents the teaching method of Ignatius of Loyola in his *Spiritual Exercises*, printed in 1596. The disciple is called upon to practice a sort of Art of Memory. During these exercises he must imagine the atrocious tortures of Hell, the sufferings of humanity before the incarnation of Christ, the birth and childhood of the Lord, his preaching at Jerusalem—while Satan, from his dwelling place in Babylon, launches attacks by his demons throughout the world—and finally Calvary then crucifixion and resurrection of Christ. *It is a question not*

of pure meditation but of an internal phantasmic theater in which the practitioner must imagine himself in a role of spectator. He is not only to record what happens but to observe the actors through the senses of sight, hearing, and touch. Introjected in his own phantasmic apparatus, the phantasm of the practitioner is to participate—in a more or less active way—in the development of the scenario. (195)

Through the creation of "internal phantasmic theaters" the Ignatian spiritual exercises placed strong emphasis on phantasmic practices, and this represents one of the Renaissance's greatest achievements in terms of manipulation of phantasms. As part of his theories on manipulation through phantasmic processes, in *De vinculis* Bruno considered religion as a powerful instrument for controlling the masses (Couliano 89): "the most obvious result of Bruno's thought is that all religion is a form of mass manipulation. By using effective techniques, the founders of religions were able, in a lasting way, to influence the imagination of the ignorant masses, to channel their emotions and make use of them to arouse feelings of abnegation and self-sacrifice they would not have experienced naturally" (Couliano 94). Bruno drew on scientific and medical theories to corroborate his arguments; he believed that uneducated individuals were more easily influenced by the impressions of phantasms:

It is all the easier to enchain people who have less knowledge. In them, the soul opens in such a way that it makes room for the passage of impressions aroused by the performer's techniques, opening wide windows which, in others, are always closed. The performer has means at his disposal to forge all the chains he wants: hope, compassion, fear, love, hate, indignation, anger, joy, patience, disdain for life and death, for fortune. (*On Magic* 142)

Such techniques related to phantasmic processes to influence the ignorant are central to the development of the action in the *Retablo*. Given Cervantes's knowledge of the workings of mental images and awareness of their complex nature—training he likely acquired as a pupil with the Jesuits—the author frequently captures the different ways images intensify and persuade. The stage becomes an extension of the spectators' own theaters of the mind, and the formal frontier between reality and their internal phantasmic theater slowly dissolves. As part of this technique there are constant appeals to the senses of sight, hearing, and touch such that the emphasis on the sensorial elements

drives the audience's active participation in the development of the performance. In *El retablo de las maravillas* the science behind the phantasmic culture of the Renaissance and its capacity to create virtual realities is therefore powerfully on display. Cervantes puts his audience on alert to the dangers of manipulation and the ways that images can be instruments of the sort of power and control that had become part of the daily spiritual or political agenda. In sum, and as part of his warning, Cervantes presents in the *Retablo* the fatal consequences of phantasmic practices in the imagination: the creation of a virtual reality dangerously taken at face value which impedes seeing nothing more beyond what lies in their little theaters of their minds.⁹

This also would explain the persisting presence of religious references in the *entremés* which strategically places belief as the theatrical medium for the phantasmic representation. The word itself, "retablo," offers several meanings, as explained by Sebastián de Covarrubias who emphasizes the connection first to sacred history and second to the mnemonic power that its figures exert on the audience:

[C]omúnmente se toma por la tabla en la que esta pintada alguna historia de devoción, y por estar en la tabla, y madera, se dijo retablo. Algunos extranjeros suelen traer una caja de títeres que representa alguna historia sagrada, y de allí les dieron el nombre de retablos [....] Y podía también averse dicho retablo de retraer, porque retrae, y retrata las figuras de la historia.

It is commonly understood that some story of devotion that is painted on a wooden board is said to be an altarpiece. Some foreigners usually bring a box of puppets that represents some sacred story, and from there they gave them the name of altarpieces [....] And it could also be referred to a retracting altarpiece, because it retracts, and portrays the figures of history. (my translation)

The characteristics of Chanfalla's retablo derives from Cervantes's conception of the *entremés*. As is well known, the writer departs from the literary framework provided by Lope de Rueda and other writers of the the pre-Lopean theatrical tradition, and explores new strategies for performance, as stated in his prologue to *Ocho comedias y ocho entremeses nuevos*: "El adorno del teatro era una manta vieja tirada con dos cordeles de una parte a

otra, que hacía lo que llaman vestuario, detrás de la cual estaban los músicos, cantando sin guitarra algún romance antiguo" (IIIr) (The decoration of the theater was an old blanket hung using two strings from one side to the other, which made what they call a wardrobe, behind which were the musicians, singing some old romance without a guitar) (my translation).¹⁰ When directing the play, Chanfalla does not refer to a "manta" but to a "repostero" (226) (tapestry) (103), that is, a luxurious tapestry which inevitably has more appealing connotations. However, as stated in the last stage direction, when Chirinos "descuelga la manta" (236) (takes down the blanket) (108), the audience discovers that in reality all they have is a lowly "manta." Like other points in the play, Chanfalla is the architect of an elaborate hoax, and the double meaning of the expression, "tirar de la manta," that is "to take the wraps off," alludes to what actually happens on stage as well as the metaphorical discovery of revealing a scandalous act that was to be kept secret. Moreover, the "manta" in question may also serve a third purpose—as a metaphor of the blank slate symbolizing the audience's imagination on which Chanfalla imprints the richly described images. By using a structure that resembles the idea of a symbolic theater of memory, but which in reality is just a simple rug, Cervantes parodies the ceremonial acts and ritual practices used to carry out phantasmic manipulations.

In the play, there also is an abundance of expressions related to the liturgy carried out during Catholic rituals. For example, when Chirinos asked about the money received before the performance, he asks, "¿Está ya el dinero in corbona?," (Is the money in the bag?) (103), a Latin expression that means "la bolsa de las ofrendas" (Spadaccini note 41 225), (the offerings bag) (my translation). Furthermore, upon discussing the qualities of the musician that accompanies Chirinos and Chanfalla, Benito Repollo uses the liturgic expression, "Abrenuncio," to express his dissatisfaction with Rabelín's musical talents; in another instance, Benito alludes to a "fiesta de cuatro capas" to describe the spectacle, an expression that refers to the number of clerics helping to officiate the mass. Last but not least, to the astonishment of the Furrier, who evidently cannot see the images described by Chanfalla, the ignorant villagers accuse him repeatedly by uttering the Latin expression ex illis es (of them you are), the same words with which the servant of Caiaphas accused Saint Peter when the disciple denied his relationship with Christ (Spadaccini note 93 234).

Within a religious context that foments the use of mental images to unite one's inner divinity with meditation practices, it was expected that writers would follow a strict moral perspective. Most authors of the manuals on the art of memory dedicated to religious practices would adapt their imaginative inventions with strict required morality. Classical manuals proposed the use

of suggestive mnemonic images "torpes, increibles, ridículas o sucias" (awkward, unbelievable, ridiculous, or dirty) (my translation)—following the advice of Cicero, Quintilian, or the anonymous author of the *Rhetorica ad Herennium*. One typical practice was to portray women sensually in order to create images with a strong mnemonic power. However, Velázquez de Azevedo will reject the use of such dangerous images in an effort to adjust them to religious and chaste purposes, and the author modifies for Christian approval the pagan use of the classic arts of memory in his *El Fenix de Minerva*. This sort of process of sacralization to which the arts of memory are subjected under the Counter-Reformation postulates appears also parodied in the *Retablo*. Among the biblical sources used by Chanfalla, although mistakenly, is the sensual image of a dancing Herodías which takes on special relevance in the development of the performance. ¹¹ The depiction of Herodías clearly adds sexual undertones, judging by the immediate reaction it has on those present.

Science and the Imagination of the Impossible

Cervantes wrote *El retablo de las maravillas* at a time when there was growing hostility toward the existing epistemological system of thought on which scholasticism was based. In its place, theorists emphasized the need for firsthand experience leading to a rise in empirical thought. The new empirical system would have an enormous influence on many personalities of the Italian Renaissance such as Tommaso Campanella, Giordano Bruno, and Galileo Galilei and thinkers outside of Italy such as Francis Bacon, René Descartes, and Baruch Spinoza. Their combined efforts to question the convictions of the traditional epistemological system gave rise to the beginnings of modern science propelled by major discoveries of thinkers like Nicolas Copernicus and later Isaac Newton. Across Europe, a variety of scientists and theorists, burdened with a stark interest in understanding our world, forced an inescapable upheaval in traditional cultural and religious thought systems.

Specifically, the publication of Copernicus' *De Revolutionibus Orbium Coelestium* (1543) opened wider the gaps in the epistemological systems that had been in force for centuries. With the so-called Copernican revolution, the new astronomical model of heliocentrism would dismantle the foundations of the traditional geocentric system inherited from Aristotle. Copernicus's ideas revolutionized understanding of cosmology by pushing back against the pseudo-scientific authority of the Catholic Church and against its sanctioned Ptolemaic model of the universe in favor of a new science and the existence of other possible worlds: "The preposition that the moon and

the planets were other worlds was a central contention of the heliocentric theory of the solar system. That theory became an important champion of the cause of science in its contest again religious faith" (Stableford 16). Under Copernican cosmology, the existence of other possible worlds traversed the imaginable to the tangible. The resultant upheaval in cultural, scientific, and technological circles brought with it changes in the epistemological system and in the perception of the world that permeated the arts and literature.

Throughout his work, Cervantes reflects on the existence of alternate worlds and realities through imaginary journeys through space and time such as in the flight aboard Clavileño or the descent into the Montesinos Cave in *Don* Quixote.12 In these episodes and in others, Cervantes not only reveals a plurality of worlds but also reflects on the notion of virtual worlds whose existence is only possible in the mind of the individual, in his homo interior. The concept of mental universes had already been outlined by intellectuals contemporary to Cervantes, such as Bruno, one of the first to speak of cosmic plurality and the infinite universe. This idea found its counterpart in *De umbris idearum* (1582), where Bruno proposed to "organize the psyche from above, by contact with cosmic powers" (Yates 234) and he defended the idea that man could apprehend the macrocosm with only the power of his imagination (Yates 254). To do so, Bruno created a memory system whose goal was to achieve a unifying vision inside the mind, "the only place where this can be done because the internal images of things are closer to reality, they are less opaque in the light of what the things of the external world are themselves" (Yates 253) (my emphasis). His system would not be the only one. Giulio Camillo proposed in L'Idea del Theatro, an architectural structure whose mental model would be considered the first memory computer, a database of human knowledge: "his theater was a mens artificial and a mens fenestrata—an artificial mind and a mind which was endowed with windows—a machine designed to draw from the inner soul the images shared by all men by rendering them newly visible" (Bolzoni 79).

Because of such new advents in conceiving the world, the dangers of the imagination began to be seen as a threat by Catholic authorities and conservative circles who remained fearful of the power of the imagination. Fray Luis de Granada, for example, clearly warns against this danger:

[...] muchas veces [la imaginación] se nos va de casa como esclavo fugitivo, sin licencia; y primero ha dado una vuelta al mundo, que echemos de ver adónde está. [...] Es también una potencia muy libre y muy cerrera, como una bestia salvaje que se anda de otero en otero, sin querer sufrir sueltas ni cabestro ni dueño que la gobierne. (193)

[...] many times [the imagination] departs from our home as a fugitive slave without permission; and first it goes around the world before we realize where it is. [...] It is also a very free and untamed power like a wild beast that wanders from knoll to knoll without wanting to be let loose or haltered and without an owner to govern it. (my translation)

Statements like these by Fray Luis de Granada and a variety of others closely affiliated with the Church and State corroborates their concern that a simulated reality was a threat to authority and to the established order. Recognizing the full force and efficacy of constructed mental images, post-Tridentine church will paradoxically react using the very same methods. We can see the echo of this reaction in the *retablo* where the main protagonists use the similar tactics meant to pressure their spectators, a strategy that the Church feared on an individual level but promoted on an institutional one. Like his contemporaries, Cervantes was seduced by the immense possibilities of mental theaters as possible worlds with infinite opportunities for personal fulfillment. However, in this process, Cervantes warns of the dangers of letting others manipulate our inner theaters of the mind.

Coda: The Usefulness of the Useless

Cervantes grappled with the substantial changes in science and technology that led to the manufacturing of realities, not unlike what has happened in our world today. The ideas I have sketched in this essay, in light of Orlowski's documentary or Zuboff's warnings on today's threats and deceits advanced by technology and media companies, connect with a similar phenomenon of which Cervantes was aware during his own lifetime. The mechanics of manipulation used by tech companies and social media platforms rest on the same principles of homophily against which Cervantes warns his intellectual reader—a reader who, unlike the uneducated masses portrayed in his *entremeses*, is encouraged to view these plays "para que se vea de espacio lo que pasa apriesa, y se disimula o no se entiende cuando las representan" (so that what happens quickly can be seen slowly, and it is hidden or not understood when they represent them) (my translation), as stated in his Adjunta al Parnaso. 13 Departing from Castillo and Egginton's argument here, Cervantes shows us his "mesa de trucos," or toolkit, in order to carry out a "mass deception [that] works by redirecting our attention elsewhere" (154). In this sense, his toolkit works "wonders" as we see Chanfalla exerting his manipulation as a professional of illusions, a sort of magus in the purest Brunian style that reveals the manipulation of mental images at its best. By doing so, in *El retablo de las maravillas*, Cervantes will show "despacio" the ways of manipulating the unwitting masses. Despite its comicality, for Cervantes, the repercussions of believing blindly in what religious and political authorities impose are far graver and more far-reaching—not unlike what we are facing today.

Therefore, and to answer the question proposed by Castillo and Egginton in their thought-provoking study, "What would Cervantes do?," the answer is clear: he, like Orlowski, Zuboff and others, and thanks to the power of literature and science, sets out to challenge the manipulative algorithm by uncovering its undisclosed gaps in order to seek the truth, a truth that reaches beyond the confines of their characters' "little" theaters of the mind or their "own stages of wonders" (Castillo and Egginton 25). In this sense, it would be apt to note Cervantes becomes the great manipulator of his own characterpuppets as he unravels their social, religious, sexual, and economic anxieties and uncovers the flaws of an epistemological system that has already begun to self-destruct because it had nothing more of value to offer. In his retablo, in particular, driven by the imagination of what seems (im)possible, Cervantes dismantles the inner workings that seek to exercise control, and strives to insert other possible worlds that simultaneously reflect the new paths in the emerging empirical science. In this sense, Cervantes reminds us of the usefulness of both science and literature to pursue the solution to current problems. In *The Usefulness of the Useless* (2013), a passionate, powerful, and lively defense for the humanities and their immeasurable value in higher education and in today's society, the Italian scholar Nuccio Ordine reveals the paradox of the "usefulness of those forms of knowledge whose essential value is wholly free of any utilitarian end" (1). His brief manifesto finalizes in a very appropriate and opportune manner by including American educator Abraham Flexner's timeless essay The Usefulness of the Useless Knowledge published in 1937. In his defense for the inclusion of sciences and medicine in higher education, Flexner advocated for a similar approach to the sciences: "science has much to teach us about the usefulness of the useless. And that together with the humanists, also scientists have played a very important role in the battle against the dictatorship of profit, in defense of freedom and free knowledge and research." Within a significant difference of four centuries, Cervantes seems to share the same militant spirit that both Ordine and Flexner flaunt in their defense of humanities and sciences as they seek to educate the individual against systems of authoritarian control while defending individual expression.

Notes

- 1. Álvaro Llosa Sanz has also seen ties between the *entremés* and Giordano Bruno's *On Magic* and *De vinculi in genere*.
- 2. According to Lina Bolzoni "through the power of concentration and the irresistible pressure of desire, the *imaginatio* can transform the very nature of reality, constraining outward form to mutate according to one's will. The *imaginatio* is the place where man succumbs to the power of enchantment and spells, and from there he may in turn project these magical forces outward" ("Art" 114).
- See Domínguez's "Imaginar mundos: memoria y ciencia ficción en la obra de Cervantes."
- 4. See De Armas 53. "As Michel Moner has explained the six or seven images displayed in the Retablo begin and end with the Bible, thus alluding to the Old and the New Testaments through Samson and Herodias/Salomé" (de Armas 54).
- 5. "In fact, some people have actually experienced such dreams, e.g. those who judge that they are arranging a given set of items according to the system for memorizing them" (87).
- 6. For this reason, it is important to highlight the predominant role that the Catholic Church will grant to the image to spread the faith after the famous XXV session of the Council of Trent. Also relevant is the decisive influence of Saint Ignatius and the so-called "compositio loci," which were to be used as a method of praying as part of the Exercises through which "se difundió en la conciencia católica la teoría de los lugares e imágenes de la retórica mnemónica de la antigüedad" (Sebastián 53) (they disseminated in the Catholic conscience the theory of places and images derived from the rhetorical mnemotechniques of antiquity) (my translation).
- 7. Certainly, Paleotti saw the potential of the images in the art of memory and their externalization and application to sacred images. According to Bolzoni, he was referring to the theory of the *imaginatio* and the power of images as it was also understood by philosophers and doctors at the time: "the various conceptions that our imagination apprehends of things, firm imprints are made in it, and from these imprints are derived substantial alterations and signs in the body" and finalizes saying "there is clearly no stronger or more effective means that that of realistic images that seem to violate our unwary senses" (cited in Bolzoni *Gallery* 141). In sum, he certainly believed in the power of images and considered them a dangerous force that can get out of control. It was also within this religious context that the danger of the image of memory and its heretical propositions—such as the prayer of recollection with its different degrees (vocal, mental and affective) outlined in the catechesis of *Camino de Perfección* by Saint Teresa or the religious movement of the *alumbrados*. See Antonio Márquez, *Los alumbrados: Orígenes y filosofia* (1525–1559).

- 8. Fray Diego de Estella recommends the extensive use of images "por quedarse más en la memoria de los oyentes su doctrina" (*Modo de predicar* I 68) (to keep his doctrine more in the memory of the listeners) (my translation).
- 9. This idea finds its echo in a passage that appeared in a very popular text during the sixteenth century, *De sublime*, a Greek work on rhetoric attributed to Longinus: "as a result of enthusiasm and emotion, it appears that you are gazing at the things that you are describing and that you are setting them before the eyes of your listeners" (cited in Bolzoni *Gallery* 177).
- 10. According to Eugenio Asensio "la historia del entremés [. . .] exige constantes incursiones a otras zonas literarias de las que recibe alimento y renovación" (25) (the history of the entremés [. . .] demands constant incursions into other literary zones which recieve nourishment and renovation) (my translation). Michael Gerli analyzes the piece from the standpoint of its theatrical significance (478).
- 11. "[F]ue su hija Salomé quien bailó ante su tío y padrastro, Herodes Antipas, y pidió en premio la cabeza de San Juan Bautista" (Spadaccini note 78 232) ([I]t was his daughter, Salomé, who danced before her uncle and stepfather, Herodies Antipas, and asked for St. John the Baptist's head as a prize) (my translation).
- 12. In *Don Quixote*, for example, we see this idea materialized in the voyages by land on the surface of the globe, the ascending trip to other planets or systems, the descending trip to the center of the earth as well as travel through time: all of them present in Cervantes's novel in the famous adventures of the enchanted ship (2.29), the ascent of the protagonists on the back of Clavileño (2.40–41) in contrast to Don Quixote's descent to the Montesinos cave (2.22–23), among others. See Domínguez.
- 13. Spadaccini 26.

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