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Technology and Wonder in Thirteenth-Century Iberia and Beyond

Christopher Swift

In his commentary on the *Song of Songs*, Pope Gregory the Great (540-604) wrote, “allegory serves as a kind of machine to the spirit by means of which it may be raised up to God” (qtd. in Swaim 21). According to Gregory, because the human soul has fallen from grace, it requires an allegory machine to elevate it again: “[t]hus when enigmas are set before a man and he recognizes certain things in the world which are familiar to him, he may understand in the sense of the words what is not familiar to him; and by means of earthly words he is separated from earth” (ibid.). According to the traditional explanation of the development of theatre in medieval Europe, mimesis and written drama share common DNA with Pope Gregory’s seventh-century program of liturgical reform, when allegorical tropes were introduced to the Mass.ⁱ While contemporary scholars have challenged and rewritten an evolutionary model of medieval theatre,ⁱⁱ there is little doubt that, as it was explored in musical and figural elaborations of the liturgy, the central rite of the medieval Church was a theatrical act animated by allegory-producing machines.

For the purpose of this chapter, I find significant two concepts from Gregory’s commentary. The first is his application of the word “sense” (*sensu*), a word that denotes both “feeling” and “understanding” in Latin, and which Gregory uses here to mean a conduit to extraterrestrial knowledge. The second is the word “machine” or “engine” (*machinam*), which Gregory employs as a rhetorical conceit: an elevator for lifting the soul towards heaven. Centuries after Gregory’s liturgical reforms, conceits materialized: allegory-engines found expressions in the physical forms of articulating, moveable

devotional objects. As the desire for sensual experiences of the sacred increased in communities across Europe in the late Middle Ages, the Christian faithful crafted life-like, mechanized figures of Christ, the Virgin Mary, and saints for use in religious festivals. Although each devotional culture evidences unique body/object relationships and meanings, in general animated ritual objects encouraged lay participation in the celebration of saints and the Passion by engaging the senses, and consequently, an emotional sense of God. I investigate the ritual alliances between late medieval Christian devotees and moveable, prop-like saints and, in particular, the performative meanings that arose from encounters with technologies of the sacred.

In medieval studies, analyses of moveable objects as instruments of performance, functionality, and technology have only just begun.ⁱⁱⁱ By engaging in an object-oriented inquiry, I hope to bridge two disciplines, arguing that medieval automata were *techno-mythological* things: productive, symbiotic interminglings of mechanical processes and holiness. Theatrical technology enhanced the sense of sacred presence for medieval worshippers without collapsing beneath the pressure of iconoclastic doubt (skepticism arising from doctrinal encroachments on sacred materiality). While I agree that medieval animated saints effuse differences that are incommensurable with modern anthropomorphic objects from the theatre (Stelarc's cyborgs or Peter Schumann's puppets, for instance), I believe that employing both contemporary object-oriented theory and late medieval comprehension of objects and things produces a fuller understanding of medieval sacred puppets and their witnesses.

Shaped by an Aristotelian natural philosophy, medieval techno-mythological objects existed and acted within polymorphous fields of materiality. In the next section, I

discuss how medieval metaphysics inflects contemporary concepts like objects, things, and materiality with historical particularity. I then place a unique mechanized object—*La Virgen de los Reyes*—in the context of the political and religious dynamics of the court of King Alfonso X (1221-1284). In the final section, I tease out performative meanings found among contradictions between faith and doctrine, and idiosyncrasies of sense and reason. In this way we may be able to shed our own metaphysical predispositions in apprehending pre-Cartesian things, and acknowledge what early modernist Jonathan Gil Harris calls “polychronic multiplicity” of objects that suggest affinities across temporal divides (4).

Medieval Presence and Materiality

A principal controversy, or engagement, in the field of medieval object ontology—one that benefits from the insights of performance studies—concerns the tensions, relationships, and contradictions between and among *signs* and *substances*. As Andrew Sofer and other theatre and performance scholars have shown, the presences of objects and actors on stage have the capacity to transcend semiotic meanings. But clearly theatrical and everyday things are both indexical and phenomenological, and the two meanings do not always coalesce. A kinship exists between this disciplinary conversation in theatre studies and Aristotelian physics and metaphysics, which were incorporated into Christian dogma and exegeses. According to Aristotle, substance signifies being in and of itself, about which accidents and accidental changes (available to the human sense organs) congregate (*Physics* Book 1). Based in his reading of *Physics*, Thomas Aquinas contends that striking images are useful to worshippers because they engage the viewer,

who, through association, produces surprising and fantastic images in her mind.

Inanimate substances cannot move on their own, and the earthiness of statues and simulacra prevents one from confusing images with God (Aquinas, Volume I 6). The scholastic God sustained the world without suspending causal power between substances. Theologians understood images as representations of sacred history transcribed in and through the visual medium.

Aristotelian discourses—as they manifested in natural and medicinal histories in combination with moral philosophy—were particularized by the complexities of social networks comprising medieval humans and things. Doctrinal responses to the veneration of images were often at odds with what medieval scholar Carolyn Walker Bynum identifies as an intentional use of materials by artisans to call attention to the materiality of objects. The crafting of holy objects was less about “conjuring up or gesturing toward the unseen” (as religious orthodoxy would contend) than it was about “manifesting power in the matter of the object” (28). In short, the growing trend in the late Middle Ages of crafting dense, vibrant, complex, articulating sacred objects intensified the present-ness of mystical sensation for the Christian worshipper. The construction of three-dimensional statues and automata “provided direct impetus for, and were the subject of, much visionary experience in medieval Europe,” sustained by “their ability to mimic the volumes, masses, textures, and even scale of living human forms, their sometimes aggressive intrusions into our real space” (Jung 215). The particular medieval brand of living presence is different from what political theorist Jane Bennett calls “conatus,” that which is “expressed as a stubbornness or inertial tendency to persist” (22), since medieval sacred objects not only persist but actively move towards, and interact with, other objects

and humans. While contemporary materialist philosophers may conceptualize networks of multimedia actants, the medieval devotee lived them fully in her everyday.

In the medieval period, fluid experiential transactions across textual, representational, and environmental domains opened up a broad variety of potentialities and transmutations for Christian worshippers. For twentieth-century phenomenologists like Maurice Merleau-Ponty transformations occur in perceptual fields, produced in the experiential rifts and irruptions between thing-ness (presence) and object-ness (subjecthood gained in the reflection of the other). Following Merleau-Ponty, performance scholar Stanton Garner, Jr. writes that because the material body is sentient and “impinged on by a thingness, imperfectly grasped [...] embodiedness is subject to modification and transformation, multiple and varying modes of disclosure, and that the forms of ambiguity that characterize the phenomenal realm represent experience in flux, oscillating within and between modes of perceptual orientation” (50-51). For the devotee of Christian saints, however, phenomenological flux exceeded the experience of an individual witness. Conditioned by narratives of agentive relics, visions of animating images, and the doctrine of Eucharistic transubstantiation that comprised the central rite of the Church, medieval Christians conceived of a world of present subjecthood—of object-things—in transmaterial dialogue with humans.

Aristotelian metaphysics of matter and zoology—that discerned the souls of humans and other living creatures existing within an eternal scheme of change (*kinêsis*) among all matters, potentialities, movers, and unmoved movers—were widely disseminated in medieval literate culture via Latin, Hebrew, and Arabic translations, commentaries, and glosses. The exegeses that responded to ancient Greek philosophy

offered the existential proposition that everyday entities like plants, animals, rocks, and other humans resided together on a spectrum of interrelated and changeable substances.^{iv} Such a proposition supported faith in legends about vivacious, proactive, clamorous saints who intervened into the worldly affairs of humans. The religious world of worshippers comprised “dazzling sanctuaries, ceremony, litanies, curses, visions, and divine vengeance, as well as saints who cured the sick, raised the dead, slept, talked (back), owned property, and, on occasion, fought to protect it” (Little 200). The engagement with the physical manifestation of saints saturated the imaginations and embodied experiences of medieval devotees.

The culture of saint worship and relic devotion in the Middle Ages centered on an assortment of sensorial practices: viewing, touching, kissing (tasting), manipulating, and carrying sacred representations, including articulating crucifixes, Pietàs, Throne of Wisdom statues, reliquary, and tryptics (Hahn 1079-81). Across the Christian realm, shrines invited pilgrims to engage physically with humanoid object-things. Statues and relics resided in churches and outdoors, took part in processions, were sent to battlefields to lead armies against infidels, and stood in pastures to petition God for the end of drought.

Medieval representations of the Virgin Mary, Jesus, and the Christian saints took multiple forms that crossed generic boundaries: oral and written texts, manuscript illuminations, paintings, reliquary, and three-dimensional statues. Disciplinary divisions between the visual and plastic arts were barely perceptible to artists, patrons, or devotees. As theatre scholar Theodore Lerud argues, in the medieval period audiences understood both elaborate visual tableaux and religious plays as “quick images,” considered in the

same artistic category as painted and sculpted images. All religious works of art, whether moving or static, “quick” or “deed” (alive or dead), were designed as external versions of those images necessary to the psychological processes of memory and understanding. Far from corresponding to distinct aesthetic categories (e.g., as drama, painting, sculpture, or visual art), all were viewed as the images of *phantasmata* (213).

Manuscripts were *multi-res*: materially thick, complex objects that medieval readers explored on the level of the senses. Made of fine materials (animal hides, plant extracts, precious metals) uniquely and painstakingly assembled, manuscripts offered affective portals into a world of touch, sight, smell, and meditation for literate and non-reading viewers. Statues of saints were media regimes: mosaics of wood, wax, dye, fabric, and earthly minerals. From the twelfth century, in a general trend towards aesthetic naturalism, the surfaces of these figures were painted. The droplets of red blood from the wounds of Christ and the blue mantle worn by Mary in Pietà sculptures—a favorite of sculptors from its introduction in the fourteenth-century—enhanced the sensorial impact of sacred representations and invited worshippers to view and touch the objects from multiple angles and distances.^v

King Alfonso X, Mary’s Troubadour

The catalogue of medieval sacred statues and images contains a number of items that were constructed specifically for transportation, animation, and articulation in processions, rites, and dramatic representations.^{vi} Twelfth-century wooden statues of the Mother of God played the protagonists of sacred plays and processional representations of the Epiphany (Forsythe 56-58). Some Romanesque “Throne of Wisdom” statues

functioned as multi-purpose instruments of worship; craftsmen carved interior cavities into the figures for holding holy relics. Human actors participating in Deposition rituals of the Passion performed with moveable wood Christ figures, many of which articulated from the shoulder joints so they could be removed from the cross and placed in a sepulcher (Uličný 44-49). Ritual objects and automata constructed for profane entertainments contained hidden mechanisms controlled by engines or unseen human operators. Manuscript evidence shows robots that derived their locomotion from steam engines, water wheels, cogs, and clock-like winding devices—technologies that can be traced back through ancient Greek, Byzantine, and medieval Arabic archives. Some European regions were more invested than others in building humanoid props, and it is likely that animated statues were more numerous than what has survived various iconoclastic reform movements. Articulating ritual objects have survived in Germany, Eastern Europe, Italy, and elsewhere. A few remarkable automatons survive on the Iberian peninsula: a crucifix from which blood flowed in torrents from the arms, feet, and side wound; *El Santo Cristo de Burgos*, a Christ figure with articulating arms and an internal system of gears; and a mechanical Madonna and Child puppet called *La Virgen de los Reyes (LVDLR)* (García de la Concha Delgado and González Gómez 60; Martínez Martínez; Hernández Díaz).

Although the joints, cogs, and pulleys of the thirteenth-century wooden *LVDLR* have been fixed for centuries, wooden statues were once fully operational dolls. The articulating statues were believed to have been the result of King Fernando III's (1199-1252) desire to possess a representation that reminded him of the "sweet beauty and warm expressions of the one that appeared to him in transcendental moments for

[pondering] the future of the Reconquest,”^{vii} and the life-sized statues led his royal entry into Seville after the fall of the Muslim caliphate in 1248. In order to simulate human flesh, the puppet’s craftsmen stretched white kidskin over the head and body of the Mary doll. Mary and Jesus articulated at the waist, knees, wrists, elbows, and shoulders; in order for the statues to move in performance, a puppeteer would have controlled their limbs by manipulating rods. Both mannequins’ shoulders are double jointed, allowing for complex choreography and gestural freedom. A different mechanism controlled head movements: set between their shoulder blades, an internal apparatus consisting of cogs, spindles, and straps moved the heads of Mary and Jesus horizontally (see figure 14.1). Miniscule pins bind an enormous skein of gold thread to Mary’s scalp, and the doll’s costume is bejeweled with silver, rubies and emeralds. Although the provenance of the machine is not clear, its costly materials suggest that it was assembled at the behest of a monarch or prince (Hernández Díaz 25-36).

[Figure 14.1 – full page]

The *LVDLR* invited handling. Like the puppets from traditional Japanese *ningyō jōruri*, she would have needed at least two puppeteers in order to perform at full potential (head, arms, legs, and baby Jesus simultaneously), and her clothing required maintenance, cleaning, and changing. She traveled through, and occupied, various cathedral and urban spaces, making her available to the general population of Seville. There is something both relic-like (flesh) and manuscript-like (vellum) about the soft goatskin that covers Mary’s body. The compositional complexity of the *LVDLR* adds ambiguity to this object-oriented analysis. Because the statue blends asynchronous taxonomies from art and philosophy—objects/things, technologies/icons,

exteriority/interiority, sculpture/android—it resists a stable interpretation. It is constantly transforming before witnesses, flickering across contrasting ontologies, and inviting the perceiver to open herself to the potentialities of indeterminacy.

Arabic-Latin translations of, and commentaries on, ancient Greek texts were plentiful in Iberia through the twelfth and thirteenth centuries; an Aristotelian climate permeated the Castilian court of Alfonso X. Some of the most widely-disseminated and persuasive tracts on the nature of images and human perception influenced the Alfonsine intellectual sphere, comprising scholars of law, spirituality, medicine, mathematics, and astronomy. Alfonso's massive translation project made the poetics of the ancient Greeks available in the commentaries of Arabic philosophers Avicenna and Averroës, who reaffirmed—among many other ideas—that images are memorable and affective not because they resemble or simulate, but because they are dissimilar to one another (Cicero 3.20, 33). Alfonso clearly understood the power of images and objects to impress and memorialize, and was especially aware of their ability to provide an experiential, performative link between heavenly and courtly spheres. In *LVDLR*, the Arabic sciences of metallurgy and mechanical engineering that permeated Alfonsine court culture found a theatrical outlet and venue for procreating sacred legitimacy and statehood.

Unlike ancient Greek robotic science, from which Arab scholars and artisans drew their technology, applications of mechanical science in the Arab world revealed an interest in creating dramatic illusions and environments for human comfort.^{viii} In his *Book of Knowledge* al-Jazarī described and sketched designs for automated moving peacocks driven by hydropower, robotic slave girls who poured wine, home appliances, automatic doors and moving figures for elaborate water clocks, and a number of devices for raising

water out of wells (99v). Images like al-Jazarī's water-raising machine employ the same cog-and-wheel system that operates the mechanisms in the Iberian Mary and Jesus dolls. The conical neck of *LVDLR*, for example, sits inside the top of the torso, within which a portal allows a leather strap attached to the hollow inner top of the head to communicate with the mechanism of the torso (see figure 14.1).^{ix} It is not known if a copy of al-Jazarī's manual was on the Iberian Peninsula during the reigns of Alfonso X and Fernando III; however, the construction of automata was an established practice across the Arabic world as early as the tenth century. Al-Muradi wrote his tenth-century treatise on technology in Muslim Spain, and this document was known to al-Jazarī (Hill 203).

As I have argued elsewhere, the performing Madonna was most surely activated for the celebration of the Assumption of the Virgin Mary during the reign of Alfonso X (Swift 54-67). Alfonso's adoration of the "Virgin of the Kings" was part of a far-reaching creative project celebrating the miracles and works of Mary. The artistic output from Alfonso's court included statuary, holy simulacra, and a vividly illuminated series of Marian miracle songs called the *Cantigas de Santa Maria*. Alfonso thought of himself as the Mother of God's personal composer of love poetry. The *Cantigas* manuscript illuminations depict him as directing musicians to play for her: "I wish from this day forth to be Her troubadour, and I pray that She will have me [...] from now on I choose to sing for no other lady, and I think thereby to recover all that I have wasted on the others" (2). The progenitors of the song collection conceived a vast network of Iberian miracles, linking *jongleur* performance culture with specific peninsular Marian shrines. The collection engages with the colonial subjects of the Castilian empire, no doubt a result of the marked increase of Islamic populations living in Castilian-held territories during the

thirteenth century. The performative functions of the mechanical *LVDLR* statue—vis-à-vis Alfonso's program of Marian worship—were intricately interwoven into the political culture of the court in Andalusian frontier society. Throughout the later Middle Ages, a number of Virgin Mary statues—patrons and icons of the military conquest of Muslims—served as imperial protagonists for Castilian armies, and as a decisive method for converting Islamic cities and organizing interreligious transaction between Iberian Christians and Muslims (Remensnyder 645). As his father Fernando III did with multiple artistic and religious forms, Alfonso employed the *LVDLR* to progress his agenda of consolidating a disparate empire.^x

Miracles and Bodies

The internal apparatus is the most unique element of the *LVDLR*. The statue is distinct from many other wooden performing statues because typically the locomotive agents of articulating crucifixes and Throne of Wisdom statues (ritual celebrants) stand in full view of the audience in a church's nave or along the streets of processions. Medieval theologians wrote on this important distinction: miracles were expected to occur in the vicinity of statutes and relics, not within the statues themselves. In an attempt to square theory with practice, Aquinas and others carefully emphasized the ontological distinction between, on the one hand, Christ and the saints and, on the other, their images, relics, and statues: "God Himself fittingly honors such relics by working miracles at their presence" (Aquinas, Volume IV 2152). Medieval metaphysics allowed for representations of both orders—imagaic and substantial—to be understood as creative manifestations that lead the devotee towards an experience of the sacred, not unlike Gregory's allegory machine.

Theologians agreed that manifestations of holy figures apprehended sensually (via sight, especially) did not contain the essence of God, nor any other holy presence. And yet, a deep contradiction exists in Aquinas's proposition. If miracles occur in the vicinity of relics, then relics must generate the power to demarcate cultish environments for saints to heal, protect, and fight. Further, legends and visionary narratives told of miracles occurring as a result of direct engagement with sacred objects. Bynum catalogues a number of instances, including statues that miraculously bled, pilgrims who were healed by the touch of a sacred fresco, and artifacts from the Holy Land that could protect the bearer from encounters with the devil or hailstones (108-112).

Affective engagements with the sensory potentialities of objects sustained an active culture of saint devotion in medieval Europe. Why then, we might ask, did artists and their patrons build "miracle machines," trumping the vitality of things with apparitions that had resided only in the imagination? And what is an object-oriented philosopher to do with automata that—by way of faith—project both *potential* and *actual* life? Speculative materialist Graham Harman and visual medial theorist W. J. T. Mitchell have carefully circumscribed their inquiry to exclude animism and vitalism. Stones, cups, and pieces of cotton, they would argue, are not inherently agentive or purposeful; rather they are active in an existential sense, (a)effectively insinuating themselves into networks of humans, animals, plants, and minerals. According to these theorists, objects do not accrue something akin to subjectivity. Rather, within a network of objects, human subjectivity is diminished.^{xi}

But by "coming to life" as an object of the world, the Virgin Mary automaton disrupts this associative process by taking the place of imagination and memory and by

collapsing Aquinas's system of deferred, or potential, animation of saints. Object transformation violated orthodoxy by suggesting idolatry, especially when occurring before an audience of multiple witnesses rather than from the testimony of a single visionary. How did those who witnessed the life-like dynamism of the Mary machine understand these doctrinal and practical paradoxes?

Our modern predisposition to distrust sensory and affective understandings of the material world complicates an answer to that question. In the Middle Ages, the production of iconic meaning (religious or otherwise) was bound up in information from the environment and filtered through sensory organs. Post-Enlightenment tendencies to view medieval spiritualism as excessive, as well as the success of Protestant ideology and Reformation iconoclasm, are factors in the formation of a modern life estranged from affective relationships with sacred materiality (Meltzer and Elsner ix). The *LVDLR*'s hidden cog-and-wheel system would have been the kind of mechanism that sixteenth-century iconoclastic reformers expected to find in life-like religious articles like bleeding Eucharists and animated statues. But pre-modern spiritual sensual schema was far more complex. "[E]xtreme physical sensory deprivation motivated by religious fervor [...] can lead to extraordinary spiritual plenitude communicated through the senses: we can taste heavenly sweetness, see divine light, smell the pungent odor of sanctity through violets, and so on" (Brownlee 75). The medieval body was not only vulnerable to sensory excess but also responsive to the absence of material partnerships.

Of particular interest to theatre scholars, the polemical fifteenth-century *A Tretise of Miraclis Pleyinge* pairs drama with the dangers of painted images. According to Lerud, *A Tretise* "conceives of plays as phenomenologically in the same category as painted and

sculpted images [...] [T]he author of ‘miraculis’ is concerned that the ‘wepynges’ at performances is generated not by viewers’ inner concern for sin, but ‘more of their sight withouteforth’” (216). The *Tretise*’s author expressed a common angst among Lollard reformers about traditional devotional piety, an antagonism that would erupt in Reformation iconoclasm. In sixteenth-century England, attacks against religious pilgrims and the cult of Catholic saints were common, and Oliver Cromwell enforced injunctions to end traditional cult practices, such as the touching of saints’ images (Duffy 403-15). This sudden, violent end to deeply lived relationships between the lay community and iconographic and three-dimensional sacred object-things initiated a transition to a human-centered universe (apparent in Kantian epistemology) where human experience constituted the empirical knowledge of the natural world. Before understanding the performative life of the *LVDLR* in the thirteenth century, we must attempt to suspend disbelief in the power of objects to violate preconceptions of the material world. Anti-papist ideology cannot explain on-the-ground, phenomenological experiences of practicing Catholics. The province of medieval spirit-image clusters is better explicated outside the domain of religious dogma and Enlightenment teleology. In order to put us into the medieval frame of mind, then, we must disengage negative and positive values attributed to religious practices in order to peer into a devotional frame where heterogeneous actants channel individual and collective energies.

In a recent collection on the performance of images, Jérôme Baschet, Gil Bartholeyns, and others argue that images accrue their power through performance; that is, establishing a condition for the manifestation of iconic power in mimicry, evocation, and physical proximity to viewers.^{xii} In medieval Europe, the image *was* a body. Icons,

inscriptions, and statues were living because they resembled their prototypes, suggesting that the aura of sacredness was not lost in the process of manifold reproduction, but actually accrued holy vibrancy, or presence, through cross-citations of similar object-things. In his prologue to an important volume on medieval performance objects, Baschet states that “[t]o speak of the image-object is to recall that images, and most particularly, those of the Middle Ages, are inseparable from their materiality, but also from their thingness, understood as a quality of being sovereign, beyond both the representation and the functionality of the object” (11).^{xiii} Here, Baschet reiterates the Aristotelian conceptual framework of substance: both matter *and* form combine to produce the essential substance of an object. To put it another way, an image cannot be abstracted from its material life since form and matter comprise the essential substance of things. Presence (and according to Aquinas’ interpretation of Aristotle presence would account for a Prime Mover, i.e. God) exudes from both the singularity and sign-ness of an object and the persistent spatiality of a thing.^{xiv} While I think Baschet’s conclusion is accurate, it only partially describes the potential complexities of sacred congress among actants in the Middle Ages. Devotional meanings derived not only from lexical-material impact, but they also flowed from mediated sensory engagements with object-things. The image of the saint procured in the mind of the devotee, I believe, was open to free interpretation based on affective affiliations between the ritual human actants and their performative occupations within networks of objects and consecrated sites.

Religious images rarely stand alone. In ceremonial contexts, they are densely interwoven with textual, musical, and scenographic media, a “configuration of multiple sensations in what is experienced as a single sensation, what might be called a

soundspace” (Morgan 64). Sensory, environmental, and doctrinal mediations help produce the exceptional presence of objects. Object-like texts and textualized objects occupy spaces that engage the body of the viewer by orientating concomitant corporealities within the spatial dynamics of topographies, sanctuaries, city streets, and architectures of private cells. Presence is not generated locally in the motion (or absence of motion) of these objects, but in the systems of mechanical works and physical sensations that comprise the entire rite: motion, music, refracted light, iconography, and rehearsals of the liturgy.

Constructed of animal skin, wood, gold thread, internal gears, gems, and silk, the *LVDLR* automaton is a palimpsest of media, representations, and technologies that projects motion into stillness and conjures the absented body of the Mother of God as it clicks and jerks into motion. She remains unknowable to spectators until and unless they permit the potentiality of life to exist in and flow from such sacred object-things. Within a continuum of animate and inanimate substances, she had the capacity to act on the senses, especially sight and touch. A medieval metaphysics of matter allows for inert statues and automata to belong to the same intuitive domain: the former “thing” engages the viewer by staring fixedly back at one’s eyes; the latter “object” draws forth the gaze with gestures that are choreographic and architectural, but none the more potent. The perceptual leap from one to the other is energized by material density, shimmering gold encasements, and the textures of paint and fabric. Both object-ness and thing-ness engage spectators somatically, sharing transformational capacities.

Three-dimensional sacred representations proliferated in the late medieval period and encouraged religious communities to imaginatively enter into biblical narratives and

the lives of saints. Memory performances and somatic fantasies arose within perceptual layers of surface, thickness, and the aura of the holy body—an “inventory of shimmer,” a field of immanent energies (Barthes 77). The *LVDLR* contributes an element of technology to this schema of effigy and image. Despite the disconcerting sense of “iconoclasm” in the odd comingling of unmediated, nonrepresentational, scientific machine and sanctified humanoid, for the thirteenth-century witness at the Seville Cathedral the technologies of Mary and Jesus had the capability of producing wonder, frenzy, and passion.^{xv} Medieval automata demonstrated the marvel and genius of God in the works of men.

Performance theory challenges the idea that the co-presence of dead and living bodies in a signifying object (such as the Eucharist) is unique to the Middle Ages. Sofer and a number of other theorists have demonstrated otherwise: “[a]s concrete synecdoches of performance, all properties are embodied symbols, felt absences. Stage properties not only impersonate other objects but perform *as* objects” (60, emphasis in original).

Medieval theatre illuminates a prominent theoretical strain in the discipline of performance studies precisely because “synecdoches of performance” apparent in pre-modern Europe (transformational objects, real presence, affective devotion) encourage us to rethink notions of presence, object networks, and devotional props in later centuries.

I believe we can extract from the category of spiritual expectation a sense of wonder produced by mechanical aptitudes, rather than simply from mimetic gestures towards the miraculous. Deeply invested in the secular exploration of the functional universe, Alfonso X’s court pursued and experienced mechanical wonder. Dynamic devices activated the power of Spanish courts, underscoring the special capacity of kings

to capture and harness repositories of knowledge and skill. They also underscored the privilege of the priest and the king to act as transformative beings, individuals authorized to enact the Eucharistic rite. Castilian kings were seen as transformative, and many kings accrued an aura of sainthood during their lifetimes or shortly thereafter. Perhaps what has interfered with our ability to fully appreciate theatricality as an internal mechanism of medieval devotion are the divisions erected between theatre and ritual in modern discourse and cultural practice. I disagree with medieval theatre historian Philip Butterworth, who states that objects like the Rood of Grace cannot be considered puppets because the audience assumed they were miracles (123-26). This sort of thinking plays into the persistent stereotype that lay traditionalists from the late medieval period were gullible victims caught in the spell of the Roman Church. Are we to think that Protestant reformers alone were blessed with the eyes to recognize a puppet when they saw one?

I take the eleventh-century churchman Bernard of Angers at his word when he wrote about the reliquary statue of St. Foy at the Abbey of Conques in France, noting that the “image represents the pious memory of the holy virgin before which, quite properly and with abundant remorse, the faithful implore her intercession for their sins. Or, the statue is to be understood most intelligently in this way: it is a repository of holy relics, fashioned into a specific form only because the artist wished it” (Sheingorn 79). Sacred machines performed within a range of interpretive and experiential modes: representation, memory, *sensu* as feeling, *sensu* as understanding, the poetics of changeable matter, and the sacrality of miraculous iconography. Through a medieval metaphysical prism, we develop the capacity to appreciate object liveness, where transactions between object-things were intentional and reciprocal. Such an aptitude may

reveal the potential for similar transactions in the modern world.

Figure 1. *La Virgen de los Reyes* (Mary and Jesus), 13th century. Cathedral of Seville.

ⁱ Early twentieth-century scholarship tended to arrange evidence of written drama in order to underscore a developmental narrative whose moment of anagnorisis contemplates the greatness of English Renaissance drama, specifically E.K. Chambers and Karl Young.

ⁱⁱ Jody Enders provides a pithy historiographical picture of medieval theatre studies, noting that it is now far more geographically and generically heterogeneous, and more carefully theorized and contextualized (Enders).

ⁱⁱⁱ Fricke, *Ecce fides: Die Statue von Conques, Götzendienst und Bildkultur im Westen*; Stevenson, *Performance, Cognitive Theory, and Devotional Culture: Sensual Piety in Late Medieval York*; Gertsman, *Fragments, Ruptures, Imprints, Play: the Shrine Madonna in the Late Middle Ages*.

^{iv} “Nature proceeds little by little from things lifeless to animal life in such a way that it is impossible to determine the exact line of demarcation” (Aristotle, Volume I 922). See also *Physics* Book 8.

^v Jung, “The Tactile and the Visionary.”

^{vi} See Tripps; Uličmý.

^{vii} “[L]a dulce belleza y candorosa expresión de la que se le apareciera en transcendentales momentos para el porvenir de la Reconquista” (Hernández Díaz 24). Translation is mine.

^{viii} See Hill.

^{ix} Torres 69.

^x Alfonso “deliberately cultivated images of enlightened courts so as to secure national consensus among a pluricultural people and promote international prestige for their ambitious courts” (González-Casonovas 153).

^{xi} “The concept of image-as-organism is, of course, ‘only’ a metaphor, an analogy that must have some limits” (Mitchell 10).

^{xii} Dierkens, Bartholeyns, and Golsenne.

^{xiii} See also Bonne 77-111.

^{xiv} Cohen; McNerny and O'Callaghan.

^{xv} "Iconoclasm is when we know what is happening in the act of breaking and what the motivations for what appears as a clear project of destruction are; iconoclash, on the other hand, is when one does not know, one hesitates, one is troubled by an action for which there is no way to know, without further enquiry, whether it is destructive or constructive" (Latour, "What is Iconoclash" 16).