Enthymema XXXIV 2023



The Voice of the Non-Human: Scientific Knowledge, It-Narratives and Fiction in the Long Eighteenth Century Alessio Mattana Università degli Studi di Torino

Abstract – Questo articolo esamina il rapporto tra letteratura e scienza nel Settecento inglese attraverso una serie di *It-Narratives*, opere nelle quali oggetti di uso comune o animali narrano le proprie vicende e, contestualmente, quelle dei loro diversi proprietari. Questi testi, che furono molto popolari nell'Inghilterra della seconda metà del diciottesimo secolo, sono stati spesso studiati come espressioni della cultura consumistica dell'epoca. In questo articolo, le *It-Narratives* verranno discusse da un punto di vista epistemologico. In particolare, verrà argomentato che la dislocazione dell'essere umano dalla posizione di narratore a quella di "narrato" possa essere interpretata alla luce dell'interesse per le *natural things* nella filosofia naturale e sperimentale post-baconiana e newtoniana. Nell'articolo verrà infine investigata la possibilità che scienza e letteratura dialoghino attraverso il concetto di *fiction*, inteso come un modo per immaginare epistemologie alternative in cui l'essere umano perde di centralità.

Parole chiave – It-Narrative; scienza; Settecento; non-umano; letteratura inglese.

Abstract – This article examines the relationship between literature and science in eighteenth-century England through a series of It-Narratives, works in which everyday objects or animals tell their own stories and, at the same time, those of their various owners. These texts, which were very popular in England in the second half of the eighteenth century, have often been studied as expressions of the consumer culture of the time. In this article, It-Narratives will be discussed from an epistemological point of view. In particular, it will be argued that the dislocation of the human being from the position of narrator to that of "narrated" can be interpreted in light of the interest in natural things displayed by post-Baconian and Newtonian natural and experimental philosophy. Finally, the article will investigate the possibility of science and literature dialoguing through the concept of fiction, understood as a way of imagining alternative epistemologies in which human beings lose their centrality.

Keywords – It-Narratives; science; eighteenth century; non-human; English literature.

Mattana, Alessio. "The Voice of the Non-Human: Scientific Knowledge, It-Narratives and Fiction in the Long Eighteenth Century". *Enthymema*, n. XXXIV, 2023, pp. 70-88.

https://doi.org/10.54103/2037-2426/20781

https://riviste.unimi.it/index.php/enthymema



Creative Commons Attribution 4.0 Unported License ISSN 2037-2426

The Voice of the Non-Human: Scientific Knowledge, It-Narratives and Fiction in the Long Eighteenth Century

Alessio Mattana

Università degli Studi di Torino

1. Introduction: It-Narratives Between Science and Literature

In his contribution to a memorable special issue of *Critical Enquiry* on "things" published in 2001, Daniel Tiffany remarked that the humanities had a long-standing problem with objects. Literature had shied away from "serious debate over the nature of material substance," and this left science as "the sole arbiter in the determination of matter" (74–75). Fortunately, research in the humanities in the past two decades shows that time has not passed in vain, with several contributions being published on things.¹ After something of a slow start, the study of It-Narratives – a loose term that identifies tales narrated by objects or centred on their life and peregrinations, usually in prose, published in Britain in the eighteenth century – became one of the most lively strands in this field of enquiry.

The conventional starting point for It-Narratives is Charles Gildon's *The Golden Spy* in 1709, a collection of satirical tales told by a handful of European coins.² Further publications of this kind followed sparsely at first – Joseph Addison's "Adventures of a Shilling" on *The Tatler* (1710); the anonymous *The Secret History of an Old Shoe* (1734) – but interest in It-Narratives started to really pick up by the mid-eighteenth century (Lamb xvi). Francis Coventry's hugely popular *The History of Pompey the Little: Or, the Life and Adventures of a Lap-Dog* (1751) went on to fourteen reprints by the end of the century, and a host of titles subsequently hit the market, including the anonymous *The Life and Adventures of a Cat* (1760), believed by some to have been written by none other than Henry Fielding, and Charles Johnstone's best-seller *Chrysal; or, The Adventures of a Guinea* (1761), a four-volume set that boasted twenty editions by 1800 (Festa, "The Lives of Things" 134). The commercial peak was reached from the 1770s onward, when dozens of tales variously told by banknotes, silk petticoats, cork-screws, fleas, pins and the like were published (Bellamy 134). By the end of the century, as a journalist in a 1791 issue of *Adventurer* noted, It-Narratives were a "mode" grown "so fashionable, that few months pass which do not bring one of them under our inspection" (Flint 165).³

As the rather diversified list of It-Narrators above suggests, anything went as long as the story involved non-human entities. The only common feature of this motley crew of texts seemed to have been their being so formulaic that they could be easily disposed of in the market (Lupton, "The Knowing Book" 404). As, with few exceptions, these narratives tended to be hackneyed and derivative works (Bellamy 121), scholars have taken notice of It-Narratives less for their literary qualities than for what they tell us about the society in which they were produced. Aileen Douglas has suggested that they are an emblematic expression of the consumer culture of the eighteenth century, "which seemed, to contemporaries, to dissolve

¹ See, for instance, Brown *A Sense of Things*; Daston *Things that Talk*; Lupton, *Knowing Books*; Hamilakis. ² On Gildon, see Rodrigues.

³ Turned into children's tales, the It-Narrative genre remained popular throughout the nineteenth century. See Freedgood.

the marks of social class and to render the barriers between social orders frangible and vulnerable" (68). Mark Blackwell adds that these texts raise "disturbing and fascinating questions about where human personhood ends and alienable property begins" ("It-Narrative" 3). James Alan Downie sees them as "commentaries on new forms of subjectivity, imperial commerce, and the new world of commodities" (253), and Liz Bellamy understands them as expressions of business exchange within the rising consumer society of the late eighteenth century (119– 128). Christopher Flint has noted their impact in terms of the connections between book materiality and the circulation of commodities (Flint 162–163), and Lynn M. Festa has found similarities with slave narratives in terms of the It-Narrators being objectified and made into circulating goods (*Sentimental Figures* 111–132).

Much of this commodity-centred scholarship has linked It-Narratives to the rise of the consumer society and the various "object crazes" that swept eighteenth-century Britain. This approach is borne out by the fact that most It-Narrators emphasise their having had several owners. In this respect, the difference between animals or artefacts was of little import. The writer of *The Adventures of a Watch!* (1788) justifies his literary endeavour by arguing that "[a]s Authors have made lap-dogs, fleas, lice, bank notes, guineas, nay even Birmingham halfpence, though of very roguish appearance, give the history of their lives, why not adopt the example?" (1–2). Similarly, in the preface to *The Adventures of a Pin, Supposed to be Related by Himself, Herself, or Itself* (1790), the source of inspiration comes from "the learned authoresses of the adventures of inanimate beings" alongside "the compilers of memoirs of rather more rational (although dumb) animals" (i). The two categories were perceived as mutually exchangeable, and even the intelligent Pompey the Little gets traded for a gold watch (Coventry 16–17).

No wonder then that It-Narratives have been chiefly studied as an expression of consumer culture. This emphasis on consumerism, however, carries with it two side-effects. One, shrewdly identified by Peter Walmsley, is that, by emphasising "commodities in the market rather than the bodies that made them," scholars risk falling prey to a paradoxical form of consumerism fetishism not unlike the one that they seek to criticize (264). A second, lessexplored consequence, is that scholars working on these texts from a commodity-driven perspective often fail to do justice to their complex epistemology. It is a remarkable fact of literary history that such derivative, market-oriented texts were also innovative in bestowing the storytelling privileges traditionally granted to human narrators to non-human entities, regardless of their being physical objects or animated beings, with human characters, in turn, being depicted from an external, "objectified" perspective. The mechanics of how this radical idea works, and whence it originated, remain understudied.

In this article, I attempt to address part of this research gap by examining some of the links between It-Narratives and the scientific ideas that were current in Britain in the long eighteenth century. In particular, I will explore the possibility that the fictional displacement of humans from their position of narrators to that of "narrated" may be illuminated by reference to the study of natural things (or things of nature), which was pursued in natural and experimental philosophy as a means to obtain more reliable knowledge about nature. I will conclude that a possible connection between these early-scientific positions and It-Narratives may be established by considering fiction as a way to contemplate alternative epistemologies centred on the non-human.⁴

⁴ As it will appear in the next sections, in this paper the term "It-Narrative" will be used in a rather comprehensive manner to include not only prose texts but also poetry, on the grounds that what is relevant is not their form but their use of non-human narrators. Moreover, although in the long eighteenth century the concept of science started to be used in our present-day sense, the term "science" still meant "knowledge", and the word "scientist" would be coined only in the 1830s. In this paper, "science" will be used to indicate proto-scientific pursuits in natural and experimental philosophy.

2. Early Science and the Voice of Natural Things

In a well-known episode in the third book of *Gulliver's Travels* (1726), the narrator visits the Academy of Lagado, which is home to a number of experimenters. One especially ambitious projector reasons that, since "Words are only Names for *Things*,"

it would be more convenient for all Men to carry about them, such *Things* as were necessary to express the particular Business they are to discourse on [...] which hath only this Inconvenience attending it; that if a Man's Business be very great, and of various Kinds, he must be obliged in Proportion to carry a greater Bundle of *Things* upon his Back, unless he can afford one or two strong Servants to attend him. (172–173)

The Academy of Lagado is a well-known instance of satire against the Royal Society of London for Improving Natural Knowledge, and the act of communicating by producing solid things was Swift's *reductio ad absurdum* of some of its members' ambitious attempts at devising a universal language for natural philosophy, most famously instanced in John Wilkins's *An Essay towards a Real Character and a Philosophical Language* (1668).⁵

As Anne Mulhall explains, the basis for such attempts was a distrust in human language that led experimenters like Wilkins to circumvent "the pitfalls of orthodox sign systems by eradicating the signifier entirely" (76). This interest stemmed from the empiricist teachings of Lord Bacon, who, in the *Advancement of Learning* (1605) and the *Novum Organum* (1620), had strongly voiced the need for philosophers to shift their interests from words to what Cynthia Wall calls "the material workings of the world" (70). In particular, Bacon alleged that "the first distemper of learning" lies in men studying "words and not matter" (30). Bacon's claim, Brian Vickers noted, was part of his polemic against the uselessness of authority-based and language-based scientific enquiries, which disregarded first-hand knowledge of nature (501). Hence, Bacon's insistence that language be made plainer so as to better describe things. Words, he cautioned, must be "the images of matter," and nothing else (30).⁶

In spite of the fact that Bacon's actual rhetoric did not always conform to his own claims, his ideas about the relationship between words and things proved highly influential in the community of experimental practitioners that gathered around the Royal Society upon its foundation in the early 1660s. As testified by its *nullius in verba* motto – to be translated as "on nobody's word" – the Royal Society institutionalised Bacon's aim to make words subservient to things. The vindication of plain language in Thomas Sprat's *History of the Royal Society* (1667), in which ornaments of speaking are said to be "in open defiance against Reason," was based on the belief that in its Edenic state of "primitive purity" man was able to deliver "as many *things*, almost in an equal number of *words*" (111, 113).⁷ The Royal Society experimenters thus aimed at restoring the primordial state in which things held more importance than words by focusing their studies on the former. As the poet Abraham Cowley put it in the opening ode to Sprat's *History*, "things" are "the Mind's right object" (Sprat, "To the Royal Society").

What did "things" mean exactly in this context? The question is a complex one because, obviously, the word had a rather broad semantic field, even if one considers the lexicon of philosophy only. Still, while the philosophical meanings of "thing" as "[t]hat which exists individually (in the most general sense, in fact or in idea); that which is or may be in any way an

⁵ Further attempts would be made by Samuel Hartlib and Francis Lodwick. See Lewis. On Swift's satire on science in *Gulliver's Travels*, see Todd.

⁶ On the relationship between words and things in Bacon, see Howell. For a lengthier discussion of Bacon's stance on "things", see Campbell.

⁷ On Sprat's stance and how it influenced the Royal Society, see Hunter; Stark.

object of perception, knowledge, or thought; an entity, a being" recorded by the OED had been in use since Old English texts, the second half of the seventeenth century saw the publication of works which explicitly referred to "natural things", or variations on it, such as "the things of nature". These noun phrases do not seem to have been much in use prior to that decade.

Interestingly, the phrase "natural things" seems to have been first employed in works of religious reflection to caution those who focused on natural rather than divine knowledge. This position appears, for instance, in the work of Quakers like Isaac Pennington the younger and Francis Howgill. Pennington concedes that there is "a knowing of God, Christ, and all spiritual things by natural things," but then clarifies that this knowledge is "weak, dark, deceitful" when compared to "knowing natural things by spiritual things" (2–3). Similarly, Howgill distinguishes "natural things," which are "the visible creation," from "the things of God's kingdom." The latter are of "another quality and nature" and must therefore be the only object of study of the Christian (195).

This contraposition between religion-based knowledge and experimental one would later be bridged by experimental virtuosos who advocated the serious study of natural phenomena as marks of God's powers. Wilkins himself devoted a chapter of his *Of the Principles and Duties of Natural Religion* (1675) to extol the "admirable contrivance of Natural Things," which must be the "productions of some Wise Agent" (78). In *A Disquisition about the Final Causes of Natural Things* (1688), Robert Boyle, well-known as the Christian Virtuoso, argued that "Natural Things" were "directed to Ends knowable by Men" by the "Divine Author," which is precisely why they are worth studying (19).

In their belief that scrutinizing things first-hand, rather than trusting past authorities, would lead to a true understanding of nature, Wilkins and Boyle walked in Bacon's footsteps and within the intellectual remit of the early Royal Society. The influential naturalist Robert Plot, who had been elected a Fellow in 1677 and made joint editor of the Society periodical *The Philosophical Transactions* in 1682, had been a key contributor to this belief thanks to his natural histories, which made a strong case for the epistemic authority of natural specimens. His *Natural History of Oxfordshire* (1677) programmatically focuses on the study of "natural things," an expression by which Plot meant all that which nature "hath retained the same from the beginning, or freely produced in her ordinary course; as *Animals, Plants*, and the *universal furniture of the World*" (1). This focus is based on the belief that knowledge coming from nature is more authoritative than that derived from human sources, as the latter, being always mediated by language, is necessarily imperfect. This is why Plot, echoing Sprat, states his aim to "treat of Things" by delivering them "as succinctly as may be, in a plain, easy, and unartificial Stile, studiously avoiding all Ornaments of Language" (2).

This position is reprised in the later *Natural History of Staffordshire* (1686), in which Plot reiterates his intention to omit "both *persons* and *actions*, and chiefly apply my self to *things*" (392). For all its focus on natural things, however, Plot did not wish to completely disregard textual authorities, especially those of his fellow Royal Society members, who are quoted extensively in his natural histories. This was likely because he belonged to the discursive community of the early Royal Society, in which great value was attached to the testimony of its gentlemanly members.⁸

The most radical formulation of this thing-centred approach to the study of nature occurred at the end of the century with Isaac Newton, who put unprecedented emphasis on the epistemic value of natural things in opposition to human-made fictions. Newton's position was that natural philosophers should only cast their attention to the things of nature, by which

⁸ On the production of knowledge based on consensus within the Royal Society, see Shapin, *A Social History of Truth*; Bechler.

he meant physical phenomena. Everything in nature, Newton believed, must be known in terms of their mathematical quantities, for animate or inanimate bodies alike abide to the same universal laws of physics.⁹ Within this framework, human interpretation is to be kept at a minimum: as the first rule of reasoning added to the second edition of *Principia* in 1713 admonished, we are to admit "no more causes of natural things than such as are both true and sufficient to explain their appearances" (785).¹⁰ Central to this claim was Newton's conviction that knowledge on nature was valid only insofar as it was based on observations of nature unburdened by the imagination of the human observer, which, he argued, always distorts what nature tries to show us. This belief was best phrased in the famous *hypotheses non fingo* motto, also appearing in the 1713 edition of *Principia*, with which Newton claimed that conjectures were never to be used in investigations into nature because of their being unverifiable fictions (484).

This position was identified by Newton's influential commentators as a point of no return for all subsequent enquiries into nature. In 1728, Henry Pemberton, a student of Newton and one of his most active popularisers, remarked that both the pleasure experienced in the "contemplation of truth" and the desire after knowledge are universal to all men, a sentiment "by nothing more fully illustrated, than by the inclination of men to gain an acquaintance with the operations of nature," by which Pemberton means a "general" disposition to "enquire after the causes of things" (2). Following Newton, Pemberton explains that "those causes, which are brought to light by a strict examination of things, will be more distinct" than those assumed by hypotheses (14–15).

Pemberton's position signals that a shift had taken place: the things of nature were not just meant as natural specimens, as in Plot's natural histories, but as the hidden structure of the universe, which Newton's mathematics-based natural philosophy just started to unveil. In the words of Fontenelle, Newton's *Principia* had ushered in an age where the "Principles and Elements of things," which had been thus far "conceal'd from us by Nature," have finally been brought to light, allowing us "a Sight entirely new and unexpected" (19, 21). What Fontenelle and Pemberton highlighted is that the things of nature have their own voice, which can be heard whenever one makes himself or herself inconspicuous – that is, whenever the observer is able to look at nature without trying to superimpose their own hypothetical explanations.

In this view, not only did things become a shorthand for nature as a whole, but they acquired epistemic status as the benchmark upon which new knowledge is to be measured, with some commentators suggesting that doing otherwise could not but lead to error. In 1748, the Scottish mathematician Colin MacLaurin spoke harshly of the "absurd composition of truth and error" that befalls those who, unable to restrain their imagination, fail to surrender themselves to the evidence of things. Newton had constituted an intellectual turning point because, with his own natural philosophy, he had "overthrown the boasted schemes" by which previous philosophers had "pretended to unravel all the mysteries of nature." This, MacLaurin added, "could not please those who had been accustomed to imagine themselves possess'd of the eternal reasons and primary causes of all things," which Newtonian philosophy had unveiled, along with "a sincere confession of our being far from a complete and perfect knowledge of [nature]" (12).

The demarcation between nature and man was at this point cast as a polarisation between the human and the non-human, and there does not seem to be much room for compromise. We should be "afraid to intermix" nature with "our own extravagant conceits," MacLaurin urges, and it is essential that human beings become aware of their innate fallibility, which

⁹ On Newton's methodology, see Achinstein.

¹⁰ The original Latin went "Causas rerum naturalium non plures admitti debere, quam quae & verae sint & earum Phaenomenis explicandis sufficient". Newton, Philosophiae Naturalis Principia Mathematica 357.

continuously leads them to confound "things" with "ideas" (12, 14). Rather, what should be cultivated is the ability to relinquish any tendency to come up with fictional explanations about the things of nature, so that they are able to speak freely.

3. The Epistemic Value of It-Narrators

As we have seen, an interest in having "things of nature" speak for themselves characterises early science for the best part of the long eighteenth century, from the Royal Society practitioners who followed up on Bacon's footsteps to Newton all the way to MacLaurin. Human observers, they variously claimed, are inclined to using rhetorical ornaments, trusting unverified past authority and recurring to their imagination, all of which make their understanding of natural things fallible. What is noteworthy is that these beliefs extended well beyond the strictly scientific domain, especially in the eighteenth century. Pemberton, Fontenelle and Maclaurin were all addressing the general public rather than experts, and when Pemberton insisted that men have a general disposition to "enquire after the causes of things," he was not specifically referring to experimental and natural philosophers, but to "men of letters" more broadly (2-3).

This leads to considering how eighteenth-century British writers responded to this issue. Novelists especially were not extraneous to the epistemology of things, though, when they considered them, they mainly did so with regards to what Christopher Flint calls the "disquieting fluency of objects" which increasingly populated their lives (166). Examples abound, from Roxana's dress in Daniel Defoe to Clarissa's and Pamela's letters in Samuel Richardson, to the host of "keepsakes" that populate sentimental novels such as Laurence Sterne's *A Sentimental Journey* (Park 40). These well-known cases are instances of commodities that acted as a spiritual extension of their owners (Lynch 345). Therefore, they are best described as "objects," which, as Bill Brown persuasively argued, are not the same as "things." Objects are charged with human meaning: we "look through objects because there are codes by which our interpretive attention makes them meaningful." Objects are transparent items that are relevant for "what they disclose about history, society, nature, or culture – above all, what they disclose about us". Things, by contrast, are opaque, bare facts that cannot be harnessed into a system of interpretation. They are independent of any structure of meaning, and they tell their own story, thus reversing the established hierarchy between human and object (Brown 4).

It is with this distinction in mind that Barbara Benedict suggests that things were "the devils of the empirical age," meaning that they were perceived as so powerful that they could take over human consciousness ("The Spirit of Things" 39). Benedict is thinking of the instruments involved in the activities of virtuoso experimenters and early scientists after the Restoration, such as Robert Hooke's microscope, which magnified tiny insects, or Boyle's air-pump, which allowed the study of air pressure. From an epistemic point of view, these examples work in a different way from the objects of the novelists mentioned above, for scientific instruments and collectible specimens seemed to have the power of absorbing their users so much that their subjectivity ended up being eroded. That is why in the early days of the Royal Society satirists like Aphra Behn and Samuel Butler portrayed experimenters and virtuosi as people living in a world of make-believe which, in some cases, had grotesque consequences, not least of which involuntary cuckoldom (Benedict, "Spirit of Things" 20). Indeed, one typical plot of Restoration plays centred on experimenters so engrossed with scientific things that they start overlooking their private lives, Thomas Shadwell's *The Virtuoso* (1676) being arguably the most famous example.

Although somewhat belated in his reaction to the practices of the Royal Society, Jonathan Swift is exemplary for his interest not just in the "roles of both objects and things," as Eli M.

Phillips has noted, but, more specifically, in the way things challenge human subjectivity (17). Evidence of this may be gathered from many loci, including the already cited Academy of Lagado in *Gulliver's Travels*, but the most conspicuous instance is that of *A Tale of a Tub* (1704), which is a story told by things that dispossessed human story-making privileges. In the handy summary of a commentator, Swift's *Tale* is "the disorganized rambling of a wooden brain, whose intellectual capacity enabled the tub's power of speech, which in turn enabled it to write a history of the Reformation" (Knellwolf King, 452).

Intriguingly, the preface to Charles Gildon's It-Narrative The Golden Spy (1711) is satirically dedicated to the "Author of A Tale of a Tub." While Gildon wrote his dedication with the aim of delivering a scathing attack (on political grounds) on Swift, he at least agreed with the Irish writer on the point that they were living at an age where rational thinking had been superseded by "Merry TRIFLING," a prime example of which, Gildon alleged, is the Philosophical Transactions, the monthly periodical of the Royal Society ("The Epistle Nuncupatory, to the Author of a Tale of a Tub"). Accusations to experimental practitioners busying themselves with such inconsequential issues as weighing air or staring at insects had been customary in the earlier days of the Royal Society (Coppola 33-88). But Gildon's charge, as it appears from the very beginning of the It-Narrative, worked at a deeper level. In the dedication, he claims that his compatriots were frittering away their hard-gained "Liberty of Philosophizing," that is, the possibility of "making free and noble Enquiries into the hidden Secrets of Nature," which Inquisition countries like Italy did not enjoy - a clear nod to the vicissitudes of Giordano Bruno, Galileo Galilei and Tommaso Campanella (1-2) The latter, and especially his De Sensu Rerum et Magia (1592), is mentioned explicitly as Gildon's source of inspiration for speculations on whether things are sentient, which, within the fictional domain of The Golden Spy, are then confirmed by the sudden realization that the golden coins in his pocket are actually talking. This allows Gildon to conclude not only that things were provided with sensibility, but also with "Rationality, and discoursive Faculty, Observation, Memory, and Reflection" (1-2).

The fact that Gildon's It-Narrative begins with these considerations seems to be indicative of two points: first, that writers interested in broader cultural debates (as Gildon was) were receptive to questions that originated within the community of experimental and natural philosophers; and, second, that the use of the It-Narrator device was not unrelated to epistemology debates about the unreliability of human-made knowledge which had stemmed from the scientific quest to unveil the secrets of natural things. Evidence from other texts with nonhuman narrators - not just in prose fiction but also in poetry - show that this interest in epistemology was thematized as a contrast between erroneous human beliefs and talking things that are able to reveal the true nature of a person. This is what happens, for instance, in Sarah Dixon's poem "From a Sheet of Gilt Paper. To Cloe." Included in her Poems on Several Occasions (1740), Dixon's It-Poem explores the divide between words and materiality by giving voice to an insincere love letter written by a rake to a young lady.¹¹ Dixon's argument is that, notwithstanding how persuasive the words in a love epistle are, it is the material medium of the letter that one should hearken to in order to gain access to the sender's true nature. Although technically "a passive Vehicle" (129), within the fiction of Dixon's It-Poem the sheet of paper upon which the love letter is written is granted agency to "explore" the thoughts of its untruthful writer (129). Mischievous human words are contrasted with the inherent sincerity of the letter paper, whose purity is emphasised by the simile "White as your Hand" (130). If the fair young reader is able to ignore the rhetoric of her suitor and listen to the letter-as-thing, she will eventually be "undeceiv'd" and reject her lover's dishonest vows (130).

¹¹ I have chosen to refer to Dixon's poem as an "It-Poem" rather than a "Thing-Poem", which is the name chosen by Benedict, to underline its continuity with It-Narratives. See Benedict, "Encounters with the Object."

By partaking in the interest in paper as a medium of ideas at a period of mass printing, works like "From a Sheet of Gilt Paper. To Cloe," or paper-centred It-Narratives like *The Adventures of a Quire of Paper* (1779) reveal, in the words of Christina Lupton, a "strangely anti-human cause, entertaining because of the way in which it seems to make paper cleverer than people" (*Knowing Books* 7). As Deborah Kennedy notes, behind the common trope of proso-popoeia – the act of projecting human feelings into a non-human entity – lies a rebellion against human authority, for "the paper itself cannot stand being sullied by lies, and even advises its own destruction" (141). This is well shown in the verses with which the sheet of gilt paper entreats her reader to "Take this kind hint, despise the squire, / And gently lay me—on the fire" (130).

If Dixon's poem is an instance of how, regardless of their being in prose or verse, texts could adopt a non-human perspective to dramatize distrust in human knowledge, It-Narratives proper acted as the sustained thematization of such scepticism by handing over the role of narrator to things. This was made possible by their shared plot structure. Conventionally, in It-Narratives a given item is first owned by people of taste and then, due to some recurring patterns (tear and wear; lack of interest by current owners; theft), it ends up being enjoyed by people lower and lower in the social ladder. By reading about things circulating across different social classes, eighteenth-century readers were able to explore slices of society that they did not necessarily have access to, and to compare them by contrast. This happens, for example, with the narrator of *The Adventures of a Black Coat* (1750). Through continuous deterioration, the coat narrator moves all the way from noblepersons to hack writers. In this sense, the black coat is the typical It-Narrator which portrays society as a series of business relationships, thus displaying what Jan Alber calls "the narrative's attitude toward the commodity fetishism" of eighteenth-century England (57).

A lesser-studied issue, however, is the fact that the It-Narrator in *The Adventures of a Black Coat* (named Sable) claims to be observing humans with a degree of penetration that humans themselves cannot reach, which is what makes the circulation of the thing-narrator meaningful. As Sable explains when talking to a younger coat, its past adventures allowed it to accumulate "experience." The black coat spent "much time in contemplating on the various modes of happiness which mankind sought after, and the different means they pursued to attain their adopted wishes," and from there it is able to come up with general maxims on human behaviour (60). These maxims are further confirmed by a plethora of data obtained via its own experience and, in an extratextual nod to other It-Narrative authors, that of other talking things. The "labours of my fellow adventurers in their diurnal expeditions, which were always communicated to the society together with my own experience," afforded the black coat with a "variety of instances" of human behaviour. One such maxim stands out for its epistemic significance:

The power of reasoning, and of assimilating their ideas, with which men are indued, to enable them to distinguish the true road to happiness, I found was of little or no service to them in their pursuit, the present gratification of the passions and senses seems to be the chief consideration and stimulater in all their actions. (60)

Based on its observations, Sable generalises on humankind by denying that they can fully use their faculty of reason, as they are too inclined to give in to their passions and senses. But, strikingly, things are granted the faculty of reason. The young coat who listens to Sable's gnomic conclusion assures that "he would endeavour to regulate his conduct agreeably to the dictates of reason, and that his study should be to acquire a fund of knowledge," thus positioning itself as an ideal observer of humankind, one that is guided by reason and, therefore, ready for more perspicuous observations and evidence-based generalisations (61).

Intriguingly, then, in It-Narratives like *The Adventures of a Black Coat* the talking thing is endowed with outstanding observational abilities and rationality, neither of which is granted to humans. The ramification of this narrative subversion is identified by Dragoş Ivana as a deconstruction of "the normative subject-object relation," which goes as far as to challenge the idea that a human writer is able to realistically portray the world. By having a talking thing narrate the story in lieu of a human being, It-Narratives "refute the human claim to authenticity and advocate an epistemological strategy which records reality in an authentic, empirical way with the help of the senses, most notably touch and sight" (149–150).

An even more complex dramatization of this subject-object epistemic reversal occurs with Tobias Smollett's *The History and Adventures of an Atom* (1769). Smollett's tale is about a secret ancient history of Japan, though the story is actually about English politics from 1754 to 1768, and all of the Japanese characters that appear in Smollett's story stand for English politicians (Mann 376). This satirical displacement is a familiar device in the eighteenth century which went by the name of "secret history" – a story in which the narrative stage is displaced to a faraway place in order to satirise the author's own society.

Smollett's *Atom* clearly belongs to this well-established tradition (Adams Day xxv). But there is a further element at play, which is crucial to our discussion on the epistemology of It-Narratives. In Smollett's tale, the story is told by an atom which has circulated for centuries. It has resided in several bodies, both human and non-human, and has eventually settled inside Nathaniel Peacock, a humble haberdasher who wrote the story we are reading. As the atom itself explains:

I was enclosed in a grain of rice, eaten by a Dutch mariner at Firando, and, becoming a particle of his body, brought to the Cape of Good Hope. There I was discharged in a scorbutic dysentery, taken up in a heap of soil to manure a garden, raised to vegetation in a sallad, devoured by an English supercargo, assimilated to a certain organ of his body, which, at his return to London, being diseased in consequence of impure contact, I was again separated, with a considerable portion of putrefied flesh, thrown upon a dunghill, gobbled up, and digested by a duck, of which duck your father, Ephraim Peacock, having eaten plentifully at a feast of the cordwainers, I was mixed with his circulating juices, and finally fixed in the principal part of that animalcule, which, in process of time, expanded itself into thee, Nathaniel Peacock. (8–9)

Within the fictional boundaries of the text, the atom takes possession of Peacock and tells the secret history of ancient Japan, a story which no human being is able to know because they do not have the atom's ability to observe inconspicuously. Therefore, the knowledge the atom conveys cannot be contested by humans. Peacock, the human host infested by the atom, is forcefully divested of his agency as a human being and has to passively listen to the voice of the atom, which dictates its secret history *verbatim* by ordering Peacock to "[t]ake up the pen [...] and write what I shall unfold" (4), an order to which the human host is unable to disobey. Human insubordination is readily punished by physical discipline, like when the atom chastises Peacock for doubting the atom's revelations:

What! dost thou mutter, Peacock? Dost thou presume to question my veracity? now by the indivisible rotundity of an atom, I have a good mind, caitiff, to raise such a buzzing commotion in thy glandula pinealis, that thou shalt run distracted over the face of the earth, like Io when she was stung by Juno's gadfly! (34–35).

By focusing on the ability of the atom to take possession of Peacock, Smollett emphasises that the human host is nothing more than an aggregate of atoms whose sole purpose is to record the story told by the atom in an unadulterated way. This process of objectification of the human character defuses the risk that Peacock could corrupt the atom's historical account with his human imagination. In effect, Smollett's *Atom* makes Peacock, the human narrator,

into a vehicle of the atom's voice, one that has no independent willpower. Notably, however, the atom's ability to disclose knowledge is dependent on its ability to maintain secrecy, rather than unveil it. Within Smollett's fiction, the atom is portrayed as having spent its lifetime in concealment, unable to communicate until the moment it encountered Peacock. As the atom explains to its human host, the conditions for it to talk are hard to achieve: atoms "cannot communicate, except once in a thousand years, and then only, when we fill a certain place in the pineal gland of a human creature, the very station which I now maintain in thine" (5). Being unable to communicate other than in exceptional circumstances means that the atom has not obtained its knowledge by interaction, but by unnoticed observation. It has not been influenced by anybody, nor has it influenced anyone prior to Peacock.

4. Fiction as Thought-Experiment with Non-Human Perspectives

As shown in the previous sections, the interest in detecting the voice of natural things displayed by early scientists seems to have some epistemic overlap in narratives told by non-human narrators - largely in prose It-Narratives, but possibly in poems too. This raises the question of whether some form of direct influence may be discerned. Barbara Benedict has rightly pointed out that the eighteenth-century interest in things occurred at a period which was "freshly scrutinizing perception, time, space, and mass in the flush of the New Science." No wonder then, she concludes, that in the eighteenth century one encounters texts which employ non-human entities as narrators, and which pose a challenge to subjectivity "by blurring the boundaries between thought and thing, self and stuff" (Benedict, "Encounters with the Object" 194). Similarly, in her review of Jonathan Lamb's The Things Things Say (2011), Christa Knellwolf King identifies a link between the "vitriolic debates about whether the materiality of the world was an objective fact or a product of human consciousness" that became common during the Enlightenment and the activity of eighteenth-century writers who actively tried to intervene in such debates by dramatizing them via the talking thing device. According to Knellwolf King, the relation is one of causation - the dumb matter of It-Narratives was given a voice "so that it could write back to the Cartesian citadel, where mind ruled supreme in a separatist universe that excluded all claims of the plebeian animate and inanimate bodies" (451).

Both Benedict and Knellwolf King are rather bold in suggesting that It-Narrative authors were consciously responding to philosophical discussions on the Cartesian mind-matter divide and the following empiricist developments which characterised the rise of modern science in Britain. This claim might be overstated, if anything because, with the exception perhaps of Gildon's *The Golden Spy* and Smollett's *Atom*, we know little of the intellectual background of the authors of most It-Narratives.¹² Even if causation is out of reach, however, correlation might just be enough, especially in a century when disciplinary boundaries were porous and scientific ideas were regularly discussed in mass periodicals. So, even if authors of It-Narratives were no philosophers, it is not unlikely that they were receptive to the debates on the epistemic status of natural things. The science-driven epistemological belief that (in Lorraine Daston's words) things speak "the truth, the purest, most indubitable truth conceivable" when devoid of the "distorting filter of human interpretation" was one that might have moved beyond the strictly scientific to inform other areas of eighteenth-century culture (12–13).

In particular, a connection may be identified in the way both It-Narratives and early science practitioners works conceived of the non-human as a speaking entity. As Bruno Latour

¹² On Smollett's writing as sitting at the intersection between literature, early science and philosophy, see Jones.

famously argued, the rise of modern science is best understood as a rift between the human and the non-human, the former being crystallized into the role of the observer, the latter into that of object of observation (*Pandora's Hope*, 4–5). According to Latour, this distinction between observing human subject and observed non-human object begins with Descartes and his duality between the mind and the body, and then develops with the English empiricists from the late seventeenth century onwards. Crucial to this demarcation is conceiving of the human as an abstraction: not an actual observer but a "mind-in-a-vat" (as Latour calls it) that watches nature as if it were an external narrator. It is precisely by conceiving of a mind detached from its own human body and from nature, Latour argues, that early scientists were able to know nature from an objective standpoint (*Pandora's Hope* 4–5).

The typical way to interpret the epistemological change engendered by modern science is to think of the early scientist as rising intellectually to eventually gain control over a "world of things inert and mute," to borrow the words of sociologist Arjin Appadurai (4). In this view, the rise of the scientific method made nature into a static entity that could be investigated by the intellectual powers of humankind. But, as we have seen, it appears that many of the key contributors to British experimental and natural philosophy in the long eighteenth century believed that the right way to study nature was by detecting the voice of its "natural things" rather than by making them into passive entities. Only by doing so, they argued, would man be able to unveil nature's secrets. Coming up with explanations while not heeding to the voice of nature would instead result in fictions - ingenious, perhaps, but still fallacious when it comes to explaining how nature works. Thus, we should be wary of the alleged capacity of humans to discover the truth about natural phenomena. This is why, as Latour goes on to argue, in the new environment of the laboratory, early scientists from Boyle onward purported to act as "mere intermediaries" of nature. They fashioned themselves as speaking "in the name of things," voicing "[n]othing but what the things would have said on their own, had they been able to speak" (We Have Never Been Modern 142). Within this approach, the human has value only insofar as it faithfully conveys what the non-human says. This explains why experimenters styled their own observations by pretending that they could make themselves invisible in the face of nature, adopting a rhetoric of invisibility that has been examined in detail by Steven Shapin and Simon Schaffer (1996) and by Donna Haraway (1997) (Mattana 34-42). It bears adding that this rhetoric operates by a fictional sleight of hand: within their narrative of discovery of natural phenomena, experimenters imagined themselves to be invisible so as to allegedly facilitate the disclosure of nature's secrets. This use of fiction as make-believe is an instance of what Michell Green (via David Egan) has defined as "thought experiment:" fiction creates imaginary worlds in which scenarios that cannot occur in reality may still be examined as if they were real (49).

The It-Narrator device may be seen in similar terms, a fictional what-if that allows one to contemplate a question like: "How would it be if knowledge came from a non-human source rather than a human one?" In eighteenth-century Britain, the two types of fiction-based thought-experiments – the early scientific and the literary – may well have shared conceptual origins. Lamb has persuasively contended that the rise of It-Narratives was occasioned by what he calls an "epistemological crisis" stemmed from the activity of early empiricists:

judging from the examples given by scientists such as Boyle and Hooke, and political philosophers such as Hobbes and Locke, the conditions for imagining a thing as a person seem to be dictated by an epistemological crisis rather than a generic opportunity. When it ceases to be certain what has caused what, and when the pseudo-essence supposed to be indicated by certain collections of ideas is capable of relocation or renomination, things acquire a first-person pronoun. (Lamb, "Locke's Wild Fancies" 202)

Lamb concludes that this epistemological crisis created the condition for an alternative "model of fictionality" wherein "the person of a thing absorbs and transforms the person of a human being" ("Locke's Wild Fancies" 201). This model of fictionality is called by Lamb "the fiction of wild fancy," and it is defined as one with neither experiential basis nor claim to truth ("Locke's Wild Fancies" 200). But a claim to truth there is, insofar as we consider It-Narratives as fictional dramatizations of then-current epistemological debates. In spite of their simplicity, It-Narratives are still armed with what Green calls literature's "capacity for epistemic value," i.e., the capacity, shared by all works of literature, to participate in the construction of knowledge and involve readers in the process (Green 49). This does not mean that It-Narratives made statements about how we should conduct our enquiries into nature. Their effect, rather, was defamiliarizing their audience by choosing non-human narrators. From the point of view of fiction, this choice is far from anodyne, as it unsettles readers by questioning "the culturally-drawn boundaries of human 'nature' by casting new light on our conventions and values" (Bernaerts, Caracciolo, Herman and Vervaeck 88).

Nowhere is this best shown than by the fact that, in It-Narratives, humankind is dispossessed of its most characteristic of abilities: that of telling stories. As Crystal B. Lake contends with reference to *The Adventures of a Black Coat* (but the point can be safely extended to a number of other It-Narratives), the presence of a non-human narrator "shortcircuits" the representation process by decentralizing human characters (184). As a result, It-Narratives contribute to questioning the narrative authority of humankind. This challenge occurs less because non-human narrators are able to circulate than for their ability to observe humankind while going unnoticed.¹³ As Nanouschka Burström noted, one of the recurrent features of nonhuman narrators across different literatures is their "peeping capacity," which "enables them to see what humans really are, that is, how they reason and behave when they think they are alone" (74).

The relevance of non-human narrators seems therefore to lie in their being able to act as observers who can watch human deeds in unobtrusive ways, and by observing study them as static entities. Human characters do formally retain their liberty of action, and, in some cases, the non-human narrator is unable to tell its story other than through a human vehicle, with processes of hybridization taking place between the thing and the human subject, as exemplified in Smollett's *Atom* or in *Memoirs and Adventures of a Flea* (1785), whose stories are written by subsequent infestations of several human bodies (7). But this liberty is still subordinate to the voice of non-human narrators. In this respect, conventional epistemic hierarchies are subverted, for, either through "reversed" ownership or infestation, the thing takes possession of the ability to narrate the story, and, within the fiction of It-Narratives, acquires more importance than human characters.

This epistemic reversal allows readers to entertain the possibility that humans may be observable entities, rather than observing ones: natural phenomena amongst other natural phenomena. In this respect, It-Narratives seem to partake in the rise of a "science of man", meant as the early-scientific notion that "human behaviour might be discussed in causal terms" (Kramnick 3). This idea, which had currency in many empiricist quarters, is at work, for example, in David Hume who, in his guise as a moral philosopher, firmly believed that the examination of human passions could aspire to the same amount of certainty that had been reached by astronomers:

Why do philosophers infer, with the greatest certainty, that the moon is kept in orbit by the same force of gravity, that makes bodies fall near the surface of the earth, but because these effects

¹³ Intriguingly, scholars like Bellamy have underlined that It-Narratives have their origin in spy novels and secret histories. See Bellamy 126.

are, upon computation, found similar and equal? And must not this argument bring as strong conviction, in moral as in natural disquisition? (53)

In this scenario, humans are just a manifestation of nature and, as such, they should be studied like any other phenomena. This was a complex proposition, one seemingly confined to the highest echelons of philosophy. And yet, by conjuring alternative worlds in which knowledge was not human-derived, It-Narratives – both prose narratives proper and It-Poems such as Dixon's – might well have offered a fictional platform to contemplate similar epistemological possibilities.

It-Narratives seem to have played with the realization that an order was there, though not the familiar one of human sense-making, but the non-human one that had been pursued by natural philosophers and experimenters. This is, of course, a hypothesis, and these complex issues need to be scrutinized more conclusively than what this exploratory essay has set out to do. What is certain is that, some twenty years after Tiffany's arraignment of the disregard of literature for the importance of things quoted at the beginning of this essay, eighteenth-century studies are now in a rather opposite predicament. With research having mostly overlooked the impact of scientific ideas, further work will now be needed to bring the two cultures once more in dialogue.

References

- Achinstein, Peter. "Newton's Corpuscular Query." *Philosophical Perspectives on Newtonian Science*, edited by Phillip Bricker and R. I. G. Hughes, The MIT Press, 1990, pp. 135–174.
- Adams Day, Robert. "Introduction." Tobias Smollett, *History and Adventures of an Atom*, edited by Robert Adams Day, University of Georgia Press, 2014, pp. xxv–lxxvi.
- Alber, Jan. "What Commodities Have to Say about Consumerism: The Eighteenth-Century Novel 'The Adventures of a Black Coat'." *Material Culture*, vol. 48, no. 1, 2016, pp. 55–66.
- Anon., Memoirs and Adventures of a Flea; in which are Interspersed Many Humorous Characters and Anecdotes. T. Axtell, 1785.
- Anon., The Adventures of a Pin, Supposed to be Related by Himself, Herself, or Itself. 1790.
- Anon., The Adventures of a Watch!. G. Kearsley, 1788.
- Appadurai, Arjin. "Introduction: Commodities and the Politics of Value." The Social Life of Things: Commodities in Cultural Perspective, edited by Arjun Appadurai, Cambridge University Press, 1986, pp. 3–63.
- Bacon, Francis. The Advancement of Learning, edited by William Wright, Oxford University Press, 1920.
- Bechler, Zev. "Newton's 1672 Optical Controversies: A Study in the Grammar of Scientific Dissent." *The Interaction Between Science and Philosophy*, edited by Yehuda Elkana and Samuel Sambursky, Humanities Press, 1974, pp. 115–142.
- Bellamy, Liz. "It-Narrators and Circulation." The Secret Life of Things: Animals, Objects, and It-Narratives in Eighteenth-Century England, edited by Mark Blackwell, Bucknell University Press, 2007, pp. 117–146.
- Benedict, Barbara M. "The Spirit of Things." The Secret Life of Things: Animals, Objects, and It-Narratives in Eighteenth-Century England, edited by Mark Blackwell, Bucknell University Press, 2007, pp. 19–42.

—. "Encounters with the Object: Advertisements, Time, and Literary Discourse in the Early Eighteenth-Century Thing-Poem." *Eighteenth-Century Studies*, vol. 40, no. 2, 2007, pp. 193–207.

Bernaerts, Lars, Caracciolo, Marco, Herman, Luc, and Vervaeck, Bar. "The Storied Lives of Non-Human Narrators." *Narrative*, vol. 22, no. 1, 2014, pp. 68–93.

- Blackwell, Mark. "The It-Narrative in Eighteenth-Century England: Animals and Objects in Circulation." *Literature Compass*, vol. 1, no. 1, 2004, pp. 1–5.
- Boyle, Robert. A Disquisition about the Final Causes of Natural Things. H.C., 1688.

Brown, Bill. "Thing Theory." Critical Inquiry, vol. 28, no. 1, 2001, pp. 1–22.

- A Sense of Things: The Object Matter of American Literature. Chicago University Press, 2003.

- Burström, Nanouschka. "Things in the Eye of the Beholder: A Humanistic Perspective on Archaeological Object Biographies." *Norwegian Archaeological Review*, vol. 47, no. 1, 2014, pp. 65–82.
- Campbell, Mary Baine. Wonder & Science: Imagining Worlds in Early Modern Europe. Cornell University Press, 1999.
- Coppola, Al. The Theater of Experiment: Staging Natural Philosophy in Eighteenth-Century Britain. Oxford University Press, 2016.
- Coventry, Francis. The History of Pompey the Little. Or, the Life and Adventures of a Lap-Dog. M. Cooper, 1751.

Daston, Lorraine, ed. Things that Talk: Object Lessons from Art and Science. Zone Books, 2004.

—. "Introduction." Things That Talk: Object Lessons from Art and Science, edited by Lorraine Daston, Zone Books, 2004, pp. 9–24.

Dixon, Sarah. Poems on Several Occasions. J. Abree, 1740.

- Douglas, Aileen. "Britannia's Rule and the It-Narrator." *Eighteenth-Century Fiction*, 6 (1993), pp. 65–82
- Downie, James Alan. "The Oxford Handbook of the Eighteenth-Century Novel." Oxford University Press, 2016.
- Festa, Lynn. "The Lives of Things: Objects, It-Narratives, and Fictional Autobiography, 1700– 1800." A History of English Autobiography, edited by Adam Smyth, Cambridge University Press, 2016, pp. 133–147.
- Festa, Lynn. Sentimental Figures of Empire in Eighteenth-Century Britain and France. Johns Hopkins University Press, 2006.
- Flint, Christopher. The Appearance of Print in Eighteenth-Century Fiction. Cambridge University Press, 2011.
- Fontenelle, Bernard Le Bovier de. An Account of the Life and Writings of Sr. Isaac Newton. T. Warner, 1727.
- Freedgood, Elaine. "What Objects Know: Circulation, Omniscience and the Comedy of Dispossession in Victorian It-Narratives." *Journal of Victorian Culture*, vol. 15, no. 1, 2010, pp. 83–100.
- Gildon, Charles. The Golden Spy; Or, a Political Journal of the British Nights Entertainments of War and Peace, and Love and Politics. J. Woodward and J. Morphew, 1709.

- Green, Mitchell. "Narrative Fiction as a Source of Knowledge." Narration as Argument, edited by Paula Olmos, Springer, 2017, pp. 47–61.
- Hamilakis, Yannis. Archaeology and the Senses: Human Experience, Memory, and Affect. Cambridge University Press, 2013.
- Haraway, Donna J. Modest-Witness@Second-Millennium.Femaleman-Meets-OncoMouse: Feminism and Technoscience. Routledge, 2018.
- Howell, A. C. "Res et Verba: Words and Things." ELH, vol. 13, no. 2, 1946, pp. 131-142.
- Howgill, Francis. The Invisible Things of God. Thomas Simmons, 1659.
- Hume, David. An Enquiry Concerning the Principles of Morals, edited by J.B. Scheenewind, Hackett Publishing Company, 1983.
- Hunter, Michael. "The Royal Society and the Origins of British Archaeology: II." Antiquity, vol. 45, no. 1, 1971, pp. 187–192.
- Ivana, Dragoş. "Merging the Human and the Nonhuman: The Object Narrator in The Adventures of a Black Coat." Metacritic Journal for Comparative Studies and Theory, vol. 7, no. 1, 2021, pp. 148–159.
- Jones, Catherine. "Tobias Smollett, Travel Writing, and Medical Botany." *The Scottish Enlight-enment and Literary Culture*, edited by Ralph McLean, Ralph, Ronnie Young, and Kenneth Simpson, Bucknell University Press, 2016, pp. 53–76.
- Kennedy, Deborah. Poetic Sisters: Early Eighteenth-Century Women Poets. Bucknell University Press, 2013.
- Knellwolf King, Christa. "A History of Inanimate Minds." The Eighteenth Century, vol. 55, no. 4, 2014, pp. 451–453.
- Kramnick, Jonathan. Actions and Objects from Hobbes to Richardson. Stanford University Press, 2010.
- Lake, Crystal B. "Feeling Things: The Novel Objectives of Sentimental Objects." *The Eighteenth Century*, vol. 54, no. 2, 2013, pp. 183–193.
- Lamb, Jonathan. "Locke's Wild Fancies: Empiricism, Personhood, and Fictionality." The Eighteenth Century, vol. 48, no. 3, 2007, pp. 187–204.
- —. The Things Things Say. Princeton University Press, 2011.
- Latour, Bruno. Pandora's Hope: Essays on the Reality of Science Studies. Harvard University Press, 1999.
- —. We Have Never Been Modern, translated by Catherine Porter, Cambridge University Press, 1993.
- Lewis, Rhodri. Language Mind, and Nature: Artificial Languages in England from Bacon to Locke. University of Chicago Press, 2007.
- Lupton, Christina. "The Knowing Book: Authors, It-Narratives, and Objectification in the Eighteenth Century." Novel: A Forum on Fiction, vol. 39, no. 1, 2006, pp. 402–420.
- —. Knowing Books: The Consciousness of Mediation in Eighteenth-Century Britain. University of Pennsylvania Press, 2012.
- Lynch, Deidre. "Personal Effects and Sentimental Fictions." *Eighteenth-Century Fiction*, vol. 12, no. 2, 2000, pp. 345–368.

MacLaurin, Colin. An Account of Sir Isaac Newton's Philosophical Discoveries. J. Nourse, 1748.

- Mann, Annika. "Waste Management: Tobias Smollett and Remediation." *Eighteenth-Century Fiction*, vol. 25, no. 2, 2012, pp. 359–382.
- Mattana, Alessio. "The Modest Genius: Mathematics, Certainty, and the Creation of the Public Newton." *Eighteenth-Century Life*, vol. 47, no. 3, 2023, pp. 30–62.
- Mulhall, Anne. "Gulliver's Travels and the Language Debates of Swift's Time." Les voyages de Gulliver: Mondes lointains ou mondes proches. Presses universitaires de Caen, 2002.
- Newton, Isaac. *Mathematical Principles of Natural Philosophy*, edited and translated by I. Bernard Cohen and Anne Whitman, California University Press, 1999.
- —. Philosophiae Naturalis Principia Mathematica. Royal Society, 1713.
- Park, Julie. The Self and It: Novel Objects in Eighteenth-Century England. Stanford University Press, 2010.
- Pemberton, Henry. A View of Sir Isaac Newton's Philosophy. S. Palmer, 1728.
- Pennington, Isaac the younger. Divine Essays; or Considerations about Several Things in Religion. John Macock, 1654.
- Philips, Edward. The Adventures of a Black Coat Containing a Series of Remarkable Occurrences and Entertaining Incidents... As Related by Itself. Alex M. Caslan, 1750.
- Phillips, Eli M. "All the Litter As It Lay': Swift, Montagu, and Their Practice of Thing Theory." Criterion: A Journal of Literary Criticism, vol. 14, no. 2, 2021, pp. 16–25.
- Plot, Robert. The Natural History of Oxfordshire. Theatre of Oxford, 1677.
- -----. The Natural History of Staffordshire. Theatre of Oxford, 1686.
- Rodrigues, Patricia. "Gildon's Golden Spies: Or, Minting Remarks on Modern Societies." Revista Canaria de Estudios Ingleses, vol. 79, no. 1, 2019, pp. 103–122.
- Shapin, Steven, and Schaffer, Simon. Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life. Princeton University Press, 1985.
- Shapin, Steven. A Social History of Truth. University of Chicago Press, 1994.
- Smollett, Tobias. *History and Adventures of an Atom*, edited by Robert Adams Day, University of Georgia Press, 2014.
- Sprat, Thomas. The History of the Royal-Society of London for the Improving of Natural Knowledge. T. R., 1667.
- Stark, Ryan J. "Language Reform in the Late Seventeenth Century." Rhetoric and the Early Royal Society: A Sourcebook, edited by Tina Skouen and Ryan J. Stark, Brill, 2015, pp. 94–127.
- Swift, Jonathan. Gulliver's Travels, edited by Claude Rawson, Oxford University Press, 2005.
- Tiffany, Daniel. "Lyric Substance: On Riddles, Materialism, and Poetic Obscurity." *Critical Enquiry*, vol. 28, no. 1, 2001, pp. 72–98.
- Todd, Dennis. "Laputa, the Whore of Babylon, and the Idols of Science." *Studies in Philology*, vol. 75, no. 1, 1978, pp. 93–120.
- Vickers, Brian. "Francis Bacon and the Progress of Science." *Journal of the History of Ideas*, vol. 53, no. 3, 1992, pp. 495–518.

- Wall, Cynthia S. The Prose of Things: Transformations and Description in the Eighteenth Century. The University of Chicago Press, 2006.
- Walmsley, Peter. "The Enlightenment Worker: An Introduction." *Eighteenth-Century Fiction*, vol. 23, no. 2, 2011, pp. 258–268.

Wilkins, John. Of the Principles and Duties of Natural Religion. A. Maxwell, 1675.