

“That Universall and Publik Manuscript”: The Book of Nature and *The Garden of Cyrus*

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Towards the beginning of his *Religio Medici* (1643), Sir Thomas Browne compares natural and Biblical sources of wisdom. Winding through examples of the divine plan he finds so manifest in the world, he concludes that:

there are two bookes from whence I collect my Divinity; besides that written one of God, another of his servant Nature, that universall and publik Manuscript, that lies expans'd unto the eyes of all. (*Thomas Browne* 18)

These “two bookes” were known in the seventeenth century as the codex scriptus and the codex vivus, but such an understanding of the world – as the book of nature, as a textual artefact – long predates Browne (Curtius 319). Ernst Robert Curtius finds that the metaphor derives “from the Latin Middle Ages” (319). “For the preacher”, he writes of this time, “the book of nature must figure with the Bible as a source of material” (319-20). Browne’s endorsement of this antique view evinces a system of thought that saw the natural world transcribed into a vividly textual form – a system of thought that gains its fullest expression in Browne’s 1658 treatise *The Garden of Cyrus*. The purpose of this article is to demonstrate the way in which this system of thought relates closely to those of early modern science. More particularly, I will trace the heretofore hidden relationship between Browne’s work on both *The Garden of Cyrus* (1658) and the second edition of Christopher Merrett’s *Pinax Rerum Naturalium Britannicarum* (1666-7), using the similarities and differences between these two books of nature to better explain how Browne conceived of his text.

What these texts share is the desire to transfer the natural world onto the printed page. Browne, a Norwich-based physician-philosopher, made his living from medicine and earned his name (and knighthood) from writing. *The Garden of Cyrus* addresses a curious fascination of Browne’s: the “Quincunciall Lozenge”, a grid of rhombi whose form he finds numerously in nature (*Thomas Browne* 551). In 1668, Browne introduced himself to Merrett – the Harveian Librarian at the Royal College of Physicians – with what Reid Barbour describes as “one of his most gently aggressive letters” (Barbour 397). Browne begins immediately to suggest species absent from the first edition of Merrett’s *Pinax*. The *Pinax* was originally conceived as a new edition for William How’s *Phytologia Britannica* (1650), a comprehensive Latin catalogue of Britain’s “Vegetabilia, Animalia, et Fossilia” (*Thomas Browne* 549; *Pinax* title page). Following How’s death, as Merrett writes in his “Epistola ad Lectorem”, “the transcription of the *Phytologia* then disrupted, a bookseller – my intimate friend – asked me to take the matter into my hands” (*Pinax* “Epistola ad Lectorem”, my translation). To produce his new edition of the *Pinax*, Merrett removed insufficiently evidenced items in How’s catalogue and then added items sent to him by reliable correspondents – such as Browne (Barbour 397-8). Both the *Garden* and the *Pinax*, then, share a broad similarity in endeavour: to realize the book of nature as a useable printed text.

Browne, though, declares early in his dedicatory epistle that “we write no Herball, nor can this Volume deceive you, who have handled the massiest thereof” (*Thomas Browne* 551). Put simply, any reader of Browne’s who had ever held a proper,

paving slab-sized herbal would recognize the *Garden* as something quite dissimilar. He goes on:

We pretend not to multiply vegetable divisions by quincuncial and Reticulate plants; or erect a new phytology. The field of knowledge hath been so traced, it is hard to spring any thing new. (*Thomas Browne* 551)

The *Garden*, then, is defined from its outset against the discipline of "phytology", against the "scientific study of plants" by which books such as How's *Phytologia* were produced (OED). Browne's dismissal of this scientific "field of knowledge" is the first recorded use in English of the word "phytology" (OED). Though "phytologia" was a title in use in continental Europe from the late sixteenth century, How's is the only text of this title in English at the time of Browne writing – as well as the nearest, chronologically (ESTC). Moreover, Browne and How had corresponded regarding his *Phytologia* (Barbour 318). Hence, it is likely that, specifically among texts of the phytological discipline, Browne defines the *Garden* against How's *Phytologia*. A decade later, however, and Browne clearly had found something new worth springing. In that first letter to Merrett, he writes:

I should be very glad to serve you by any observation of mine against your second edition of your *Pinax*, which I cannot sufficiently commend. I have observed and taken notice of many animals in these parts. . . . I shall onely at this time present and name some few unto you which I found not in your Catalogue. (*Works* 4: 343)

When we consider that Browne defines the *Garden* against phytology, this offer to assist with the construction of Merrett's *Pinax* is particularly significant: it is against texts like How's *Phytologia* that Browne defines *The Garden of Cyrus*; and he then offers his aid in producing a replacement for this very text. The connection between the *Pinax* and the *Garden* has not previously been noted and – despite Browne's attempts to draw a distinction between them – the practices by which Browne gathers knowledge for the two texts are strikingly similar.

Through exploration of the ways in which he assists Merrett in writing a phytology – the *Pinax* – a better understanding of how Browne produced and communicated knowledge of the natural world, including in *The Garden of Cyrus*, can be reached. The practices under scrutiny are those offered to Merrett in that first letter: to "observe", to "take notice", to "present", and to "name". This article's enquiry is confined mainly to Merrett's *Pinax* and Browne's *Garden*, though both are situated using Browne's illustrative correspondence and the contemporary scientific texts to which they refer. The first section (Observation) discusses Browne's written tuition of Henry Power, a young family friend studying at Cambridge (*Works* 4: 254). Browne's readings of ancient scientific authorities are compared with Power's readings of Browne, recovering the use of *The Garden of Cyrus* as a phytology like Merrett's *Pinax*. The second and third sections (Notation and Presentation) explore the individual investigator within the broader natural historical community, focussing on the difficulties early modern scientific writers had when attempting to make their discoveries vivid across distance. The conclusions drawn here apply both to Merrett's *Pinax* and to Browne's literary works. The fourth (Naming) argues that Browne and Merrett's discussion of how to name specimens is also key to understanding how they name their texts. Through reference to these naming conventions among the broader

connections between *The Garden of Cyrus* and the discipline of phytology, this final section presents an explanation of why Browne names his text for an ancient king mentioned just four times within it – an issue that has long puzzled readers.

Observation

In his first letter to Merrett noted above, Browne's offer of assistance moves rhetorically from "serve" to "observed", the first part of his fourfold investigative programme (*Works* 4: 343). Observation represents the investigator's initial interaction with the natural world, and its purpose – within the programme – is to provide primary evidence for use in a given scientific argument. However, as Lorraine Daston and Elizabeth Lunbeck note in *Histories of Scientific Observation*,

observation must first be conceptualized as a distinctive way of acquiring knowledge, with its own methods, guarantees of reliability, and functions vis-à-vis other modes of investigation. (Daston and Lunbeck 115)

Daston and Lunbeck set up a framework in three parts: methods, guarantees, and function alongside other modes. This framework is appropriate for understanding Browne's tuition of the young Henry Power, future Fellow of the Royal Society and author of *Experimental Philosophy in Three Books* (1664). Though Daston and Lunbeck's three areas cannot be compartmentalized simply, their framework captures the treatment of authorities when transforming individual observation into useable knowledge – both how Browne treats authorities and how Power treats Browne as an authority.

In the earliest letter we have between the Browne and Power, written in 1646, we find Browne urging the importance of observation in the creation of new learning:

ἐκ βιβλίου κυβερνήτα is grown into a proverb; and no less ridiculous are they who think out of book to become Physicians. I shall therefore mention such as tend less to ostentation than use, for the directing a novice to observation and experience, without which you cannot hope to be other than *ἐκ βιβλίου κυβερνήτα*. (*Works* 4: 255)

The Greek proverb translates as "statesman from the book" and is, in essence, a warning against entirely library-based learning (*Life* 1: 356). In place of learning merely "out of book", Browne counsels the importance of practical "observation". Browne is describing, in Daston and Lunbeck's terms, the specific "methods" through which observation is "conceptualized as a distinctive way of acquiring knowledge" (Daston and Lunbeck 115). In the training of a physician, Browne finds observation to be indivisible from "experience" (*Works* 4: 255).

Immediately following this advice, Browne goes on to prescribe some twenty-seven authors and twelve specific texts (*Works* 4:255-6). This may seem contradictory, but Browne is just ensuring that Power's "observation" is converted into usable "experience" (*Works* 4: 255). To do so, it must have a clear function "vis-à-vis other modes of investigation", as Daston and Lunbeck write (Daston and Lunbeck 115). Hence, the books Browne recommends to Power are piecemeal compendia of their writers' investigative results, allowing the younger man to test his observations against those of other writers. Power indicates that this is his "method" in a 1648 letter to Browne, which begins with him confirming that "I have traced yr commands". Power continues:

Sir, I have now by the frequency of living and dead dissections of doggs, run through the whole body of anatomy, insisting upon Spigelius, Bartholinus, Fernelius, Columbus, Veslingius, but especially Harvey's Circulation. (*Works* 4: 259-60)

The distinct steps taken by Power in his education show his response to Browne's ridicule of those who "think out of book". Books remain a key feature of Power's learning, of course, as demonstrated by his litany of writers ("Spigelius" to "Harvey"). What is more significant, however, is how the work of these six writers is mapped onto the real world through "living and dead dissections of doggs". The emphasis is on personal experience structured and enriched by the textual sources, repeating the experiments of others and ensuring their relevance to the individual investigator.

This structure gives what Daston and Lunbeck term "guarantees of reliability". The purpose of such guarantees is well explained by Robert Boyle, a pioneer of the modern scientific method, in the first of his *Certain Physiological Essays* (1661). "When a writer", explains Boyle:

acquaints me onely with his own Thoughts or Conjectures, without enriching his discourses with any real Experiment or Observation, if he be mistaken in his Ratiocination, I am in some danger of erring with him, and at least am like to lose my time, without receiving any valuable Compensation for that great loss. (Boyle 10)

Boyle wishes for a broad range of sources, both "Thoughts or Conjectures" and "Experiment or Observation" to "enrich" scientific study; more plainly, he suspects that an "enriched" study is less likely to waste his time. Significantly, it is with this quotation that Power ends the preface of *Experimental Philosophy* (Power xviii-xix). This endorsement of Boyle's view underlines that the method Browne teaches Power requires corroboration, ensuring inaccuracies are removed from the individual observational experience. Hence, all three of Daston and Lunbeck's criteria are folded together: the "method" gives "guarantees of reliability" through its relationship with "other modes of investigation", through an equal reliance on both natural and textual sources.

The fruit of these observational practices may be seen not just in Power's *Experimental Philosophy* – a text which states its scientific credentials in its very title – but also in Browne's *Garden of Cyrus*. Such emphasis on evidence is unexpected in a text which to many readers gives the impression, as Kathryn Murphy writes, "of a chaotic lack of organization" (Murphy 243). Indeed, rather than as "a more or less haphazard cull from reading and notebooks", Power reads *Garden* as a further instruction manual in his observational education (Murphy 243). Indeed, in its multiplicity of unsorted observations, Power's *Experimental Philosophy* seems to imitate the *Garden*'s structure. Power's observation on "Moon-wort" ends thus:

The exiguity and smalness whereof may very well be one of the *Magnolia* of Nature, somewhat illustrating the great Work of the Creation, and vast Production from Nothing. (Power 47)

This entire paragraph is taken wholesale from Browne's *Garden of Cyrus*, published some six years before (*Thomas Browne* 573). The quotation is unattributed and has not

previously been noted by scholars. Power takes instruction from Browne as a scientific authority – and he reads the *Garden* as he would a scientific text, copying it both in broad structure and in specific observations.

Power treats *The Garden of Cyrus*, then, exactly as Browne teaches him to treat scientific works: by testing Browne's results against private observational experience, by agreeing with them, by disagreeing with them, even by quoting them directly. This reflects the fact that the educative strain of Browne's letters – the strain that tells Power to combine library-based learning with personal observation, the strain Power echoes through Boyle in *Experimental Philosophy's* prefatory note – is still present in his more literary published writings. In quoting the *Garden* alongside *Certain Physiological Essays*, Power treats Browne as an authority alongside Boyle – whose scientific reputation has survived rather better. Power reads *The Garden of Cyrus* as he does many of the texts Browne recommends – as the scientific compendium against which to compare his own observations. He reads it, that is, like exactly what Browne says it is not: a phytology.

Notation

The close connection between observation and note-taking is signalled in Browne's letters to Power where he draws attention to "that paragraph whereof you pleased to take notice" (*Works* 4: 268, my emphasis), as well as in his initial letter to Merrett. As already noted, Browne included both natural and textual sources in his understanding of observation. This section will explore how early modern investigators moved between the two, making nature into text. The transfer from observation to notation is well demonstrated by a letter of advice from Browne to a third correspondent – his eldest son Edward, during his tour of Europe:

When it shall please God you are in the Netherlands; it were good to take notice of such plants as you see, observing what growes common, what not so, on the wayes & feilds, & putt up some in a booke. (*Works* 4: 29)

Browne defines observation to Power as being not merely "out of book"; here, to Edward – to a recipient of almost exactly the same age – he advises positively to "put up some in a booke". This process of moving nature onto the page is pertinent with respect to the *Pinax*. M.J.Y. Foley – by trade a botanist, but with a particular interest in early-modern phytologies – finds that Merrett's initial composition process was one of refinement: "Due to a lack of evidence or an earlier reliance on dubious sources, Merrett eliminated about two hundred plants from those listed in How's *Phytologia*" (Foley 193). Foley suggests that Merrett's *Pinax* began fundamentally as a text of subtraction, the writer's removals leaving gaps "so severe as to provoke criticism from leading naturalists" (Barbour 397). However, three copies of the *Pinax* – primarily British Library Shelfmark 976 b.3, but also Bodleian Library Shelfmarks Gough Nat. hist. 3 and Douce M 566 – show how it became a text of addition in the hands of its early readers. The marginalia of these copies show readers expanding the *Pinax* according to personal interest and expertise, demonstrating the individual process of making nature text (*Thomas Browne* 88).

The cultural historian Ann Blair has written that "physical copies of books are full of clues about who read them and *how*" (Blair 304, my emphasis). In this regard 976 b.3 is of particular interest. It was bound interleaved – that is, with blank pages inserted between those holding the printed text – creating a space within the text later filled by many annotations in many different hands. This physical amendment causes a

fundamental shift in the *Pinax*'s function, as its owner un-finishes the text and makes it in part a repository for Merrett's observations and in part a repository for their own. The book's most obvious personal intervention is the prevalence of references to "Darkin", modern-day Dorking (Foley 195). Dorking, rarely referred to in the printed text, occurs twelve times in annotations to 976 b.3. For instance:

Chrysosplenium Saxifraga aurea major foliis longius incedentibus, hanc belle depingit hortus Eystetensis. Near Hedley Hampshire. Mr Brown. & on ye W oppositifolium side of Darkin in Surrey on a bog ¼ mile from ye town. (Foley 200, manuscript notation underlined)

This instance highlights a further intriguing difference between the main text and annotations – and one which points again to the marginalia's personal slant. Where the example "Near Hedley Hampshire" is attributed to a "Mr Brown", for the frequent Dorking references no recorder is given (Foley 195). Moreover, the annotations are far more likely to record measured distances (in miles) than the printed text:

Epipactis helleborine Helleborine, Wild white Hellebor, G. 442. Elleborine minor flore albo, P. 218. On Roe-hill in Kent, not far from Dartford. & a mile N from Darkin in ye Beech woods. (Foley 198)

These more specific distances collocate with a greater proportion of Dorking sightings than they do with any other locality. Having unfinished his copy of the *Pinax*, the reader begins the process of making Merrett's book more personal, noting observations around his Dorking home. This is a book created, as Browne suggests to Power, for practical "use". It forfeits its claim to completeness and turns instead to its individual reader/note-taker, to a personal experience of nature.

976 b.3 shows, perhaps unsurprisingly, personal location as a governing dynamic in an investigator's practices of notation. However, two further copies – both held by the Bodleian Library, Shelfmarks Gough Nat. hist. 3 and Douce M 566 – suggest that the *Pinax* reader's practices of notation were influenced more importantly by specific areas of interest. First, in Gough Nat. hist. 3, a list of birds of prey is marked by twelve black manuscript crosses in the outside margin of each page (Gough 170-1). Each cross is level with a bird's identifying name, regardless of its length of entry in the *Pinax*. The division between the two sets of birds – those marked by a cross and those not – does not seem to follow any particular pattern within the text itself, and so must represent some connection between bird and reader/note-taker. Just as the Gough copy shows a specific interest in birds of prey, the Douce copy demonstrates a similarly focussed interest in fungi. The text for the most part is marked very little – save to correct the spelling and grammar of Merrett's Latin – until this section, where there are seventeen ink dashes spread over four consecutive pages (Douce 40-3). It is my conjecture that both sets of marks indicate personal first-hand observation – of the specific birds in the case of Gough Nat. hist. 3, of the specific fungi in the case of Douce M 566. These marginal marks tell us two things about the *Pinax*: first, that its readers had defined areas of interest; and second, that the *Pinax* was used not merely as a list, but as a checklist.

These checklists show notation in Merrett's *Pinax* being used as a record of the moment of finding. The longest and most significant of these additions addresses a subject some 250 miles north of Dorking. That subject is "Allium ampeloprasum", the wild leek, and its entry reads thus:

Allium ampeloprasum Ampelopressum, sive Portum sylv. Wild Leek. G. 1276. Ampeloprasum. P. 871. among Barley near Beachenton, betwixt Oxford and Banbury. Mr. Stonehouse. Ph. & at Skire thorn in Craven, going from mawater tarn to Dosolio[?] bridg before you come to ye river ye maketh Wharf River in Yorkshire. (BL976 6)

The entry itself is fairly standard in its form and content, but its accompanying notation demonstrates in striking fashion the personal and active reader of 976 b.3. Intriguingly, the reader/note-taker describes not merely a place or a plant so much as the journey taken in finding it. This, of course, is true of many entries – those whose location is “betwixt” two places, for instance, such as Oxford and Banbury above. The significance of a marginal addition like this one, though, is its sense of activity. On the rare occasions that verbs are given in the locations, they are almost always in the past tense – “found by” being by far the most common. The two present tense verbs here (“going” and “come”) convey the moment of discovery with far greater clarity than the *Pinax*’s standard “betwixt” locations. Like the manuscript crosses, this handwritten description highlights the excitement of finding – over the practicalities of re-finding – in a way that the printed descriptions never do.

The smudged boundary between the vibrant natural world and the printed word in Merrett’s *Pinax* is hinted at from the text’s very first proper page. The dropped initial in the catalogue’s first entry is inhabited by a plant, twisting around and about it (BL976 1). This – though perhaps a mere practicality, printers having a limited stock of initials – encapsulates the coming together of text and world that marks the *Pinax* in so many ways. It is the same coming together found when Browne encourages his son Edward on his travels to “take notice of such plants as you see”, moving from “observing what growes common” to suggest that he “putt up some in a booke” (*Works* 4: 29). Notation – of plants in the Netherlands, of birds of prey, of fungi – is the method by which multiple observations are recorded in an ordered form. Before presenting these observations to other enquirers, it is the first step from natural world to printed page. When he says he will “take notice”, this is the service Browne offers to Merrett.

Presentation

Brian W. Ogilvie, a historian working in the field of early-modern science, writes that “No single individual invented natural history; by its very nature, it could be the product only of a community” (Ogilvie 1). The movement from notation to presentation is most clearly conceptualized as a movement from private to public. Notation is a shorthand process – a process of compressing observed data into the minimum of distinguishing features, personal to the observer. Presentation necessitates re-expansion, the reversal, frequently enacted through reference to enormous herbals that Browne and Merrett held in their libraries – books of the type Browne recommended to Power. Elizabeth Yale has studied how seventeenth-century naturalists worked collaboratively through “scribal exchange” to create scientific works, particularly John Aubrey’s *Naturall Historie of Wiltshire* (Yale 167). But Merrett and Browne’s investigative practices necessitate continuous conversation not just with their contemporaries but also with the authorities of the past, in the form of their printed works. The ability to reference the rich store of images contained within these printed works enabled Browne and Merrett to communicate their observations with the other in a shared graphic language.

The importance of the image is the central difference between notation – of the type we have seen in the *Pinax* – and presentation. Its importance is reflected in the

greater value of books which – unlike the *Garden* and the *Pinax* – contain images. When Browne's library was auctioned off, the bookseller Thomas Ballard was careful in his catalogue to list those texts which contain images ("cum fig.") despite his abbreviation of the texts' actual titles (Finch 21-82). The reason for this is the image's utility in bringing a sense of primary experience to secondary data. This is best exemplified by Browne's two responses following primary observation of fish: one which he writes privately for himself and one that he sends to Merrett. First, the former, recorded in Browne's personal notes:

A sword fish, or *Xiphias*, or *Gladius*, intangled in the Herring netts at Yarmouth agreable unto the Icon in Johnstonus, with a smooth sword not unlike the *Gladius* of Rondeletius about a yard & half long, no teeth, eyes very remarkable enclosed in an hard cartilaginous covercle about the bignesse of a good apple. (*Works* 3: 418)

The note focusses on the swordfish's head, the part of the creature that Browne had acquired (*Works* 4: 367). Though the textual reference is present – "the Icon" from prolific Polish scholar John Jonston's *Historiae Naturalis de Piscibus* (1657) – it is secondary to Browne's own commentary, giving the swordfish's significant features as they appear to him. When presenting a sawfish across distance to Merrett, however, Browne sends "the figure in litle of a *pristis*", a small image of the creature in place of descriptive notes (*Works* 4: 360). This example demonstrates the differences between "taking notice", as Browne conceives it, and "presentation". When taking note of the observation privately for himself alone, he reduces the creature to its three key features: its size, its lack of teeth, the strange cover around its eyes. Presenting his observation to another investigator necessitates greater care and it is simpler to send a miniature image – allowing Merrett closer to the moment of Browne's initial observation, allowing Merrett to characterize the swordfish for himself.

Yet neither of our two central texts – Merrett's *Pinax* and Browne's *Garden of Cyrus* – is filled with images. The method by which the *Pinax* addresses this shortcoming is by using a sort of coding system between Merrett and its bibliophilic readers, as demonstrated by the *Alcoa vulgatis*:

Alcoa vulgatis, *fine cut*, or *Vervain Mallows*, P. 301. Malva Verbenaca G. 931. in pratis & sepibus, sed rarius, variat flore albo. (BL976 3)

Merrett's method of presentation, of making vivid, utilizes a system of page-numbers and reference texts in order to expand the compressed visual data. The *Alcoa vulgatis* seen in situ is reduced to its name and to its basic visual details – "variat flore albo" (varying with white flowers). However, such that the reader might expand this into a fuller visualization, the *Pinax* provides corroborative sources for where it may be found: in "pratis & sepibus" (hedges and meadows); and P. ("Parkionus") 301 and G. ("Gerardus emaculatus", Gerard) 931. It provides, that is, visual sources both natural and textual – referring the reader both to his books, and to his book of nature. It seems that early readers followed these references: beside the entry for *Alcoa vulgatis* one of Merrett's early readers has amended "P. 301" to "P. 302" (BL976 3). Shortly before it on the same page, we find a further correction:

Ægilops Bromoides, *Bearded Wild Oats*, G. 77 Ægilops Bromoides Belgarum, Dutch Havergrass, P. 1149. in satis. 8. (BL976 3)

These corrections to 976 b.3 are matched by similar in Gough Nat. hist. 3, where the reader has corrected the entry for *Lanius* – “the butcher bird” – from I. 24 to I. 8 (Gough 170). They tell of a readership not passively moving from page to page, but decoding the *Pinax* with reference to other texts. The significance of this is that Merrett’s text was designed to be read – and, clearly, was read – among a wider group of image-filled texts. Just as the *Pinax* is a guide to specimens in the natural world (“betwixt Oxford and Banbury”), it is also a guide to specimens in the textual world.

Concerns over how to make plants vivid on the printed page preoccupied Browne as he wrote *The Garden of Cyrus*. A text with an extraordinary reliance on visual detail to make connections, he nonetheless eschews printed images. Browne addresses the absence of illustrations in the text’s prefatory epistle:

He that will illustrate the excellency of this order, may easily fail upon so spruce a Subject, wherein we have not affrighted the common Reader with any other Diagramms, then of it self; and have industriously declined illustrations from rare and unknown plants. (*Thomas Browne* 551)

Here is an attempt to have the best of both worlds: Browne does not print images as he does not wish to affright “the common Reader”. But he does wish for one image to be printed: that “of it self”, of the quincunx (*Thomas Browne* 554). In contrast, Merrett’s *Pinax* has designs on being truly universal, encompassing all flora, fauna, and fossils of Britain. However, in its constant references to a set of texts owned only by a bibliophilic circle, it is certainly not for “the common Reader”. Having the quincunx as the text’s sole printed image is emblematic of Browne’s focus on a single bounded section of the book of nature. His “manuscript”, then, may only be “universall” in its treatment of a small and personal topic, but it is “publik” in its presentation.

Naming

The knowledge Browne’s *Garden* presents is acquired through a similar process and presented in a similar fashion to Merrett’s *Pinax*. Yet Browne resists his text being read as a “herbal” or “phytology”. The resolution to this tension lies in Browne’s naming practices. Nomenclative practice is a topic discussed frequently in the letters between the two men. Writing to Browne, Merrett expands on the multiple purposes of naming:

I doe entreat this favour of you, to inform mee fuller of those unknown things mentioned herein, & to add the name, page, &c. of the Author if mentioned by any, or els to give them such a Latin name as you have done for the fungi which may be descriptive and differencing of them. (*Works* 4: 348)

A name must be “descriptive” and “differencing” – or, as he writes in a later letter, must describe “the most obvious and most particular difference to the ey or any other sens” (*Works* 4: 360). Browne and Merrett’s nomenclative practices work through comparison, through stating what makes one entity different in relation to another. These practices apply equally to the specimens he identifies with Merrett, to his generic characterization of *The Garden of Cyrus* in its introduction and – most significantly of all – to that incongruous name on its title page.

The fungi to which Merrett alludes is what Browne called “an elegant *fungus ligneus*” (*Works* 4: 344). However, having named in this vague manner – vague insofar as “ligneus” (“of the nature of wood, woody”; OED) is a trait shared by many fungi –

Browne next wishes to "difference" it. Unable, though, either to send it to Merrett ("fearing it should be broken") or find it in their shared textual world ("I have not found in any author"), Browne instead attempts to distil its essential characteristics into an appropriate name (*Works* 4: 344). He writes:

unto some it seemed to resemble some noble or princely ornament of the head, & so might bee called *fungus regius*; unto others a turret, top of a cupola, or lanterne of a building, & so might bee named *fungus pterygoides*, *pinnacularis*, or *lanterniformis*. You may name it as you please. (*Works* 4: 344-5)

The classification system is a combination of similarity and difference: Merrett and Browne wish to pin their specimen as "ligneus" among other fungi, and yet distinguish it from these others through reference to its "cupola", "turret", or "princely ornament". The lack of a commonly-agreed nomenclative practice makes this a somewhat arbitrary process – indicated by Browne's resigned admission that "You may name it as you please". He finds two characteristics ("*fungus*", "*ligneus*") that describe the specimen but he struggles to decide on the most appropriate analogy among several that present themselves.

The difficulty in selecting a single name for a single species was an issue of material importance within seventeenth-century naturalist networks (Ogilvie 207). The number of known plants and animals was expanding rapidly: just one of the herbals in Browne's library, Caspar Bauhin's *Pinax Theatri Botanici* (1623), contained some six thousand different plants (Finch 44; Ogilvie 208). Multiple names for so many specimens created problems of organization – an issue Merrett addresses clearly in the *Pinax*, from his introduction to "*De Plantarum Classibus*":

Maximi sane est momenti res omnes naturales ad certas classes reducere. Sic enim facilius ediscuntur, promptius edocentur, fideliusque retinentur. Praeterea, hanc viam ingressus non committet ut sub variis nominibus eandem plantam tradat, quod a quibusdam fieri non difficile est observare.

[Most important, of course, is to reduce all natural things to certain classes. Thus, it is easily memorised, readily learned, faithfully retained. Further, others up until now have given the same plant under various names, making it difficult to observe.] (Merrett 127, my translation)

Merrett's main task in the construction of his *Pinax* was to reduce the findings of his disparate correspondents to "*certain classes*" ("certain classes"), with a consistent system for translation of his correspondents' observations ("*observare*") into the names ("*nominibus*") as presented in the *Pinax*. This ensures that no single species is given two different names – for instance, when sent to Merrett by two different correspondents – and facilitates the reader's navigation of the catalogue. Merrett's *Pinax* is named to be "descriptive" in Browne's terms: etymologically related to bibliographical "tables", it is a system created to catalogue the observations of multiple correspondents (OED). The title of *The Garden of Cyrus* is "differencing": as it is the work of only one hand, its title "differences" it from a phytology.

The emphasis on "describing" and "differencing" explains too why Browne gives *The Garden of Cyrus* its strange title. Cyrus is not a significant figure in the text that bears his name. He is mentioned just four times: three times in Chapter I and just

once more, in Chapter IV. Claire Preston suggests that Cyrus' prominence is to make a radical "military-horticultural simile", writing that:

Nothing, it seems, could be more violently yoked together than warfare and garden fruits, and Cyrus is Browne's convenient signature for that conjoining of apparently exclusive categories. (Preston 177)

Given, however, that Browne continuously emphasizes Cyrus' qualities as gardener – "lord of gardens", "manuall planter thereof", a "splendid and regular planter" – rather than his qualities as soldier, it would be inaccurate to focus on this military side of his presentation (*Thomas Browne* 557). Rather, he is introduced thus:

Cyrus the elder brought up in Woods and Mountains, when time and power enabled, pursued the dictate of his education, and brought the treasures of the field into rule and circumscription. (*Thomas Browne* 556)

Browne's "circumscription" has a specialized taxonomical sense here, referring to the same delimitation of species as Merrett's "*certas classes*". Cyrus' role in bringing structure and order to the plants of his garden is – according to Browne's descriptions – the same as Merrett's in ordering the plants of Britain in his *Pinax* and the same as Browne in ordering quincuncial plants in his *Garden*. Though Browne states that *The Garden of Cyrus* is not a phytology, it is – by his own description – named for a phytological endeavour.

Conclusions

Power – to whom Browne taught the methods of investigative observation – treated *The Garden of Cyrus* as a phytological text. It is more than possible to see why – it is clearly an attempt to set down the natural world on the printed page in an understandable format. We are encouraged to view Cyrus and Merrett and Browne's works as parallel endeavours, moreover, by the word used in *Garden* to summarize them:

So nobly beautifying the hanging Gardens of *Babylon*, that he was also thought to be the authour thereof. (*Thomas Browne* 556)

Though "authour" could at this time be used to mean "creator" or "cause" or "source", it is particularly associated with the written word (OED). Browne, for instance, is referred to as "authour" six times in the publisher's note to *Certain Miscellany Tracts* (1683; *Thomas Browne* 603-4). The garden Cyrus plants, then, is presented as a textual endeavour in the same way as Browne's textual endeavour. Cyrus as "authour" figure – as the constructor of a phytology – is perhaps more obviously a Browne equivalent than a Merrett equivalent: both Browne and Cyrus attempt to structure and order the natural world, using only the quincunx to do so.

This conflation of Cyrus' two roles – of "authour" and "planter" – need not seem a collision. That the two roles can be seen as analogous is evidenced by Browne in a 1679 letter to his son Edward, in which he describes a quite extraordinary book:

This day one came to showe mee a booke and to seel it; it was a *hortus hyemalis*, in a booke, made at Padua, butt I had seen it above thirtie years ago, and it containes not many plants. (*Works* 4: 120)

Browne's misgivings are not the key point here. *Hortus hyemalis* ("winter garden") is an epithet representing one last crossover between the natural and textual worlds. It consisted, as Leah Knight writes, "of a bound book with plants or plant parts first pressed between heavy paper, to flatten them, and then sewn or glued into place on its pages" (Knight 29). The *hortus hyemalis* is striking for its directness, for its fusion of natural and textual worlds in the most literal and immediate way (Knight 38). Knight suggests that this demonstrates "the more broadly and uniquely bookish nature of sixteenth-century botanical culture". But one ought to consider this from the opposite direction – the intensely botanical, or if we may phytological, nature of seventeenth-century book culture (Knight 38).

The "universall and publik manuscript" must encompass both the natural and the textual: books, gardens, gardens as books, and books as gardens. Shortly before his invocation of the book of nature in *Religio Medici* – returning to where I began – Browne considers the place of the great and the small within the natural kingdom, of the individual within the universal:

wee carry with us the wonders, we seeke without us: There is all *Africa*, and her prodigies in us; we are that bold and adventurous piece of nature, which he that studies, wisely learns in a *compendium*, what others labour at in a divided piece and endlesse volume. (*Thomas Browne 793*)

Within this passage we may read the place of the individual, of a Browne or a Merrett, whose "compendia" show in microcosm some part of the macrocosmic book of nature (*Thomas Browne 793*). The *Pinax* and *The Garden of Cyrus*, ultimately, are just different portions of the universal manuscript; together, and given they are shared in a "publik" circle, they inch towards completeness – towards, that is, a perfect library of a perfectly printed natural world.

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