Walking through ideas: Memory and the body in the premodern memory palace

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Abstract
Early Modern Italian manuals for memorization present memory as deeply embodied, especially through the memory palace technique. Here, physical sensation, emotion, navigational skills, and personal experience, are all functional to intellectual learning. This article individuates these embodied tools through the analysis of three memorization manuals from 16th century Italy – a time, place, and religious context, in which the body could still be involved in mnemnonics: Dolce's *Dialogo del modo di accrescere e conservar la memoria* (1562), Della Porta's *L'Arte del Ricordare* (1566), and Gesualdo's *Plutosofia* (1592).
In these manuals, it is especially the *loci*, the architectures of the memory palace, which show sensory participation. Fundamental for place-navigation skills, these embodied techniques are a theoretical challenge for the manuals' authors, tied to the period's view of memory as a fundamentally abstract process. Their various approaches are reviewed, and organized along a spectrum, from claiming to denying the contribution of the described practices to a theory of memory and knowledge.

Keywords
memory, loci, body, embodiment

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In the 16th century, the borders of knowledge were expanding like never before: a new continent appeared within the horizon of European intellectuals, as well as a new branch of Christianity. The printing press was capable of spreading information with unprecedented speed and reach, as well as doubts, anger, hopes. Scholars were left without social, epistemological, and cognitive structures able to manage the growth. As a consequence, the 1500s saw thinkers passionately engaged in active debates over a wide number of possible solutions. Of these, only a handful would survive the century and eventually be welcomed in the culture as an adaptive mechanism.

In this study, successful adaptations are not the main point of interest. I will focus instead on an unsuccessful set of solutions elaborated to cope with the century's information overload, that of the Memory Arts. This ancient discipline, rooted in oratorical necessities and transmitted within rhetorical and monastic traditions, dealt with the coupled needs to have one's knowledge at hand, and to make that knowledge meaningful, when books were scarce or even non-existent. The Memory Arts consisted of a multiplicity of techniques, accumulated through centuries of trial and error, which made use of automatisms of the body-mind unit, like muscle memory and emotional memory. Their aim, as Mary Carruthers has observed, was mostly compositional: to select, order and organize, preserve, and ultimately reuse, information.[1] In the 16th century, the Memory Arts gained interest and traction, since literate people's information-management skills were under the combined pressure of Gutenberg, Columbus, and Luther.[2] Rooted as they were in practical tasks and empirical procedures, the Arts were however somewhat controversial: they had a distinct embodied character that did not translate easily into the time's philosophical frame – especially the Protestant one. Besides, their somewhat cumbersome sense-making tools could not equal the speed and reach of the printing press, eventually relegating them – ironically – to oblivion.[3]

1 "This extraordinary elasticity of mnemonic places could bring great advantages for the management of information in an age flooded with ever-increasing notions coming from all over the world": Bolzoni, *Memoria e Memorie*, 67. From here on, all translations of Italian titles will be my own.

2 "Toward the end of the sixteenth century and the beginning of the seventeenth, however, the structure of the art became so complex that many intellectuals found it almost impracticable. Abandoning the traditional, strictly mental method, they increasingly made recourse to external devices as 'secondary memories' such as commonplace books, elaborated indexes, slips of paper or note cards and branching diagrams": Kuwakino, "From *domus sapientiae* to *artes excerpendi*", 59.

3 "The development of Memory Arts in 1500 is something paradoxical: it coincides with the expanding of the printing press, that is, with the creation of a condition in which the art of memory becomes less and less important, and eventually, substantially useless. At the same time, we register a long phase of co-existence, of interaction: we witness then a precarious yet fascinating balance": Bolzoni, *Memoria e Memorie*, 15.

I am interested, in particular, in what was lost along with them. That mnemotechnics declined in Western 16th- to 18th-century culture is undeniable: what is surprising is rather their lingering, well after technological advancements had made them obsolete.[4] Such persistence is symptomatic, I believe, not only of burdensome structures within the institutions designated for knowledge production. But also, and importantly, of the Memory Arts' peculiar capacity to bridge the gap between localized individuals and collective knowledge: they systematically brought this second one quite literally inside the cognitive system of each person. As Luis Merino Jerez writes, "[mnemotechniques'] function consists in mediating between textual and oral, that is, between private and public" (25). The Memory Arts, with their embodied and personalized mechanisms, allowed for the holding together of personal stories with collective myths; of the everyday and physical with the eternal and cosmic; of the city or the monastery with the monastic order, the nation, the empire. The Memory Arts thus testify to the importance and centrality of the personal, physical, local aspects characterizing pre-modern approaches to cognition and knowledge. My proposal is that of problematizing a narrative that equates these aspects' later dismissal with their being obsolete. Moreover, I aim to encourage scholars to deepen our analysis of embodied, personal practices at the basis of Western culture.

The existence and implications of embodied practices is here shown through the comparison of three books: Lodovico Dolce's *Dialogo del modo di accrescere e conservar la memoria* (Venice, 1562), Giovan Battista Della Porta's *L'Arte del Ricordare* (Naples, 1566), and Filippo Gesualdo's *Plutosofia* (Padua, 1592). These texts are representatives of the mature phase of the Memory Arts' revival in Italy (1560-1600), which was characterized by a high degree of popularization. As such, they pertain to the manual genre, they are printed in rather inexpensive formats, and are written in the vernacular. Moreover, they support their proposed techniques through very accessible (even though not always extremely clear) theoretical explanations. In these, one finds a preoccupation with the role of the body in processes of knowledge-acquisition and -administration. The three authors express distinct instances of mediation between traditional views of human cognition, as well as new necessities; their different solutions are contingent on each author's position within the power structure and on their specific goals: pedagogical, social, commercial. As will later emerge, these instances translate into significantly different approaches to the problem of embodiment in cognition.

This comparison shows, firstly, that the reflection of the body/mind problem went beyond university walls. Secondly, but not less importantly, that the time's exploration of this problem still fully recognized themes that would later be dismissed, such as the importance of physical perception and of emotions in processes of learning. In

[4] Notably, as I will articulate in a few pages Dolce's is a (rather free) translation of Romberch's Latin text, for popularizing purposes; Della Porta's was also originally written in Latin, and the author then curated a translation into the vernacular for publication.

other words, the approach to knowledge proposed in these books takes into account the contribution of perception, emotion, personal participation, etc., showing different possibilities of their harmonization with the Western epistemic system. These memorization manuals thus showcase a discursive development down an alternative path to the dis-embodied one adopted by the West – traditionally blamed on Descartes, and often deemed as the only one possible. For a brief time, before the Memory Arts were discarded as incompatible with new methods of knowledge-formation, we can recognize an attempt at bringing this body-mind integration into modernity. Perhaps a missed opportunity then, such an attempt gives us an opportunity now: that of using it to better understand the early modern conception of human cognition. Recognizing these manuals' willful involvement of the body in knowledge-making, in other words, opens the way for us to elaborate a more nuanced formulation of the early modern "body-mind problem".

New problems, old solutions?

In *Uncertainty in Post-Reformation Catholicism: A History of Probabilism*, Stefania Tutino highlights how, among what we now frame as technological and scientific revolutions, Renaissance probabilists usually turned to traditional knowledge for solutions, even radical ones.[5] Rather than shaping brand-new ideas, that is, they refashioned those they had received, finding potential for rearrangement of values and practices from within the canon. This is a similar case, which shares with probabilism a deep connection to practical knowledge. The Memory Arts belonged to the European canon: as the fourth part of Rhetoric (*memoria*) they represented an element of every pupil's basic education, from antiquity well into the 18th century.[6] However, around the 1500s, the archive shows a distinct shift in the Arts' application toward general knowledge. While this turn

[5] "Figurae dicuntur ea quae in locis reponimus, pro rebus memorandis, quae figurae *immediate* memorandas res, nostrae representat memoriae": Rosselli, *Thesaurus artificiosae memoriae*, 77v; my italics.

[6] "The idea of an art of remembering and thinking that functions "mechanically" will be newly relevant between mid-1500 and mid-1600. At this time, we witness a deep intertwining of different Memory Arts traditions. [...] The idea resurfaces of a concept-generating mechanism able, once set into motion, to self-perpetuate, almost independently of the individual's contribution; and to continue until the final consequences, until total comprehension. This would have allowed humans to read, in its integrity, the book of the universe": Rossi, *Clavis Universalis*, 5. Also, Bolzoni: "In the mid-1500s, method becomes one of the new aspects of the art of memory. Great faith is placed in the possibility of formulating a method that will rigorously regulate both knowledge and the ways of communicating and recalling it. [...] The new directions of logic and dialectics interact productively with the new possibilities created by the book and by the ordered and reproducible space of the printed page" (*The Gallery of Memory,* XIX).

in the discipline has been explored by scholars ever since Frances Yates's 1966 seminal work *The Art of Memory*, and has been connected to the centuries' technological and conceptual innovations, I want to bring attention to an aspect of this change so far overlooked: the centrality of bodily perception and performance in cognition. In 16th century Memory Arts in fact, the body is not a spectator of the process of memorization, nor is it merely an aid to it: it is often the main factor in determining cognitive change. This becomes particularly visible when the printing press makes the Arts available to a wider audience through the manual genre.

The Memory Arts manual was a desired object in the 16th century. It had evolved from being a part of the Rhetoric manual (that dedicated to memorization of speeches) into a stand-alone text. The printing press aided and enhanced this independence. Almost a century after the (then) famous Petrus Ravenna's *Phoenix, sive de artificiosa memoria* (1491) had reached enormous circulation and success, the genre underwent important changes.[7] The books here selected showcase the main traits of this development. Firstly, they are written in the vernacular, as opposed to the traditional Latin, granting them more reach and appeal among non-erudite publics.[8] Secondly, they show encyclopedic and literary ambitions, explaining their own processes toward theoretical explanations and erudite citations, as opposed to the initial scrawny lists of practical precepts on which a teacher would have to elaborate. Thirdly, they advertised their cognitive tools way beyond the traditional uses of memorization and meditation, mostly limited to monks and scholars. According to these books, anyone would benefit from the Arts, for any everyday activity, from trade to prayer. Lastly, they are all products of the tension between Italian philosophical discussions – especially the Paduan milieu, but also voices like Campanella and Bruno – and post-Reformation Catholicism.

7 For an account of the Protestant attitude towards sensory stimuli (in the form of images, but also of objects, spaces, sounds, etc.) as both a threat and a resource, I refer to Koerner, *The Reformation of the Image*, especially the final section of the Introduction, "A Reformation Altarpiece", 69 and "Part I: Cleansing", with a particular attention to the sections on "Beliefs", 94 and "The Arrested Gesture", 153. As Koerner analyses mostly early German thought, I would add Tribble and Keene's *Cognitive Ecologies and the History of Remembering*, which expands its attention toward post-Reformation England.

8 On the other side of this spectrum – the Catholic one, the senses were still problematic, but solidly encapsulated in the religious and civic life, in a way letting tradition and habit act as soothing factor against a theology that saw in the body the place of sin. In fact, Haigh in *The Plain Man's Pathways to Heaven*, 2007 argues that it took a generation for Protestants to feel comfortable enough, and not constantly conflicted, within the new rites and habits. Studies of post-Reformation Catholicism that pay special attention to materiality and embodiment are De Boer and Göttler. *Religion and the Senses in Early Modern Europe*, Noyes's *Rubens and the Counter-Reformation Crisis*, and Tutino's *Empire of Souls*. Michelle Molina's *To Overcome Oneself* richly engages the embodiment of specifically Jesuit practices.

The Memory Arts had had millennia to accumulate techniques with the aim to quickly and efficiently individuate, store, retrieve and reuse data.[9] Facing an unprecedented tide of information, scholars turned to them to find solace and, perhaps, the roots of a new method.[10] This happened regardless of the methodology that had been behind the Arts, which had very little to do with rigorous philosophical inquiry, instead showing solid roots in use and habit. The manual genre allowed, or even celebrated, knowledge coming from, and aiming for, practice. On the other hand, the demands of the market for entertainment and for a master-less teaching favored the expansion of the manual genre into a more encyclopedic enterprise, richer in theories and not just in practices. In this interesting cohabitation of a practical and theoretical attitude, we can find, firstly, beliefs derived from practice -often treated as obvious despite being mostly absent from theoretical treatises; secondly, we can find the tensions that these practice-bound beliefs create when their authors attempt to justify them in theory. Therefore, the theoretical apparatus of these books can be used as a way to investigate ideas of the time that were widespread among the widening literate, but not necessarily erudite, population.

With regard to these common ideas emerging in the genre, a Catholic perspective offers a peculiar set of solutions. Protestant and Calvinist systems[11] were ambivalent towards the heavily visual and sensory component of the Arts – from the crafting of gruesome and stunning images, to the selection of the angle and light from which to watch them. While still controversial, these practices were not as problematic in Catholic environments:[12] they could be fully utilized, rather than rejected.[13] In fact, as we will see in

9 "The *Bildkritik* of the Reformers implies thus a *Gedächtniskunstkritik*: the art of memory is dangerous because it leads to introduce into one's mind and heart images that can ignite the senses and, in so doing, is inherently impious: de facto, it substitutes the divine word, which is the inspiring agent par excellence. In Catholic milieus instead, the survival of the Memory Arts depends exactly on its long-time fortune as, on the one hand, a fundamental support to the discipline of interiority of clerics and monks; and, on the other hand, as a valid aid to the believers' indoctrination": Torre, Introduction to *Dialogo*, XXV -XXVI.

10 Lina Bolzoni defined the art of memory as a "cultural fossil, the residue of a world that is deeply other". While at the same time it invites "To experiment techniques aimed at controlling the connections between body and mind, between the sensory images and those populating the spaces of one's interiority": *Memoria e Memorie*, 2.

11 "The art of artificial memory, born with Cicero and Quintilian, and recuperated by Albertus Magnus and Thomas Aquinas, were considered essential for the exercise of the Christian virtue of prudence. The Memory Arts, cultivated by Lull, Bacon, and Leibniz, are then pushed aside: eventually joining anthroposophy and spiritism in occultist publishing enterprises": Rossi, *Clavis Universalis*, XIII.

12 For a deeper treatment of the genre's evolution, see Poupard, "*La méthode des* loci", 19-55.

13 While I will quote the *Plutosofia* from its original Paduan edition (digitized), I will approach Dolce's and Della Porta's texts from their relatively recent editions curated by, respectively, Torre and Sirri. Even though the originals are available, and I first read both texts in that form,

a moment, these manuals show resistance toward the abandonment of an Aristotle-derived idea of cognition as embedded in one's body and life. The books analyzed here treat the senses as an integral part of the knowledge process, pushing to problematize the role of perception despite theoretical (and real-life) risks. Dismissing such insistence as a relic of a dying system could cause us to overlook a trait of Western culture that was central to the formulation of its values and practices,[14] before fading into obsolescence.[15] The embodied, personal, situated nature of knowledge is expressed through the centuries in myriads of ways: from didactic methods, to storytelling practices, to thinking processes. It is especially apparent in places, like the Memory Arts, where the subject matter consist of the mechanisms of the mind and soul.

Three specimens

The three popular books I selected were published by Italian authors in the second half of the 16th century. I had three, interwoven criteria for this selection: a chronological one, in that I wanted books that reflected the moment of greatest expansion of the genre, including its attempts at encyclopedism. Beyond this, I used a cultural and rhetorical criterion, in that I wanted books written for a wide public in a Catholic context. Hence, these texts are in the vernacular, they tend to be exhaustive and clear in their explanations, do not take for granted higher education (in theology and philosophy), but they do rely on basic education (rhetoric and common knowledge). Moreover, they pertain to the Italian milieu: given the divide created by vernacular use, and the prolific Italian book market, that seemed like the best possible choice to individuate typically Catholic traits of the genre.[16]

I am grateful that I could rely on experts for a proper transmission of the texts' language and meaning. Their comments, contextualization, and insight have been more than precious for my research, and I wish my thought and translation could do them justice.

14 "[Dolce's adaptations] aim at making the work more comprehensible and at widening its reach, in order to reach one final goal: a balance between utility and pleasure – which was a trait of poetics too – able at once to distance this text from the courtesan treatise form (which was intended for the pleasure and education of a limited audience), and to highlight the will to help a wider public": Torre, *Clavis Universalis*, XII. The Romberch-to-Dolce passage has been studied in depth by Ramos Grané, especially in her "De Johannes Romberch a Lodovico Dolce: la metamorfosis del *Congestorium artificiosae memoriae*".

15 Della Porta, *Ars reminiscendi, aggiunta l'arte del ricordare tradotta da Dorandino Falcone da Gioia*.

16 "Dolce indeed seems to be demonstrating how it is possible to make literature of texts that have been long confined within the borders of proto-scientific expertise. A literature, as he envisions, that is surely mass-oriented and aiming at public utility; but also, it still possesses 'order and ornament', able to reach and involve a growing number of readers; without the presumption to make them experts, but maybe […] interested": Torre, Introduction to *Dialogo*, XVI.

The first text I will introduce is Lodovico Dolce's *Dialogo del modo di accrescere e conservar la memoria*, published in 1562 by Sessa in Venice.[17] As is common for Dolce, he is not properly the author: this work is a translation, with Dolce's own additions, of the *Congestorium Artificiosae Memoriae*, published in Venice some 40 years before (1520) by the Dominican friar Johannes Romberch. While this is therefore not technically an original work, Dolce's late translation presents key differences from its original, which resonate with an embodied, and culturally relevant conception of the Memory Arts. Tellingly, Dolce's additions to Romberch's texts are, on the one hand, the reference apparatus integrating theological and classical authorities with those of vernacular literature (notably, Dante); on the other hand, his translation into the vernacular, its transmutation to the dialogue form, and many other adjustments, which render the text available not to a wider audience (since Latin was the lingua franca), but to a different one, whose interest in a text was more likely to include entertainment, pleasure, and curiosity.[18] The timing is also important: almost half a century after Romberch's publication, the book can be proposed and perceived as a popularizing project. Memory Arts manuals were common by then – and they commonly explained more than just memory techniques. In this context, Dolce's text was what Romberch's could not be: a neutral, easy to sell, pleasant read.

The second text is Della Porta's *L'Arte del Ricordare*, published in 1566 by Cancer in Naples. This work is also a translation, but from the same Author's Latin text into the vernacular (by Dorandino Falcone da Gioia). Della Porta's original *Ars Reminiscendi*, which he had written in Latin, was published only later, in 1602 (still in Naples, but with Sottile). However, the Italian version was curated by Della Porta, and was part of his project in producing and popularizing culture. Following Raffaele Sirri,[19] I will refer to the 1583's edition, which differs from the 1566 because of the deeper revision it was subject to through the Latin text. Della Porta was exceptionally erudite. His fervent interest in the sciences

[17] The brain was not the sole organ of the body devoted to cognition; at this point in time, however, the brain had outruled the other organs in theoretical importance. For further insights on this passage, see Vidal, *The Sciences of the Soul*, especially chapter 2, "Psychology in the Sixteenth Century: a Project in the Making?", 21-47, and the section of chapter 3, "From soul-form to soul-mind", 74-82.

[18] Credited to 11th century pedagogue Guido of Arezzo, this mnemonic for music inscribed in the hand traveled the centuries. This was "The system by which he [Guido] pointed to joints in the fingers of the left hand in order to teach solmization. Each joint represented a specific pitch in the scale". Weiss, "The Singing Hand" in Richter Sherman, *Writing on Hands*, 17. See also Berger's chapter "The Guidonian Hand" in Carruthers, *The Medieval Craft of Memory*, 71-102 (but especially 71-82).

[19] "The point of departure is sight […] However, what we see here goes well beyond that: images, once they are visually constructed, acquire life, density, depth. This process is aided by the intervention of the other senses (touch, hearing, for example); at the same time, it calls them into play, and elicits their intervention": Bolzoni, *Memoria e Memorie*, 4-5.

and the magical arts led him to develop a constant intellectual exchange (with correspondents from Galileo to Campanella) and also his own scientific activity, as well as an incessant effort of knowledge dissemination. His choice of the vernacular is thus not casual. It is telling that he only published his manual in Latin when the *Sant'Uffizio*'s interest in his work grew enough to steer him away from popularizing literature.

The third text is Filippo Gesualdo's *Plutosofia*, published in 1592 by Megietti in Padua, and reprinted in 1600 in Vicenza by Bertelli. Solidly into a period of popularity of the genre, this manual comes late into the century, showing its belonging to a now mature genre: preceded by many authors (which he quotes), Gesualdo is comfortable proposing his work as part of a tradition. A Franciscan, he lived all across the Peninsula, while pursuing the task of restoring, promoting, and realizing, methods of virtuous communal life, in line with directives from Trent and Saint Francis's original rule. His *Plutosofia*, published while he was appointed to the restorative task by the Pope, echoes this larger moral plan. On a more formal level, it also reveals the typical down-to-earth attitude common to the manual genre. A characteristic particularly precious for Gesualdo, who was deeply aware of the power of didactics in ideology battles.

The authors of these books were not unaware of the mediation they were facilitating between specialist and general cultures. Their texts are punctuated by explicit references to the tension generated by the translation of knowledge from the original monastic and academic circles to the much wider readership of popular printed books. Looking across these authors allows us to see different angles from which this problem was approached. Gesualdo is a representative of the monastic ascendancy: closer to the traditional channels of knowledge reproduction, especially in this field. The other two instead represent the new channel opened by technological and social changes: Dolce and Della Porta are "popularizers", educated people who dedicated their efforts to the production and dissemination of knowledge on a large scale. Through their different backgrounds (north and south, university and homeschooled, respectively) and different motivations, dictated by their professional and social status (Dolce more on the commercial side, Della Porta more invested in his own interest), these authors represent different viewpoints on dissemination within and beyond institutional and traditional ways. Gesualdo's interest was that of making a For Dolce, this was part of an equally commercial and ethical enterprise,[20] utiliz-

[20] See Anderson's statement that "Both body and world were generally understood to dynamically participate in human cognitive processes. Also noteworthy is that the soul is portrayed as distributed within the body, rather than as head bound", *Renaissance Extended Mind*, 82. In the memory manuals, this is expressed explicitly: "Eating too much greatly compromises memory, and so does excessive drinking, and foods that are hard to digest: bovine meats, hard-boiled eggs, and the like. They either produce bad humours, or they fill the head with damaging vapours. Other than this, sleeping too long, staying awake for too long, excessive heat or cold, and everything that is extreme: like strong passions, and the pleasures of the flesh": Dolce, *Dialogo*, 28.

ing the printing press as a way to improve society as a whole. Della Porta instead, because of his abiding interest in topics such as magic and natural science, could not enjoy the same delusions of harmony and fought censorship in the name of his beliefs.

Embodiment in the memory palace

The body and the senses are present in several ways in the art of memory. Firstly, cognition is localized in the body: all memory manuals of the time follow the Galenic-Aristotelian superimposition that attributes knowledge mostly to the workings of the brain.[21] In this diagram, memory occupies the last chamber of the Galenic three-part brain, which is usually the scheme used by memory manuals to describe it. Moreover, the body is a source and repository of mnemonic tools, able to give way to devices like the famous Guidonian hand.[22] However, the least obvious sign of embodied cognition is the most significant here. While the explicit involvement of the body is of interest in itself, what is peculiarly visible in Memory Arts manuals, making them such precious documents, is the role of bodily stimuli in determining even the most "internal" processes of the mind.[23] The whole body, from sensory organs to the heart and veins, is seen as a system – it participates as a

[21] For an analysis of this shift, see Piro, "La semplificazione dei sensi interni", in *Il Retore Interno*, 123-129.

[22] The memory palace is but one, although the most complex and articulated, possible use of *loci* and *imagines*. Its efficacy is testified already in the pseudo-Cicero of *Ad Herennium*, who describes the technique almost verbatim to the Renaissance authors. He suggests crafting vignettes (famously, the man holding a ram's testicles to remember the presence of two witnesses, a truly memorable example), ordering them onto imagined/remembered architectures. In the Middle Ages, however, when these techniques were appropriated by monks and embedded in religious practices, their spatial character was utilized in various ways. For example, Carruthers (*The Craft of Memory*) describes pathways of meditation embedded in church decorations, as well as manuscript illuminations that were meant to be "folded" in one's mind to make them tridimensional ("Two Unusual Mind Diagrams in a Late Fifteenth-Century Manuscript"). Other applications of the technique of place-memory can be found in the use of the body as "holding" structure for images, instead of the palace. The Guidonian hand is the most famous such instance, but in both Medieval and Early Modern texts, examples abound of this use of the body: from the placement of entire and structured images (like in Peter from Rosenheim) to that of symbols and letters (like in Marafioto's *De arte reminiscentiae*). In this essay, I will mostly engage with the memory palace specifically. As alternative naming, I will use "*loci*-system" to mirror the lexical choice in my corpus, and I sometimes use "local memory" as a rough translation.

[23] "We witness that naturally, whoever wants to remember a long event, they always try to remember, first of all, where that event took place, and then recounts the event following the order of the places where it happened": *Arte del Ricordare*, 62. "Because too small a place cannot contain the image; but one that is too big would distract the sight, and the Mind as a consequence, which in turn attends to Memory, which is funded on the senses": Gesualdo, *Plutosofia*, 20r.

cohesive unit to the cognitive work.[24] This conception was not easily viable in theory any more: the process of concentration of cognition that had brought a very diffused system to a one-chamber brain in the course of three centuries had almost come to its end.[25] However, the old theories held their place in the Memory Arts' practices, which were derived from a tradition that informally passed down techniques on the basis of their effectiveness – not of their theoretical soundness. Perceptive stimuli were thus the centre around which memory techniques were arranged. Allowing the body to perceive, and to do it with ease, is in fact fundamental to the functioning of the Arts.

Such an approach does not falter in the Renaissance, quite the opposite: we witness a particular focus on the body in one technique of the Arts, the *loci*-system technique, especially in its manifestation known as the memory palace.[26] If learned properly, the memory palace promises to expand one's memory considerably and with relative ease. The *loci*-system consists in translating concepts and words into images, called *imagines agentes*, by virtue of personal association. Such images are then arranged onto ordered spaces, often architectural in nature, called *loci*. These span from the human body, to palaces and churches, to the entire order of the universe. These *loci* (referred to as *loci communes*) are subdivided into sections, each signposted with a specific element -an elbow, a window, a *girone* of hell- (called *loci particulares)*. These ordered spaces, fixed in our memory either by familiarity or by precise hierarchies, keep the *imagines* in a chosen sequence and in precise relationship to each other. This technique combines and exploits two cognitive mechanisms: the *loci* employ our natural tendency to remember physical places and paths to keep a stable order; whereas the *imagines* utilize our ability to remember visual stimuli with an emotion attached, rather than disinterested lists.

Premodern Memory Arts manuals included directories of precepts on how to best craft *imagines agentes* and *loci*. On top of that, typical of these Late Renaissance manuals are lengthy discussions listing the various options emerging from different traditions, with subsequent reflections on which characteristics were indeed the most useful, and comparisons of different acquisition methods. These discussions are a rich basis on

[24] Petrus from Ravenna in his *Phoenix* adds to classical rules of memorization "Some innovations, dictated by his personal experience rather than by a theoretical research". Matteoli, *Il Rinascimento Italiano e l'Europa*, 394.

[25] For example, Thomas Murner, in his *Logica Memorativa* (1507) portrays logic constructions through human figures interacting with several perplexing objects, such as flying fish and scorpions. An explanation of his mnemonic system for logic can be found in Ong, *Ramus*. Gesualdo's *Plutosofia* offers a model for a human body to be used for *loci*. And Piero Veglia in 1626 writes a *Computo Ecclesiastico Sopra le Pieghe e Nodi delle Dita*, where he teaches how to calculate the liturgy calendar's days through complicated distributions on one's hands.

[26] "The figures, and images should be proportionate in height, so that the eye does not get strained in trying to look too far up, in order to see them; nor in lowering the gaze too much to contemplate them": Gesualdo, *Plutosofia*, 47v 48r.

which to explore the time's shifting theories. Across the board in fact, *loci* and *imagines* are deemed most effective when they mirror the natural predispositions of the human mind:[27] therefore, these precepts, and the conversations accompanying them, grant a view of the time's common beliefs on the nature of cognitive functioning. Moreover, this view has an empirical character, required by the Memory Arts[28] and amplified by the practical nature of the manual; but still quite troublesome in the context of an encyclopedic expansion of the genre that involved explicit reference to "official" theories. Thanks to this expansion, in fact, the practical and theoretical sides of this discipline are pushed to co-exist: but at that time, a mediation between experiential observation, and the philosophical and scientific knowledge, is still debated. For this reason, often points of tension coincide with the passages in which the fundamental role of the senses is explicitly stated for the creation, the use, and the efficacy of mind-images necessary for the Memory Arts.

Any reader of Memory Arts manuals will be intrigued, entertained, sometimes even troubled, by the illustrations and descriptions present in these books. The forefather of the genre, Peter Ravenna's *Phoenix*, famously invites the use of naked women as *imagines*, and other manuals like Nicolaus Simonis', *Ludus Artificialis Oblivionis* (1510) use human-shaped monsters that would compete with the most nightmarish creatures in a Jeronimus Bosch painting.[29] Entire sections of these manuals describe mechanisms for forming images so as to make them striking -thus memorable. Depending on the item to remember, which could be a concept as well as a single word, one might attach to it a vignette or a single object in the designated space; even, as Della Porta describes, headless geese and doves (89). Importantly, though, whatever is represented should not counter the rules of human perception -or strain the senses.[30] Therefore, a figure of excessive size, like a tower or a mountain, cannot be placed inside the mind-palace, with-

[27] "If things are excessive, we have to either imagine them smaller and proportionate [to the *loci*] with the force of our mind; or, keep the essence of the thing, without paying too much attention to the size; or else (which to me seems the best solution, and the most secure) we can put in that place the image of some artificial painting or sculpture portraying that thing. For example [...] a house, or a mountain, or a big tower": Gesualdo, *Plutosofia*, 34v.

[28] "About the quantity and size [of the memory images], they must not be (as said for the *loci*) small, because small things do not move others and are not possible to see well or at all (the way geometrical points, atoms and such things are; since they are so small, that they barely move the senses). And similarly, they will not move fantasia enough": Dolce, *Dialogo*, 89.

[29] "Measure the place through a man of good stature, with his arms stretched out, so that you can get the size from his height and from his width (right to left). The place should not be taller than what the hand of a standing figure could reach; and it should not be taller than a standard man": Dolce, *Dialogo*, 60.

[30] For a thorough description of the precepts from antiquity to the Early Modern, see Merino Jerez, *Retórica y artes de memoria*, 57.

out creating confusion. It is advisable to substitute it with a representation – a painting, for example.[31] Conversely, a single ant will be difficult to spot: it is better to place a multitude of them, or to have an ancillary figure point at the single ant, or be bitten by it.[32] The ideal size of a *locus*, and of the *imagines* there included, is that of a person with their arms stretched out.[33]

Likewise, the characteristics of the *loci* are meticulously listed in terms of their ease of perception.[34] Della Porta insists that the *loci* be well-lit and "risplendenti" (shining) (63), in order to facilitate distinguishing pictures and figures, their outline and colour.[35] Conversely, the others (consistent with the majority of the tradition from the *Phoenix* on) warn the reader of the risks posed by an excess of brightness, as well as by excessive darkness, which impede clear perception of visuals, overwhelming the senses. A dimly lit environment, for them, is thought best to make the task easier on the mnemonist. Similarly, the distance between *imagines* is also taken into consideration and regulated. They need to be far enough from each other for the figures to be distinct, but not so far that they would strain the viewer having to keep them in the same mind-space.

[31] "A dark place is not right for this art, because it buries, covers, and blinds the image. Conversely, an image in an open space becomes too bright for the eye, because of the excess light, and the eye itself is darkened when looking at it, unable to contemplate it clearly and comfortably. Similarly, the mind cannot effectively grasp, nor memory can show, an image upon which an excessive light is cast": Gesualdo, *Plutosofia*, 16v.

[32] A little further he adds: "In the corners, however, experience teaches me that *loci* can be only two feet apart; and it is necessary that we place some kind of separation between them". *Ibidem*.

[33] "When you are designing particular *loci*, make them face each other: so that standing in the middle, you can see both of them without turning your head [your eyes] around too much": *ibid*., 28v. Whether this turning movement is performed with the whole body, walking around the room, or just with the head standing at the door, it changes from manual to manual, but it is usually specified.

[34] "In this we will follow Peter Ravenna's suggestion: that is, moving from the left side, we follow the Sun's path going towards the right-hand side, forming with our thought the loci with the same order that we would use to write letters: this is the best way to do it": Dolce, *Dialogo*, 66. This metaphor, as we will see later, mirrors that of the mind as a *tabula rasa* imprinted by the seal of the senses.

[35] "And I believe that the reason why our memory presents items from the right-hand side, as well as from the opposite one, is the following: because [our memory] does not follow the order imparted by the movements of our feet, but that derives from seeing the objects with our eyes. These items in fact are not only ordered first to second to third and so on until the last one; they can also be seen from the last one back up to the first. Therefore, once we order the *simolacri*, a sensory-based memory can present the items in one sense or the other, with no effort. Just like the eye can scroll through items in a right-to-left order just as easily as it does left-to-right": Gesualdo, *Plutosofia*, 19v.

> It is good to keep a five feet distance between loci. Truly, Cicero wanted these places to be medium-sized, that is, around thirty feet. But Petrus Ravenna claims that the space in-between loci needs to be five, or even six, feet. And in my own experience, this opinion is the most useful. Because, if the interruption is too wide, mental application is less effective, since additional distance has one spending too much time walking around; just like the eye that, in reaching to things that are too far, risks losing them, because the rays that tie it [the eye] to the object, get scattered around. Conversely, an excessive proximity mixes the images and confuses them, because distinction becomes hard; just like letters that are written too close to each other do not let us read [aloud] with ease.[36]

The ideal, as Gesualdo specifies, is that figures would be at an even distance (predictable), still close enough to permit one to see them all just by turning their head around.[37] The same holds for the order in which these places are reviewed. Some, like Dolce, maintain that the order should be from the left-to-right, thus recalling the metaphor that equates the act of creating *loci* with that of writing:[38] others, like Gesualdo, reclaim the profoundly oral and visual character of the discipline, which keeps order of placement distinct from the sequence of processing.[39] For the same reason, the various spaces that are used as *loci*

[36] Dolce, *Dialogo*, 59. Without going deeper into the formative role of Platonic images, even in the Aristotelian camp it was difficult to achieve a balance between senses and cognition, as Spruit explains: "The ontology of the intelligible species, and its consistency with other endorsed views were hardly ever addressed issues. […] The basic tension underlying these observations is hard to solve: intelligible species are produced on the basis of physically grounded sensory representations; and yet, they are received by an immaterial mind": Spruit, *Species Intelligibilis*, 6-7.

[37] For a reflection on the theories and practices of the chimera as an inner process of combination and/or invention, see Swan, "Counterfeit Chimeras: Early Modern Theories of the Imagination and the Work of Art". In Payne, *Vision and Its Instruments*, 216-237.

[38] "Many say that you need to craft *loci* out of solitary and empty places; but based on our experience, we disagree, and also based on the authority of Peter Ravenna. According to him, it is enough if we see the buildings (in which we have to craft the *loci*) devoid of crowds only one time": Dolce, *Dialogo*, 64. As opposed to Gesualdo: "Let us form the Places when the weather is cloudy; or, during those hours, when the day darkens at night, or when it is just getting brighter in the morning. And let us forever remember them like so, as we saw them the first time we formed them": Gesualdo, *Plutosofia*, 17r. In this quote, it is also possible to imply that the formation of the *loci* happens at the same time as their sensory experience.

[39] "Peripatetics consider sense perception as a process delivering information to be selectively used by the mind. Before making effective use of this information, the mind has to transform it: in the abstraction of an intelligible species the active feature of mind ('intellectus agens') provides the knowing mind, which is also a mental record ('intellectus possibilis') with a cognitive content transcending the content represented by sensory images. Only after the reception of the intelligible species, concept formation and discursive reasoning are possible": Spruit, *Species Intelligibilis*, 8.

communes (usually the edifices containing *the loci particulares*, that is, the signposted spaces where individual *imagines* are placed) need to be contiguous. An interruption in the mental walk and in the visualization it elicits, inevitably breaks the spell and hinders the capacity to remember and connect. The connection between bodily sensations and mental processes is, in short, essential rather than strong.

Embodiment in practice: the loci problem

The visual aspect is crucial for the art of memory, but vision is not the only sense that is present and important. Because of this, there was tension between, on the one hand, a heavy reliance on sensorial stimulation; and on the other hand, a more theoretical horizon in which the senses had but a limited, and controversial role to play, in the workings of the human soul.[40] While the emergence of such themes is not surprising, given that philosophers and theologians were busy with them as well, the same cannot be said of what resulted from this reflection centered on *memoria*. Aristotelian claims regarding the sensory origin of all knowledge are in fact thoroughly upheld. However, there is division over whether and how mind-images are derived from direct experience, or rather from the successive workings of the inner senses, especially imagination (*phantasia*). This oscillation is visible in multiple ways: from questions on how combined images can exist,[41] to discussions on whether it is necessary to first see the edifices empty, in order to use

[40] Bolzoni's observation on how this metaphor changes with the advent of the printing press is very insightful: "These are obviously not neutral metaphors. The art of memory changes deeply, in a fruitful interaction with the realities created by technologies of writing first, and of the printing then. […] It is significant that the most explicit testimonies of such changes are found in people like Dolce, literati who work in close contact with publishers and printmakers": Bolzoni, *Memoria e Memorie*, 16.

[41] As Renaissance scholars start to approach the cognitive sciences, interesting reflections emerge. During her exploration of Rabelais metaphoric language, Banks finds a concept in cognitive neurology that can help explain the different levels of embodiment these Memory Arts authors refer to: "Experiments carried out by Rutvik Desai and colleagues strengthen the view that to understand relatively unfamiliar action-related language we use a relatively detailed simulation, whereas, as conventionalism increases, our reliance on sensorimotor systems is reduced. These findings contribute to a 'graded view of conceptual embodiment,' according to which conceptual representation consists of multiple levels of abstraction from sensory, motor and affective inputs. The top level contains schematic representations that are highly abstracted from detailed representations in the primary perceptual-motor system; these are sufficient for adequate and rapid processing in highly familiar contexts. By contrast, in novel contexts, or when the task requires deeper processing, sensory-motor-affective systems make a greater contribution": Banks and Chester, *Movement in Renaissance Literature*, 85.

them as *loci*, or if it is enough to imagine them as such.[42] As a consequence, in the description of practices and exercises, while in some cases the senses are so present that they seem to linger well after the generating moment, some other times they are relegated outside the "headspace" of cognition entirely.[43]

By comparing these three works, however, some distinct tendencies emerge. As is already visible in the previous section, *loci* and *imagines agentes* respond to different principles. Going back to an ever-present metaphor of the genre, the *loci* are like the blank paper onto which the images are inscribed like writing.[44] The *loci* images thus need to be as neutral as possible, permanent, and reliable, like paper (or wax, or parchment). Whereas the *imagines* have to mimic the ink, and be stark and distinct enough to mark the page. In other words, *loci* need to be assimilated like a background, i.e., always present, but not requiring too much attention to unfold. Conversely, *imagines agentes* need to hit the imagination as hard and quickly as possible, in order to be memorable and unequivocally connect to the designated concept, word, or sentence.[45]

Despite their different goals, the instructions on how to "form" images for *loci* and for *imagines agentes* are at times so similar, that reading the later sections gives a sense of déjà vu. However, a closer look reveals some meaningful distinctions. In all three manuals, in fact, the sections pertaining to the *loci*, compared with those pertaining to the *imagines*, are more explicit in suggesting that direct experience is necessary to provide working memory images. For example, Della Porta, the most radical of the three in affirming this necessity, insists that the senses need to be responsible for the *loci* images,[46]

[42] "When choosing this universal place it is necessary to abide by certain conditions. First, that we inhabit or frequently find ourselves in this place and that we know every last part of it. Let travelers choose for themselves the place where they were born or where they have had some pleasurable experience, because these places often remain impressed in our memory more than others": Della Porta, *The Art of Remembering*, 93.

[43] "Even admitting into the discipline these *personae*, I say that they are analogous to the places (*loci*): since they are formed to support the *imagines*, as usage will make clear; by contrast, the *personae* that are placed daily and that are movable, are analogous to the *imagines* [*agentes*]": Gesualdo, *Plutosofia*, 22v.

[44] "As observed by Aristotle [...] Imagination does not comprehend a similitude that is not proportionate to the thing we have to remember: since there is nothing that can go through fantasia without going first through the senses; and the object that transcends, damages the senses": Dolce, *Dialogo*, 90.

[45] "Our imagination and fantasia thus follow mostly what our external senses apprehend, as the Master said, and as long experience teaches": Dolce, *Dialogo*, 62.

[46] "The faculties were located in the ventricles of the brain [...] around which the 'animal spirits' circulated [...] The data arriving from the external senses (sight, hearing, taste, touch, smell) were unified by one of the internal senses, the 'common sense' (*sensus communis*), which activated memory as well as the active and passive imagination (*vis imaginativa, fantasia*). On the basis of the sensory images thus generated, the intellect derived through abstraction universal

but not necessarily for the *imagines agentes*, which can derive from literature, religion, or any other story.

This sharp contrast in Della Porta's treatment seems to suggest different paths to memorization depending on the goals. The author does not indulge in explanations, and we as readers are left to hypotheses. The job of remembering places, which is recognizable in animals too, could pertain to a lower level of intelligence, to the Aristotelian *anima sensitiva*, needing an embodied experience. Conversely, the formation of mental images through imagination had been at the centre of philosophical debates for centuries. As a result, while the *imagines* were undoubtedly a slippery ground for theoretical speculation, the *loci* could enjoy some wiggle room to present a different idea of cognitive processes that would not necessarily interfere with the tradition.

However, Della Porta pushes his ideas (and his fate) further, even though mostly between the lines. Indeed, he seems to suggest that the processes of memorization needed for the *loci* could be applied to the *imagines* as well. In a later passage, he proposes to populate his *loci* with human figures (*personae*) not in the role of *imagines agentes*, but as an ulterior technique of memory anchoring: the chosen people will then populate the *loci* in neutral form (naked, in a passive pose). Every time that the mnemonist uses the memory palace, they will clothe, position, animate, in a theatrical way "direct", these figures, and make them interact with objects. In this "mental puppet theatre", as Bolzoni defines it (*Memoria e Memorie*, 3), Della Porta strips the *imagines agentes* of some more metaphysical trait: he shifts the universally recognized mnemonic power of human figures in action, the *imago agens* par excellence, towards the fixity of *loci*. In doing so, he also claims for these figures the same characteristics of familiarity he deems essential for the *loci*.

> In the aforementioned places [*loci*], we will situate some people whom we know well, and not whomever we come across or dream up ["come to our *fantasia*"]. We will choose our dearest friends, ten or twenty beautiful women whom we have loved or revered, and others, ridiculous people such as fools and the like, and we will mix them with matrons, noble persons and lowly persons, with young boys and girls and others, and make a mixture of them. It is necessary to know the habits and deeds of all these people fully, along with the things that have happened to them, especially cheerful things. … If we cannot come up with a good number of these, being poor in friends, we will fill the places with common people, reserving every third or fifth place for one of these, so that the memory can stop at them and rest as it tires.[47]

concepts which enabled us to understand the objects perceived; it also carried out its other specific operations, such as subdividing and combining, distinguishing, inferring, deducing, and choosing": Vidal, *The Sciences of the Soul*, 33.

47 Della Porta, *The Art of Remembering*, 97. See also Piro, *Retore Interno*, 126: "At the beginning of the 16th century, scholars in Paris were mostly inclined to the maturing doctrine, according

We do not know whether Della Porta believed in a different acquisition of *loci* and *imagines*, or if he believed in one same embodied process, but was allowed to express this belief only regarding the *loci*. In any case, he is not alone in these oscillations. Gesualdo agrees with his statements: Della Porta is one of his main sources of inspiration.[48]

> From this principle we get this art's method, which aims as making us easily remember sentences, or words, through sensory supports. In the end, the imaginary *loci* are onerous; because memory is doubly burdened, because of the *imagines*, and of the *loci*; whereas, if we have stable *loci*, formed by the senses; the only effort, is that of inventing and placing the *imagines*. […] Since in this art we aim at conferring tenacity and vivacity upon our memory, with the utmost ease: therefore, it is very beneficial, leaving aside imaginary places, and artificial, to form instead in our memory real *loci*, natural or man-made, that we have seen, and understood through the senses, which are the origin and the foundation of the *simulacra*, which pass through the inner senses and come to reside in memory.[49]

Hence, Gesualdo also proposes the necessity of first-hand experience for the formation of the *loci*, offering reasons and details to support this principle. In particular, he justifies this choice of *loci* as a way to unburden the memorizer's mind, already crowded with *imagines*. It is noteworthy how, while sustaining the same radical principles of Della Porta, he does so with a very different attitude, careful to keep his rules within the limits of what is acceptable. He fully uses the manual genre's flexibilities here, in invoking practice as a deciding element, and in cherry-picking his theoretical references. He also takes care not to exclude alternative possibilities to first-hand *loci*, if determined by necessity or preference. This reassuring approach, Gesualdo's belonging to the institution of the Church, and his working actively for a pro-Trent enterprise, made his statements less potentially inflammatory than those of his colleague Della Porta. Therefore, a few pages later, while discussing the formation of imagines, Gesualdo can write:

> Above all, try to have images from things that are known to you, as familiar as possible. Thus, if you have images from real things, stay away from using fabricated ones; and if you have images from things you know, stay away from the unknown ones.[50]

to which there was only one inner sense. Among Italian Aristotelians, influenced by the Greek commentators [Alexander of Aphrodisia, Themistius, etc.] and in general by philological work on Aristotle's texts, the tendency is the same: but the problem of differentiating *Sensus Communis* and *Phantasia* remains".

48 "There can be nothing imaginable, that is not also sensible": Dolce, *Dialogo*, 90.

49 Gesualdo, *Plutosofia*, 12v.

50 *Ibid.*, 48r.

Gesualdo is here endorsing the deep embodiment Della Porta suggested, and pushing it further: he expands it directly into *imagines* territory. This time he does so *in passim*, within a list of miscellaneous rules, thus not as boldly as in the *loci* section.

We understand the importance of such operations when we compare them to Dolce's text, true to Romberch's original, more plain and conservative. His section on *loci* is, of the three manuals, the least insistent on realism in the mental imaginary. Even though he quotes the Aristotelian primacy of the senses in theory,[51] and even though he insists that the senses are the origin of imagination,[52] he then proceeds to ignore, or water down, these premises. In the practices he proposes, for *loci* and *imagines* alike, he keeps suggesting that imagination is suited to the task alone, not needing the support of an active and experiencing body for memorization. In clear but fruitful contradiction, on the one hand he echoes the others, predicating the necessity to "anchor" images to sensory perceptions and experiences, especially for the *loci*. On the other hand, Dolce still maintains the use of entirely imaginary, i.e. not experienced, settings and images:[53]

> Some places are common property, some are private; either way, they can come from nature or be constructed, that is, formed by our thoughts; since we can form *loci* that we never saw

[51] "Therefore, even though this Renaissance allegorical model initially seems oppositional and centralised, there is a complex division of the self into a mass of internal agents, who operate through a coalition of quasi-independent animal and natural processes, and on which reason is dependent. In addition, these agents do not share unified purposes, connections with, or perspectives on the world since they operate on different levels of an epistemological and ontological hierarchy. The assumption of a centralised controller, with which the kingdom model appears to begin is resisted by the recognition of the multiplicity and dispersed nature of the mind…": Anderson, *Renaissance Extended Mind*, 90-91.

[52] Vidal briefly and effectively explains the baseline of the many variations on this doctrine: "The faculties were located in the ventricles of the brain (hence the name of 'cell theory') around which the 'animal spirits' circulated. They were interlinked in accordance with the principle that *nihil est in intellectu quod prius non fuerit in sensu*, that nothing is in the intellect which was not previously in the senses. The data arriving from the external senses (sight, hearing, taste, touch, smell) were unified by one of the internal senses, the 'common sense' (*sensus communis*), which activated memory as well as the active and passive imagination *(vis imaginativa*, *fantasia*). On the basis of the sensory images thus generated, the intellect derived through abstraction universal concepts which enabled us to understand the objects perceived; it also carried out its other specific operations, such as subdividing and combining, distinguishing, inferring, deducing, and choosing. Scholastic psychology in the seventeenth century focused on the acts of the sensitive and intellective faculties in man": Vidal, *The Sciences of the Soul*, 33.

[53] "We can, in our mind, imagine further places from what we have so far described: things that do not exist, fake and imaginary, which have in their part some likeness to the real ones. In the same way that we imagine a mountain made of gold because we have seen mountains and gold, so the parts of different animals, which we deem familiar, we compose into the Chimera": Dolce, *Dialogo*, 69.

> or heard of, based on those we know in reality. Just like the ones that never existed, nor do they exist today, nor will they ever exist in any other place than in our imagination. And that this is easy to do, it is demonstrated by the work of the architects [builders], who, when ordered, produce beautiful and proportioned buildings, which they never saw before.[54]

> Let us go inside and outside (the places), for how much our imagination allows; and let us notice, among the imaginary things as well as among the real ones, what there is (that is, outlining the walls, the entrances, the doors, etc.): this we can do from outside. And if we wanted to also consider the inside of the building, through our person or our *fantasia* (whichever works best for us).[55]

In other words, while *imagines* can be created by our mind or by other people's, this is not always true with the *loci* for all authors. In fact, while Dolce concedes such possibility and even encourages it, Della Porta denies it vehemently; he insists that *loci* need to be experienced first-hand. Gesualdo leans toward Della Porta's position, but also recognizes the option of fabricating places, too. The fact that this disagreement emerges during the discussion of the *loci*, and not of the *imagines*, is noteworthy. Differences in scopes and structure can ignite a reflection on the origin of mind-images: recognition or denial of such distinction, and to what degree, depends in most part on the author's ideology. *Loci* and *imagines agentes* thus are either presented as pertaining to the same mind-forces, to the same inner-sense mechanisms; or else, they reflect two specific processes, relying on different relationships of the inner and outer senses. In both cases, the seed of doubt is planted: is direct experience necessary for knowledge? What is the cognitive role of this powerful grounding into memory provided by one's own embodied experience and attachment?

Theories and embodiment: three strategies

In every manual, the way internalization and anchoring worked, both in the case of sense-derived (*loci*) and in that of book-derived knowledge (*imagines agentes*), depended on a system of beliefs that combined the time's theories with the practical approach required by the Memory Arts. However, it is not easy to parse out the composition of this system. What is striking is not that outer- and inner-senses would give origin to reciprocally comparable, or even identical, entities. The tradition maintained the idea that sensory perception entered the *Sensus Communis* chamber at the front of the brain, where perception was collected and experienced more or less radical transformation through the inner

[54] *Ibid.*, 37.
[55] *Ibid.*, 71.

"faculties" of the mind (or *inner senses*).[56] Thus, it was normal to talk about images travelling from the senses to memory through the various faculties, and then being recalled for reuse and modification. Rather, it is significant how, while treating practices that insist on the distinction between sensory- and intellectually-generated sources, these authors tend to avoid engaging in explanations that bring to the fore the full theoretical consequences (including heresy) suggested by such insistence. This problem, in other words, is acknowledged, but not entirely and clearly developed to explain the multiple processes of memory, despite all three authors being educated in this realm.

It is not, I would argue, a lack of education motivating such theoretically unsatisfactory treatment. Instead, based on a comparison between the three manuals in context, I consider silence, confusion, and compromise, as choices preferred to theoretical clarity. Choices made for survival, surely, as Bruno will learn the hard way soon thereafter. But I argue that this is also a form of negotiation, which allows the Memory Arts to continue to function through multiple contrasting systems of thought. On the one hand were the traditional theories of mind, which allowed for a flexible exchange between senses, thoughts, and mind images. This framework, however, could not explain why some images are internalized more quickly or more solidly than others, and what role the senses play in this equation. On the other hand, new theories emerged in philosophy departments from Padua to Paris. These posited a simplification of the *inner senses* system (from various reductions to a one-chamber brain with unified stimuli),[57] which would give more coherent and unified explanations on the foundational role of the senses in the cognitive system. Such a move however needs inner unity: they so postulate, and thus require, a coherence that was never before needed. One of the consequences of this passage is the confining of sensory interventions to "outside the head": sealing them into the world of matter. Both frameworks (the traditional and the new, the multiplicity and the unity) need to be active for 16th century Memory Arts to stand theoretically. Yet the mediation at the time was far from easy – especially in systems, like academia and post-Trent Europe, that did not aim at reconciling contradictions, but rather at resolving them.

Here the contrast between Dolce's slipperiness, Gesualdo's attempts at normalization, and Della Porta's relative intransigence, can be illuminating. While the latter chooses to

[56] I here kept both the vernacular and Latin where significant. I know it is a bit messy, but the oscillation between correspondence and distance between the two languages is telling of the manual's appeal for theoretical relaxation. In Sirri's edition of the original Italian, this is also on page 57.

[57] Reflections on these metaphors are common among scholars of the Memory Arts. Carruthers's chapter "Models for the Memory" (18-55 in *The Book of Memory*) explains the most common metaphors active in the Middle Ages, especially those referring to various kinds of containers (the treasure chest, the satchel, the arca …). Both Luis Merino Jerez, *Retórica*, 55-61, and Seth Long, *Excavating*, 58-81, instead, focus on the value of writing as a metaphor.

be coherent regarding sensory perception as an origin of knowledge, the other two are not as consistent. Their theoretical explanations tend to be recursive rather than clarifying; this is as typical of the time, as it is strident, especially in an author like Gesualdo, whose awareness of the problem clearly appears between the lines, and even, at times, within them. As an almost inevitable consequence, they do not always cohere in their own theoretical explanations, leaving room for perplexity and doubt. Most importantly, their theory does not always cohere with their practice, with the techniques they recommend. In these cases, looking at the practices can be revelatory of un-theorizable mechanisms that were nevertheless accepted at the time. Not only that, it can also help to understand the rhetorical strategy of the author in mediating between official theory and working ideas.

Dolce's strategic confusion

While the original author of his text, Romberch, wanted to express his political and theological beliefs, Dolce did not desire to, and could not afford to, clash with any authority. His strategy was thus one of suggestion and accumulation. In this excerpt, for example, Dolce insists on the different nature of the matter of memory from that of the senses, right before declaring, as we saw, that imagination and senses are connected:[58]

> Because, just like the image in a seal ring remains in the wax, but the matter of the ring does not, so memory as well receives from the senses (through the sensitive faculty) the image (*somiglianza*), that is, the representation (*dipintura*) without its matter. Therefore, memory is not employed on the thing itself, but rather on its image.[59]

Dolce's theoretical oscillations are reiterated throughout his book; the practices he suggests reflect this, but are inclined rather towards the prevalence of the inner over the outer senses. His form of coherence is thus one of nuanced preference, which allows him

[58] This metaphor is a re-proposition of that dominating Aristotelian theories of the mind, which saw the latter as a neutral place where significant signs would be impressed: "Sense data are impressed, whereas intelligible species are not. Sense data theorists were in the grip of a powerful but ultimately misleading metaphor: the mind as a *tabula rasa* upon which the objects of the physical world leave their imprint". Memory in this instance acts as the particular *place* in the mind that receives these signs; and similarly, theorizing about this is complicated by the fact that sensory input is not the only dataset that memory processes: "The classical doctrine of intelligible species, on the other hand, claims that sensory information is qualitatively processed by the inner senses and the agent intellect; this information is just not 'impressed' upon the mind": Spruit, *Species Intelligibilis*, 15.

[59] Dolce, *Dialogo*, 86.

to hold together the visual creativity of the Memory Arts with their moral pursuit, their necessity of sensory experiences with a strong reliance on an entirely book-learned system of references.

Dolce's confusion is telling: Aristotle's affirmation of the experiential origin of knowledge indeed serves the purpose of the Memory Arts, in some of their parts; while it is an impediment in understanding other parts. Recuperating the original message of the Philosopher, thanks to the time's philological approach, was not a solution for this branch of knowledge, because it would contribute to minimizing, or even eliminating, the ambiguities. Conversely, the tradition of *inner senses* and brain-chambers that emerged around Avicenna's and, especially, Averroes's interpretations, allows for more nuance and, even, fruitful confusion. In other words, the complex and stratified system composed by the body and the inner senses[60] could be a limitation and a frustrating tool for some, but in this, and many other cases, it is a resource as well. The blurred boundaries of many different faculties' tasks, as well as in their superimpositions, allowed the coexistence of opposing priorities with respect to human nature. Moreover, Romberch could stand by his text, which he stated as viable for a generalized public, but that was mostly aimed at knowledgeable, academically-minded people who could argue against him. Dolce's use of this philosophical language instead sounds different. In his book, explicitly written for a large and non-academic public, the heavy philosophical discussion is rendered in an imitation of orality (it is a dialogue, after all) that, rather than making things more legible, covers the contradictions. In a discipline like the Memory Arts, moral and sensory tasks converge, which is especially true in Dolce's case (and Romberch's before him): he insists on this double nature of the art, able to bring intellectual and moral betterment to the readers. It is thus useful, for him, to forego consistency in favor of accumulation.

[60] "Hylomorphism persisted, however, particularly in the university. [...] As far as the concept of soul was concerned, the 'mechanized' vision of the universe and the explanation of physical phenomena in terms of the movements of matter played a major role in dislodging the Aristotelian definition. The rejection of 'qualities' and 'forms' in the natural realm entailed the rejection of the idea of souls in animals and plants. When René Descartes (1596-1650) banished the soul from nonhuman living beings, he performed one of the most radical acts to emerge from the mechanistic reform of natural philosophy in general, and physiology in particular. [...] From an ontological point of view, however, this distinction persisted. The objects of Aristotelian and post-Aristotelian psychologies were different: the soul-form and the soul-mind, respectively. For post-Aristotelian psychology, the human being was indeed a union of two substances, but these substances were joined in a relation quite different from that of form to matter. The union of the body with the soul therefore emerged as problematic, beyond the terms of hylomorphism": Vidal, *The Sciences of the Soul*, 74-78.

Della Porta: wise omissions of a humbler Minerva

At first glance, these manuals follow the traditional doctrine of the *inner senses*, distributed through a physiology arranged after Galen's rule.[61] The diagrams and the explanations accompanying these books show the path of images and thoughts from the *Sensus Communis* at the front of the head all the way to Memory, housed in the farthest chamber at the back of the brain. Medical advice also focuses on this position of the memorial faculty, targeting the area above the nape for compress application and healing movements. However, while the "first entry" of what will become memories is clear in its trajectory (often echoing the Aristotelian *thauma* principle, according to which wonder is the first motor of knowledge), less clear are its successive uses after storage; not to mention in the creation of new ideas and Chimeras.[62]

For instance, as just illustrated, Dolce foregoes strict theoretical coherence. He reassures his reader that his was not meant to be a philosophical reflection, but offers some authorities to provide the comfort of approval for the practices described in the book. Thus, right after having declared Aristotle's truth, he pivots to an inner-generated array of images. These are not only based on, and originated by, but also interacting with, the derivation of sensory perceptions – as if there was no substantive difference. Conversely, Della Porta operates a courageous choice, which he explains swiftly, almost unnerved:

> We shall explain what each of them is [memory and recall] in a style that calls upon a humbler Minerva, so that our rules may be clearly understood. We shall leave off the diverse and difficult opinions of the philosophers who have written on this topic, because this is not the appropriate place for such an analysis. [63]

He is working here in both an offensive and defensive mode. In fact, he calls the opinions of philosophers "difficult", which deems them unviable for a non-specialist text. At the same time, he proposes a description of the cognitive operation, which he protects

[61] "[…] Thus, the seal bestows characteristic of singularity, which then assigns it to the Senses and not to the Intellect; and so Memory pertains to the sensitive faculty, and not to the intellective. And I answer you, that singularity is not exclusively pertaining to the senses, but it can regard the intellect as well; this one in fact is not so restricted to knowledge of the universal, that it cannot know the singular. And therefore, the intellect preserves the object with its contextual actions, and times. Thus, not just in the sentient, but in the intellective part also there is Memory": Gesualdo, *Plutosofia*, 7v.

[62] As Baldriga also states in *L'occhio della Lince*, 133.

[63] Della Porta, *The Art of Remembering*, 89. On Bruno, see Matteoli, *Nel tempio di Mnemosine,* 2019 e Canone, "Phantasia/Imaginatio nella lessicografia filosofica", in Centro per il Lessico Intellettuale Europeo, ed., *Phantasia/Imaginatio*, 239. On Camillo, the main work is still Bolzoni's *Il Teatro della Memoria* and her introduction to *L'idea del Theatro*.

from accusations by stating it as a rough simplification. The lack of complexity thus, and not the content *per se*, is at fault here:

> Like an excellent painter, the imagination [*imaginatio*], which is located in the head, has the power through its many windows [*speculis*] – the eyes, the ears, the nose, and the other senses [*reliquisque sensibus*] – to create a portrait of material things [*hausta rerum sensilium simulacra*], and uses its brush to sketch in the memory, which stands like a canvas before the imagination. So, when we have the will to remember something, we remember what we want through the intellect, which promptly goes to the memory [*intellectus ope, qui illico ad memoriam occurrens*] and there contemplates that ideal painting [*idealem picturam*], as if it were present before our eyes [*ac si prae oculis essent*].[64]

The vernacular as well as the Latin texts often refer to the senses, and ostensibly to the outside senses. The imaginative faculty (*imaginatio*) then controls the act of "painting" performed in memory, which is like canvas. This painting act portrays material and sensible things, creating *simulacra*, mind-images. The recuperation of these is performed by the intellective faculty (*intellectio*), which Della Porta describes as quick and able to penetrate memory, in order to recuperate the information orderly stored in there. A multiplicity of actors thus intervenes in the process; while memory is quite passive and static. *Imaginatio* and *intellectio* perform the cognitive functions, moving, connecting, and translating different stimuli: both real stimuli, and their representations. This system explains simply the complex operation of retrieval of data from material reality on the one hand, and from memory on the other. However, it does not explain how images reach memory when they are not produced by the senses: does the "painting" look different when it represents a house we lived in, as opposed to a coat of armour we only know through ekphrasis? Does the intellect retrieve the picture more quickly if the painting highlights some elements rather than others? Given Della Porta's insistence on the sensory origins of *loci*, it is somehow disappointing that he would not express explicitly his theory of mind. However, in giving the readers the above-mentioned explanation, he only describes the memorization process when generated by the external senses. This gave such a process a central role that the reader was then authorized to retain as an explanation for all other memory phenomena. In the case of such an erudite and polemic author, we cannot think of ignorance or forgetfulness as reasons for this one-sidedness. Conscious of the inflammatory character of his views, Della Porta probably was being prudent: suggesting and omitting, when declaring was dangerous.

[64] Della Porta, *The Art of Remembering*, 89. See also Matteoli, in Clericuzio and Ernst, *Le Scienze*, 394: "[In the Renaissance,] building memory images became one with crafting metaphors. The exclusivity of the former private and personal vocabulary, constituted by inner scenes, became a communal patrimony, belonging to a popular collectivity whose language was just as iconic and vision-based"..

Gesualdo: the authority to redefine cognition

Gesualdo attempts to answer these questions as well. He, too, uses a metaphor for memory, that of the seal with wax, rather than that of painting.[65] Tellingly, the main difference in using this metaphor is that, if the passivity of memory is confirmed, the actions of imagination and intellect are removed. This has the effect of making the stimulus pass more directly from the outer to the inner senses:[66] even more so than the classical doctrine would dictate:

> It is not a contradiction that Aristotle in his booklet on Memory says that Memory is a passion in the First Sensitive, that is, the Sensus Communis; because here, the Philosopher reasons around sensitive and organic Memory. You tell me that the Philosopher himself says that the simulacrum is imprinted (imprints itself) into Memory, like an image would be imprinted by a seal-form of the sensory object. 5v.

Gesualdo explains the process in terms similar to those of Della Porta, referring to the sense-derived memory images as *simolacri*. He, however, adds the explicit mention of "second-degree" images formed from the elaboration of such *simolacri*, which Della Porta chose not to do.

> I will say two things. First, how this memory is made inside of us. Second, if we can form memories beyond sensory acts. About the first point: the *simulacrum* (memory image) is

[65] I cannot expand here on this important aspect, but reflections on the composition and role of communal stories and references are very present in this age. The need to systematize a collective cultural patrimony is extremely visible in enterprises that the printing press disseminated widely, like emblem books, commonplace books, etc. For its applications to memory, see Bolzoni on the conscious efforts by the Venetian Academy and by Orazio Toscanella in particular (a milieu Dolce was part of), which were twofold: on the one hand, the aim was the expansion of shared, collective knowledge; on the other, the facilitation of the assimilation of such knowledge (*The Gallery of Memory*, especially chapters 1 and 5).

[66] This aspect echoes the Medieval tradition that saw memory as a quintessentially emotional matter, as described by Carruthers here: "Memories themselves are *affects* in the soul and mind. In ancient philosophy, that property classified memory with the emotions and meant that each memory involves some kind of emotion; each memory is thus to an important degree a physiological, bodily phenomenon. It also meant that there is no such thing as an emotionally detached memory. As understood by the early scholastic philosophers, Aristotle taught also that *every memory is composed of two aspects*: a 'likeness' or 'image,' which is visual in nature (*simulacrum*), and an emotional resonance or coloring (*intentio*), which serves to 'hook' a particular memory into one (or perhaps more) of a person's existing networks of experience". *The Medieval Craft of Memory*, 8 (original italics). Here Carruthers refers to "bodily" differently than Della Porta does: the latter in fact specifically refers to the distinct power of the senses in creating impressions, while the former points out how the whole body plays a role in producing the passions.

> made into us mostly from the senses, who receive the sensory images (*simolacri*) and then, through those same senses, like through windows and doors, they pass into the inner chambers of the Sensus Communis and Memoria, where they settle. … As to the second point: our memory not only receives the *simolacri* which were wholly in the senses. But also those imagined in our Cogitative faculty, which can, contemplating those in our memory, connect a *simulacrum* with another and craft from it new images, which then get stored back into memory.[67]

However, his choice to delve into this question, instead of dismissing it like Della Porta, complicates Gesualdo's task. More coherent than Dolce, he attempts to hold together the moving parts of a composite, often contradictory tradition. Regardless of Gesualdo's preparation (which was at once wide and extremely focused on didactic practices), such a task was hard enough for academic philosophers,[68] even without taking into account the contribution of empirical data. He knew that by connecting the senses and memory so directly, theoretical problems would arise. Hence, he tried to explain how it was possible that memory images pertain to the intellectual part of the soul, and therefore to the eternal and divine, rather than to the sensitive, thus mortal, part.

This is especially complex because the mark of the sensitive realm is the particular, that is, the contingent quality of the object (time-bound aspects, individual traits, etc.), which is definitely a strong feature of memory images.[69] After some complex explanations, however, he frustratedly admits that there is no ultimate solution but to renounce the ambition of a satisfying theory to this practice. Similarly to Della Porta, he relegates the task of these reflections to the philosophers' arena. Contrary to Della Porta however, he does not distance himself from the reflection, but rather from the expected approach of a philosopher. Indeed, Gesualdo explicitly, and wittingly, defends his right to be unfaithful to Aristotle, when needed:

> And even if Aristotle's doctrine was completely contrary to this notion, I do not know if you want to be among those Philosophers, who do not think that any other Truth can be found, outside that coming from the mouth of Aristotle. If so, then remember that Aristotle himself in his Ethics (1,6) says that he prefers truth over the philosopher, and not the other way round.[70]

67 Gesualdo, *Plutosofia*, 7v.

68 "These structures, in other words, are not informative. They are *inventional,* both in the sense of putting things away and in the sense of discovering things": Carruthers, "The Poet", 887.

69 "Early modern probabilists used traditional categories and a well-known vocabulary to grapple with profoundly novel challenges": Tutino, *Uncertainty*, 2. For the specific ways in which traditional concepts and terms were repurposed, see her chapter 1, "Building Blocks", 1-26.

70 Gesualdo, *Plutosofia*, 6r.

Notably, the need to distance one's position from traditional doctrine emerges around the definition of memory as deeply connected to the material world through the senses. In these books, such connection is certified by personal experience and by the collective practice of many other mnemonists. Gesualdo, when expressing this need, speaks as a cleric and an educator, from within secure hegemonic positions. It is important to restate, in fact, that Della Porta's perplexities and difficulties might echo Gesualdo's, but could not be expressed as liberally; and that Dolce's commercial mentality did not allow him to efficiently separate Romberch's pre-Trent anti-Lutheran positions from his own literary and popularizing intents.

Conclusions

These three positions on the interactions between outer and inner senses reflect the authors' approaches to the management of information, that is, together with the resulting moral betterment, the ultimate goal of the Memory Arts. If we set theoretical expressions alongside practical advice, these books are representative of three disparate solutions to the problem of information overload faced by 16th century readers. The Memory Arts' peculiar approach is that of modifying one's inner system of reference, so as to enhance one's capacity to receive, register, retrieve, and utilize information. Della Porta leans toward a strong recognition of the role of the personal in this. His focus, in line with countless memory manuals,[71] is highly individualized, based on information derived from one's internalized knowledge. What is uncommon of Della Porta, however, is the insistence on utilizing information that is not just familiar to the individual, but especially retrieved through first-hand experience. His theoretical stance backs up this view by radicalizing the idea of memory as a derivation of sensory experience.

Dolce, on the other end of the spectrum, presents a system in which the personal and the communal are fused together. In an operation that echoes Camillo's and Bruno's,[72] he proposes that the inner structure organizing knowledge be derived from literature and religion.[73] In other words, he, even more explicitly than Romberch, envisions a scaffolding made largely from the same material that will be arranged on it. This superimposition of personal and collective knowledge requires a theoretical apparatus, down-

[71] For the persistence and modalities of the five rhetorical "parts", see Ward's study "The Medieval and Early Renaissance Study of Cicero's *De Inventione*" (1-75); for memoria in particular, see Carruthers's "Rhetorical *Memoria* in Commentary and Practice" (109-143); both are found in Ward and Cox, *The Rhetoric of Cicero*.

[72] For a study of the *Phoenix*'s success, see Merino Jerez's "The Fortune of Peter of Ravenna's *Artificiosa Memoria siue Phoenix*".

[73] I am quoting the translation by Maggi *et al.*; the pages referenced are relative to this text. However, in Sirri's edition of the Italian original, this text is on page 70.

playing the difference between information acquired through direct experience, and that coming from interacting with cultural products. The oscillations shown by Dolce's discussions of theory give way to such a position, where sensory and imaginative stimuli are not starkly distinguished in origin, nor in goals.

Finally, Gesualdo's stance is one of mediation: he recognizes the importance, for the interaction with knowledge, and the production of it, of both an individual's biography, and of collective stories, myths, beliefs.[74] In this context, the discussion on *loci* might be designated to host this divergence of opinions because it was less theoretically dangerous. *Imagines* were clearly the product of imagination, involving superior faculties pertaining to elevation, be them spiritual or artistic endeavors, or both. *Loci*, instead, were just part of an operational, animal, part of cognition, that was assigned to the movement of the body. This topic's lower position in the hierarchy might have encouraged the inserting of an empirically observed fact -we remember familiar places with more ease if we have known them with our bodies- into a theory of cognition. Acknowledging this theory emerge, despite its unsatisfactory elaboration, and despite having to read it somehow between the lines, is still meaningful. It signals the (possibility of an) awareness of embodied cognitive mechanisms in the 16th century. Such awareness in turn could have determined the development of various solutions, which required a different approach to knowledge. One solution, that by Dolce, relied on the powers of the mind alone to conjure all the tools needed to build, retain, and utilize knowledge. Its counter-theory, portrayed as essential by Della Porta and recognized as a game-changer by Gesualdo, involves the body as part of cognition, a powerful one too, that should be used to our advantage.

Adding a layer, these various solutions are expressions of an emerging problem of Modernity. The Memory Arts in fact try to manage a mass of knowledge expanding beyond the individual's traditional reach. In all three instances, what surfaces is the problem of connecting two elements: the person learning and elaborating, and the information to internalize. To solve this problem, these three authors all try to augment the power of the *loci* system. Dolce does so especially by expanding, in width and reach, the mind palace itself, which will then be able to accommodate a larger bulk of information. This however can only be done by stretching beyond the experience of the self, and utilizing the products of collective culture. On the contrary, Della Porta bridges the gap through an empowerment of the individual over the information. The personal is not only sufficient, but also stands alone as the only tool that is at once strongly attached to the self, and flexible enough to adapt to a great variety of information.[75] Finally, Gesu-

[74] In Sirri's edition of the original Italian, this is on page 57.

[75] This was the norm in Medieval mnemotechniques, as Carruthers explains: "In monastic teaching […] the ordinary practice was to construct a wholly fictional building, rather than to use an

aldo distinguishes the superior strength of personal experience in creating attachment, on the one hand; and the highly flexible and adaptable character of cultural products, on the other. What all of these solutions highlight is the difficulty of reformulating a relationship with knowledge from within the drastic changes of the 16th century.

Challenged by the fast, overwhelming growth of data, and by the progressive loss of physical presence as a prerequisite of knowledge (intellectual, political, social, etc), these Renaissance authors turned to the body. They defined the lived experience, the sensory stimuli, as unequivocally part of the thinking process, even fundamental to it. The experience of the world thus, which philosophers were starting to propose as the basis of knowledge, is also embedded in cognitive operations, in the most personal, contingent, and situated way possible. From Della Porta's insistence on the use of biographical data, to Dolce's suggestion that we internalize Dante's cosmology, these reflections invite us to consider how, in this system, a disembodied, impersonal rapport with information seems unthinkable. Conversely, a participation in knowledge, and not just its use, was considered the natural goal: a deeply, almost absurdly personal connection, through one's life and body.

In these books, it is precisely this embedded, embodied experience, developed in its own terms, that allows humans to interact meaningfully with an unprecedented amount of data. the Memory Arts techniques make this data relevant and present to every single individual: they *de facto* incorporate it into each mnemonist's knowledge system. Such an approach to knowledge suggests an early modern awareness of the role of the body in cognition; one that had been lost for centuries and is only now being (re)discovered in Western *scientiae* – mostly, cognitive sciences and neuroscience. Significantly, this awareness emerges in specific texts, pertaining to a moment of epistemic (and political) crisis, as well as to a practice-oriented genre, less prestigious but still theory-informed. Today, the presence of such embodied-ness tends to go doubly undetected, as it is elusive in the time's sources, and alien to our body-less ideas of cognition and knowledge. However, the small, but excellent group of scholars who devoted their efforts to this topic, testifies that once individuated, the presence of the body in knowledge is robust and pervasive. With this essay, I hope to encourage more research towards mapping the still largely unexplored influence of embodiment on disciplines and works of the period – as well as its legacy on our own interpretations of human nature and of its possibilities.

actual one. When invoking a building plan as the device for a compositional structure, monastic writers did not customarily use the monastery buildings that they lived in daily, but rather laid out a typical, exemplary construction […] At the same time such buildings are not 'wholly imaginary', in our sense of that phrase. They exist as words in a text (the Bible) that can be 'revisited' often, and in this way made fully familiar and habitual": *Craft of Thought*, 238-239.

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