

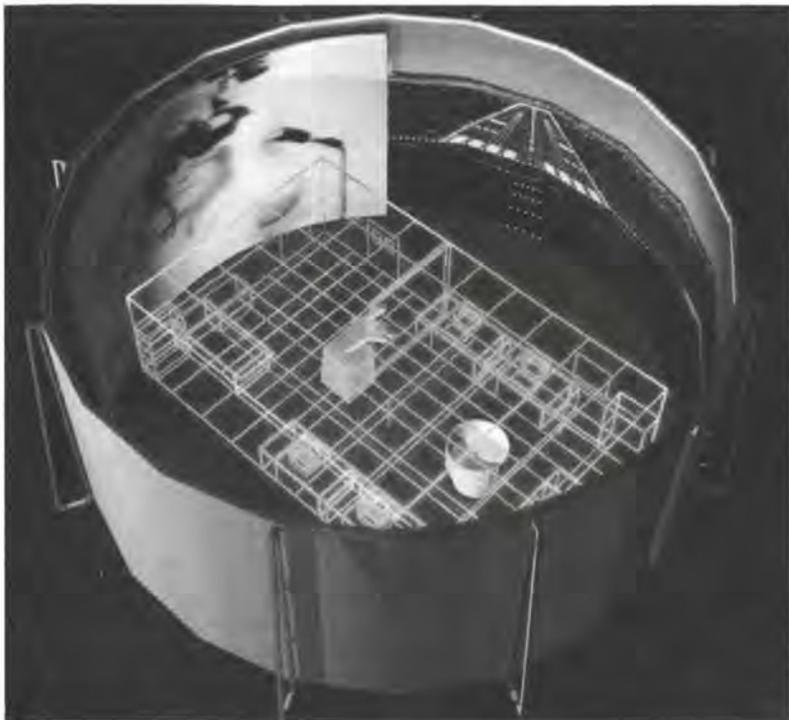
# Memory Theatre in the Digital Age

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<sup>1</sup> A documentation of these and many more computer-based memory theatres can be found on [http://peter-matussek.de/Pro/F\\_05\\_Synopse/Frameaufruf.html](http://peter-matussek.de/Pro/F_05_Synopse/Frameaufruf.html)

For centuries, the Memory Theatres of the Renaissance have languished in oblivion, but today they appear more relevant and contemporary than ever. Especially many software developers, web designers and multimedia artists have explicitly referenced the memory theatres of Giulio Camillo (1550) and Robert Fludd (1619). To name just a few: *Memory Theatre One* by Robert Edgar (1985) – an interactive computer animation for the Apple II; *The Theatre of Memory* by Howard/Bevan (1991) – a Hypercard-Stack for the Apple Macintosh; *Memory Theatre VR* by Agnes Hegedüs (1997) – an interactive environment with panorama-projection (fig. 1);

■ Figure 1. Agnes Hegedüs, *Memory Theatre VR* (1997), ZKM Karlsruhe (with permission of the artist).



*Camillo – Memo 1.0. The Construction of Theatre* by Emil Hrvatin (1998) – a computer-aided performance; *Postmodern Theatre of Memory* by Ronald T. Simon (2000) – a website; *Theatre of Memory* by Kate Robinson (2001) – a 3D-animation; and *World Memory Theatre* by Peter Oldfield (2009) – an exhibition architecture with *mixed reality* projections (fig. 2).<sup>1</sup>

All these computer-based memory theatres were inspired by just a few pages from a single book: Frances Yates' *The Art of Memory* (1966). Yates, who was working at the Warburg Institute, did not deal with the question of representing knowledge in the digital age. She was writing about the history of mnemotechnics within the rhetorical tradition, and in that context briefly discussed the forgotten memory theatres of Camillo and Fludd, thus rediscovering them for a future generation of virtual memory architects (Yates 1966: 135–74, 310–54). How, we might well ask, did this scholarly book by a mid-century art historian come to have such an enormous influence on many current media artists and web designers? What made it so attractive for them? And how is it possible for someone like Giulio Camillo, who created a rather strange and enigmatic memory system out of the occult and alchemistic thinking of his time almost 500 years ago, to be seen as a contemporary of the *Facebook* generation (as the recent conference title of the P*S*i, 'Camillo 2.0', suggests)?

Let us have a look first at Camillo 1.0, the historical character, to find out how he could have become so fashionable. We know little about him, and what we do know does not fit very well into our conception of someone who

contributes to *Wikipedia* or posts on *Facebook*. He lived from about 1480 to 1544 and left behind nothing more than a few manuscripts and a lot of rumours. He studied the humanistic sciences in Venice and Padua, probably without completing his examinations, and taught at a number of different schools in Rome, San Vito, Udine, Bologna, Reggio and Modena.

Obviously he was eager to escape this rather dull existence as a teacher of the so-called 'studi minori'. He turned his interests to kabalistic and hermetic writings in search of alchemistic and occult knowledge. He also managed to find some wealthy patrons, among them the King of France. With this support, he was able to lead an impressive and luxurious lifestyle, and it is said that he grew very fat. And although he spoke a rather crude Latin, he supposedly did it with such hypnotic persuasiveness that he soon enthralled the people around him.<sup>2</sup>

The report of his death, given by a friend, highlights his astounding character: after a typically opulent dinner, the nearly sixty-five-year-old is said to have had such excessively strenuous intercourse with his wife and his daughter that he literally breathed his last (the source does not specify whether the daughter was biological or adopted).<sup>3</sup>

So far, we have no good reason for seeing any appeal in Camillo as a consultant for Web 2.0



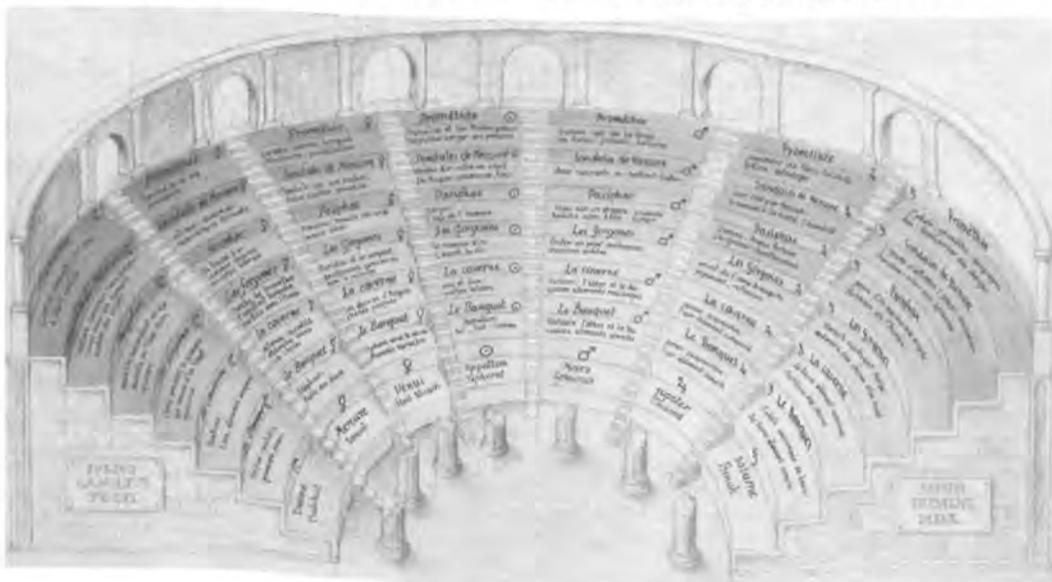
■ Figure 2. Peter Oldfield, *World Memory Theatre* (2009), floor plan with projection example (with permission of Oldfield).

practices. If someone like him tried to friend us on *Facebook* we might well refuse. And if we examined his scientific reputation, we would likely not want to have him as a contributor to *Wikipedia* either. Instead of pleading for *Common Source*, his main work, the treatise *L'Idée del Teatro* (Camillo 1550), which instructs the reader on how to build the *Teatro della Memoria*, purports to be secret knowledge that may not be made public. In the introduction he claims that the things he has to say should not be spoken about in public and are to be communicated only through enigmatic means.

Furthermore, Camillo's theatre provoked polemics from the humanists, who compared Camillo's theatre to the great works of

■ And if the oft-referenced anecdote found in Camillo's treatise is to be believed, his charisma was such that it could even tame wild animals. He himself relates the story thus: *And to the author of this Theatre it happened that, finding himself in Paris, at the place called 'La Tournelle', in a room with many gentlemen at some windows looking out over a garden, a lion, who had escaped from his cage, came into that room. Drawing near to him from behind, with its paws, took him without harm by the thighs, and with its tongue, proceeded to lick him. And at that touch and at that breath, himself being overturned, and having seen that animal, all the others having fled, some here and some there, the lion humbled himself to him, almost in the act of asking forgiveness.* (Camillo 1970: 39/261)

<sup>1</sup> Marginal note in A. Neri (Keller 1991: 205).



■ Figure 3. Reconstruction sketch of Giulio Camillo's *Theatro della Memoria* (taken from [ianjwpollard.wordpress.com](http://ianjwpollard.wordpress.com) <<http://ianjwpollard.wordpress.com>>).



■ Figure 4. Titian, *Allegory of Prudence* (1565), National Gallery London (public domain).

contemporary rhetoricians and found it lacking. As Eugenio Garin explicitly noted, the theatre's construction was seen as a mere 'parody of all that the Renaissance theorists had rigorously attempted' (Garin cited in Rossi 1983: 119n8). Dolet and other Parisian scholars referred to Camillo unceremoniously as a 'quack' (Erasmus 1938: 479, fn).<sup>4</sup>

If we set his outrageous personality and his pretentious attitudes aside, however, and focus just on the machinery of his theatre, we find some aspects that are worth considering. His treatise gives only vague indications with regard to the architecture, but from descriptions in contemporary documents we can deduce that it was a wooden structure in the style of the Vitruvian theatre in which at least two men could stand upright. So it might have looked like this drawing by Athanasius Kircher (fig. 3):

<sup>4</sup> Other accusations against him were ones of pretentiousness and charlatanism (Keller 1991: 208).

In this theatre, however, the spectator was not seated on the risers around the amphitheatre looking down onto the stage, as in the classical Vitruvian theatre. Instead, he stood on the stage and looked up at the seven tiers of seats. Here is where we find the objects of memory represented by images derived from the philosophical mainstream of the Renaissance: the Neoplatonism resurrected by Marsilio Ficino and Pico della Mirandola in the late fifteenth century. The objects are a mixture of motifs from Egyptian and Greek mythology, from cabbala and astrology. The pillars in the inner circle are described by Camillo as the seven pillars of Solomon's House of Wisdom and each is assigned to the seven planets then known: Moon, Mercury, Venus, Sun, Mars, Jupiter and Saturn. Each of these seven planets reigns over one of the seven segments of the theatre, which in turn describe the seven levels of the cosmos:

1. On the lowest level reside the planets themselves – as the spiritual foundations of creation.
2. On the second level we find the basic elements of creation, the *materia prima* (represented by the mythological image of the divine banquet of Oceanos after Homer's tale).
3. On the third level Camillo placed the mixed elements, that is nature (illustrated by the Homeric cave of the nymphs).
4. Here Camillo goes from the macrocosm of creation to the microcosm of man by representing his inner being, his mind and soul (image of the Gorgon sisters).
5. On the fifth level we find the human body (Pasiphae with the Bull).
6. The sixth level is reserved for activities in connection with biological self-preservation (Mercury Putting on his Sandals).
7. The seventh and highest level, finally, represents man's productive activities – from craft via the fine arts up to science (Prometheus with a Burning Lamp).

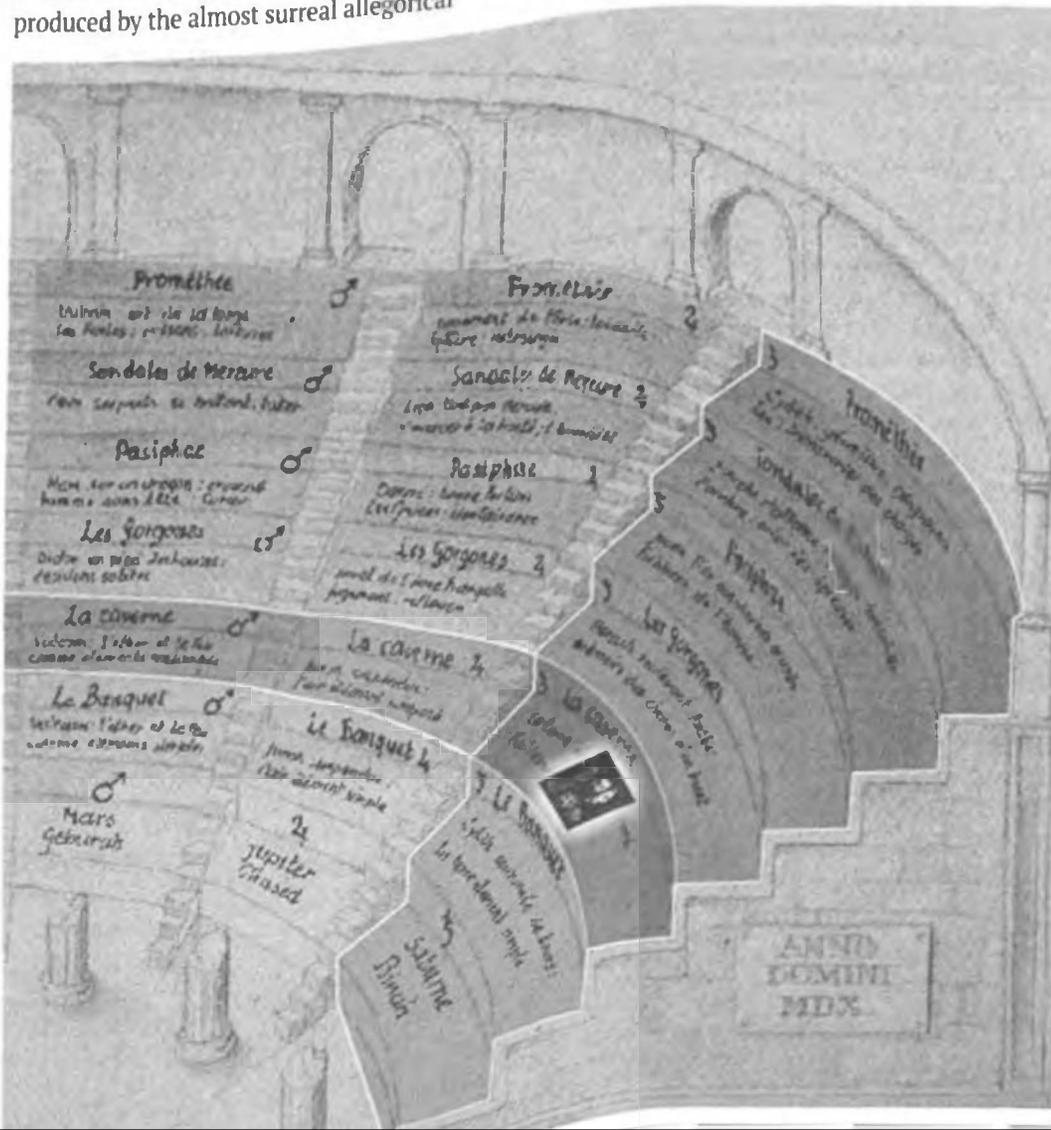
We know that the images which filled the

tiers of the *Teatro* were painted by well-known artists like Francesco Salviati and Titian. Despite the fact that the *Teatro* itself was destroyed, at least one image has survived: Titian's *Allegory of Prudence* (fig. 4). From this painting, commissioned by Camillo, and from the description of the theatre within the context of Camillo's treatise, we can derive some of its basic characteristics.

First, the example of Titian's painting demonstrates that the images in Camillo's theatre do not lend themselves to easy interpretation. Their meaning is not immediately obvious but rather ambiguous and enigmatic. The images therefore demand mental activity from the spectator. This mental activity is not just logical, like solving a riddle. It takes as its starting point the strange effect produced by the almost surreal allegorical

constellation of human and animal faces. In his treatise Camillo describes his effort to find images '*che tenga sempre il senso suegliato & la memoria percossa*' (Camillo 1550: 11). Frances Yates translates this passage as 'keep the mind awake and move the memory' (1966: 142). Wenneker is closer to the original meaning when she translates: 'always stimulate the mind and jog the memory' (Wenneker 1970: 205). But in view of Camillo's intentions, one must go even further and translate the expression '*la memoria percossa*' as 'shake up the memory'. Camillo does not only refer here to the rhetorical tradition of the Romans, who recommended memorization with the aid of *imagines agentes* – actuating images, that is, images that act upon the mind of those adept at mnemotechnics (Cicero 55 B.C.: II, 358; *Rhetorica Ad Herennium*: III, XXII, 37).

■ Figure 5. Position of Titian's painting within Camillo's theatre (sketch by the author).



Within the context of his *Teatro*, the *imagines agentes* must also be actively set in motion within the mind of the spectator – like a chess player who is thinking through different combinations – in order to create ever-changing meanings. To that end, Camillo refers to another, newer tradition, the Lullistic *ars combinatoria*. How this is implemented in his theatre can once again be demonstrated by Titian's painting, which not only stands as an *imago agens* on its own, but furthermore demands mental activity by virtue of its specific position: it is situated at the intersection of the cave level and the segment dedicated to the planet Saturn (fig. 5). As already mentioned, the cave level stands for the manifestations of nature that result from the mixing of the elements. Within the range of the Saturn segment, nature is characterized in accordance with the primary attribute of this planet, which is, according to the astrological tradition, a melancholic temper. Thus, where the cave level intersects with the Saturn segment, we take a melancholic view of nature, which is to say, we see its transience, its decay over time. The positioning of Titian's painting at this location therefore gives the viewer a specific clue as to its interpretation: *Allegory of Prudence* should be seen as an allegory of the passage of time.

In his treatise, Camillo makes clear that this aspect of time is completely different from our habit of measuring time by the spatial position of the planets. We divide the years into months, and the months into days, by the cycles of the waxing and waning moon, and we know the hour by the position of the sun in the sky. Time under the aspect of the intersection of the cave level and the Saturn segment, however, is not perceived in the outer dimension of here or there, but of the inner dimension of what is now, what has passed or what will be. This trinity of past, present and future is represented in Titian's painting by the three heads: a young, a middle-aged and an old man. The spectator must now ask himself how this trinity is related to that of the three animal heads. Camillo gives us some hints:

That of the wolf signified time past, because he already devoured it. That of the lion is the present (if one can give the present), because present troubles thus encountered, strike terror in us, which the face of the wolf would do, if it overcomes us. That of the dog indicates future time, because in the manner of a fawning dog, the future always promises us something better. (Camillo 1554: 46)

With these hints, however, Camillo's theatre remains enigmatic and leaves much for the visitor to mull over – which was obviously Camillo's intention. Not content to merely maintain convention by simply recording the cultural memory of his time, he wanted to 'shake up' the memory in order to attract our attention and to make us create meanings of our own.

Researchers disagree on the question of what Camillo's conjunction of a neoplatonist *ars memoria* with an *ars combinatoria* might mean and what its function was meant to be. Three distinct interpretations have emerged:

1. Frances Yates argues that Camillo designed his cosmology in emblematic images and symbols, because he believed in their magic powers. According to the neoplatonist – hermetic tradition, man's mind could become one with the divine spirit when he acquired 'all conditions in heaven and on earth' through memorization. Yates thinks this is intended to go beyond merely a *cognitive* unification with God. Rather, she claims, Camillo attributed a miraculous power to the images, the energy of which was supposed to be passed to the visitor of the theatre. This would also explain why he shrouded his whole project in the fog of mystery.
2. Later research has sharply criticized Yates' thesis of magic (Leinkauf 1993: 5; Kaube 1998). With her fixation on occult aspects she is said to have emphasized Camillo's irrational traits disproportionately to the detriment of the rational features of his thinking. In this view, Camillo should be placed in the universal scientific rather than in the occult tradition and seen as an encyclopaedist, like

many others of his time. The encyclopaedists focused on techniques by means of which the world's knowledge could be collected, organized and portrayed. Accordingly, they set up archival collections such as libraries and museums. Camillo's use of the word 'teatro' is not necessarily at odds with this characterization. During the sixteenth and seventeenth centuries 'Theatrum' was frequently – not to say excessively – used in book titles to indicate different forms of presenting knowledge (Schramm 1990: 215). In its most common use, 'Theatrum' stands for a collection of knowledge objects, emphasizing its encyclopaedic nature. To name just a few of many such titles in existence: *Theatrum Instrumentorum et Machinarum* (Besson 1578), *Theatrum Scholasticum* (Alstedt 1610) and *Bibliotheca sive Theatrum concionum* (P. a Braitenberg 1625). The conjunction 'or' (sive) in the last title makes it quite clear that 'Theatrum' is just another word for archive here.

3. If Camillo had in essence intended primarily to design a universal storage mechanism for scientific knowledge, it remains incomprehensible why he chose to encode his representations in such a manneristic way. The emblematic character of the images requires a complex deciphering process. From an encyclopaedic point of view, that is not a very efficient way of conveying information. But it is efficient for another purpose: namely, to activate the imagination of the visitor. To put it in rhetorical terms: it is not the *dispositio*, the collection of various subjects of study, but rather the *inventio*, the creation of ideas, that was fostered by Camillo's *Teatro*. When we apply rhetorical terms to Camillo's work, however, we should bear in mind that Camillo himself did not belong to the formal rhetorical tradition nearly as much as Yates and others have assumed. In Camillo's view, it is the Platonic understanding of *memoria* that is essential: the *anamnesis*, that is, recollection of truth within oneself. According to Plato, *anamnesis*

arises when habitual knowledge, the *doxa*, turns into *aporia*, a 'shaking up' of this habitual knowledge, which is in line with Camillo's main intention of '*la memoria percossa*', as we saw earlier.

If we accept this notion, we can hardly refer to Camillo as an encyclopaedist. Rather, Camillo wants to *subvert* the conventions of cultural memory, the routinely established meanings, in order to initiate active processes of recollection in the minds of the visitors to his theatre. To that end he offers images that are open to interpretation, so that visitors are instantly motivated to fill the semantic gaps with their own imaginative constructions of meaning. This understanding of *inventio* pervades the whole text of Camillo's *Idea del Teatro*. Again and again the treatise focuses on the words 'creazione', 'generatione' and 'produzione' (Keller 1991: 206). The authorization of the recipient to be the producer of his own play of memory images corresponds to the inversion of the architectural functionality of the classical theatre: by putting the visitor on the stage and the memory images in the tiers, Camillo turns the visitor into a performer of his own recollection, which becomes a staged process of active acquisition and recollection of knowledge.

In view of this inventive perspective, the intention behind Camillo's *Teatro* can certainly appear as a fruitful avenue of exploration for the *performative turn* in our own culture of memory. Camillo's project was embedded in a historic setting that – not unlike our own time – suffered from the hypertrophy of memory storage. In Camillo's time, the tradition of the *Memoria* had fossilized into scholasticism – in a 'summa' literature of canons and registers, collections of *sententia*, *exempla* and *florilegia* (Hajdu 1936). Of course, today's storage options are technically quite different, but the problem is similar: we face a complex accumulation of externalized data that are not accessible for vivid recollection.

But things have become more difficult for us: we cannot describe our current knowledge in terms of a centred cosmological order



■ Figure 6. Robert Edgar, *Memory Theatre One* (1985). Photo and screenshot by the author.

any more (cf. Winkler 1997) – and we have lost the metaphysical foundations which once guaranteed that images could have transformative powers. Consequently, Robert Edgar, the author of the first digital Memory Theatre, formulated the decisive question: ‘What, I wondered, would an art of memory be like today, when no cosmology can summarize even a single text?’ (fig. 6). Edgar does not transfer the historic model naively one-to-one; rather, he reproduces the inventive momentum in the self-referential context of today’s information technology: the visitor is made to move within the intermedial space between writing and image, where there are both intertextual and inter pictorial gaps in meaning. The spectator must read *between* the lines, see *between* the pictorial elements, and fill the empty spaces with one’s own imagination. Others, like Agnes Hegedüs (1997) or Janez Jansa (the artist formerly known as Emil Hrvatin 1998, 1999) follow similar principles of creating ‘Leerstellen’ (gaps) – in the sense of Iser (1976: 284ff.), whose poetologic concept has in the meantime been taken up by art history (Kemp 1985) and film theory (Branigan 1998: 15f.) – in order to activate the imaginative powers of recollection.

But the activating potential of such gaps can

only develop under the assumption that there is some coherent totality that they interrupt. So the question still remains: What could represent this totality in place of the former cosmology that is no longer valid?

The ‘docuverse’ – as Ted Nelson (1981) coined it – of our days is the so-called *Web 2.0*. It has not only no centre; it also has no order that could be conceptualized in any way. While the data bases and electronic archives of the first generation operated with fixed searchable structures (thesauri, indices), so that the information consumer was given precisely the output that had previously been put in by the information producers (Matussek 1988; 2001), the memory structures of the second generation allow for active processing of user input (*user-generated content*) and the ways it is presented (*user-driven design*). Everyone who is using the web today is leaving traces that can be taken as valuable information for others. It begins with recommendation systems based on search profiles (‘customers who viewed this also viewed’), goes further over systems that allow editing and annotation (*wikis*, *social tagging*) all the way to ‘Collaboratories’ (Olson et al. 2008) that support communication and data management related to specific projects and allow far-flung scientists with intersecting interests to find one another through research profiles, thus paving the way for new and innovative scientific pursuits.

So the consumers or users of *Web 2.0* are at the same time producers of new content and are therefore called ‘prosumers’ (Toffler 1980: 53–61, 483–92; Blätzel-Mink/Hellmann 2010) or ‘produsers’ (Bruns 2008). Much as Camillo put the visitor on the stage in order to turn the memory objects situated in the tiers into actors in the performance of his memory, so the producer of *Web 2.0* becomes the director of his own data play. What is missing here, however, is usually the *inventive* character of Camillo’s conception, which he achieved through the ambiguation of his memory images, thus turning them into actuating images, *imagines agentes*, that ‘shake up’ the memory. In order to achieve this under current conditions, the producer

must be placed in a position to question the representations of cultural memory offered by the World Wide Web. Technically, this is entirely possible. But it would mean that we would have to give up our consumer-oriented attitude to information and develop a tolerance for ambiguity. In short, we must get a better grip on our craving for data than Giulio Camillo had on his appetite for rich food. In this respect, a *Camillo 2.0* remains a paradox.

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