

# PEPLOS

**The Dissimulating Façade** The ephemeral event of the Olympics mediated to a global audience is mirrored by the buildings of the Olympic village and their surfaces that communicate with the urban public. This thin layer has become the powerful screen to which architecture is often reduced and yet it is still a layer of potentials.

*"Irrational thoughts should be followed absolutely and logically."<sup>1</sup>*

Author: Niall McLaughlin

In 2007 London won the bid to host the 2012 Olympics. In part, the bid was successful because of a commitment to use the infrastructure of the games to create a new urban quarter. It was important that this great transient event would have a permanent impact on what was perceived as a run-down part of the city. The decision to use the Olympics as a spur to develop an enormous area of the city is a manifestation of a particularly modern condition. This six-week festival, experienced by billions of people on television around the world, was to leave behind a place, which would be the permanent home for a large urban population. The fugitive, flickering event witnessed on countless screens was intended to leave a residue of permanent built form that will frame people's lives in the future. It must become ordinary, embodied, and close-knit.

The long-term ambition to build a grand new urban realm was naturally telescoped by the immediate requirement to have a working development in place by 2012. The Olympic Development Authority (ODA) exported their obligation to build houses for athletes by employing the experienced private developer Lend Lease to carry out the work. The developer took on the money and time risks and expected to make a profit on their investment of capital and expertise. Naturally they wanted to build the houses as cheaply and quickly as possible in a way that maximised their margins. However, the ODA also wished to promote its own values through the process whereby the development of the Olympic Village would be a shining demonstration of good design in which many young architects could showcase the best of British talent. In light of this, the ODA created an overseeing committee, the Design Review Panel, to regulate the developer's management of the process so that these values could be guaranteed.<sup>2</sup>

The Design Review Panel, working with the Architecture Foundation, carried out a competitive selection procedure to choose eighteen architectural practices to design the athletes' housing. Lend Lease did not want to work with such a number of practices all trying to solve the same problem, so instead they chose four architects out of the group because they had demonstrated previous experience in the large-scale production of urban housing for commercial developers. This small group designed the "chassis" for all 2800 homes in order to produce a standardised internal layout, structure

and services for each of the blocks across the whole 27-hectare development. However, the Design Review Panel wanted to create a greater urban variety as well as a broader range of opportunity for architectural practices, so they insisted on a larger pool being used. In response, Lend Lease instructed their architects to appoint other practices as sub-consultants to design façades for the already standardised chassis.

This arrangement illustrates a coming together of cultural aspiration and rational management. On the one hand, the celebration of athletic achievement is seen to have its correlative in celebratory built form but on the other, the prominence of the development necessitates that it is produced in a way that exposes the final client to the lowest financial risk. It is evident that one aspiration requires a celebration of particularity and difference, while the other leads to a highly normative system of design delivery. Social modernism is characterised by this kind of marriage of capital and social values in which capital is used as an engine for growth but it is moderated to embody social aspirations through legislation, governance and specification. The hobbling of the free operation of capital through legislation in order to protect social values creates a particular working tension in the development of buildings that is comparable to two characters running a three-legged race.

When Glenn Howells, one of the chassis architects, asked us to participate as sub-consultants on his team we accepted. We recognised that the commission to design only the façade of a preordained building core-form offered an opportunity to deal with a very clear example of a condition that is increasingly common in building construction – the separation of design and construction into an abstract system of component tasks and the precipitation of the representative part of architecture onto the thin layer of the building's perimeter. We were reminded of Kenneth Frampton's characterisation of a contemporary dilemma.

"Modern building is now so universally conditioned by optimised technology that the possibility of creating significant urban form has become extremely limited. The restrictions jointly imposed by automotive distribution and the volatile play of land speculation serve to limit the scope of urban design to such a degree that any intervention tends to be reduced either to the manipulation of elements predetermined by the imperatives of production, or to a kind of superficial masking, which modern development requires for the



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facilitation of marketing and the maintenance of social control. Today the practice of architecture seems to be increasingly polarised between, on the one hand, a so-called high-tech approach predicated exclusively on production or, on the other, the provision of a 'compensatory façade' to cover up the harsh realities of the universal system."<sup>3</sup>

## Le Corbusier's Hymn to the Parthenon

There is a new, project management-led, risk-averse culture that is changing the nature of construction in the UK. Innovative forms of procurement put an increased level of responsibility for the completion of construction documents onto the contractor and the specialist. The corollary of this is that the role of the architect in determining the final design, during detailing and construction, is diminished. Buildings are increasingly conceived of as assemblies of approved, manufactured products, rather than individually crafted entities. The diminished new role offered to architects has the effect of distancing them from both the user and the maker. The traditional role of the architect in overseeing the design and construction will be delegated to management specialists, who focus on isolated particles of the whole reality of the building. It is, in effect, the application of Taylorism to the design process.

Taylorism is a broad range of scientific management techniques applied to manufacturing, associated with the nineteenth century engineer Frederick Winslow Taylor who pro-



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posed the Taylor System. He advocated an analysis of work processes leading to the division of labour into discrete standardised entities that could be completed with maximum efficiency. The role of integrating these tasks belonged to a new echelon of workers known as planners whose job it was to synthesise the divided components into a new unity. It seems clear that the managed division of the architectural conception of the buildings in the Athletes' Village into a broad master plan, detailed masterplan, followed by chassis, façade and detailed component design, each carried out by different practices and integrated by a team of project managers, represents the promotion of Taylorism from manufacture into design itself.

The ideological aspect of Taylorism was very attractive to an emerging group of avant-garde architects in the 1920s. They saw the systematic organisation of labour in the production of buildings as an essential component of the modern Zeitgeist. Le Corbusier first read Taylor's *Principles of Scientific Management* in 1917 and gradually became convinced of the rational underpinning of this systematic approach. He advocated that "in order to BUILD: STANDARDIZE to be able to INDUSTRIALIZE AND TAYLORIZE,"<sup>4</sup> Corbusier, Gropius and others saw it as the architect's task to conceptualise mechanical and manual processes and synthesise the manufactured particles into meaningful built form. In the Taylorised process Corbusier wrote, "a strange foreman directs severely and precisely the restrained and circumscribed tasks."<sup>5</sup> What they did not appear to see was that the same process of division and specialisation could equally be applied to their own activities. The "strange, precise, severe foreman" need not be an architect. Architects with their manifestos, aesthetic cults and liberal training might not be suited to the dispassionate management of a systematic process. Architectural design could itself be divided, specialised and procured at the lowest unit cost for every operation.

The famous pairing in Le Corbusier's *Vers une Architecture* of the Parthenon with an automobile invites us to find a common spirit between the conception of this ancient temple and the perfection of a modern wonder of engineering. The Parthenon is a machine for moving the emotions "la machine à émouvoir."<sup>6</sup> In his description, they are both products of selection. The car is a systematic assembly of machine-manufactured parts, each optimised by rational processes. The Doric Temple is also an assembly of basic components such

1 West elevation, athletes' housing, olympic village (Photo: Niall McLaughlin Architects)

2 Le Corbusier's pairing of the Parthenon with an automobile, *Vers Une Architecture*





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3 Archibald Archer, *The Old Elgin Room, 1819*

4 The Parthenon Stones in the Duveen Gallery

5 Fragments of the cavalry in a grid formation (Photos 5–9: Niall McLaughlin Architects)

as columns, entablatures and metopes; they equally have been perfected through a process of selection and specialisation.<sup>7</sup> Le Corbusier made another drawing of the Parthenon in *Vers une Architecture*. He drew the horizon and the dark silhouette of the Acropolis. The profile of the trabeated form of the Parthenon is set against the luminous backdrop of the sea. It is at the centre of a broad horizontal stripe that passes right across the drawing. This isolated figure is his "pure creation of the mind".<sup>8</sup> With these images, Le Corbusier strips the Parthenon of its complex authorship, its entanglements in the loam of its origins, its finely negotiated relationships with its situation and its identity as the built manifestation of rituals. He replaces it with an abstract system of parts held up against a generalised idea of nature. For him, the spirit of Taylor and Henry Ford is alive in the Parthenon, "a product of selection applied to an established standard".<sup>9</sup>

### Mrs. Coade's Manufactory

By the time Le Corbusier idealised the Parthenon it had become a ruin, stripped of most of its carvings and left isolated amidst the wrecked remains of its previous setting. The arrival of the Parthenon Stones in London, following their removal from the Parthenon under instruction from Lord Elgin, coincided with a crisis in the debate between original figurative sculpture and architectural form. Just as individually commissioned monumental sculpture was disappearing from public buildings, mechanically reproduced casts were becoming more technically sophisticated and more common. The success of Eleanor Coade's *Artificial Stone Manufactory* on the South Bank of the Thames from 1769 onwards is testament to a thriving industry in mechanically produced ceramic stoneware. This change in both cultural attitudes and technical capacity was reinforced and complicated by the writings of JJ Winckelmann, who held that the way for the modern age to achieve greatness was through literal imitation of the Greeks.<sup>10</sup> Joseph Rykwert, observing this phenomenon, suggests that the Parthenon carvings were seen as nonpareil and therefore incapable of improvement.<sup>11</sup> He writes: "At the same time, mechanically produced casts were becoming increasingly common and accepted by architects as a near antique surrogate."<sup>12</sup>

Nash's original development of the villas around Regent's Park set the standard, for better or worse, for a form of urban development based on thin housing stock clothed in a scen-

ographic layer using the mechanical replication of antique sculpture in cast-stone and stucco. John Summerson, paraphrasing Rasmussen, describes Nash's villas as "not only a dream of antique architecture" but "just as much a finance-fantasia over risk and profit."<sup>13</sup> These new developments in urban design, initiated in Paris and London, mark a significant shift in the relationship between building stock, public space and the way in which meaning was represented. They are associated with changes in society emerging from the Enlightenment. New building types were needed to cater for the boom in commercial and administrative activity and they required a form of architectural representation that set them apart from the old idea of the city centred on the court and the church. The wholesale import of an idealised Greek culture and the mechanical replication of its representations was consistent with a culture that linked commercial realism with a desire to emulate a perceived golden age in public life. Here is an early manifestation of the hobbling together of cultural improvement and bottom-line methods.<sup>14</sup>

The ease of manufacture of mechanically produced decoration made it accessible for all kinds of house building in the rapid development of London. Redgrave, in his 1851 *Supplementary Report on Design for the Great Exhibition*, wrote about the "sickening monotony"<sup>15</sup> of decoration produced by machine. His most telling comments relate to the relationship between cheapness and excellence.

"It is this merely imitative character of architecture which so largely contributed to decorative shams, to the age of putty, papier mâché, and gutta-percha. These react upon architecture; and, from the cheapness with which such ornament can be applied and its apparent excellence, the florid and the gaudy take the place of the simple and the true."<sup>16</sup>

So, when imitation, produced cheaply, creates "apparent excellence", it is a sham. The queasiness at the heart of this proposition touches a key aporia in the development of Modernism. The period of the Enlightenment and the early Industrial Revolution are characterised by the application of rational systematic thought to the natural and human world. The figurative tapestry woven of images, stories and received truths that was stitched back into a hinterland of ancestral authority and had underpinned society is replaced by abstract reasoning, which does not in itself yield an embodied alternative. What resulted was the sense of a flight into emptiness. In architecture, the agreed external order,

whether religious or natural, which a building could imitate, no longer had implicit authority. This created a tendency for architecture to appeal, not to a fixed external correlative, but to its own materials, processes and procedures. This is how something of apparent excellence can be described as a sham. What it lacks is integrity in how its materials were handled in the process of its becoming. Meaning is something turned in on the thing itself.

### A Great Blankness

The design and construction of the athletes' housing was an attempt to express certain dilemmas associated with modern building culture. There is an ideal of a society that draws upon its own local resources to make buildings through shared labour and consequently these buildings manifest the possibilities and limitations of available materials and represent commonly held ritual practices. This persuasive concept was cultivated by Goethe in the late eighteenth century and developed into a coherent system of assumptions by nineteenth century architectural writers like Pugin, Ruskin and Morris. The power of the idea lay in its resistance to the abstract, deracinating character of social modernism, which was beginning to emerge in the Industrial Age from 1800. As the systems of production and consumption became increasingly detached from the lives of ordinary people, the apparent coherence of this preindustrial model was held up as an emblem of resistance. Since the industrial manufacture of goods disrupted fundamental human habits, these newly manufactured artefacts were perceived to be false and, in contrast, works using traditional craftsmanship and natural materials were assumed to have a truth-telling capacity.

These contradictions are often concealed in the twentieth century manifestations of Modernism because the literal attachment to traditional materials and manual manufacture was replaced with an intoxication with industrial techniques. However, many aspects of the original assumptions had been sufficiently internalised that they seemed self-evident and beyond contradiction. The rules and syntax for design with industrial materials contain an older order of assumptions that are rooted in a romantic critique of social modernism. Structural integrity, truth to materials and the built manifestation of place are treasured although they interrupt the free deployment of goods and labour central to social modernism.

Avant-garde architects of the 1920s were enthralled by the scientific analysis of manufacturing espoused by Taylor among others. They believed engineering to be rational and implicitly truth-telling because of its perceived scientific basis. The abstract, dispassionate analysis of materials and labour processes was bound to yield an authenticity in buildings that allowed them to escape the entanglements of historicism. Buried in this ambition was an assumption that buildings and cities produced by rational processes would yield a society amenable to rational management. The romantic assumption that work produced by skilled handiwork from materials that lay close at hand had a truthful quality was conflated onto the new infatuation with engineering

processes and industrial materials. The medieval mason and the modern engineer were both heroic types of their own times, far removed from architects in thrall to aesthetic cults.

Goethe's figure of the medieval master mason embodies an imagined resolution of two closely interlinked problematic aspects of representation. In the first, architectural representation was conceived as a showing out of the intrinsic properties of construction. The grammar of representation was evolved around a manifestation of possibilities and limits relating to environmental and constructional matters. The advent of new industrialised materials, processes and systems created a crisis because it gradually undermined the natural limits that gave rise to the grain and texture of older buildings. The relationship between built form and constructional limits began to erode. The second crisis belongs to the stability of external representations. The Enlightenment dissolved the fixed external order to which all figurative representations could refer. The shared cosmic, social and political order became fragmented and it was no longer possible for buildings to carry representations that situated them within an indisputable framework. Looking to the future in 1846, Karl Bötticher foresaw a "great blankness."<sup>17</sup>

During two decades at the start of the twentieth century, we witness an almost complete abandonment of external figurative representations in favour of a manifestation of the intrinsic properties of construction. Instead, the building form was expected to directly manifest the rational processes and undisguised materials required for its own construction. Perfect transparency became a convention for perfect truth. By telling the truth, they represent nothing other than themselves, but this creates a tautology – I am what I am.

If buildings underwent a crisis of identity, so too did the architect. When Le Corbusier imagined the strange foreman directing tasks, he created a figment to stand for the unspoilt intellect at the empty place of origin, able to speak truthfully about rational processes. The problem is that Le Corbusier was immersed in metaphors. In identifying himself with the strange foreman he embodied these paradoxes. He was both the perfectly rational agent of objective order and the weaver of myths, transparent and yet alive with associations. The instability of the relationship between transparency and meaning was loaded onto the figure of the architect. Le Corbusier did not attempt to resolve this dilemma. Instead he suppressed it by creating an ecstatic synthesis; the truth-telling architect, stripped of figurative baggage, employing only abstract management processes to embody the values of a wider community. This was not sustainable. It is a figure highly vulnerable to the operations of social modernism. Soon enough, the activity of architectural design itself became subject to oversight by managers and planners who made a higher claim to dispassionate analysis.

### The Edgeless Carousel

For our Olympic project we chose the dispersed fragments of the Parthenon because they embody these difficulties. Le Corbusier saw the Parthenon as the refined coming together





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6 Digitally scanning the fragments of the frieze.

7 The 3D digital scan.

8 The 3D surface routed into high density foam blocks.



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### The making of the panels

In order to gain consent for the project, we contacted Ian Jenkins, the Keeper of the Stones, at the British Museum. He acknowledged that there was no copyright and arranged for us to get nocturnal access to the Duveen Room, where the stones are kept. I became distracted by one particular horseman whose hidden leg reappeared behind the horse to show the palm of his foot facing the viewer under the horse's belly.

Of course Ian Jenkins knew this foot and its only other partner on the other side of the frieze. Seizing his opportunity, he started to persuade me to abandon my conceptual schemes and to lose myself in the horses. "I know you have lots of ideas Niall, but the people of London will love the horses."

Professor Tom Lomax and Chris Cornish digitally scanned the chosen fragments of the frieze. They used a standard projector to cast gridded and striped patterns onto the stones. A tripod mounted SLR digital camera recorded the patterns crossing over the surfaces. This data was relayed back to the laptop where a 4D Dynamics programme converted it into legible 3D digital surfaces. The scans were pieced together using Rapid Form software.

The files were edited in our office. It was necessary to work out a viable ratio between the depth of the relief and

the surface of the panel. The new panels are ten times the surface area of the older stones but the depth of relief available was the same. We altered the model to get rid of any inward sloping surfaces on the upward-facing edges, to avoid weathering problems.

The digital information was converted into tool paths for a CNC routing machine using Master CAM software. This modelled the 3D surface onto high-density foam blocks. The positive relief panels were assembled into storey-high panels and used to make rubber latex casts – the negative.

The precast panels were made using a concrete mix specified to closely match Portland Stone. Each concrete panel was cast with one horizontal and one vertical section of the framing grid attached. Thus the production process undermined the conventional separation of frame and panel.

Once on site, foam insulation was attached to the back and they were hung using metal brackets. We had little idea what the panels would look like once they were seen on the scale of the building. I arrived for the first time before dawn. As the sun rose, it cast oblique light across the north façade and the array of horsemen seemed to switch on like a projection. An hour later the early sun had moved away and the horses were like faint grey tracings on the concrete.

of separate fragments, honed to perfection by abstract selective processes. For him it was an ancient emblem of a synthesis he imagined could be made possible in a new age of reason. We see the contemporary power of this building, not in its becoming, but in its dissolution. The deep, contingent connections of community and place that allowed this building to emerge and change through generations were broken when it was treated as an abstraction. It was idealised and deracinated all at once and, broken into pieces, it entered the modern age. In their detached state the fragments had enormous power to carry new significations. Siteless, they were endlessly duplicated and used to stand in for an ideal of synthesis in an industrialised society predicated on the precise and calculated separation of things from the mesh of their becoming. The nineteenth century architects, who made London anew, adorned their plain housing stock with gimcrack casts of these antique sculptures, creating an absolute

separation between the intrinsic properties of the construction and a representational system embodying the aspirations of an emerging middle class. "Nothing can be more noble or magnificent and at the same time so absurd" John Soane said of Nash's caryatids on Whitehall Palace.<sup>18</sup>

We digitally copied fragments of the cavalry on the stones and arrayed them randomly in a grid formation on the façade of the athletes' housing. By subjecting these figures to the matrix of the grid we intended to suppress their original rhythmic linear organisation. We were looking for a quality of weightlessness, distance, even eeriness, in the way that they hovered between windows, balconies and the ordinary stuff of London apartment life. The Ionic frieze on the Parthenon establishes a clear linear development existing in time with a marked beginning and an end. Our lost troop of horsemen process endlessly, hypnotically, as if on an edgeless carousel. We wanted them to attest to the proposal that

architecture does not need to suppress paradoxes. It can represent them.

The Panathenaic procession was an event dedicated to dressing the cult statue of Athena with a veil called the "peplos". The frieze depicting the procession begins with a man dressing himself and ends with the folding and putting away of the ritual garment. All along the procession people are handling, arranging and adjusting their clothing. At the climax of the event, the goddess Hera extends her arm to hold out her veil.<sup>19</sup> For Semper, the underlying frame of a building is dressed, or bedecked, in a fabric which bears representations of the hidden construction and the ideals of the society that brought it into being. In dressing ourselves, we show what we would like to seem to be. The modern avant-garde conceived of an impossible fictional garment for buildings, it was perfectly transparent so that they could seem to be what they truly are – "off with your coats and be what you seem."<sup>20</sup> This denies what Semper knew and what theatre enacts; we make masks and representations and we become what they are.

Architects working today are doubly bound. The fiction of transparency, or honesty, is more and more difficult to sustain in a system where technical demands delaminate the building's materials into increasingly specialised layers and where Taylorised management separates design into discrete particles of expertise. At the same time, there is no stable external order of figures that can claim to embody the ideals of an increasingly attenuated society. I suggest that the contemporary architect must rely on a form of irony in order to practise. Fernand Halryn describes irony as "a representation of reality whose eventually fictive nature I recognise, but which I decide to employ as if it corresponded to reality."<sup>21</sup> In conjuring the horsemen on a screen we do not claim that they embody a better, prelapsarian age; in arranging them within a grid we offer no authority to origins or order. Any architect today might ask how to continue making pieces of the world without a common consensus about what that world should represent and the answer might be, in the words of Samuel Beckett, "you must go on, I can't go on, I'll go on."<sup>22</sup>

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<sup>1</sup> Solomon LeWitt, "Sentences on Conceptual Art", *Art-Language Vol. 1 No. 1* (May 1969), p. 11. From Rosalind E. Krauss, *The Originality of the Avant-Garde and Other Modernist Myths*, Cambridge, Massachusetts 1984, p. 255.

<sup>2</sup> This was the procurement structure when NMLA were appointed. In the summer of 2008, the public-private partnership between Lend Lease and the ODA ended when Lend Lease was unable to raise the capital, due to problems in the banking market and concurrent doubts about the strength of the housing market. To rescue the project the government stepped in to finance the shortfall, using part of the Olympic Contingency Fund. Source: <http://www.guardian.co.uk/uk/2008/jun/20/olympics2012-politicsandsport>

<sup>3</sup> Kenneth Frampton, "Towards a Critical Regionalism", in: *Labour, Work and Architecture, Collected Essays on Architecture and Design*, London 2002, p. 78.

9 The panels casting shadows in oblique light



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<sup>4</sup> Mauro F. Guillén, *The Taylorised Beauty of the Mechanical Scientific Management and the Rise of Modernist Architecture*, Princeton/London 2006, p. 32.

<sup>5</sup> Le Corbusier, *Towards a New Architecture*, New York 1986, p. 275.

<sup>6</sup> English translation in: Le Corbusier, *Towards a New Architecture*, New York 1986, p. 211.

<sup>7</sup> Richard A. Etlin, "The Parthenon in the Modern Era" in: Jenifer Neils (ed.), *The Parthenon, From Antiquity to the Present*, Cambridge/New York 2005, p. 376.

<sup>8</sup> Le Corbusier, *Towards a New Architecture*, New York 1986, p. 218.

<sup>9</sup> *Ibid.*, p. 133.

<sup>10</sup> Barry Bergdoll, *European Architecture 1750–1890*, Oxford/New York 2000, p. 15.

<sup>11</sup> Joseph Rykwert, *The Judicious Eye: Architecture Against Other Arts*, London 2008, p. 73.

<sup>12</sup> *Ibid.*

<sup>13</sup> John Summerson, *Georgian London*, Harmondsworth, Middlesex 1978, p.185. Summerson is quoting Rasmussen's description of the Adelphi in *London, The Unique City*, Harmondsworth, Middlesex 1960.

<sup>14</sup> Barry Bergdoll, *European Architecture 1750–1890*, Oxford/New York 2000, pp. 43–44.

<sup>15</sup> Richard Redgrave, "Supplementary Report on Design" in: *Reports by the Juries*, London 1852, from: Harry Francis Mallgrave, *Gottfried Semper: Architect of the Nineteenth Century*, New Haven/London 1996, p. 202.

<sup>16</sup> *Ibid.*, p. 203.

<sup>17</sup> "The principle of Hellenic and Germanic Architecture and its Relevance to Contemporary Architecture". Speech given by Karl Bötticher on 13 March 1846, celebrating the anniversary of Schinkel's birthday.

<sup>18</sup> Joseph Rykwert, *The Judicious Eye: Architecture Against Other Arts*, London 2008, p. 391.

<sup>19</sup> Sue Blundell, "Parthenon Frieze to star in the London Olympics", in: *Classical Association Newsletter*, June 2012

<sup>20</sup> Friedrich Nietzsche, "Untimely Meditations", from: Daniel Breazeale (ed.), *Cambridge Texts in the History of Philosophy*, Cambridge 1997, p. 84.

<sup>21</sup> Fernand Halryn, *The Poetic Structure of the World: Copernicus and Kepler*, Translated by D.M. Leslie, New York 1993, p. 21.

<sup>22</sup> Samuel Beckett, "The Unnamable", in: *The Three Books*, New York 1994, p. 418.