MARTA PIECZARA*

LABYRINTH GAME

GRA W LABIRYNT

Abstract

The notion of labyrinth is often a subconscious reference to the perception of a path travelled by a human across space. The labyrinth game played by an architect with the architecture's user relies on sensibly leading the user's steps towards the intended direction, on inviting him to enter certain spaces and on refusing him access to those which are reserved for another group of users. Becoming conscious of this game's full potential is crucial as it helps to guide the user's steps in a far more discreet way than placing signposts.

Keywords: labyrinth, game, difficult peregrination, confused footpath, knot, the path's selection, distribution principles, simplification and impediment, denial of access

Streszczenie

Pojęcie labiryntu stanowi nierzadko podświadome odniesienie do postrzegania drogi pokonywanej przez człowieka w przestrzeni. Labiryntowa zabawa architekta z użytkownikiem architektury polega na świadomym kierowaniu jego kroków w zamierzoną stronę, na zapraszaniu go do jednych miejsc oraz na odmawianiu mu dostępu do tych, które są zarezerwowane dla innego rodzaju użytkowników. Uświadomienie sobie potencjału tej gry jest cenne, ponieważ daje możliwość sterowania krokami użytkownika w bardziej dyskretny sposób niż stosując drogowskazy.

Słowa kluczowe: labirynt, gra, utrudniona wędrówka, pogmatwana ścieżka, węzeł, wybór drogi, zasady dystrybucji, uproszczenie i utrudnienie, odmowa dostępu

* Ph.D. Arch. Marta Pieczara, Institute of Architecture and Planning, Faculty of Architecture, Poznan University of Technology.

1. The term

Since the time when architect Daedalus was commissioned by King Minos to design a labyrinth, a prison to the mythic Minotaur, the notion of labyrinth has rooted deeply in the human collective unconscious. Available in most encyclopaedias, the definition of labyrinth describes it mainly as "a system of more or less tangled paths among which one leads to the target" [1], but also as "an edifice composed of numerous rooms and passages arranged in such a way that once inside it is impossible to find the way out." [2] The etymological origin of the word "labyrinth" alone evokes broad discussions among archaeologists and semiologists. Some theories derive its beginnings from the word "labrys", signifying a double-headed axe, considered to be Daedalus' invention and found in many forms in the excavations at Knossos [8, p. 58], whereas other theories point out its relationship with the word "labra", the primary meaning of which would be "a cave, a mine composed of numerous drifts and corridors" [8, p. 58–59]. Paolo Santarcangeli has proposed his own and a very interesting hypothesis of the discussed term's origin. It would actually emerge as a conjunction of the word "labra" (a cave, a mine) with the prefix "inda", reserved for designating children's games. "Labrinda", and subsequently "labyrinthos", would therefore signify "the cave game" or "the mine game" [8, p. 61]. This game, which consists of challenging human's spatial imagination, has taken various forms across the history of mankind. "There are no limits to the labyrinth and the appearance it takes in a given epoch, in a particular social context, is always an expression of a certain style, of a certain way of living" [8, p. 42].

2. The question of style

Like architecture, the style of a labyrinth's graphic representation is therefore an expression of the epoch. The oldest known type of meander drawing, called the "Palace" sign, was used in ancient Egypt to seal, inter alia, the belongings of the deceased monarch being buried [8, p. 72]. The same motif, brought up to a larger scale, also served as a principle of planning palaces, temple complexes, and tombs. The Egyptian labyrinth was characterised by its strictly geometrical design and by a very high level of complication, with an extensive network of corridors, numerous cul-de-sacs and many dangerous traps. These were all meant to prevent an intruder from finding his way back to the exit and, by doing this, to protect the sanctity enclosed within the labyrinth's centre. And, in accordance with the religious principles shared by the society of ancient Egypt, which believed in the monarch's divinity, this sanctity was often represented by the body of the deceased Pharaoh.

In other civilisations the labyrinth is often reduced to a two-dimensional drawing, the centre of which can embrace, for example, the tribal chief's house, like for the Zulu people [8]. In the Hindu and the Tibetan tradition, in turn, the labyrinth drawing is associated with the tales of life's peregrination, dotted with obstacles and inevitably leading towards death and rebirth. The graphic representation of this peregrination obtains its most artistic shape in the form of mandala, but was also present in the indigenous cultures of Oceania and, on

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[1] *Wielka Encyklopedia Powszechna*, PWN, Warsaw 1965.
[2] Littré E., *Dictionnaire de la langue française*: „Édifice composé d'un grand nombre de chambres et de passages disposés tellement, qu'une fois engagé on n'en pouvait trouver l'issue."

the other edge of the world, among Mayan and other Indian people. In the latter cases, the labyrinth serves as a formal representation of a journey to the world of the dead or to Hell [8].

The images of knots and tangles, to which the labyrinth drawing is conceptually related, find their particular form of graphic representation as arabesque, typical of Islamic art. Modelled on the world of plants arabesques or strictly geometrical interlaces are usually drawn with a single, continuous line, which loops or bends repeatedly and, at the same time, rigorously, revealing the mathematical precision of the Islamic artists.

Metaphoric references to the labyrinth viewed as a magical sign or to its underlying concept of a complicated system built of rooms and passages, which has anchored deeply in our collective mind, are not foreign to the society of today. Besides its frequent use as a graphically intriguing symbol, like for example in Alfa Romeo's advertisement from the 1960's, the labyrinth continues to be more than a formal inspiration. For architects, in particular, it constitutes a subconscious reference to the path walked by an individual in space. While designing space, we naturally trace his steps, with a special regard to where he turns, where he will have to stop, and where will he direct his sight at that moment. Such considerations form one of the fundamental design principles and they directly affect the rules of distribution.

3. Network of distribution

The labyrinth game that an architect plays with the architecture's user mainly relies on a conscious leading his steps towards the intended direction, on inviting him to enter certain spaces and on refusing him to access those which are reserved for another group of users. At the same time, the direction the user takes automatically leads his eyes towards a determined perspective where he will see a view worth attention and remembering. Carefully arranged by the architect, this view will evoke certain feelings in the user. Permanently inscribed in his memory, these feelings will then become integral parts of his personal map of imagination representing the space he travelled through. This phenomenon becomes, in turn, a foundation for debating phenomenology as well as psychology of space. Both these domains remain nowadays in the focus of society's attention, constantly concentrated on one's individualism as well as on the need to consolidate human relationships.

Narrowly related to the architectural type, the principles of distribution in a building are generally based on an analysis of functional connection and are one of each design's foundations. Properly resolved, the network of distribution ensures a user ease in moving through space. In a building designed with a careful regard to this issue we need neither signage nor arrows in order to find its main entry or its entrance hall. At first glance, it seems that this is our intuition that leads our steps accurately to the place we desired to find. But in reality, the easiness of reaching the target is due to the countless hours of thought the architect has sacrificed so that he can ably lead us through the labyrinth of a designed building. He discreetly guides our steps and, at the same time, he restricts access to these areas which are designated for other users. Moreover, he urges us to contemplate the spaces we walk through. The architectural labyrinth game does not, therefore, aim at getting the user lost. On the contrary, its authentic goal is to most efficiently lead him through the projected spaces, directing his attention to the most attractive viewing axes and to the neatly designed interiors. It seems best to investigate a few examples.
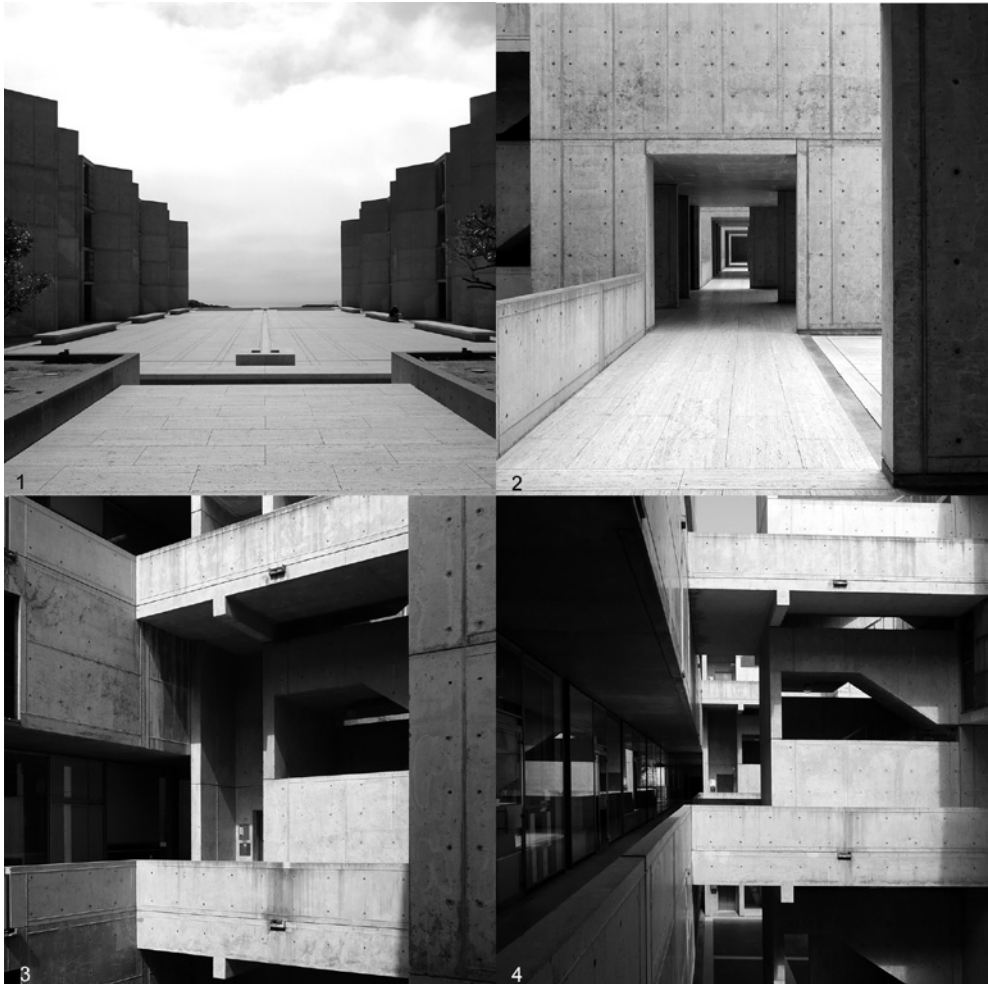
Ill. 1. Louis I. Kahn, The Salk Institute, La Jolla CA, USA, 1959–65. The spaces of distribution: [1] Central plaza. [2] Portico. [3], [4] Labyrinth of passages leading to the laboratories as well as to the scientists' private cabinets (photos by the author)

4. "Anti-labyrinth". Kimbell Art Museum, Louis I. Kahn

The distribution layout of this building is transverse to the structure and it intentionally leads the visitor, in the simplest way, from the main entry related to the street, through the entrance hall and the stairs, up to the exhibition level. Here, on the first floor, our gaze falls first on the entrance overlooking the park and to the right or to the left, where the exhibition halls are located. Behind the stairs there is a bookshop area, which is also open to the public. The average visitor will not even be conscious of other existing spaces, use of which is closed to the public, like for example a conservator's workshop, a storage area equipped with a ramp

to load or unload precious works of art, or a two-storey library. Only insiders or inquisitive ones are able to identify a way to the rooms otherwise restricted to the personnel. Designed by Louis I. Kahn, the Kimbell Art Museum building can therefore be referred to as an "anti-labyrinth", as it leaves no hesitation concerning the choice of a path.

5. Intended confusion of distribution as a denial of access. Salk Institute, Louis I. Kahn

The characteristic feature of this building is that its principal spaces of distribution are out-door, which is, besides, conditioned by the Californian climate. The paths of entry to the entire complex lead on the bias through the native eucalyptus forest, before bringing the visitor to a few outdoor steps and a raised platform, limited on its both sides by the orange grove. This place, which serves as a threshold of the laboratories complex, precedes a descent down to the central courtyard, also referenced to as the central plaza (ill.1). Every visitor to the Salk Institute owns a photograph of this courtyard, which spectacularly opens over the ocean. This view appears as a unique and highly individual discovery to everyone and at every time. This feeling is inevitable because the distribution of the whole complex was designed with a par-ticular regard to that place. The architect intentionally introduces the visitors at an angle and through a narrowed, raised passage in order to intensify their wait and, subsequently, to enchant them with the unfolded view. On both sides of the courtyard there are also two rows of porticos (ill.2) which are a shelter from the sun and open, at the same time, new viewing axes on the vast landscape of the Pacific coastline. The porticos belong to the area open to the public, but they also give the beginning to a confusing labyrinth of passages, stairs and galleries leading to the laboratories as well as to the scientists' private study rooms (ill.3 and 4). Their intended confusion is an unequivocal sign that further access is not for visitors. This prominent labyrinth of architecture constitutes a bold psychological barrier, thanks to which there was no need to install either coded gateways or other forms of restricting access in this area.

6. Concentric labyrinth. Exeter Library, Louis I. Kahn

The idea of a precisely centred plan of this building was based on two main principles. Firstly, the architect has seen the role of a library within the university campus as its intel-lectual heart. Secondly, the central location of the project in relation to the whole campus was translated into the concept of an "entry from everywhere around." So was conceived the portico which encircles the library building, offering a shelter to users coming from all directions and guiding them around the building till they reach the entrance. This first "ring" of the labyrinth introduces the users from two opposite sides into the library's vestibule, from which, subsequently, two symmetrical, semicircular flights of stairs lead to the inside. Their official, institutional character prepares the visitors for the view of the library's main hall, whose concrete walls provided with immense circular openings give an insight on all the building's storeys and, by doing this, they reveal to the visitor's eyes dozens of shelfs filled with books. This space reflects the architect's conviction that in a library all books should be visible straight after entering [10, p. 182]. This thought was doubtless inspired by the famous vision of the Bibliothèque royale designed by Étienne-Louis Boullée, but it might

also be related to a visit in Stockholm Public Library designed by Gunnar Asplund in the 1920's. Similarly as with the Salk Institute referenced above, the main representative space of the Exeter Library is open to the public and gives a beginning to further communication. However, the placement of two staircases connecting the following storeys within the building's corners along with their less representative character are a sign of restricted access. It may be less explicit than in the case of the Salk Institute, but it is still perceptible. On the library's upper floors, the repeated layout of spaces invites the user to circle around its central hall. This layout consists of (respectively): a gallery surrounding the central space, the space of bookshelves and, finally, the outer "ring" of the labyrinth. The latter contains places to read books and overlaps the exterior portico. Exactly like in a round labyrinth, the users of this building move in a circular, a centripetal and a centrifugal motion.

7. Centrifugal labyrinth. Rolex Learning Center, SANAA

Comparably to the previous example of the Exeter Library, the architects of the Rolex Center made an assumption that the building's users would be coming from all directions and they should be brought into its centre in the most effective manner [6]. As an answer to this principle, they proposed the idea of lifting all four facades more or less in the middle of their lengths, so that the users could walk underneath, just like under bridges, until they reach the building's heart. Contrary to the traditionally perceived labyrinth, the centre of the whole is therefore smoothly reached. Here, the main entrance is found. Starting from this point, however, the distribution network starts to complicate. The authors lead us through a labyrinth of ascending or descending spaces, presenting minutely composed views. Stepping unsteadily, we ask ourselves the question of where the books are stored in this library [4]. In our search, we pass through a labyrinth of rounded spaces, directing ourselves outward from the centre and getting closer to the glazed facades. In their proximity library departments, reading rooms, and an auditorium, as well as other functions housed in the building are situated.

8. The labyrinth as an element of architect's practice

The labyrinth game is played, in a more or less conscious way, by every architect. While designing space and a communication system that connects its individual units, it is impossible not to consider the path walked by its user. Depending on the need, or more precisely on the building's purpose together with the designation of its certain areas to a given group of users only, this path can be simplified or made difficult. Realising the whole potential of the labyrinth game is important, as it gives the possibility to control the user's steps in a far more discreet and "architectural" way than placing signage.

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