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# Karol Pomykała Personal space

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### 1. Introduction

The subject of space has always been intuitively appearing in my artistic creation. The deepening of my subject is closely linked to my creative work, which is constantly evolving, forcing me to develop the means and methods I operate. The work which is the subject of this hearing is a continuation of my artistic activities which I have been carrying out for several years in the field of artistic graphics and digital graphics. The search I am doing is a long-term process that results in new ways of presenting. The first conscious space research I started by creating a "one direction" graphical installation, working on a doctorate is a solution to it and a further step to deepen my problems that bother me.

This doctoral work consists of three elements, a wide-format linocut graphic, a 360-degree animation through VR goggles and a description of them. The description includes, but is not limited to, the inspiration, the background to the work, and the most important problems associated with the realization of the graphic installation entitled "Personal Space".

The main problem that it is taking in this doctoral dissertation is the attempt to present my, internal and wide visual spaces with elementary particles - point, line, plane. The immutability in using limited means of expression has put me in front of a rather difficult task, which is finding the best methods to present space

in a flat image as well as animation.

In this graphic installation, I am interested in the issue of space in different areas and in all kinds of methods that allow me to build this space. In purely graphic terms, I am interested in the depth and structure of the image being built and in the planning of compositions that suggest space. More broadly, I analyse space in the symbolic sphere, moving the problem of internal, personal, and social space, and how space can be perceived by the viewer.

The chapters of the description show my desire to solve the problem of space and to look for the illusion of physical depth and metaphysical depth in my work. It undertakes to describe the creative process which intended to build compositions solely by means of the basic components. I am talking about the problems I encountered during the project.

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I describe the historical ground and how humanity has reached the view of depth and how these experiences translate into my creative activities. Working on installation is a form of exploring and defining what areas I am interested in creatively at this time.

# 2. Space.

There are many theories describing space. The simplest of these is to understand space as a wide, empty surface without clearly marked boundaries or distance between two objects. When I talk about space, I recall the words of Leszek Brogowski, who defines space as having any set of elements whose subtotals are considered<sup>1</sup> or a space which is intuitively associated with the space surrounding us - the world, in terms of micro and macro. It refers to the definition of a territory, states, cities and, on a smaller scale, to our home, peace, and the immediate space around us. This is the area where all physical phenomena occur. Space can also be recognized of social phenomena<sup>2</sup>, which is divided, inter alia, into private or public spaces reserved for individuals, members of a particular group or public spaces. All social phenomena are spatial. Space also refers to psychology, where its role is to explain the relationship between man and his wider environment and how man shapes his space and how space shapes man. Investigates interpersonal communication of human beings in the process of goal setting, self-fulfilment, and explanation of behaviours toward selected individuals, relationships within a group, and privacy.<sup>3</sup>

The term space also refers to our emotions and the invisible private space around us, to which only a few have access, referred to as personal space; it is treated as a private area that we keep depending on the situation in which we find ourselves.<sup>4</sup>.

Space is also considered as an area of internal survival, which does not have physical characteristics but contains a collection of our emotions and experiences. The place of this interaction is the imagination, which is considered not only as a function of recalling images of things that are absent or imposing subjective meanings on objects of perception, but above all as the human ability to combine images and meanings<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Leszek Brogowski, Art in the face of change, School and pedagogical publications, Warsaw 1990, p.

<sup>&</sup>lt;sup>2</sup> http://www.cotojest.info/przestrzen\_763.html

<sup>&</sup>lt;sup>3</sup> Andrzej Strzałecki, Marzena Mykytyn-Rosner, psychological space under conditions of imprisonment, 2000, p.

https://www.poradnikzdrowie.pl/psychologia/rozwoj-osobisty/przestrzen-osobista-prywatna-spoleczna-czym-sie-roznia-i-jak-nie-aa-TArG-bxJY-G9QS.html

<sup>&</sup>lt;sup>5</sup> World images, masterpieces. Literature - visual arts, ed. Stanisław Jasionowicz, Krakow 2016 (Imaginarium, 1), p. 5

Space can also have an abstract or symbolic dimension. It may finally have a virtual dimension that does not exist physically<sup>6</sup>.

Space definition is used in various scientific fields. Defines the scope or framework of phenomena discussed in it, such as space in mathematics, physics, philosophy, geography, astronomy, polythology or art.

In the area of art, space was one of the main problems that artists have addressed over the centuries. The problem of space for a long time was to create ways to show the 3D experience and the depth of the flat image. This is how much space in painting is said by Jerzy Tchórzewski "paintings have always had to respond to space, but I think that contemporary art often understood space too unilaterally. Under the pressure of science or faith in science, it was confined to physical space. Painting has thus succumbed to the same illusions to which science has succumbed. There has been no further references and no internal space, which in the individual experience is not at all poorer than external space. Quite the contrary. What is art at the end? The response of man to the outside world. But it is a prerequisite for the world to enter the human interior, in the corner of the inner space. Cubism, which is certainly the beginning of a revolutionary wave in terms of the relationship between painting and space, is at the same time the beginning of an analytical breakdown of the world<sup>7</sup>."

All previous depth shows were symbolic and generally accepted conventions. However, before the revolution in the perception of space in art took place, there was a Renaissance period in which the development of science affected artists and their desire to seek an ideal representation of perspective and depth<sup>8</sup>. The result of these searches was, among other things, the creation of a linear perspective that became one of the best forms of depth in the picture. The artists did not allow a different vision of artistic creation, which resulted in a revolution and a timetable of perspective in the 19th century. The new concept of space meant that the creators consciously expanded the possibilities of space perception. According to today's concept, the essence of space is its multilateralism,

<sup>&</sup>lt;sup>6</sup> Anna Gabryś, Dematerialization of the object in virtual space, monograph, painting space space, monograph, Department of Art areas, Intermedia Department of the Academy of Fine Arts in Krakow, Krakow 2017, p.**81** 

<sup>&</sup>lt;sup>7</sup> https://kultura.onet.pl/fragmenty-ksiazek/przestrzen-wewnetrzna/pvd4dch

<sup>&</sup>lt;sup>8</sup> Stanisław Sheybal, plastic Composition Basic principles. State-owned establishments of school publishing houses, Warsaw 1964, p.83

the endless possibilities of relationships within it.<sup>9</sup> The development of Cubism changed the perception of space in the picture and initiated the development of modern art. This period resulted in a breakdown of the classical perspective, a breakdown of the solid, the desire to show it in all its richness from all sides, thanks to the cubist's all-round perspective, a new fourth dimension was introduced to the present three dimensions: time.<sup>10</sup>.

The discovery of a new view of breaking with the traditional way of presenting space for a new presentation has resulted in the development of many directions of modern art. Today, the extent of the feeling of space is still widening not only through the picture itself, but also through sound and touch, this can be seen by the development of new technologies that enable people to penetrate the virtual world, but also by virtual reality, which completely submerges the viewer in the plot world imitating practically every experience<sup>11</sup>. Virtual space provides almost infinite possibilities to create from simulating a real environment to creating completely abstract forms. The space of artists is shown through various means of expression, often taking on a conceptual character that opens a completely new meaning of space.

In my work, an important element, as well as the problem of obtaining spatiality in an image as the perception of the physical world, is showing the non-physical space, internal and personal space, which contains my emotions, observations, life experiences and opinions. These areas of space attract me, and I am also trying to present them in my work.

I create space by using a variety of means of expression, the main purpose of which is to create a sense of depth and 3D in the image plane and in the animated image. Plans, different forms of perspective such as a linear perspective, an air perspective, a light-cut model, and a painting perspective are the main and basic means of creating depth illusion. To find the best solution for the space, I had to analyse the different periods of art history and understand how artists came to show depth and what role they assigned to it. I create

<sup>&</sup>lt;sup>9</sup> Sigfried Giedion, Space, time and Architecture, State Scientific Publishers, Warsaw 1968, p. 465, 466

<sup>&</sup>lt;sup>10</sup> Jerzy Olkiewicz, the colours of the space, Art-Graphic Publishers, Warsaw 1966, p.125

<sup>&</sup>lt;sup>11</sup> Jarosław Janowski, a presentation of the imaginations of space on paintings, paintings in the mind, studies on the perception of imagination, edited by Piotr Fancuz, "Scholar" Publishing House Warsaw 2007, p.105

a non-physical space by means of a concept that contains my internal observations of the world around me, which I am trying to present. I also undertake physical and non-physical space analysis through virtual activities and the collision of the audience with my vision of the space viewed through VR goggles. This part is an experiment that aims to test the impact of virtual activities on our personal space.

#### 3. References to previous works

The doctoral thesis is the result of several years of experience, observation, and experimentation around artistic graphics, and a new chapter of search and interest that I initiated the "one direction" graphic installation. In my work I constantly seek different forms of expression, so I try not to create in one style, but I still remain faithful to one technique that is a linocut, which I began to expand with the new media.

My first graphics were characterized by a specific cut in the matrix, where I cut compositions with small dots. The encounter with the point linocut is related to the work of Professor Krzysztof Szymanowicz, who told me during the class about point linocut. The way the artist builds his compositions, the multiplicity of interpretations, the idea and the creation of planes and shadows using different sizes of points has had a huge impact on my subsequent works. I began to carefully examine ways of creating a point linocut, which in our country has long traditions, initiated by Józef Gielniak and still used by many great artists such as Krzysztof Szymanowski, Leszek Kiljański, Stanisław Bałdyga, Grzegorz Dobiesław Mazurek and many others. My desire to expand the graphic workshop has led me to add short linear cuts to compositions created from hundreds of points, which are the interpretation of the original method of drawing up the matrix by Prof. Maksymilian Snoch. Snoch in his work created spaces that were often surrealistic, using wide planes and contrast elements that in their simplicity acquire many meanings. Thanks to the diversity of the art materials used, I began to execute abstract compositions, while at the same time abandoning the use of soft spots and gradations of grey. Over time, my compositions began to appear next to a point and line, a plane of monochromatic colour, with a symbolic indication of the presence of man, these are works that clearly comment on the reality that surrounds me. The topic that I started to address around the impact of society on individuals and their condition in the current world. I preferred to comment on the problems of modern man.

Entering the virtual area was a huge change for me, and it was a broadening of the experience of 2D images. I was happy to transfer the visual means I operated in the Linocut to the 3D graphics environment and to create new graphics worlds with them. The virtual area gave me many purely visual and semantic possibilities, which were

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emphasized by changing the medium. This is a kind of experiment that allows me to combine different creative methods and observe the relationship between them. The doctoral dissertation is the next stage, a continuation of my research in which I focus on the broadly understood artistic and semantic space.

#### 4. Links and artistic references

When I created the concept of doctoral dissertation, I analysed the creative achievements of the artists I appreciated, who inspired me, were a guide and had an indirect influence on the concept of work. The analysis of interesting and inspiring works helped me solve the research problem in artistic work and influenced the visual sphere of my work.

The first artist who fascinated me is Giorgio de Chirico, who was the creator of metaphysical painting. In his works we find the ambiguity shown by fantastic urban spaces, which, through a deformed perspective and a juxtaposition of symbolic elements, aroused the viewer with fear. My attention was drawn to the artist's approach to setting the shadows that are built against the rules adopted, which creates a specific atmosphere by creating different interpretation options in front of the viewer.

The artist, whose links with my work were discovered only after I entered the virtual reality of my graphics, is Magdalena Abakanowicz. I do not have to write about the artist's greatness, it is known that she is an outstanding figure. I am going to refer mainly to a part of her work that deals with the problem of man and his condition in the modern world.

In the works of Abakanowicz, man is an anonymous figure without individual traits placed in the crowd. Rather, the artist presents a negative aspect of the individual's performance in the group and focuses on the sensitivity of the biological structure of man. The artist's selected sculptures, which show the series of characters, by their form, scale and setting, cause anxiety and cause reflection. The projects relate to the political situation that the artist observed. This was the result of a reflection on the reality of human masses subjected to ideological indoctrination, constantly in queues, closed to the world and cut off from information deemed not to be allowed. The head-free crowd also appears as a warning against instincts and emotions of human beings shaping behaviour without being aware of - how he can command love or hate .<sup>12</sup> In the work of Abakanowicz, I find interesting the way in which stories are told and the area of the problems that were moved.

<sup>&</sup>lt;sup>12</sup> Contexts. Polish people's Art, 3-4 (274-275), M. Abakanowicz, *Meditations*, 2006, No. 3-4, p. 133.

Another artist whose work is close to me is Julian Stańczak. The artist was linked to the movement of the Op Art. The subject of his work covered the relationship between space, light, and movement. In his work, I was interested in the works that build the illusion of space by multiplying straight and wavy black lines.

I am also inspired by the work of Antony Gromley, who creates sculptures that clearly or symbolically represent a human being. His multi-figure projects provoke reflections on the role of man in nature. His works strongly interfere in public space by placing sculptures in quite intriguing places. In his works, as in Abakanowicz, I was interested in creating narration through a multiplication which strengthens the perception itself and becomes symbolic.

## 5. The components of the installation. Linocut and animation

The installation consists of 2 elements, each of which is created in a different technique. The first element is a wide format linocut 220 x 725 cm, comprising 8 parts, the linocut is printed on paper. The second element is a circular 360-degree 3D animation, which is a moving, indented image, which is one long loop with no cuts. The animation is viewed on a smartphone connected to the Samsung Gear VR goggles. I consciously do not use the general definition of VR because the animation I am presenting is not the full experience of VR, because it does not have the characteristics of interactivity. In my animation, the viewer is immersed in a virtual space in the centre of the action, which happens independently, and affects both visual and sound effects. However, the viewer has no influence on the reality around him, we see the scene 360 degrees without the ability to move, we are only an observer.

Linocut and animation are extremely different artistic media, but both serve for artistic creation. The main difference between linocut and animation is their experience, the linocut is fully real to see directly, the animation on the contrary is a non-physical, mobile, virtually infinite virtual simulation seen through the filter, which is the phone and VR goggles. Linocut is a flat picture in its nature, which imitates the impression of depth by means of art materials. 360-degree animation seen through VR goggles also simulates depth, but is far more powerful, by its immersive character, it allows you to experience physical presence in the world you are creating. What distinguishes VR from older forms of representation, such as painting or film, is not so much the fact that they relate to real worlds outside the representations, but that they constitute a different kind of being in the world<sup>13</sup>.

Installation is a combination of traditional graphics and modern technology, which is a real-life collision with virtual, moving 2D analogue graphics to a three-dimensional, computer-generated world. Both media are visual media, that are interconnected and form a coherent whole. In a sense, it is one multidisciplinary image that represents the same space seen from different perspectives and shown through two different media, but both

<sup>&</sup>lt;sup>13</sup> Man, and Virtual Worlds, Tadeusz Miczka, pure illusion testing reality: Two virtual realities - two participation, Katowice 2009, p.25

are created from the same elements. The role of the animation is to simulate linocut with all its characteristic features.

The starting point was the linocut project, which was a model and reference for building virtual space. I copied linocut's visual means and simulated them in the animation so that both spaces are as visually consistent as possible. As I was immersed in the animation through the VR goggles, I wanted to get the feeling of being in the linocut world to be able to experience the indifference of my own spatial presence. I wanted to create an environment in which the recipient entered the space and became part of the work that was created physically and virtually.

Working on the visual aspect of linocut I had complete control over the art sphere, while in the animation I encountered the challenges I had to face through the technical characteristics of linocut. The technical aspect, which was the equipment I used to watch, played a major role and influenced the appearance and guality of the animation itself. For the best viewing experience, goggles used are attached to a computer, so we can simulate realistic scenes in real time and influence the reality around us through hand-held controllers, the experience is fully interactive. Using a simpler solution like a set of goggles and a phone, we decide to experience a slight deterioration in image quality and lack of interaction. In my installation, I selected a simpler option for several reasons. Using a PC kit, we are able to reflect the world in the most realistic way, but in my vision I did not want to see a photo of realistic visual effects, the world we see is a black raw linocut, which is made up of lines and points only. Also, my animation does not have interactive features, we are just watching. It was important to me to be easy to use and mobile. The phone system is intuitive to use, just turn on the app and put your smartphone in the goggles, while the PC kit requires professional handling. Goggles with glasses are wireless compact in their entirety, whereas a computer with goggles must be connected with different cables. When I chose a kit with my phone, I had to go for visual trade-offs. The image you see is not perfect, the sharpness you know from linocut is difficult to obtain, the image may be slightly blurred due to the lens and the way the viewer focuses on the goggles.

The solids of the characters are more angular than the oval, but in my opinion this does not affect the feeling of space and the reading of the idea.

## 6. Practical methods for solving the research problem

When I created the graphic installation, I wanted to get a solution to the problem that is covered by the subject of the doctoral dissertation. The following section describes the important elements that make up the intended purpose, and I have divided them into three parts. The first part looks for appropriate visual means to show space in an image and animation with incremental particles and analyses the relationship between the real and virtual images. This section contains the design aspect, format definition, composition, and description of the elements that affect the whole. The second section is devoted to the presentation of the visual installation page. The last section describes my internal space, which is to identify my problems and describe the symbols contained in my work. This section contains my reflections and conceptual considerations.

# a. Artistic means analysis

#### Point, Line, Plane.

The basic concept of primordial geometry and Euclidean geometry, next to space, is a point, line, and plane, which are part of the basic elementary particles in the physical world.. The discussion on the role of the point and line and their influence and links in the plastic sphere is described by Wasyl Kandynski in the book Point and Line vs Plane. The line and point are the basic elements from which everything begins. A point is the start from which a line is created, shapes and figures are created from the line. At the same time, the point and the line are opposite, the point is static, represents calm, while the line represents dynamism and movement. The way they are used in a composition influences the emotions and feelings of the viewer<sup>14</sup>. When I created the concept of doctorate, I assumed that in the linocut and in the animation I would use only these elements.

<sup>&</sup>lt;sup>14</sup> Wasyl Kandyński, Point and Line vs Plane. Contribution to the analysis of painting elements, National Institute of Publishing, Warsaw 1986

A point, which is one of the basic building blocks of my graphics and animation, is the smallest and basic element of the composition, as Aliberti writes, a character that cannot be divided into parts anymore<sup>15</sup>. All the characters included in the installation are made up of hundreds of points. By compacting the points, I create smooth connections between white and black. The point is the component that builds the suggestion of three-dimensional and chiaroscuro modelling in the representation of the figure. In the linocut, I create all the lit sections by the density of white spots, gradually spreading them to each other, creating a gradient that becomes black. The virtually identical role of the point plays in the animation, except that character models are entirely composed of points, and the 3D impression is obtained by lighting the entire scene that builds the light-dark modelling of the character in this case, the dots have different grey scales as opposed to linocut, where the dots are always white.

Another element that I use is the line, in my conception I always try to create it as thin as possible. The lines in the linocut are constructed in such a way that they cannot be further divided. In the animation, however, the size and thickness of the lines depend on their perception. A line that is too thin is no longer readable and the one that is very thick becomes a very strong and powerful visual element that is too much. I made a line and I think its thickness is the best. Lines in animation and Linocut form a flat surface by their parallel arrangement and multiplications, the line is always the constituent part of the substrate.

The next element is the plane that I build with grey or black flat solids. In the linocut through black planes I build a shadow cast by characters, while using grey planes I build large, unshaped abstract forms that take on many different interpretations. In the animation, the same planes are responsible for building all shadows.

#### Black and White.

Stanislaw Fijałkowski writes about black and white colours this way *"using black and white we replace the reality of colours palette. We present a wealth of combinations of one* 

<sup>&</sup>lt;sup>15</sup> L. B. Alberti, about painting, Wroclaw 1963, p.5

colour. The restriction allows us to enter the depths of meaning, gives spiritual joy, different from sensual pleasure, which we experience using colour. (...) it is sophisticated knowledge, how to achieve convincing action with two colours, possibly with a change in tone."

In the linocut and in the animation I abandoned the use of colour, and I built space with only black and white and extensive grey areas. By giving up colour, I freed myself from the next character layer and considered the role and impact of colour on space building. This decision allowed me to focus more strongly on the research problem that was set up, and it also allowed me to build a concrete aura that is important to me from an artistic point and some meaningful point of view. The monochromaticity in my work is a means of expression that is symbolic. White is identified with multi-layer light, and black is dark to create an atmosphere of mystery and horror.

The light that creates the story and is an important element in building the sense of depth and enhancing the perception and feeling of form also plays an important role in my work. In the animation and linocut, the light source is sharp and single point, positioned low above the horizon, giving me long and deep shadows that emphasize spaciousness in the composition.

#### Multi-Replication.

When I designed linocut, I used the main feature of the graphic, which was multiplication, which allowed me to duplicate an image from a single matrix. I used this feature to enlarge the graphics format by placing the same prints side by side from one matrix, resulting in only 3 matrices instead of 8. However, this method encountered some important obstacles that I had to resolve. The main problem was to design the right composition, which allowed me to achieve the reproduction effect, and this phase required a huge number of projects. At the same time, I had to find the right measures to express the depth in the picture, which will also allow me to replicate the picture, and I will write

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about this more in the part about the perspective. Another problem was to keep the image seamless from a few identical graphics, and I had to fit each edge of the graphic perfectly to the edge of the next copy, and the fit was already done at the cutting stage of the specific matrices. The last problem was the repetition and noticeable rhythm of the reproduced fragments, I solved this problem by appropriate remodelling of the scene in the image and masking the fragments by overprinting the grey surface over the already existing graphics. I used a similar multiplication solution in the animation, but I do not use this method to build an entire composition, but only a part of it. I designed one repetitive element that imitates the surface of the substrate, which simulates the characteristic cuts in the linocut. The entity was designed as a texture consisting of the lines themselves, where all edges when combined formed a single perfect string, without a clear rhythm of the fragment being reproduced. This was the plane of the earth in the animation.

Multiplication also refers to characters that are present in animation and linocut, with some significant differences. In the assumption, each character is identical, and the main model of the character is built in the animation, which has been copied and distributed over the entire surface. In the linoleum, each character is different, each one is different in shape and is made up of different cuts, which is due to the nature of manual making of linocut.

#### Frame.

An important part of the installation is the human resource, which is the specific area seen in the animation and the link. Using two different viewpoints, I show you different ways to see a similar space.

The frame in the linocut shows a specific section of space that is additionally limited by the paper size. Although I have created a composition that allows you to expand your graphics in every direction, it is still limited even by the place where it's presented and the animation is going to show things differently. The nature of space in virtual reality implies that the staff can be unlimited. This makes the animation a window by which you can see items that are not visible in the linocut or are only suggested. The reduction in the frame also applies to my animation, where the lack of interaction and the ability

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to explore the virtual world also sets the boundaries of the area you see. This can be compared to reality, where our perception also has its reach while standing still.

#### Different perspectives.

From the Renaissance, artists were able to present a visual image, but in fact they represented not a real world but an imaginary world<sup>16</sup>, it is a formal procedure that allows the artist to present his vision of the artist's space. The perspective that gives us the image provides the means to create a sense of depth and 3D on a flat 2D image.

The creation of linocut, which, on the assumption, consists of several repetitive elements, has forced me to compromise on certain compromises and to abandon obvious methods of building space. I abandoned the basic assumptions of a linear and a painting perspective, both methods allow me to easily build a three-dimensional space, but they did not allow me to build a picture from repetitive elements. When I created identical compositions in real and virtual graphics, I realized that I had to use different perspectives in both cases to create an illusion of space. To achieve the goal, I have chosen two different strategies to create the same show.

I have combined two perspectives in the linocut. The first is a diagonal and row-diagonal perspective, also called axonometric, which is often used in technical projections<sup>17</sup>. In this way, all the elements at the bottom of the frame are closer to the observer, while the elements that are set higher are further away from the field of view. To an axonometric perspective I added a behind the scenes perspective, which consists of the items that are closer to the elements that are further away. Both perspectives are usually not applied to realistic forms of space representation, but their use does not prevent a sense of depth. Using the above methods was the only solution that allowed me to create a graphic from repeatable elements.

<sup>&</sup>lt;sup>16</sup> Jarosław Janowski, a presentation of the imaginations of space on paintings, paintings in the mind, studies on the perception of imagination, edited by Piotr Francuz, "Scholar" Publishing House Warsaw 2007, p.105

<sup>&</sup>lt;sup>17</sup> Stanisław Sheybal, Composition of art. Basic principles. State-owned establishments of school publishing houses, Warsaw 1964, p.88

In constructing the animation, I used all possible means to create an illusory representation of space, such as the principle of distant plans, the principle of a convergent perspective, or the perspective of painting. the 3D graphic mechanics themselves, which have created a 360-degree animation, are designed to reproduce the spatial impression as much as possible. However, to get the most out of the virtual world, you need a filter, the VR kit, which includes special glasses and a smartphone. The illusion of spatiality viewed through VR glasses is closely related to the use of a mechanism related to stereoscopic, i.e. binocular vision.<sup>18</sup>. Depth illusion is built with a single image seen from two different sides. One image is responsible for viewing the left eye and the other for viewing the right eye. This composite image produces an ideal 3D illusion according to physical rules of view. Unfortunately, this kind of illusion of space cannot be shown on a flat surface of the image, you always need a filter as a variety of glasses.

#### Point of view.

The image space is organized in some way, and this organization consists of two elements. The first is to organize the internal space of the image, and the second is to set the viewer how the image can be seen<sup>19</sup>. In the case of installation, it was very important for me to organize in an appropriate way the space that determines the position of the viewer in advance and how the viewer is to receive the image and the illusion of space.

When I built a scene in a linocut, I used a row-diagonal and spherical perspective, so I got an illusion of looking from the top at a distance from the main scene, no matter from where we look at the work. This procedure allowed me to gain the effect of the illusion of power over the subject of a presentation about which Gillian Rose writes in the interpretation of visual materials<sup>20</sup>. In the animation, we do not look at the stage from above as in linocut, here we are immersed in the middle of the composition. I set my point

<sup>&</sup>lt;sup>18</sup> Jarosław Janowski, a presentation of the imaginations of space on paintings, paintings in the mind on the perception of imagination, edited by Piotr Francuz, "Scholar" Publishing House Warsaw 2007, p.66

<sup>&</sup>lt;sup>19</sup> Gillian Rose, Critical methodology for Research on Visual Performance, PWN Scientific publication, Warsaw 2010, p.64

<sup>&</sup>lt;sup>20</sup> there, p.69

of view in the middle of the scene, and the height corresponds to the height from which we see reality in the real world, the viewer is in the narration. Thanks to this treatment, I have been able to create an opposite impression than in the linocut, here we are a part of the composition, we are observed and subjected to the action that happens around us. This allows the viewer to feel part of the animation and to enhance the feeling of space.

# b. Installation visibility.

In the linocut and in the animation, the main motif is the characters without individual attributes, which I set into an infinitive large group. The characters are positioned on a flat plane that suggests the ground. Each character casts a long shadow that is seen at the end of the day when the sun is low above the horizon. I put all the characters in one direction, despite the synthetic figures, we can tell what direction they look in, we have the impression that they look at something and wait for something. The linocut composition is divided into two parts, one is completely empty, the other is filled with characters. In the area of empty space, I set up one character that is disconnected from the whole group and came out of several other characters. In addition, in the crowd I hide a few characters that float. The entire scene is covered by long grey stripes of irregular shape, I do not specify what they are, but you can only guess what they can represent.

In the linocut, the viewer is only a far observer of the entire scene, while in the animation the viewer is a direct participant and observer. The viewer immersed in the animation is in the centre of the crowd, all around are figures of characters that are broken into one group, just like in the graphic. The characters in the animation are simplified and have no clear characteristics. As in the linocut, the space is divided into a space filled with characters and an empty area. An important element of the animation that we do not see in the linocut is the huge synthetic characters that run over us and are spread over the entire empty part of the plane. The suggestion of huge figures in the linocut is undefined grey planes, whose presence in the linocut is not aware, only the entry

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in the animation reveals what they are and what they are doing. Colossi and their long shadows constantly move across the space, walking towards the viewer. One of the characters goes to us and leans over us, and then it is straightening up and going away. During the animation I change my viewpoint, this change is made by lifting, which allows you to see the entire scene from a certain height, and it is the same as a presentation of floating characters in a linocut. The image you are watching fades away and the animation begins again.

I intentionally put in a linocut one character, which is clearly separated from the crowd and several characters that float, while in the animation the equivalent of these characters is the viewer itself. These shows have the same role in my vision, referring to the idea that Charles Baudelaire created, referring to the city's followers for his experience. This idea developed under the influence of the movements of situation-groups in the mid-20th century, which created the Idea of a floating character, moving around the space without a specific objective that could be borne by these temporary situations, while becoming an observer from outside, looking at social processes from the outset. Going further, the situation created a psycho, a graphic description of space, focusing on personal emotions about space<sup>21</sup>. In my work these alone and floating figures play a similar role as observers.

In animation, apart from visuality, the recipient also has sound, which aims to create the right atmosphere, and thanks to the stereophonic character of the composed music, it helps to feel spaciousness.

Both works, physical graphics and animation interpenetrate each other, what is unsaid in the linocut is explained in animation and vice versa.

<sup>&</sup>lt;sup>21</sup> Jacek Złoczowski, hybrid and virtual spaces. Wandering through a work of art, Monograph, Image Image Space Space, Monograph, Department of Art Areas, Intermedia Department, Academy of Fine Arts in Krakow, Krakow 2017, p. 67

#### c. Internal space.

In fact, the artist works much like an inventor or Explorer; all three seek new relationships between man and his world. In the artist's case, these relationships are emotional and based on knowledge, experience, and intuition. He is a specialist, who shows us in his work as in the mirror, something we did not realize for ourselves: The state of our own soul<sup>22</sup>.

In this section I will focus on the symbolism and the stories contained in the installation. I will try to present an image of the internal space and how I interpret and describe the problems that matter to me.

Through the art language, it shows a part of my internal space. I designed the visual sphere in such a way as to obtain the best solution to the research problem, in which I also present my own feelings and internal reflections on topics that bother me and interest me, which I want to comment on and externalize in my own way. What I am presenting in the visual sphere is my interpretation of the reality surrounding me, it is a presentation of my imagination.

The problem that I am addressing is a multi-layered picture of the relationship between society and the individual, of the gap between individualism and conformism. I address the problem of managing and enslaving individuals and entire societies with the help of various forms of manipulation that "bend" the truth only to convince people to specific actions or views.

In my mind, as an individual, we are a small cog in the great machinery of corporate influence. The inspiration for information and fake news that comes to us through social media, television, temporary trends, politics, and commercial communication make us part of the passive mass that exists to consume and meet specific objectives. A unit in a crowd dies, ceases to be important, becomes only one of hundreds of parts of the entire mass that has specific roles. It is becoming increasingly difficult to distinguish the truth from fiction, everything is shaken and mixed, it affects our choices and the perception of certain

<sup>&</sup>lt;sup>22</sup> Sigfried Giedion, Space, time and architecture, State Scientific Publishers, Warsaw 1968, p. 462

contentious issues. I realized that controlling social feelings by manipulating information and distorting the truth in real and virtual space is a weapon that threatens everyone.

In my interpretation, long shadows, similarly to scaled figures, reflect "Big Brother" who tries to influence us and society through all fake news. This is a symbol of enslavement that we should fight against. The vision of repetitive characters in one direction forming an infinite crowd is a symbolic representation of the society that is being manipulated. The isolated character and the floating characters are aware of the surrounding mechanisms, as in the theory of the situation, they are a symbol of individualism and opposition to the misrepresentation of reality. The idea is my internal opinion, which is extremely important to me. Through my work, I would like to draw attention to the preservation of common sense in the adoption of different news, from the media in general. We must remember that the content that we receive is created and often is intended to make us move in a specific direction and for special purposes.

Another area of internal space is the creative process, which is extremely important in the creation process. Apart from a purely physical aspect, the creative process is also carried out in imagination. It is when I work with the matrix that I create new ideas, new ways to cut the matrix, I ask questions, this is a special moment, a moment of isolation. It is a time of intense work that gives me a lot of fun. This is the moment when I am alone with a matrix and a pure form of creation. This time is ideal for me to consider, make difficult decisions not only in creative terms, but in general. The completion of the reflected graphic and generated animation is the closure of a specific creative but also mental phase, then the summaries and new decisions are taken.

#### d. Exposure.

An important element of the project is the issue of exposure which affects the viewer and is spatial in nature. The first thing you see is that there is a huge over 7-meter linocut hanging on the wall. In front of the linocut, stands are placed with VR sets, the number of which should be as large as possible. People standing straight in front of linocut and immersed in animation through VR glasses in a sense become part of the installation and a verbatim image of the crowd known for my presentation. This practice of attracting the viewer, where he becomes part of the installation himself, opens another area for interpretation of the space. There are further questions about how the immersion affects the viewer's personal space, whether it is disturbing it by being completely cut off from the physical world, it makes our personal space barrier go on the side. Or maybe the viewer in my internal space simulation automatically creates their personal space in virtual reality. These are very interesting problems, which require quite a different and separate analysis.

#### 7. Summary.

I have been able to create an installation that takes full advantage of the value of convex printing, and with the use of VR, it allows you to literally dive into the world of my graphics, which illustrate my internal considerations. All the actions I have taken have been designed to explore space. The creation of this graphic installation was an attempt for me to explore the problem of depth and space in my graphics. I have examined the relations between the shape, structure and space of my work, and the relationship between them. A rhythm of repeated lines builds the space of the plane, a point is the centre by which it creates a 3D impression of the elements contained. The work I have created is inspired by different contexts and summarizes the experience I have acquired. I have faced many formal and ideal problems that I have combined into one coherent picture.

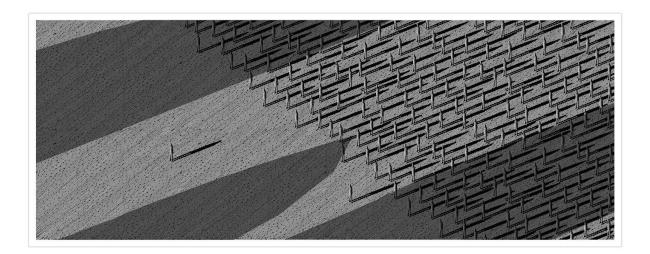
I have built a space that shows my personal thoughts and illustrated them as a virtual experience that allows the viewer to participate in the simulation of my internal space. This is a very interesting topic, and the viewer becomes part of the vision that is my internal image. By using immersion, I obtained an effect much stronger than the effect of experiencing the depth of work hanging on the wall. Extremely different methods of presenting the same space gave a different impression, it is difficult to compare such different images. However, despite the clear differences, I managed to achieve the target. In both cases I built space with the same visual means, which in their way show depth.

Artistic work and research in the theoretical sphere have revealed new fields of creation to me and have given rise to new ideas. I am sure the installation will be developed significantly and is going to affect my further creative and visual exploration.

# 8. Bibliography.

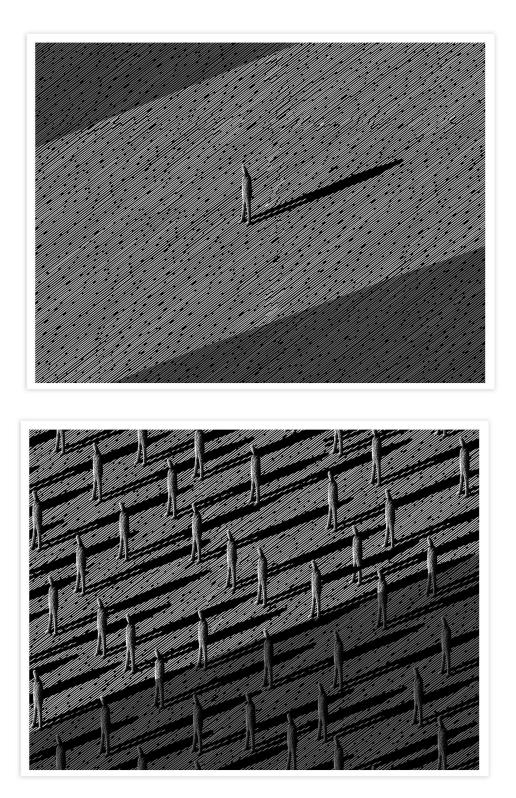
- Leszek Brogowski, Art in the face of change, School and pedagogical publications, Warsaw 1990
- Andrzej Strzałecki, Marzena Mykytyn-Rosner, psychological space under conditions of imprisonment, 2000, p.35
- 3. *World images, masterpieces. Literature visual arts*, ed. Stanisław Jasionowicz, Krakow 2016 (Imaginarium, 1).
- Anna Gabryś, Dematerialization of the object in virtual space, monograph, painting space space, monograph, Department of Art areas, Intermedia Department of the Academy of Fine Arts in Krakow, Krakow 2017.
- 5. Stanisław Sheybal, Artistic composition basic principles. State-owned Establishments of School Publishing Houses, Warsaw 1964,
- Sigfried Giedion, Space, time and architecture, State Scientific Publishers, Warsaw 1968.
- 7. Jerzy Olkiewicz, The colours of the space, Art-Graphic Publishers, Warsaw 1966,
- Jarosław Janowski, A Presentation of the imaginations of space on paintings, Paintings in the mind, Studies on the perception of imagination, edited by Piotr Francuz, "Scholar" Publishing House Warsaw 2007,
- M. Abakanowicz, Thoughts, *Contexts*. Polish people's Art, 3-4 (274-275), 2006nr 3-4.
- 10. Miczka, clean illusion testing reality: Two virtual realities two participation, Man and virtual worlds, Tadeusz Katowice 2009.
- 11. L. B. Alberti, about painting, Wroclaw 1963.
- 12. Gillian Rose, *Critical methodology for Research on Visual Performance*, PWN Scientific publication, Warsaw 2010.
- 13. Jacek Złoczowski, Hybrid and virtual spaces. Wandering through a work of art, Monograph, Image Image of Space Space, Monograph, Department of Art Areas, Intermedia Department, Academy of Fine Arts in Krakow, Krakow 2017.
- 14. Wasyl Kandyński, Point and Line vs Plane. Contribution to the analysis of painting elements, National Institute of Publishing, Warsaw 1986.

# 9. Reproduction of the graphic installation

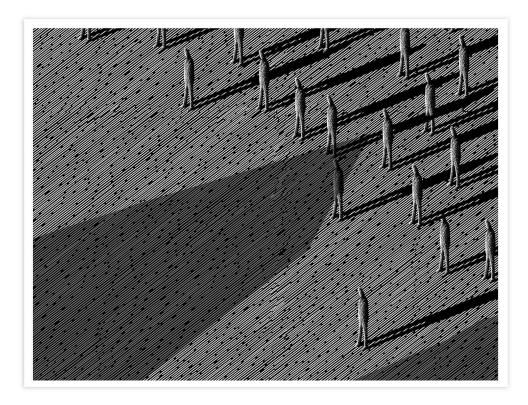




1. "Personal Area", General View, linocut, 220 x 725 cm format



2. "Personal Space", part, linocut, 110 x 181 cm format



3. "Personal Space", part, linocut, 110 x 181 cm format



4. "Personal Space", frame from 3D animation, 360 degrees



5. "Personal Space", frame from 3D animation, 360 degrees



6. "Personal Space", frame from 3D animation, 360 degrees