

Summary of professional accomplishments

Krzysztof Rukasz

Faculty of Arts, MCSU in Lublin

Lublin 2018

Table of contents:

1. Personal data

2. Introduction

3. Chapter I – Description of previous artistic/scientific achievements, including the period preceding the obtaining of the Doctor of Fine Arts title and searching for new forms of artistic expression

4. Chapter II – Analysis of the declared work to comply with requirements of the post-doctoral proceedings - **A set of lithographs created between 2014 and 2017, presented under a common title "Stone and Air"**

5. Chapter III – Description of scientific, teaching and knowledge promoting activities

Personal data

1. First name and surname : Krzysztof Rukasz

2. Academic/artistic titles and degrees

Doctor of Fine Arts title granted by way of a resolution of the Council of the Faculty of Arts, Maria Curie-Skłodowska University in Lublin of 29th June 2007, pursuant to the doctoral dissertation entitled "Scheme, Symbol, Affectation"

Supervisor: Professor Piotr Lech

Reviewers : Dr hab. Jan Ferenc, Faculty of Arts, MCSU in Lublin

Professor Andrzej Węclawski, Academy of Fine Arts in Warsaw

Master of Arts in Art Education – Institute of Art Education MCSU in Lublin

Thesis written under the guidance of professor Danuta Kołwzan-Nowicka in the Lithography Department, 5th December 1995.

Supervisor: Dr hab. Piotr Lech

3. Information about employment in scientific / artistic organisational units

15.02.1996 – 30.09.1999, senior technical specialist at the Institute of Art Education, MSCU in Lublin

1.10.1999 – 30.09.2007, assistant lecturer in the Graphic Art Department, Institute of Fine Arts, MCSU in Lublin

Since 1st October 2007 until present, assistant professor in the Department of Graphic Design and Lithography, Institute of Fine Arts, Faculty of Arts MSCU in Lublin

4. Indicated artistic achievement

In accordance with the formal requirements, I indicate the set of lithographs made between 2014-2017 presented under a common title "Stone and Air".

STONE AND AIR

Introduction

In this summary of professional accomplishments, I attempt to discuss my artistic output, as well as my teaching and scientific achievements, in the period since obtaining my Master of Fine Arts degree until the present day, with particular focus on the period between obtaining the Doctor of Fine Arts title in 2007 and the year 2018.

The summary consists of three chapters. In the first chapter, to put facts in chronological order and to ensure transparency of my evolution as an artist, I present my works created as a junior employee at the Faculty of Arts of Maria Curie-Skłodowska University in Lublin, and I describe the process of arriving at my present artistic path. Chapter two provides a detailed description of the set of "Stone and Air", focusing on the most characteristic works, as well as works that served as breakthroughs in my current lithographic pursuits. In this chapter, I also included the general conceptual and formal description of the set, followed by the prospective artistic ideas I am willing to pursue. The third chapter presents my achievements in the higher education sector and their specific aspects, with emphasis put on teaching and propagation of knowledge.

Chapter I

Etymology

During my art education and early years of pursuing the career of a professional artist, I was strongly attached to figurative art. This infatuation was reflected in the series of lithographs made for my MA degree entitled "Retrospekcja H-D" [H-D: The Retrospection]. They were made in a realistic convention and presented compositions made of silhouettes of Harley-Davidson motorcycles, combined with frames of very carefully selected, characteristic stylistic details of the vehicles. Individual lithographs were devoted to specific legendary models, being breakthroughs in the history of American motorcycle industry. The project was based on a very detailed photographic record. I performed the drawings on limestone plates of 72 x 58 cm. I used a ball pen as my drawing tool. This method of drawing the matrix is very laborious, as the pen leaves a very fine trace, which is twice or three times thinner than the trace left on paper. This is due to a significant difference in the hardness of the medium. Paper visibly yields to pressure, enlarging the interface between the surface of the paper and the ball of the pen. Hard surface of a stone does not yield when pressed, which makes the interface between the surface of the paper and the ball of the pen quite narrow, consequently producing much thinner lines. In case of thicker lines and more extensive areas of black or intense colour, this fact forces the author to employ much more time and energy to work the matrix. Ball pen lithography involves meticulousness and consistency in mastering the graphic skills. Without proper expertise and practice in making the drawing using this method, it is very hard to embrace all aspects ensuring professional permanent printing. When you have proper expertise, you can in a controllable and informed manner, transfer your artistic visions to the limestone plate. This experiment was very interesting and edifying. The eagerness to continually master my graphic skills has been with me until today. I'm trying to take every opportunity to expand my theoretical and practical knowledge. Therefore, I find it very important and developing to participate in scientific conferences and symposiums devoted to art, to visit art exhibitions and participate in meetings with other artists. Sharing knowledge and experiences, in any form, allows me to develop my own artistic awareness. This type of confrontation brings thoughts that I can do something

"better", "differently", "in a more absorbing way"; this gives me determination and motivation for further explorations of the nature of art.

Effect and cause

My decision to abandon the previously followed artistic path was a breakthrough in my career. In the work entitled "Scheme, Symbol, Affectation" presented with my doctoral thesis, I managed to settle with my past inspirations. In order not to get stuck with thematic and stylistic affectation, I deliberately gave up the style I had developed. I created a spatial graphic composition made of twenty double-sided digital drawings, forming walls of a cuboid suspended in the air. A solid formed this way could be watched from the inside and from the outside. The exterior parts were photograms of the main theme made as positives, whereas the interior of the cuboid was their negative reflection. The installation symbolized my previous output, whereas the spatial form made references to the shape of a parcel into which I packed and in which I left my artistic past. By repudiating my past achievements, I deliberately placed myself at the point of no return. My declaration to give up my previous habits and creative methods was ultimate and announced in public. This caused some kind of self-liberation, however it not yet marked the beginning of a new path, but only a breakthrough in my career.

Time of confusion

Breaking off with my earlier creative habits served was indeed purifying, yet it gave me nothing in return, apart from the question: "What next?". I started to search for new forms of artistic self-fulfilment. Generally, I can refer to this period as the time of erratic experiments; from implementation of individual and group niche projects in the public space, to assisting my friends artists in their projects, to time devoted to mastering the pinstriping technique.¹ Undoubtedly, this was a very engaging time, abounding in various

¹ Application of décor to motorcycles, automobiles, bicycles and other objects in everyday use, using special 'sword' shaped brushes enabling to create very thin long lines. <https://en.wikipedia.org/wiki/Pinstriping> (15.12.2017)

artistic undertakings, some of which have awaited production until this day in the form of an idea only. I do not see it, however, as wasted time. In that period, my visual interests got transformed and redefined.

Genesis of the Air

The new concept was not born accidentally. In fact, its basic components have always been present in my artistic pursuits. On the one hand, there was the infallible lithography with its broad spectrum of creation capacities, on the other airbrush painting (which I took up before starting my university education) with its impenetrable tonality and no marks left by the drawing tool. The idea to merge the two techniques has allowed me to conceive my new, original form of graphic representation. I was aware, of course, that I had not been the first artist to reach for the airbrush to draw a lithographic matrix, however I perceived this area of artistic creation as underestimated and offering an extensive range of means to express one's creative potential. Many lithographers admit that they attempted to use the airbrush in working the stone plate, but they usually gave it up during the testing phase or after production of a few works. Other artists using the lithography technique, have treated the airbrush as a complementary or auxiliary tool, but never as their primary instrument. Airbrush²-made lithographs are very hard to find, especially as far as European art is concerned, and Polish art in particular. While pondering over reasons for this status quo, one should take into account four main aspects determining the status of airbrush painting as far lithography is concerned:

- The first factor having negative influence on to-date position of airbrush painting has been a scarce number of publications, studies and training materials. In Polish in particular, there were no serious and comprehensive publications available presenting the essence of airbrush painting. Over the years, the only available literature included short press articles describing general features of airbrush painting and presenting single profiles of its enthusiasts who found self-fulfilment in this method of creation. In the age of the Internet,

² A small, air-operated tool that sprays various media, most often paint but also ink and dye, and foundation by a process of nebulization. <https://en.wikipedia.org/wiki/Airbrush> (15.12.2017)

the situation has clearly improved; now it is possible to use specialist websites presenting necessary expertise, equipment and materials. New fora of enthusiasts of this method of imaging have appeared, just as instruction videos discussing the structure and operating rules of the device, operating techniques, tricks and videos presenting airbrush artists at work.

- The second reason for poor appeal of airbrush painting among artists has been its association with creation for utility purposes, design and not with art work in a strict sense. It may be said the airbrush has been regarded as a less noble device than, e.g. a nib, crayon, bristle paintbrush, needle/pin or chisel. Considering a relatively short airbrush history (the first airbrush was patented only in 1876³), it is hard to compare it with the aforementioned tools. Versatility of this tool and multitude of its applications should not have a negative impact on the way it is perceived and used in art. I believe that widespread use of an airbrush in 20th century advertising should not eliminate this tool from artistic applications – quite the contrary. It is an ergonomic, cost-effective, high precision device offering a wide spectrum of capabilities. Unfortunately, the airbrush did not become as popular in Europe as in its homeland, i.e. the United States of America, where it has been widely used by professional artists and countless numbers of amateur visual artists. In 1886, The Illinois Art School was established; it was the first art school to offer classes specializing in airbrush techniques in its curriculum.⁴ One of the forerunners who used the airbrush for art purposes was Man Ray, who in 1917 presented a series of works made using this tool⁵. The mostly remembered times were of course the pop-art, op-art and hyperrealism periods. It was then that airbrush painting was the most popular in high art.

- Another reason why the airbrush has been underestimated by artists is the fact that they are often impatient to obtain an immediate effect, forgetting that each tool must first be known, accustomed to, and that one should learn how to use it. This is exactly the same

³ Website devoted to airbrush painting history
http://www.airbrushmuseum.com/airbrush_history_stanley_1.1.htm (15.12.2017)

⁴ Website devoted to airbrush painting history
http://www.airbrushmuseum.com/airbrush_history_timeline.htm (15.12.2017)

⁵ Website devoted to airbrush painting, A. Karpiński, *Airbrush historia i terażniejszość*
http://www.airbrush.com.pl/att/Airbrush_historia_i_terazniejszosc_PL.pdf (15.12.2017)

process as learning to draw with a pencil or charcoal, painting with a traditional paintbrush or learning to write with a fountain pen. This simply requires time devoted for practice, doing specimens and making exercises.

- The fourth reason why the airbrush has been ignored as an artistic tool is the wrong selection of devices, or more specifically, using low-quality equipment. Many artists, especially from Eastern Europe, due to lack of choice, began their airbrush painting story with Soviet-built airbrushes⁶, that could discourage even the most zealous enthusiasts. At the moment, one can find a practically limitless choice of this kind of equipment; new models are constantly released, catering to the increasingly demanding customer requirements and market expectations. Offered products include single-action and double-action airbrushes, devices for allergy sufferers, for southpaws and for the right-handed, equipment able to leave a hair-thin line, as well as a smear of more than ten centimeters wide. In the multitude of offered products however, there are many no name devices or equipment manufactured by companies whose names are confusingly similar to the well-known brands. This kind of equipment should be classified as even worse than airbrushes produced in the Soviet Union. Only airbrushes manufactured by renown companies, adhering to high manufacturing standards and constantly improving their products, are able to cater to the expectations of contemporary professional artists. During my classes at the university, courses, annual shows during Lubelski Festiwal Nauki (Lublin Science Festival), presentations in Art Academies, I demonstrate, discuss and compare a whole range of airbrushes, from completely useless to top-notch models available on the market. This is to make future airbrush artists aware of how important it is to select proper equipment, and how to avoid dishonest and profit-focused manufacturers. Wrong equipment often discourages the beginners to follow this path to artistic self-fulfilment and makes them give up any further attempts to use this tool.

Being aware of the fact that the airbrush is just a tool, however a highly important one, helping me to implement my artistic concepts, I began to assemble a new collection of graphic tools and to improve my knowledge about airbrush painting technique. I gradually expanded my resources - equipment and materials, and what is the most important,

⁶ Author's comment: Airbrush manufactured in the Soviet Union by "Этон" factory

I learned by talking to artists more experienced in this field, and by translating publications devoted to airbrush painting⁷. Detailed instruction videos released on DVD⁸, as well as short tutorials available online devoted to different tricks and methods applied to obtain specific visual effects proved invaluable. Unfortunately, this knowledge did not mention airbrush use in drawing a lithographic matrix. The only source I encountered at that time which addressed this topic, was a book by professor Paweł Frąckiewicz entitled “Pamięć przyszłości”⁹ [Memory of the future].

First airbrush tests on a stone

Using my privately-owned airbrush and having purchased, for my own money, the first compressor to the Lithography Department, I started testing different drawing materials. After numerous trials with lithographic inks of all brands I had known about, tincture and drawing materials prepared by myself for purposes of the project, I found there is only one product meeting my expectations. The Rohrer & Klingner¹⁰ lithographic ink,

⁷ Airbrush magazine published on a quarterly basis, presenting airbrush artists, their works and techniques they use in the form of a step by step guide, *Airbrush Step By Step*, Newart Medien & Design, Hamburg

Pinstriping, airbrush and kustom graphics and lifestyle magazine published on a bimonthly basis. *Pinstriping & Kustom Graphics Magazine*, Pensord Ltd, Blackwood

⁸ An instruction video presenting the profile and techniques used by Gary Jenson. G. Jenson, *Pinstriping Dynamics, Pinstriping Kustom Series*, Airbrush Action Inc., New York 2006

An instruction video presenting clearcoating tricks and methods presented by Craig Fraser and Dion Giuliano, *Clearcoating cheap tricks & special F/X, Automotive Kustom Series*, Airbrush Action Inc., New York 2002

An instruction video presenting Auto-air products and their uses, *Auto-Air Colors-Water Based Custom Automotive Paint*, SM Designe, East Granby 2008

A series of ten videos presenting the techniques used by David Morton, *David Morton*, Airbrush Classes, California 2008

An instruction video presenting the profile and techniques used by Steve Kafka, scrollbrushing master. *Kafka - Welcome to My World*, vol.1, vol.2, Kafka Design, Allenwood 2005

⁹ P. Frąckiewicz, *Pamięć przyszłości-Perspektywy rozwoju litografii wobec digitalizacji*, Akademia Sztuk Pięknych im. Eugeniusza Gepperta we Wrocławiu, Wrocław 2012, p. 94

¹⁰ In 1892, the lithographer Johann Adolf Rohrer (1850 – 1918) began with the production of special graphic supplements in the city of Leipzig. His son Johann Adolf Rohrer junior (1880-1953) – a skilled lithographer



owing to its very fine pigment (it failed to clog the airbrush nozzle) proved to be the most homogeneous as far as its consistency was concerned – it failed to form excessive number of layers. This product offered permanent and even distribution of grease on limestone surface (the finest point was printable and it failed to expand its size). Another important property of this ink is its black colour, which allows to obtain a controlled effect on the plate, as close as possible to the effect of the printing ink.

To comply with research goals set out in the statute of the university, I submitted a research project concerning airbrush use in lithographic applications. Funds I obtained allowed me to buy the first professional airbrush to our lithography atelier. This surely encouraged more studies on possible airbrush uses in lithographic printing. The very first attempts of airbrush use also sparked students' interest in the capacities of the device and in lithography itself. All this confirmed my conviction that the new artistic path I embarked on will not only help me develop as an artist, but that it will primarily boost student interest in lithography which is a highly demanding and laborious technique. In the era of digital technology, it is natural that many students choose an easier path to self-fulfilment, due to many improvements and unlimited possibilities. Traditional printmaking techniques get underestimated. Therefore, to preserve traditional skills, it is important to search for new, original solutions for classic graphic arts. Continuous extension of the range of available materials and tools enabling ongoing development and experiments, is of crucial importance as well.

The skills

The next stage turned out to be extremely laborious and time-consuming. I started to develop procedures for preparing a stone plate covered with a drawing applied in a contactless manner. An image produced that way is exceptionally thin and delicate, its thickness is measured in micrometers which translates into great ink savings. In the initial phase, the plate is very susceptible to damage, as bonding of the drawing material to the

himself – continued the manufacture of these special products and founded with his partner Felix Arthur Klingner in 1907 the cooperation that is still known under the name Rohrer & Klingner Leipzig-Co. <https://www.rohrer-klingner.de/> (15.12.2017)

surface of the stone depends on viscosity of each ink particle. Finer particles of the drawing material tend to produce a weaker bond to the limestone, for they dry faster as they travel through air from the airbrush nozzle to the surface. The finest particles arrive at the plate completely dry, losing their ability to bond to the stone, and forming the so called air dust. When ink contacts the plate, it is deposited by gravitation, making an extremely delicate bond; it is not rubbed in mechanically in large quantities, as it is the case with traditional drawing instruments. Therefore, one needs to be very committed to prepare the plate in accordance with the procedures, in order not to damage this fine bond. Another important property of the prepared plate is a microscopic dot. At the end of the needle, ink flowing out from the airbrush nozzle meets a stream of compressed air, which leads to ink atomization; consequently, the gun delivers a precisely directed delicate mist of diffused drawing material. A dot produced this way should not be traditionally covered with rosin, as hand-ground rosin has a non-homogeneous structure. One and the same sample contains smaller and larger rosin grains. If a larger grain is bound to a smaller dot, the dot may later get enlarged. For this reason, while preparing the plate, I secure the drawing only with talcum powder. In a plate prepared like this, the talcum powder fully protects the dot against etching, at the same time preventing widening of its diameter, keeping the nominal size. Individuals following Senefelder's¹¹ procedure more strictly may of course negate this method; based on my experiences however, I found that this procedure is safe and fails to interfere in the drawing. While making a drawing using the airbrush, one should be careful not to excessively blacken the printing plate. Particles of diffused ink can be so small that our unaided eye will not be able to spot them. During replacement with black paint, it may turn out that our drawing is as much as two hues darker than the effect we had expected to obtain. To solve this problem, we need to keep controlling the stone surface during preparation of the drawing, by observing the progress through the magnifying glass. You can always darken the drawing and this poses no problem, as opposed to brightening, which is not impossible, but gives a different light effect than the proper amount of applied ink. To brighten a drawing, I use a sandblasting mini gun, as this device causes no typical mechanical scratching of the stone, but only restores a natural grain-like structure of limestone surface.

¹¹ G. Antreasian and C. Adams, *The Tamarind Book of Lithography Art. & Techniques*, Tamarind Lithography Workshop Inc., Harry N. Abrams, Inc., Publishers, New York 1971, p. 55



This method allows to re-work the drawing in the brightened part of the image without the risk of revealing any unwanted mechanical plate damage. The gun may not only be used as a correcting device, but also as a drawing instrument. It is a great tool for use in the mezzotint¹² process applied to stone. In this case, it involves going from dark to light on the surface of the stone blackened with asphaltum, by uncovering specific parts of the drawing via corundum grains expelled under pressure. This form of preparing the printing plate offers an extremely wide grayscale and highly diversified spectrum of effects. If we apply high pressure of more than 3.5 Bar and fine corundum grains (above 200) and we approximate the nozzle 2-3 mm off the stone surface, we may obtain a clear, vivid line with thickness corresponding to trace of a fine liner left on a piece of paper. Along with increasing the distance between the nozzle and stone surface, the line will get thicker and its boundaries will get blurred until they disappear completely. While preparing surfaces using one-size corundum grains, we may control the brightness by manipulating the distance between the nozzle and the printing plate. The smaller the distance, the brightness will be clearer; the larger the distance, the obtained drawing will get darker, subdued, and its contours will merge with blackness of the background. Another variable determining differences in the drawing prepared this way is time. Longer exposure to the stream of corundum expelled under pressure will make this spot look brighter, until obtaining the desirable intensity or pure white. We can achieve a similar effect by regulating the input pressure. By raising the pressure, we increase the velocity of corundum grains expelled by the gun, which increases the force with which asphaltum is removed from the printing plate. Another variety allowing to create images using this method is the use of corundum grains of different sizes. Finer grains leave subtle, hazy blurs composed of nearly imperceptible dots, whereas larger particles reveal clear grain-like surfaces, which allows for juxtaposition of different textures. Therefore, this extremely broad spectrum of possibilities of obtaining spatiality of the image allows one to arrange original combinations, mix them, complement with different masking methods, or make any necessary corrections.

¹² W. Warzywoda *Podręcznik Litografii Czarno-Białej*
<http://www.witoldwarzywoda.republika.pl/dydaktyka/cb7.html> (15.12.2017)

Lithographic alchemy?

In search of the proper method for chemical preservation of the drawing on the printing plate covered with the airbrush-applied drawing material, I went to Berlin invited by the dean of UDK (Universität der Künste¹³), professor Mark Lammert¹⁴. Together with Steffen Tschesno¹⁵ lithography lecturer at UDK, after testing preparations of different concentration and numerous etching times, we concluded that we don't need to reinvent the wheel. Irrespective of whether we prepare the printing plate using the wet or dry method, ink applied to the plate using the airbrush and properly protected, behaves in exactly the same manner as the non-diluted ink applied to the stone using a nib, paintbrush or stick. One should only trust one's previous experiences and draw the printing plate as in the case of an ordinary ink drawing, in line with the preferred method. Any modifications only introduce anxiety and chaos. Careful observation of stone surface reactions during preparation is an invaluable help in determining further steps. It is more important to use a proper paint during the preparation and add it gradually until the expected effect is obtained. Any attempts to accelerate this process, e.g. by using paint leaving excessive marks or excessive amount of paint on the roller, are bound to fail. Excessive blackening of the drawing by applying wrong paint or excessive amount of it for the first time on the printing plate washed with turpentine oil or tincture, is a typical mistake of beginners using the airbrush while making lithographs.

Paper vs. paper

During my stay in Berlin, I also had a chance to test numerous kinds of handmade paper that are not commonly available on the Polish market. This experience broadened my knowledge about paper used for graphic purposes, and made me more aware during their

¹³ Official website of the University in Berlin <https://www.udk-berlin.de/startseite/> (15.12.2017)

¹⁴ A German painter, illustrator and teacher, https://de.wikipedia.org/wiki/Mark_Lammert (15.12.2017)

¹⁵ A German printer, lithographer and teacher, <https://www.udkberlin.de/personen/detailansicht/person/steffen-tschesno/> (15.12.2017)



selection. While printing an image from a graphic printing plate prepared using the airbrush, type of paper, paper density and method of its preparation are of fundamental importance. As I understand it, professional printing is essentially about transferring any, even the tiniest dot from the printing plate onto paper, in an unchanged form. Not every paper can meet this requirement while complying with standard printing conditions (without excessive pressing and paint leaving excessive marks). Results of these experiments allowed me to clearly identify papers I should avoid, and those I should use while pursuing specific methods and representations. Of the entire spectrum of tested paper varieties, one product was clearly distinguished by its versatility and precise printing qualities. Zerkall, a German paper mill, offers the “LITHO VI” line, paper dedicated for lithography purposes coming in four densities: 210, 250, 270, 300¹⁶. In my opinion, this is very high quality paper, absolutely perfect for printing plates prepared using an airbrush. It fails to delaminate during soaking, and its surface texture does not degrade. It has homogeneous, compact internal structure, which makes it unlikely to strip the face off during its removal from plates covered with extensive areas of black colour, even those filled in with exceptionally viscous paint. During printing from stone with drawings made using an airbrush, it absorbs even the tiniest dots, perfectly keeping their shape and colour intensity. These properties make “LITHO VI” a perfect match for printing plates drawn with an airbrush; at the same time however, this brand offers highly demanding products showing no mercy for any deficiencies at the drawing or preparation stage. They perfectly transfer everything, including any possible defects.

¹⁶ A German paper mill Papierfabrik Zerkall, Renner und Soehne GmbH & Co.KG
<http://www.zerkall.com/English/Paper/Planopapiere.E1.html> (15.12.2017)



Chapter II

Revival / effect / object

After I completely abandoned my previous path, and following the turbulent times of searching for a new direction in my artistic pursuits, I embarked on a road somewhat known to me, yet highly inscrutable, full of mysteries, astonishing and fickle. My extremely risky decision brought about considerable disappointment and many moments of doubt, at the same time however teaching me to be determined and to believe in my own artistic ideas. It helped me revive as an artist and become a better teacher. I regained the unhampered joy of creation and eagerness to share my experiences. At the first stage of studying the secrets of the new method of preparing the lithographic printing plate, I went in for deep black going tone by tone into more lighted up sections of the image. This is how two brand new graphic art works were produced.

Lemmerz I, II



Lemmerz - lithography, 40 x 60, 2014

Lemmerz works employ extensive, heavy velvety black, in which light reveals a cropped elliptic object. Light, building the image, is distributed on the object with different intensity and strength. Non-uniform exposure to light results from a complex structure of a seemingly trivial object. In these works, I tried to obtain the darkest possible tones, resembling subtle rubbing of a pitch black spot made with dried charcoal with a hand. I was not interested in typical greys offered by a graphite pencil; they only inevitably complemented the colour scheme. Going further to approximate whiteness of a page, I managed to produce an effect I had never used before: delicate, subtle off-white colour. Due to the fact that the dot is nearly unnoticeable, and the spots resemble smoked overlapping photographic plates, I decided to enrich the texture of presented surfaces with disorderly arranged larger-size

grain. I made this impression by placing a sharpened pencil in front of the airbrush needle at a 30 degrees angle in relation to its axis. Atomized ink ejected from the airbrush under pressure hit the graphite of the pencil, which imitated another needle on which ink particles were accumulated to form larger droplets. The tip of the sharpened pencil remained inside the stream of the mixed drawing material and air. This made ink continuously delivered to the pencil tip, and the air threw larger droplets down onto the plate. I modified the dot size by adjusting the input pressure of the compressor, according to the rule: the smaller the pressure, the larger the dot. As a result of these efforts, the produced image resembled works made using the mezzotint on stone technique. The image is created with light, retrieved from the total darkness.

Skazony pejzaż / Tainted landscape



Skazony pejzaż - lithography, 100 x 70, 2015

Conceptually, this work was intended to create the feeling of uneasiness, danger, alienation, helplessness. What I wanted to achieve at all cost while creating this work was to avoid excessive literalness, at the same time shifting the accent on the impression of destruction. The stripes of impoverished land arranged askew and going upwards from the bottom line, give the impression of unbalance and instability; they are topped with the imaginary empty horizon. The work in question is a depiction of specific mental states, it provides the escape for accumulated sensations and related emotions. It is a kind of a dialogue with myself, it shows the way I perceive important situations, what I really am, how I observe other people. In this work, I used an airbrush to apply black ink onto stone through a gum arabic stencil, done immediately on the printing plate using the viscose sponge texture. To a drawing made that way, I kept adding lighter tones with a sandblasting mini gun. This tool, or rather the mark it leaves on a limestone, is fully compatible with effects obtained as a result of drawing the plate using an airbrush. The drawing material was corundum delivered under pressure. A huge

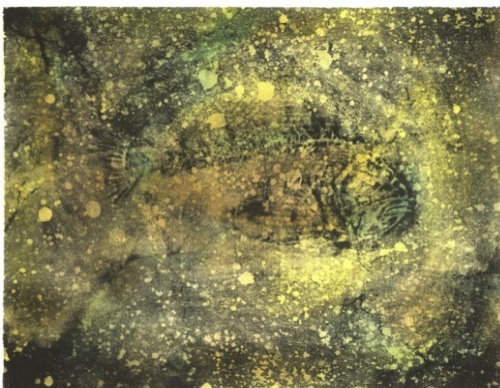
difference between these two tools lies in the fact that the sandblasting mini gun leaves a white trace in the previously applied drawing material, therefore it is a reversal of an airbrush, its negative form. Twin-like nature of both instruments provides the author with unlimited possibilities of creation, at the same time allowing to keep the nature of the drawing coherent. Majority of previous methods of removing the drawing were based on manual, arduous deletion of individual scratches, which very often damaged the stone surface texture. Thanks to the use of a sandblasting mini gun and selection of corundum grain of proper size, I managed to keep the original drainage, which helped me apply a new drawing on adjusted sites without losing the nature of the stroke or blot. Using the airbrush while making a lithograph for the first time, I realized that I was not the forerunner of this method of preparing the stone plate, however as far as the sandblasting mini gun was concerned, never before had I encountered any lithographs or any works made or appearing to be made using this technique. While describing the method I originated employing this tool, I permit the thought that I might have not encountered another artist who came up with the same idea, however, I conceived this idea on my own, without any reference to the output of other artists.

Masks

Another stage in looking for the new direction of my artistic pursuits was the time when I tested different forms of masking, starting from a direct template made of gum arabic, to all kinds of self-adhesives, and templates cut out using plotter and laser devices. A specific group of templates are adapted materials. These include open weave (diaphanous) fabrics, net curtains, nets and meshes, construction materials, knitted fabrics, wadding, screens, horsehair of old paintbrushes, canes, doormats, oakum, granulated products, grains, dried plants, etc. The range of different kinds of screens is inexhaustible, I keep discovering ever new materials that prove very useful in the creation of a lithographic plate. I have used some templates a number of times in different works, however I always adjust them to a given artistic concept. Using the same template, I often achieve completely different effects. When I position the tool perpendicularly to the printing plate, I obtain a patch whose colour is evenly distributed over its entire surface. It is enough however, to

position the airbrush at a 30 degrees angle, and a blot receives a tonal range. A drawing prepared in this manner is brighter near the nozzle, to gradually become darker until complete darkness near the edge that is farthest from the airbrush body. Another manipulation I have used is changing the distance of the template in relation to the medium. A mask contacting limestone surface directly allows to obtain a shape with a clear and sharp contour, whereas the same template moved away to a certain distance from the medium gives a soft, smooth and dispersed contour. Templates also include water-based reflectors giving highly interesting results, especially when the material of the drawing is applied at a very sharp angle. I sprinkle the plate with large droplets of water, then I position the airbrush nearly perpendicularly to the stone surface and I apply the drawing material. Ink, thanks to gravitational forces, is freely deposited on areas not covered with water and on droplet surface. Since droplets have a spherical shape, and since oil and water do not mix, the ink partially flows down the plate surface, gathering along the contour of the wet spot, making it clearer. Direction in which ink is delivered is equally important, as near the airbrush, on the droplet side the drawing material is condensed, whereas on the opposite side, there is a shortage of the material. After water evaporates, ink is deposited on the stone surface, in accordance with its previous distribution on droplet surface. Ultimately, this gives the drawing a 3D illusion and individual droplets appear very natural.

Twarda ryba / Hard fish

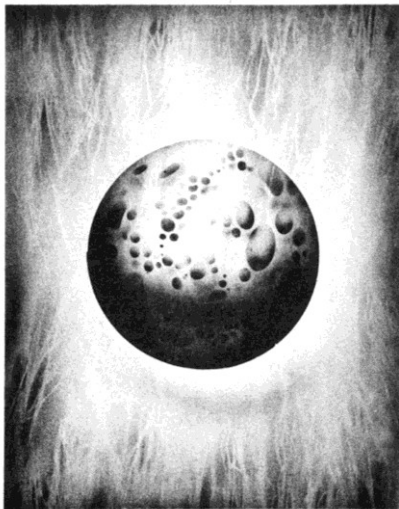


Twarda ryba – lithography, 50 x 70, 2014

In this work, in terms of technological solutions, I was looking for non-obvious applications of the templates on printing plates using liquids. I used masks made of water for my rendition of the stone texture, instead of as we can frequently may encounter, imitating droplets of a liquid. This shows how a given screen may be applied in a variety of ways, and not necessarily in accordance with its originally intended purpose. In terms of the underlying concept, *Hard fish* is my personal approach to such life aspects, as memory, passing of time, or traces we leave in the world after we are gone. In a nutshell,

this work refers to the concept of time - time in the most trivial, chronometric, as well as a more abstract idea of a moment or eternity. In this work, I don't ask myself any questions, I only present my personal vision of the idea. This work is just one of multiple facets of the natural world. Just like rings of a tree form circles in the cross-section reflecting subsequent years of its existence, layers of the soil or rocks carry information about specific events and periods. *Hard fish* tells a story about being whose existence has come to an end, yet paradoxically continues to last. This seeming inconsistency is a part of a broader, logical and well-arranged course of events where a given being only changes its form, state of existence, at the same time keeping its essential features. This work attempts to render the work of time and the way it affects the existence.

Struktura sferyczna / Spherical structure I , II , III, IV, V, VI



Struktura sferyczna I – lithography, 18 x 14, 2015

An important collection reflecting my present undertakings is a series of works entitled *Spherical structure*, initiated in 2014 and devoted to the relationship of an element of unchanged shape and size, however subject to continued fluctuations of texture, to the incessantly modified background. The prevailing element in the space is a sphere – the perfect shape, the surface of which has a different form in subsequent works from the series. In my study on the sphere structure, I used various screens, from geometric grating to metamorphic stone textures. I confronted spheres prepared in this manner with textures of the background obtained using the same technique. Addressed issues included: texture, structure, space, and correlations between them. Initially, this was just a formal experiment intended to explore different possible forms of graphic creation with the use of an airbrush. Ultimately, this series became the foundation for my later formal pursuits, and it set out the direction for my subsequent explorations as an artist, based on geometrical shapes and texture.

Formy sferyczne / Spherical forms

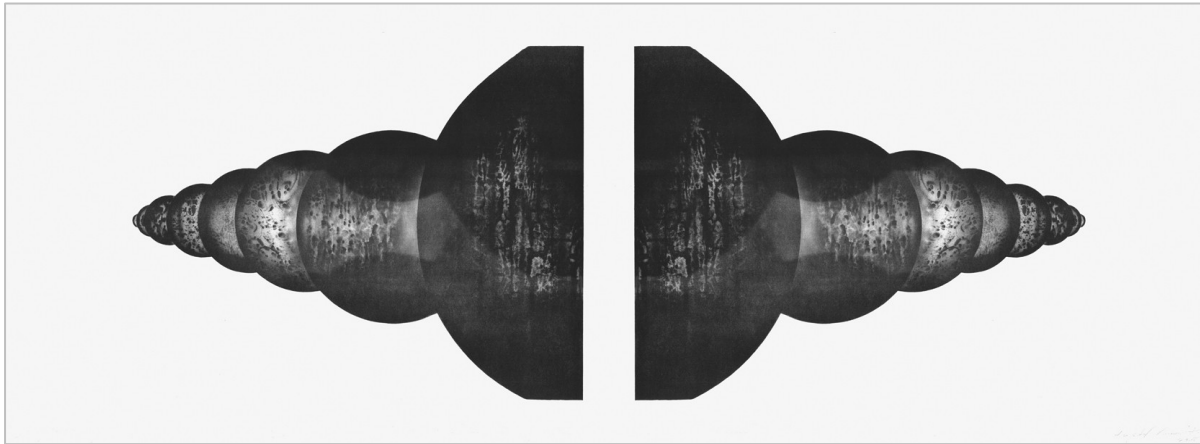


Formy sferyczne – lithography, 70 x 100, 2015

The work entitled *Spherical forms* is a graphic composition of 70 x 100 cm, made of spherical objects, randomly scattered on a white sheet of paper. Presented items are of different size and colour intensity, sometimes they overlap, which gives the impression of their levitation in a three-dimensional space. Planes created in this manner allow to observe the relationships

between specific forms, creating an open design which may be developed using one's imagination. Sphere surfaces are covered with diverse, metamorphic textures, referring to geological phenomena and related transformations. This work renders my reflections about the origin, identity and transformations. It also makes references to the genesis of today's world, and the reflection over the moment in the process we came to live at, whether this is still the beginning, midpoint or end; if the twilight, then the following questions are provoked: How will it all end? What is going to happen to us? How much time is left before we die? Will we survive? This work, in its literal aspect, provides purely existential deliberations of the author, rooted in the broad context of time. It provides no description, explanation, or answer; it is only results from rendition of my personal impressions, my inquiries related to existence.

Koniunkcja sferyczna / Conjunction of spheres



Koniunkcja sferyczna – lithography, 70 x 200, 2015

The work *Conjunction of spheres*, 70 x 200 cm, strictly derives from the *Spherical structure* series. References to the previously discussed set of works are manifested in the derived primary theme of a texture-coated sphere. This time the shape of the major element is multiplied. I arranged all spheres in a wing-like manner, along the line demarcating an invisible horizon, with the largest central sphere not completely fitted into the frame. The concept is based on the mirror reflection and despite having typical background (only whiteness of the paperboard), this solution provides for spatiality of the created arrangement. Absence of the background is an intentional step towards purification of the composition and focusing viewer's attention on the modules, their textures and arrangement. The presented correlation between specific components was my major goal and it determined all other actions. A simple, transparent arrangement with clear interdependencies, made of components of identical shape, however with different surface structures, represents the concept of hierarchy and unification within a group. Unified shapes displaying individual features in the form of diversified textures, are forced into a formation imposing a specific position in the set. The central component prevails in terms of its size, distinctness and intensity; it wrenches itself free beyond the presented frame, its nominal silhouette being lost and requiring some guesswork. It represents the leading entity, head of the group, who being eager to command pushes on and is no longer the same as the remaining elements of the community, it becomes rough, changes its phenotype and no longer fits the model of the population. This work makes references to the world order

proposed by George Orwell, where it is no longer a pessimistic vision of the future, but it already came to be realized in numerous aspects of our presence.

Sfera blue / Blue sphere

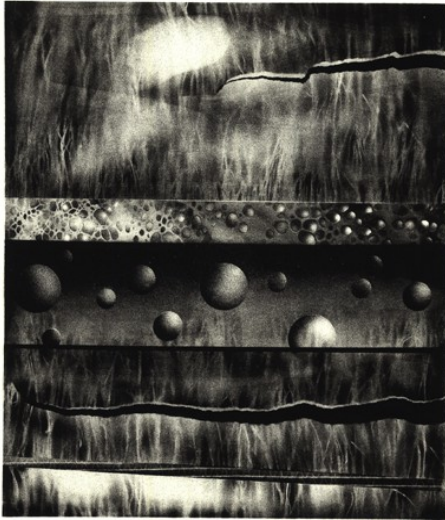


Sfera blue – lithography, 100 x 70, 2015

Blue sphere, is another work in which a sphere is the prevailing element. Again, I decided not to arrange the background, in order to focus on the main theme and phenomena taking place on its surface. Surface of the sphere reflects some non-identifiable landscape, accentuated with a specifically distorted horizon that divides the sphere into two parts: the upper part, reflecting the open space, and the bottom part making references to the structure of the top soil. On the spherical shape prepared in this manner, there

appear flashes of light cutting through the textures and emphasizing spherical nature of the main object. Another element of the drawing are defects in the planes, in the form of scratches made mechanically, disturbing smoothness of the surface and endowing the drawing with a more vivid character. The last layer of the drawing is made of randomly scattered droplets of a transparent liquid, forming lens that distort the lines and shapes of the previously arranged planes. The whole composition is in a colour evoking specific emotion and nostalgic impression. The underlying idea of this work was to create a combination of contemplative and congenial effect, expressing the seemingly mutually exclusive states. Despite the use of cool blue, the work emanates with warmth and evokes positive impressions, in line with its original assumption. Technologically, the work is a compilation of various drawing techniques. The base is an airbrushed drawing, covered with highlights made with a ball pen. The work is complemented with light effects made using the sandblasting technique.

Berlin

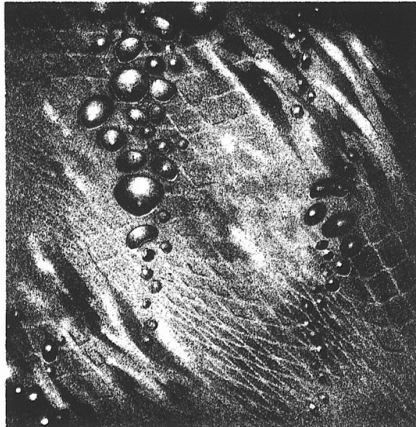


Berlin - lithography, 40 x 30, 2016

Berlin is the artistic epitome of my stay at UDK Berlin. It is a 40 x 30 cm lithograph, comprising my abstract impressions about the capital city of Germany. It was made for the purpose, and during, my research on various methods of chemical preparation of the limestone printing plate, with a drawing made with an airbrush. This took place in the lithography atelier of Steffen Tschesno in Pankow. Formally, the work combines various drawing techniques and solutions offered by the airbrush. While preparing the stone, I applied all

image creation techniques known to me at that time. As a result, I created a lithograph reflecting the diversities of the five-million people metropolis embracing various cultures, styles, artistic approaches etc. The work has a strip-like arrangement and is composed of four images comprising specific layers. Two of them, the first and the last one, are ripped by cracks symbolizing disruptions and discords I observed in the city and in attitudes of people I encountered. The other two layers refer to orderliness and extreme propriety of many Berliners. In my view, Berlin is a set arranged by some superior authority, including often extreme contradictions forced to exist side by side. This dichotomous nature of the capital of Germany is typical of contemporary urban agglomerations, but it was strictly Berlin together with its residents, that drew my attention to it and made me investigate this issue in greater detail. The work is a kind of memo, rapid interpretation of stimuli, and it renders my subjective feelings related to specific geopolitical and sociological phenomena taking place over a given time.

Jadran M I, MII, MIII, MIV, MV, MVI, MVII MVIII



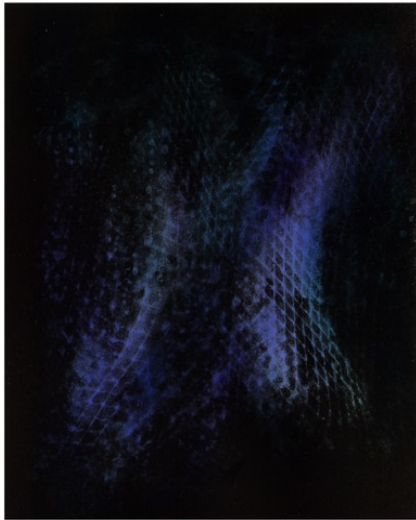
Jadran M I - lithography, 10 x 10, 2016

Jadran M is a series of 10 x 10 cm black-and-white miniature lithographs made with the airbrush, ball pen, sandblasting mini gun and an X-ACTO knife. For masking purposes, I used a mesh from a landing net and templates cut out with a laser in mylar sheets.¹⁷ In the individual components of the series, by changing the tension of the net spread over the stone surface, I modified the shape of the eyelets, obtaining highly varied regular arrangements of trapeziums and rectangles producing the structure of the background. The foreground is filled with cylindrical shapes imitating randomly spread air bubbles that obscure and distort, as lens do, the regularities of the background framework. Conceptually, this series was intended to reflect a specific fragment of time and related personal feelings of the author evoked in this period. It is a private collection of metaphors based on positive feelings and states of mind. Peace, tranquility, internal harmony, satisfaction, fulfilment, euphoria, are the keywords to this collection of miniature forms. The story it tells is a travel to places and moments evoking in me the feeling of permanent relaxation and balance.

¹⁷ Mylar is a thermoplastic polyester film manufactured by DuPont. It is highly transparent and displays good tensile strength. It is chemically stable, resistant to high temperature and can successfully serve as a very good gas and aroma barrier. Mylar is widely used in the electronics industry as electrical and thermal barrier. With adequate preparation of Mylar and covering it with a special coating, the material is suitable for digital, flexographic, offset and screen printing. This combined with the ease of converting this material, significantly expands its applicability in other industrial solutions.

<http://www.labels.pl/en/mylar.html> (15.12.2017)

Jadran



Jadran - lithography, 30 x 20, 2016

Jadran, a 30 x 20 cm lithograph, is the aftermath and extension of the previous *Jadran M* series. This work however, differs from the original lithographs in terms of the format, absence of clear accents in the foreground, and colour. In this work, I focused on the area of a single plane, the structure of the net, intensification and vanishing of its regularities. After drawing the printing plate, during plate preparation I redeveloped the image by applying a strong etching agent, splashing it over the image not secured in any way. As a result of this experiment, the drawing became lighter and it got enriched with new components; it became more expressive and natural. In order to enhance the impression and consistency of individual components of the drawing, I introduced colour however, I narrowed the spectrum down to greens, blues and violets. Applied colours are highly transparent, they permeate each other, change the hue of the black printing ink, deepening its tone and determining its temperature more precisely. Colour defined in this way complements the representation and makes it more complete. Conceptually, the work corresponds to the original series, and it refers to depiction of a given period of time and related impressions. This lithograph results from attention shifted to strictly determined experiences. It fails to refer to generalisations, undefined situations extended over time; it is an enlargement, approximation intended to last much shorter. An incident perceived in this manner contains more subtle details inspired by more precise determination of the event. This method of representation is intended to make the audience delve into the image, thus enabling them to scrutinize it more thoroughly, which consequently should lead to emergence of new, personal interpretations of the work. Each subsequent innovative interpretation adds value to the work, it makes it more open and allows audiences to experience art. Any image focused on a specific approved interpretation, imposes self-limitations already since its origination; it gives no opportunity to develop any thoughts, broader analysis and personal comments on the work, as well as its underlying idea. The work has the right - and it should - live its own life through

different interpretations, and not be taken hostage by only one thought that guided the author during the creation. Multiple meanings of the representation produce personal descriptions and ideas.

Punkt / Point I, II, III



Point I - lithography, 10 x 10, 2016

Point is a series of small 10 x 10 cm graphic art forms, made using the lithography technique. All works in the series were made solely with an airbrush. I failed to employ any other drawing techniques. Individual images were created by arranging circle-based objects in different configurations. While creating the works, I decided to subordinate the entire graphic space to a single central point prevailing in the representation. In this manner, I created

miniature lithographs composed of various elements canalized to form rings of varied diameter, having one common central point (geometric centre). The underlying idea of these lithographs was to create graphic forms implying the transitory area connecting the two worlds: the present, real world, the one which we live in, with the future world, inscrutable, symbolized by a point meaning nothing. This area symbolizes time we had been given, with its bright and dark fragments, forming a compilation of experiences grouped into circles, becoming smaller and smaller as the time passes by. Progressive reduction of the rings also refers to the changed perception of time as it goes by. The older we get, we get the irrational feeling that time is shorter, that days, months and years pass by faster. We do not take into account however, that our point of perception is changing, as we move in time, and consequently our observation point gets transformed. The fact that we live more intense lives at a higher pace is of great importance as well, although these aspects do not constitute the foundations on which this series emerged. The lithographs in question constitute geometric graphic art works, referring to a flood gate in which we came to live. The point making the title of the series is only an inevitable end of existence and serves as the starting point for a story which is told. It is the duration of staying in the transitory area,

that is the theme of these works. This period is determined by various events, dependencies, it assumes different forms, more or less awkward, smooth, extensive, accumulated etc. Specific elements exert more or less influence, their quality and power undergoes permanent modifications. Obtained forms overlap, forming different reflections, they are translucent, revealing deeper layers, they interfere creating swirls in the worked area.

Struktura sześcienna / Cubic structure



Struktura sześcienna - lithography, 100 x 70, 2016

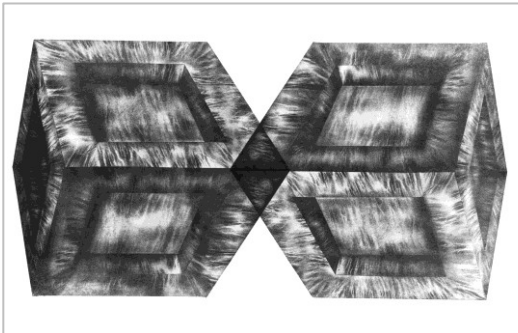
This work is the aftermath of my previous undertakings where I presented various concepts and issues using solids and textures. In this lithograph, I applied my earlier composition assumptions, however the main theme here is a cube arranged in a distorted perspective. I disturbed the structure of a classic cube by adding recesses in three planes visible in the image. I created particular surfaces using texture obtained as a result of applying ink through a mask made of thin twigs cut out from a broom and stuck together with a tape to form a flat open-work net. The light and shadow, as well as direction in which texture was arranged, formed shapes of specific sheets comprising the final form of the object. There are no falsely applied strokes comprising contours of the planes; connections of not uniformly lit surfaces naturally reveal the structure of the solid. Contour lines are therefore the resultant of juxtaposed blots, and not their individual contours imposed without any justification. This is intended to give the impression that the conceived object is more realistic. The work is coloured. I used a narrow palette, starting from chrome yellow going to warmer hues, shades of orange, to finish with dark brown tones. Application of these colours made the work look warmer, more positive, and refer to its underlying idea. In this work, I refer to a specific stage of my development as an artist. It depicts my internal satisfaction due to finding of a new, original form of my self-fulfilment as an artist. More specifically, it is a representation of a belief verging on certainty that this is exactly the path I would like to follow, that this is the way I would like to speak about myself and my

surroundings, and that this is exactly my language of artistic expression. It may be still quite rough and flawed, but it opens up an extensive space for my artistic work and further pursuits.

Awareness of faith

The multitude of ideas, themes and forms I discovered at that time opened up the world of immeasurable creative potential. It evoked fresh enthusiasm to work even harder, and I started to believe in what I was doing. Awareness of my own development, as well as the number and pace of newly emerging concepts, escalated my reflections about fleeting time. The thought that I may not have enough time to make all my ideas come true constantly returns to me; however, at the same time it has been the driving force to break any barriers and inner limitations. It makes any further search meaningful, it gives faith in one's own artistic output.

Zderzenie / Collision

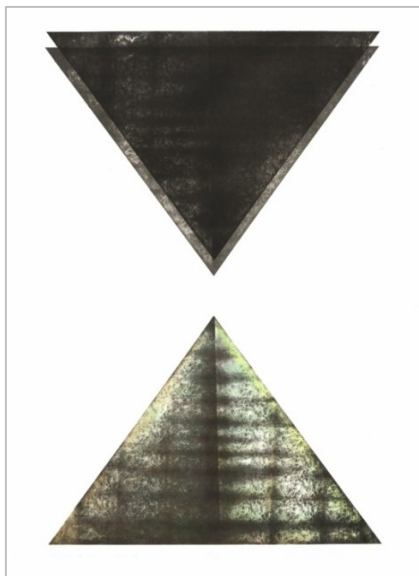


Zderzenie - lithography, 70 x 100, 2016

Collision is a 70 x 100 cm lithograph in which I used the template prepared for my earlier work entitled *Cubic structure*. This time, I arranged this solid horizontally and duplicated it on the opposite part of the image, which gave the impression of its reflection. In this manner, I obtained two objects arranged to collide with each other. In this work I used the same drawing printed twice and shifted on a single printmaking sheet. The manipulation involving change of paper orientation and new configuration of items helped me create a different object than the original one, referring to extremely different message communicated by the work. The intention behind this work was to present a conflict of two physically similar entities, having different personality traits. I realized this intention by changing lighting conditions for the juxtaposed elements. The object on the left-hand side is illuminated from above, whereas the cube on the right-hand

side is illuminated in its bottom part. Converted projection of the illumination transforms the presented objects, and despite having so many identical features, it gives the impression that the two juxtaposed items are completely different and of contradictory nature. Two objects occupy nearly the entire space of the image, there is only little space filled with air, not taken by aggressive wedges of the items driven into each other. Distribution of all components of the image emphasize the tension and force of the conflict this representation refers to.

Napięcie Natężenie / Tension Intensity



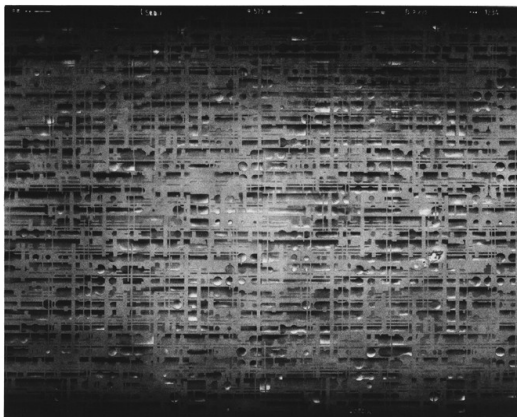
Napięcie i natężenie - lithography, 140 x100, 2016

This 140 x 100 cm lithograph is composed of three isosceles triangles. Two figures placed in the upper part of the work overlap with a slight shift, their apices directed downwards. The third triangle is placed in the bottom part of the work, apex facing upwards. All drawings were made with an airbrush, and masks made of open weave fabric and paper tape. The background is a non-image area. While printing, I used the double embossing technique with a shift. After I finished the basic print, I was lifting up the sheet of paper and, without treating it with ink again, I moved it by always the same distance in relation to the stone.

Then, I did another printing on the same sheet of paper, only using ink left on the printing plate from the previous embossing. A reproduction prepared this way looked like it was printed using one classic printing cycle and another uncompleted, where paint failed to cover the surface completely, the so called ghost image, duplicating the original form. This manipulation was intended to render the intensity of a given state. *Tension* and *Intensity* used in the title of the work do not refer to phenomena commonly known from the laws of physics; this is my personal artistic vision of terms related to perception of visual stimuli and emotions likely to appear under their influence. By juxtaposing triangles facing each other with their apices, I wanted to reflect the tension produced between them, whereas by duplicating the upper wedge, I wanted to show intensity and pressure they exert of the

opposite element. Texture of the objects is meaningful as well; it is a tangle of countless confusing lines, and their arrangement introduces some kind of anxiety. If we fix our eyes on details, vibration of the twisted lines distracts our attention and gives the feeling of ripples. This manipulation is intended to evoke the feeling of uncertainty resulting from concocted tension and intensity.

DOS, ZIP, KOD



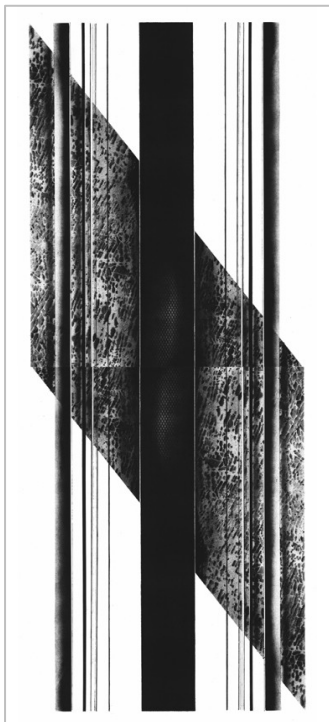
DOS - lithography, 70 x 100, 2017

A triptych composed of lithographs entitled: *DOS, ZIP, KOD* 70 x 100 cm each, is my experiment intended to create the lithographic version of computer graphics of late 20th century. As regards the substance, I focused primarily on the texture, form, regularities and light used to engineer it. Clear darkening of ornaments in the upper and bottom part of the work, embrace the work in the space between them. This manipulation opens the composition on the right- and left-hand side, conferring upon the work a stripe-like character. The structure of the emerging space resembles a segment of a cylindrical shape that may be extended over and over again. This open design allows to freely arrange the exposed space. By combining numerous prints of the same work I can create one, extended and consistent graphic reproduction. The multiplied object is no longer a typical duplicate, but it becomes a brand new, integrated, independent print. Conceptually, these three lithographs again investigate the question of time, or more specifically processes going on in time. Continuity, recurrence, stage-wiseness are the main features of those works. Another important theme is a reference to the beginnings of digital graphic design in art created using DOS¹⁸. It had been exactly the initial computer-aided graphic design experiments that inspired emergence of the triptych. The lithographs constitute excerpts rendered using specific technical textures, creating space for graphic art

¹⁸ DOS (*disk operating system*) – first portable (disk) operating system used in microcomputers in the 1980s, <https://pl.wikipedia.org/wiki/DOS> (15.12.2017)

imitating *Digital-print* from the 1990s. This reference is not intended to evaluate those renditions, it only attempts to perform similar actions using a more traditional, conventional printmaking technique. It is an experiment based on designing an original interpretation of the existing forms, intended to face specific formal problems and to produce their lithographic counterparts. All this led to the emergence of graphic art produced using a technique patented at the end of 18th century, initiated with the imaging method developed in the late 20th century. This is an inversion of a typical course of events, i.e. founding new artistic concepts on previous experiments. In this series, the older graphic art design technique draws inspiration from the imaging method developed two hundred years later. This is possible thanks to cultivation and not giving up the achievements of previous generations, in the name of easier, less demanding forms of self-fulfilment. This is an art phenomenon allowing often extremely different techniques, methods and styles to function, co-exist and have a stimulating effect on each other, by developing new solutions, representations, visualizations of the most unexpected concepts.

Totem I, II, III



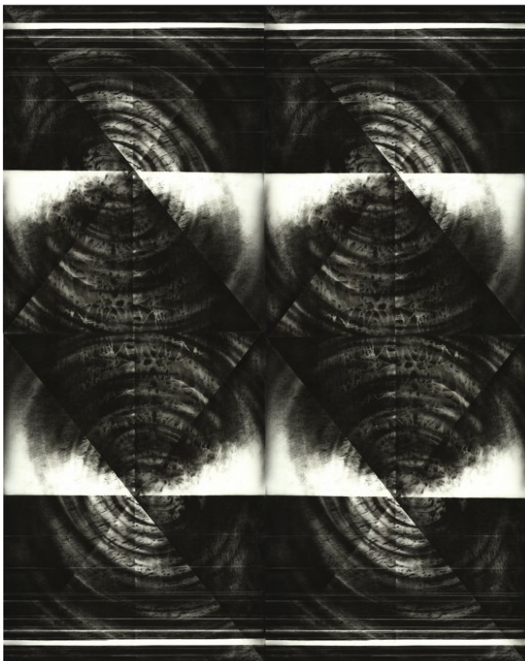
Totem I - lithography, 155 x 55, 2017

Totem is another series presenting the direction of my current artistic pursuits. It is composed of three black-and-white 155 x 55 cm lithographs. In this series, I used three different drawing techniques. The base is an airbrushed drawing, which was then corrected using the sandblasting and scratching techniques, to finish the process with highlights and accents made with a ball pen. While preparing the printing plate, I used templates, masking, painter's tapes and elastic tapes to create pinstripes¹⁹. I designed the totems by juxtaposing simple shapes of a trapezium, ellipse, rectangle, lines, and giving them diversified textures. Starting from smooth, not disturbed black and white surfaces, to elements brought to life using chiaroscuro, which only outlines the shape

¹⁹ Author's note: thin stripes glued or painted, serving as ornaments of sign boards, carriages, motorcycles, automobiles and other objects in everyday use

of the solid, to planes imitating complex patterns derived from nature. In this series, the background stays white, as I wanted to focus the most on the form and structure of the constructed object. Conceptually, this triptych makes references to the world of deities, obelisks, symbols of old cultures. They served as the foundations on which I erected my own contemporary totems being a speculative visualisation of phenomena, tendencies and attitudes I have observed as common nowadays. Consequently, there emerged a visual analogy, linking very distant beings - those that are gone with those present at the moment. This parallel highlights the cycle-like nature of processes in the history. The works refer to the world of beliefs and their depiction by creating images of concepts of supernatural nature. At the moment, this series constitutes a triptych, however I do not want to freeze it in this form; I expect to develop this idea further.

Kalejdoskop / Kaleidoscope



Kalejdoskop - lithography, 140 x 110, 2017

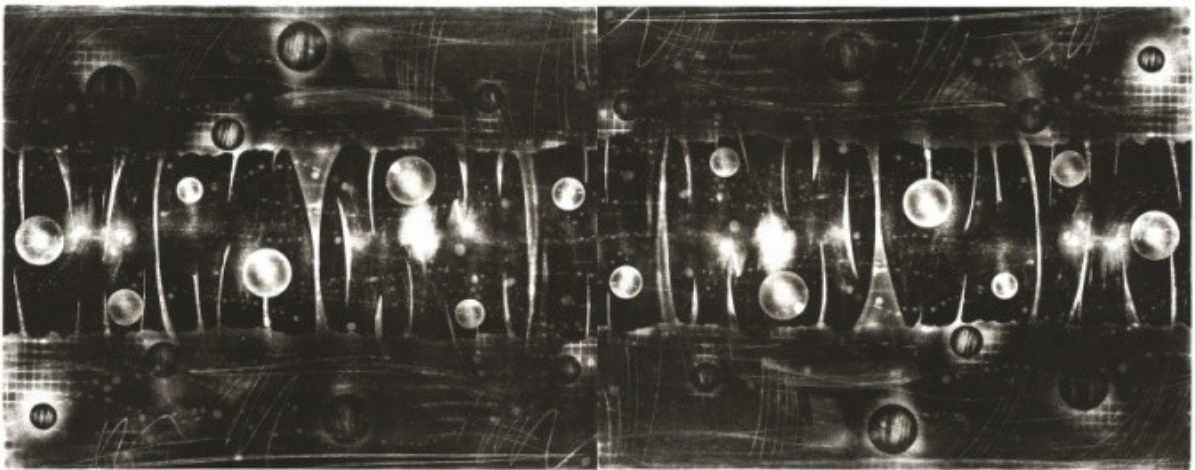
This work is composed of four black-and-white lithographic prints, arranged in a coherent narrative. The size of the work is 140 x 110 cm and the entire area is covered with a drawing. Each print comprising a quarter of the arrangement, is divided vertically, horizontally and diagonally (both diagonals) to form eight triangles appearing to be the photographic plate covering the basic drawing composed of different textures and bound with a trace resembling a whirl. While creating this work, I used various templates imitating textures of biological origin, and the *free hand* method²⁰.

Using a sandblasting mini gun, I introduced corrections and illuminations of selected parts of the drawing. The design made in this manner is my time machine, taking me back to my

²⁰ C. Misstear, H. Scott-Harman *The advanced airbrush book*, Orbis Publishing Limited, London 1984, p. 156

childhood years, to highly blurred memories. A kaleidoscope, a figurative childhood toy distorting the reality, deluding the senses, no longer pleases the viewer with sparkling colours. Shapes are increasingly deformed, entangled, whereas colours faded away long time ago, replaced by the full spectrum of greys. This lithograph is a sorrowful conclusion concerning the time gone by and the present moment. It is a note about something that is lost forever.

Brzeg I, II, III / Verge

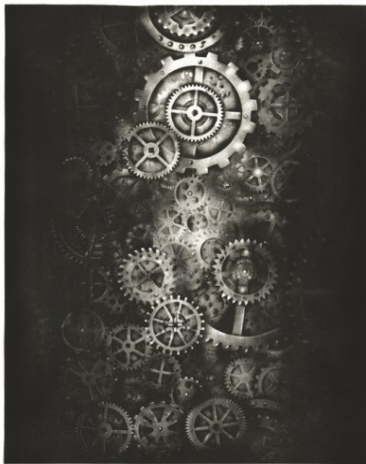


Brzeg III - lithography, 55 x 155, 2017

Another series of my works is entitled *Brzeg / Verge*. It is composed of three 55 x 155 cm lithographs made with an airbrush and employing the use of templates made of adapted materials. Here, I used templates made of twigs taken out of a sweeper and some paperboard torn by hand. The specific feature of these works is their horizontal orientation enabling multiplication and continuity of the image. Continuity of the representation enables clearer emphasis of the main conceptual framework which refers to the perception and the manner of presenting the concepts of duration, existence, being. In these works, I depict continuity and uninterruptedness of time as a linear phenomenon. Although it goes by, it continues to last, it cannot be depleted or accumulated, it just flows. Time changes, but it becomes unchanged, all solely depends on how we view its nature. The lithographs in question do not challenge any theory describing time in the philosophical or physical sense. This triptych only represents my private observations and reflections about methods of

depicting to some extent abstract idea. It attempts to visually interpret the very specific processes that have fascinated people for centuries. The form and design is subordinated to a specific idea, it imitates the characteristic features of the discussed object. These lithographs constitute compilations of abstraction and literalness, both in terms of intellectual challenges and manners of depiction.

XIX

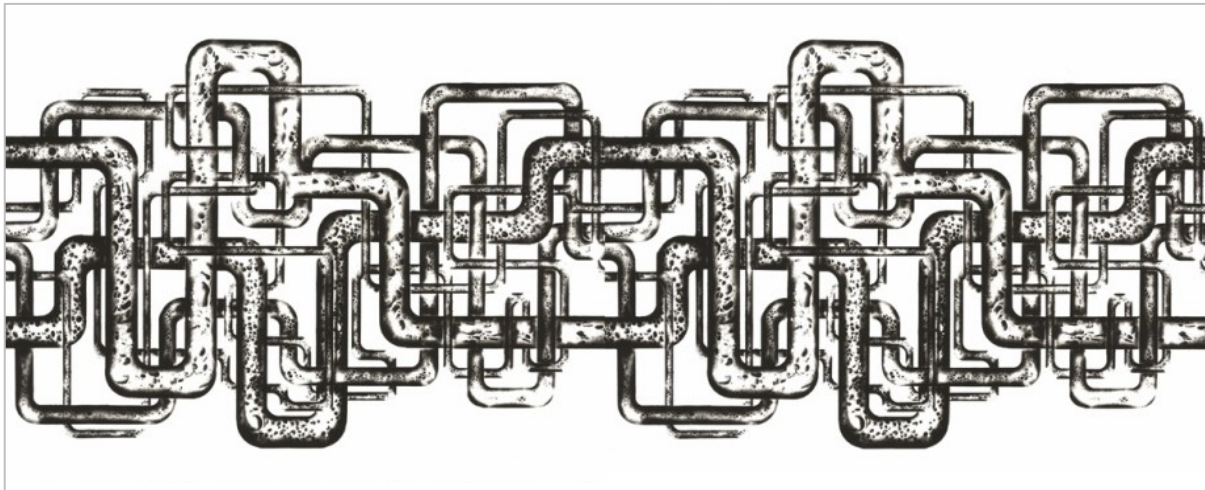


XIX - lithography, 70 x 56, 2017

XIX is a 70 x 56 cm lithography, with its form referring to *DOS* series. In this case, the work involves elements presented in a more realistic convention, arranged vertically into a rectangular shape. The main theme of the work are gear wheels, depicted in non-uniform sizes and forms, emerging from the black background. The intention I was guided by while making this work was to create a system of diverse, yet similar modules, depicting a specific longer period of time. This lithograph is devoted to development and transformation initiated in the 19th century, that is time that has been sinking into oblivion and underestimated. I chose a gear wheel as the symbol of this period: a mobile element, a driving force that I believe has changed the then world the most. Never before had a gear wheel been used so extensively, or influenced the fate of humanity so strongly. Therefore, choosing this object as the symbol of the epoch was self-evident, and in my opinion most useful to depict the idea. In the nineteenth century, even the most common items had clear distinctive features; their formulation harmonized with an aesthetic look. It was only with the advent of the 20th century that we experienced widespread unification, destroying not only individual character but taking away the opportunity to commune with beauty. Ergonomics (which is not always the benchmark), cost-effectiveness, minimalism and extremes designers' priorities; aesthetics and beauty have taken a back seat. In pursuit of innovation, we lose our sensitivity to beauty, we surround ourselves with practical items, which are not necessarily attractive. Beautiful free standing wall clocks, cupboard clocks, pocket watches finely ornamented, engraved, were

ousted by electronically displayed angular soulless digits, providing precise information and measuring time, but being not necessarily joyful to our eyes. This design is the reminiscence of another time, the time of beautiful objects.

Formy rozciqgle / Jelita miasta Extensive forms / Urban guts



Formy rozciqgle / Jelita miasta I - lithography, 56 x 156, 2017

The work entitled is a 56 x 156 cm lithograph made using a technique employing ink gravitation, composed of 6 bands of three different widths and having tubular shape. The bands stretch along the entire length of the design, bending at a ninety degrees angle, turning round, crossing each other and interweaving, making an intricate tangle arranged into an ornament. The surface of these components has a non-uniform texture, emphasizing their cylindrical character and forming a kind of patina. Lines formed by these elements sometimes disappear, they become less clear only to present their powerful impact. This manipulation diversifies particular elements and sections of the image, which gives it more spatiality. The idea weaved into/behind this work is based on the intention to create a graphic form lasting much longer, being more extensive and weave-like. The basic theme was designed to allow the total length of the work to be modified depending on specific exhibition needs and possibilities. As a result, it is possible to create a permanently closed object, by connecting both ends of the image and its exposure, for example, on a cylinder or on all walls in a room in the form of a panorama. This work was inspired by my reflections about living in a city, the manner in which I perceive municipal forms of existence, what they

mean, how I perceive this period of my life, how I am affected by the fact of being settled in the "human anthill".

Meanings in the set

In the discussed collection of works selected from my current output, one can recognise different narratives based on my personal artistic concepts. While creating specific works or their series, I approach them individually, not planning to put them as parts of a larger whole. The set was built on the selection of artistic concepts present in my output strictly connected with the use of an airbrush in lithography. While analysing specific works and searching for the common area (disregarding technological issues), one may notice a characteristic element emerging from most of the works. The element uniting the entire set is "time" rendered in a variety of forms, aspects, meanings and terms. It is time in all available varieties that determines the majority of my artistic pursuits, gives them meaning, serves as a point of reference and inspiration. The extensive semantics it offers, is the foundation of most of my graphic narratives. *When? How long? How fast? How was it? How is it going to be?...* - these are the actual, to some extent conscious, to some unconscious, issues addressed in my works. Time is treated as an open-end, extensive and unlimited term, putting my artistic concepts in an order, on the literary level and literally. It is my most faithful companion, it initiates and guides my thoughts, provokes my actions, it motivates me to take further artistic steps. It triggers the creation of my lithographs, appearing in chronometric, terminal, fourth dimension or in the philosophical contexts. The multitude of meanings is my everlasting inspiration. The context of time induces me to create images that do not reflect it, but constitute a thematic reflection - unbound and creative translation of ideas into two-dimensional images, visual transcription of the developed concepts.

The direction

My current output is not the aftermath of a revolution or evolution, it is the resultant of my previous experiences from which I have isolated the most crucial components: limestone, the product of nature, formed a few million years ago, on the one hand, and on

the other, a tool built by man in the 19th century and successfully used until this day. The two have been with me for over twenty years, however only recently did they come together. This marriage of two inventions used in graphic art, patented at an interval of only 78 years (lithography in 1798²¹; airbrush in 1876) brought me back my eagerness to create, fascination with art and interest in experimenting. The adopted artistic path has allowed me to fully express myself, without any limitations, influence or having to work under pressure of expectations of others. I am a more informed and self-assured artist. I have no idea where this road is leading me to but I know that I want to follow it. I want to learn and find new solutions, to explore the intricacies of art, to depict ideas, create innovative images, experience the unexperienced, to agitate all my senses.

I do not wish to offer an excessively intricate ideology; I transform specific ideas into images, I respond to my imagination. By printing a given representation, I visualise a thought, I get rid of it so to say, I classify it and thus purify my mind. This is an ongoing process that never ends. In place of the realized forms, there come new ones, they stand in line to be brought to life, they ripen, and sometimes burn up or become blurred as less intriguing ones, not powerful enough to leave the incubator and come to life. I cannot control images born in my mind, or know whether they are produced by my consciousness or unconsciousness, but I can shape, process, improve and transform them. A tool that makes it possible is my visual awareness; it allows me to control and verify different ideas.

I perceive visual awareness as the effect of human thinking induced by various stimuli (not only visual stimuli). It is a collection of experiences, the sum of various interconnected impressions that build our sensitivity to shapes, colours, blots, lines, textures, structures, systems, arrangements, light, shadow, darkness, sound, silence, temperature, humidity etc. Sensitivity is the ability to feel real impressions, as well as the unreal, perception of unreal forms – figments of our imagination. Visual awareness may be treated by artists as a kind of compass enabling them to travel through the creative process in a controlled manner. It enables one to deliberately learn, feel and express ideas.

²¹ J. Werner, *Podstawy technologii malarstwa i grafiki*, Państwowe Wydawnictwo Naukowe, Warszawa - Kraków 1989, p. 138

The ability to interpret is the manifestation of artist's creativity. Interpretation does not refer only to real things, it involves analysing and redefining concepts related with the real and the imagined. It involves skilful creation of new forms more or less related to the original, if not more or less departing from the original.

If visual awareness is not enough to verify a given concept, I have one more diagnostic tool at my disposal – my intuition. Intuition is not a component of visual awareness, it helps one make choices but provides no justifications for a given decision. Intuition makes use of the same premises as awareness, but it also employs the subconscious, and it may exclude consciousness.

Idea

My artistic output reflects my constant search for the ever new forms of graphic art, being the record of my personal experiences, feelings, memories making a kind of a visual album of experiences. This record is made of more or less obvious signs, symbols and meanings located in the formal and literary layer of the image. This dichotomy allows me for more unconstrained and less literary manipulation of meanings, which offers a much broader field for interpretation for the audience. Even in the case of realistic works, I am not set on the literal message; an object is just a pretext for formulation of a private thought, expression, state of mind. Then, I use items, forms, symbols I am most familiar with and which are close to me, and I often change their meanings, thus creating my own visual language. In that manner I create a kind of a secret code, and I am the only person who is able to read it. Therefore, I am not anxious for everyone to grasp all meanings included in the image, I prefer to leave more space for interpretation. I do not wish to be a nuisance and suggest more or less obvious answers. This solution gives audience a chance for unhampered speaking of their mind without being under any pressure, and offers me an opportunity to know other interpretations of signs I used in the image. The recipients should not be guided to adopt "the only approved" interpretation recorded in the two-dimensional message, they should read, understand and feel for themselves, building their own story. In my opinion, each work should trigger thinking related with perception, it should encourage a dialogue, provoke discussion, and not exist for the sake of pure existence.

In my work, I try to explore new forms, methods, techniques of preparing the printing plate. Diversified methods of preparing the template used in different combinations allow me to establish relationships between specific elements of the image. Conscious formal operations approached this way, increase power of the message behind the concept. The narrative reveals new layers and becomes more open. Discovery of new technical solutions is a driver that keeps me delve into the ever new artistic explorations, which induces me to work even harder during printing experiments. This is a closed circuit, a kind of inner loop, continuous mutual stimulation of two different planes, the intimate, internal, intellectual *perpetuum mobile*. The practice I have developed is my personal solution to avoid multiplication of the same patterns, and consequently style-imposed tricks. I have deliberately resigned from the so called „my own style”, as I believe that this causes self-limitation of the artist. It is no accident that I chose lithography as the medium for my expression as a graphic artist, as it offers an exceptionally wide possibilities of creation. Technological demands impose sufficiently strict regime on graphic artists, therefore I do not wish to additionally restrict myself with my own style. I realize that the style in question may emerge due to my individual patterns of perception, my own behavioural characteristics and some limitations each of us has. I only want to declare that my own style is not my purpose. I try to give it up for the benefit of experiments and freedom of artistic creation. This approach may involve less recognition and lack of coherence across the works, but in my opinion art is intended to arouse interest, make one think, excite curiosity, astonish, bring joy, and not carry a label „Created by Rukasz”²². My task is to search, find solutions and struggle, and not duplicate the developed/elaborated systems of creation. I have discovered in myself more traits of a researcher painstakingly achieving his goal, than of a celebrity willing to earn the applause. As most people of course, I want to be accepted, noticed and appreciated, however I will never sacrifice the freedom of expression.

²² „Created by Rukasz” – expression I used in the introductory note to the catalogue from my individual exhibition entitled *Lithography*, held on 26 June 2015 in Warzywniak Gallery in Gdańsk Oliwa (Poland)

Chapter III

Alma mater

My first job position at the university was that of a senior technical specialist in the Lithography Department. I took the opportunity to expand my lithographic experience, to get familiar with the practical side of teaching and investigate all nooks and crannies of the educational process. During four years of holding this position, I got thoroughly prepared to assume a teaching position. The next stage in my career was marked by my promotion for the position of an assistant lecturer in the Lithography Department. Currently, I have worked as an assistant professor in the Department of Graphic Design and Lithography. While holding the teaching positions, I had classes as part of full-time, part-time and postdoctoral programmes, such as: *lithography, intaglio printing, relief printing, graphic art techniques and technologies, rudiments of graphic design, graphic design and airbrush painting*. The last class is my original project I managed to introduce into the curriculum of the postdoctoral course in painting. In this period, I also held courses promoting knowledge about airbrush painting and lithography, as part of extra-curricular classes for students and secondary school pupils. For five years, I have coordinated Lubelski Festiwal Nauki (Lublin Science Festival) on behalf of the faculty. I have prepared and been in charge of art projects presented during the festival and during Open Days of the faculty. I have been actively involved in the recruitment of candidates, either appointed as a secretary of the recruitment committee, member of the evaluation committee or person controlling proper examination procedures. Currently, I have held the position of the year advisor for the second time.

During my entire employment, I assisted my colleagues during promotion of bachelor and master's graduates. Ever since I was appointed an assistant professor, by way of a resolution of the Council of the Faculty of Arts, I have acted as a supervisor of master's theses and taken a direct care over the graduates. To date, I managed to supervise eight holders of master's degrees. In most cases, these graduates received very good final rating. As part of the Erasmus programme, I have regularly held classes with students from the Czech Republic, France, Lithuania, Turkey, or Ukraine. I have actively promoted activities of the Faculty of Arts by organizing exhibitions of the staff employed in the Lithography

Department, presentation of their output and achievements during scientific symposia, initiating contact with other scientific and artistic units in Poland and abroad. I have supported and participated in the activities of Polska Republika Litografii foundation²³ promoting domestic lithography and artists who work using this technique.

I have actively participated in national and international exhibitions and graphic competitions. I had over twenty individual exhibitions and participated in about seventy group exhibitions. To that end, I have established cooperation with art galleries and centres promoting cultural activity. For many years, I have organized art exhibitions propagating output of our students and young employees of the department. I have been a member of the Lublin Branch of ZPAP (The Association of Polish Artists and Designers).

Another important aspect of my work at the university has been the development and improvement of material and equipment resources in the department. I have been searching and testing new media and tools useful in a lithography atelier; I have renovated and reconstructed presses and their subassemblies; I have designed and built new equipment, such as tables, grinding stands, limestone racks etc. I try to introduce the most attractive solutions, novelties observed in other similar ateliers, thus enhancing the potential of my home department. Changes I have introduced are intended to improve ergonomic use, location and arrangement of individual devices, and enhance mobility in the atelier. I have started the modernization process already since I got employed, and I have continued this activity until present day. I believe I will never give it up, as my nature of an improver, enhancer and designer will never let me do it. As long as there are ideas, there is always something to repair, improve, conceive, do.

Sine qua non

Working with students is the essence of my professional activity and my career of an artist. Contacts with younger generations gives me inspiration, make me sometimes change my approach, and keep me going. Owing to work with young people, I keep searching for the

²³ Official website of Polska Republika Litografii foundation on a social network site
<https://www.facebook.com/Polska-Republika-Litografii-390497104383758/> (31.12.2017)

ever new methods of evoking their interest, establishing a dialogue, passing my knowledge. Contemporary students demand more attention and they do not surrender to the established teaching patterns. They constitute a challenge for a lecturer, but I find it very positive and contributing to the mutual development of the teacher and the learner. Widespread use of computers offering easier, cleaner, and less labour-intensive forms of creation, has significantly decreased student interest to deal with traditional printing techniques. Students often expect to get an immediate effect of their work that precisely renders their concept; the usual arduous work in the workshop (frequently physical work involving the risk of making a mistake) is not something they are interested in. Therefore, the teacher plays a substantial role in this process, with his attitude to students, creative approach to the subject, ability to adjust the program and the discussed issues to students' potential, as well as willingness to experiment and introduce innovation. I have known from my own experience that doing something together with students brings very good effects. A student observing his or her teacher at work, opens up to the new methods of creation, thoroughly inspecting specific technological and artistic details, asks questions of their own free will, absorbs expertise in a natural manner. This produces a bond between them, not a dependence. Such relationship favours effective communication, enhances transfer of information, stimulates emergence of new concepts, results in sharing one's experiences and ideas. To some extent, this is a reverse process of the traditional teaching methodology involving following theory with practice. In this case, theory stems from the real, tangible artistic and workmanship activities. This is learning through empowerment, instead of presenting selected aspects using uninteresting examples isolated from their contexts. Comprehensive sensory cognition and analysis of integrated stimuli helps students assimilate and put the learned content in an order. If education is brought down to verbal communication only, the above analysis is hard to conduct, consequently providing an outline instead of comprehensive knowledge.

Searching for and demonstrating the latest technological innovations also motivates students to work. Such attitude on the one hand enriches the spectrum of possible methods of creation, and on the other stimulates students to go on their own creative quest. The multitude of formal solutions allows to properly match a given technique and technology to the conceived idea, which is reflected in a coherent, carefully thought out work that truly

renders sensitivity of the artist. Airbrush painting and pinstriping techniques included in the curriculum constitute an excellent example. They solicited vivid interest among students and, semester by semester, I have observed an increasing number of pupils using these drawing techniques in their works.

Learning, expanding and sharing this knowledge has been my clearly defined goal I decided to pursue already during my education at the school of visual arts, which I have been consistently doing ever since. At the moment, I can regularly improve my professional and artistic skills, and what is the most important, share my knowledge and experience with young art enthusiasts. Learned students of art schools are the chance for lithographic printing to survive and maintain the tradition of this excellent planographic printing technique. Therefore, every effort should be made to encourage young people to explore the secrets of Senefelder's heritage. Lithography forced out by offset and digital printing is no longer commonly used in industrial printing. It became a technique used by artists and enthusiasts of classic printing. Numerous lithographers who used to work in publishing houses abandoned their profession and left their jobs, failing to transfer their expertise and experience to the next generations. Technological progress brought about depression of lithography, pushing it aside to the category of niche activities. Consequently, UNESCO entered lithography on the list of disappearing professions²⁴. Currently, as a result of efforts extended by lecturers in art institutions of higher learning and lithography lovers, we have observed an increased interest in lithography and its varieties. Nearly all academia across Poland offering instruction to future artists has a lithography department, the number of cultural institutions promoting stone printing is on the increase, and there are more and more private lithography ateliers established across the country. After the initial wave of fascination with high technology, students have started to gradually return to traditional graphic techniques. Lithography is slowly reborn, and although the status quo is not yet satisfactory, it offers favourable forecasts for the future. It is important to continue the activities promoting lithography and encouraging young artists to use this technique in their artistic pursuits. I believe that the key to improve the condition of lithography is continued broadening of its capabilities by introducing new materials, innovative technical and

²⁴ „Wielość w Jedności” *Litografia i techniki druku płaskiego w Polsce po 1900 roku*, M. Woźniak, Muzeum Okręgowe im. Leona Wyczółkowskiego, Bydgoszcz 2015, p. 13

technological developments, breaking stereotypes related to stone printing, modernization by matching it to the interests and needs of the new generation, as well as by consolidation of the lithographic community by initiating new common projects, sharing experiences, organisation of exhibitions, conferences and scientific sessions.

Bibliography:

- *Airbrush* [online], portal Wikipedia, [access:15.12.2017], Available on the Web:
<<https://en.wikipedia.org/wiki/Airbrush>>
- *Airbrush Step By Step* , Newart Medien & Design, Hamburg, yearbooks: 2009, 2010, 2011
- G. Antreasian, C. Adams, *The Tamarind Book of Lithography Art. & Techniques*, Tamarind Lithography Workshop INC., Los Angeles, Harry N. Abrams, INC., Publishers, New York, 1971
- *Auto - AirColors: Water Based Custom Automotive Paint*, [DVD], SM Designe, East Granby, 2008
- E.O. Bottger, *Createx Workbook*, Newart media & designe GbR , Hamburg, 2010
- M. Devon, B. Lagattuta, R. Hamon, *Tamarind Techniques for Fine Art Lithography*, Harry N. Abrams, INC., Publishers, New York, 2008
- DOS, [online], portal Wikipedia, [access:15.12.2017], Available on the Web:
<<https://pl.wikipedia.org/wiki/DOS>>
- C. Fraser, Dion Giuliano, *Clearcoating cheap tricks & special F/X, Automative Kustom Series*, [DVD], Airbrush Action Inc., Nowy Jork, 2002
- P. Frąckiewicz, *Pamięć przyszłości: Perspektywy rozwoju litografii wobec digitalizacji*, Akademia Sztuk Pięknych, im. Eugeniusza Gepperta we Wrocławiu, Wrocław, 2012
- *Graphics Magazin*, Pensord Ltd, Blackwood, yearbooks: 2009, 2010, 2011
- G. Jenson, *Pinstriping Dynamics, Pinstriping Kustom Series*, [DVD], Airbrush Action Inc., Nowy Jork, 2006
- A. Jurkiewicz, *Podręcznik metod grafiki artystycznej*, opracował i rozszerzył R. Artymowski, Arkady, Warszawa, 1975
- S. Kafka, *Kafka - Welcome to My World: vol.1, vol.2*, [DVD], Kafka Design, Allenwood, 2005
- I. Kossowska, *Narodziny polskiej grafiki artystycznej 1897-1917*, UNIVERSITAS, Kraków, 2000
- A. Krejca, *Techniki Sztuk Graficznych: Podręcznik metod warsztatowych i historii grafiki artystycznej*, Wydawnictwa Artystyczne i Filmowe, Warszawa, 1984
- E. Kuryluk, *Hiperrealizm – Nowy realizm*, Wydawnictwa Artystyczne i Filmowe, Warszawa, 1983
- Labels, *Myral*, [online], corporate website, [access:15.12.2017], Available on the Web:
<<http://www.labels.pl/mylar.html>>
- M. Lammert, [online], portal Wikipedia, [access:15.12.2017], Available on the Web:
<https://de.wikipedia.org/wiki/Mark_Lammert>
- B. Merlin, *Airbrush history Stanley* [online], Airbrush Museum website [access:15.12.2017], Available on the Web: <http://www.airbrushmuseum.com/airbrush_history_stanley_1.1.htm>

- B. Merlin, *Airbrush history timeline* [online], Airbrush Museum website [access:15.12.2017], Available on the Web: <http://www.airbrushmuseum.com/airbrush_history_timeline.htm>
- B. Merlin, *Airbrush historia i terażniejszość* [online], website [access:15.12.2017], Available on the Web: <http://www.airbrush.com.pl/att/Airbrush_historia_i_terazniejszosc_PL.pdf>
- C. Misstear, *The advanced airbrush book*, Helen Scott-Harman: Orbis Publishing Limited, London, 1984
- D. Morton, *David Morton*, [DVD], Airbrush Classes, California, 2008
- *Pinstriping* [online], portal Wikipedia, [access: 15.12.2017], Available on the Web: <<https://en.wikipedia.org/wiki/Pinstriping>>
- Polska Republika Litografii, [online], social networking site, [access: 31.12.2017], Available on the Web: <<https://www.facebook.com/Polska-Republika-Litografii-390497104383758/>>
- Rohrer – Klinger, corporate website [access: 15.12.2017], Available on the Web: <<https://www.rohrer-klingner.de/>>
- J. Stanisławski, K. Billip, Z. Chociłowska, *Podręczny Słownik Angielsko-Polski*, Wiedza Powszechna, Warszawa, 1983
- Univesytet Der Kunst, [online], website, [access: 15.12.2017], Available on the Web: <<https://www.udk-berlin.de/startseite/>>
- Univesytet Der Kunst, *Osoby* [online], website, [access: 15.12.2017], Available on the Web: <<https://www.udkberlin.de/personen/detailansicht/person/steffen-tschesno/>>
- W. Warzywoda, *Dydaktyka*, [online], portal Republika, [access: 15.12.2017], Available on the Web: <<http://www.witoldwarzywoda.republika.pl/dydaktyka/cb7.html>>
- J. Werner, *Podstawy technologii*, Wydanie ósme poprawione, Państwowe Wydawnictwo Naukowe, Warszawa – Kraków, 1989
- M. Woźniak, *Wielość w Jedności: Litografia i techniki druku płaskiego w Polsce po 1900 roku*; Bydgoszcz Muzeum Okręgowe im. Leona Wyczółkowskiego, Bydgoszcz, 2015
- Zerkall Paper, *Papiery*, [online], corporate website, [access: 15.12.2017], Available on the Web: <<http://www.zerkall.com/English/Paper/Planopapiere.E1.html>>

