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# CHAPTER 1

## *The dogmas*

### **Introductory**

*This book owes its existence to the artist, mathematician and teacher Marian Bohusz-Szyszko<sup>1</sup> and ten momentous minutes in which he told me what he claimed to be, “All you need to know about painting”. Although somewhat dogmatic in tone, what he said turned out to have a great deal of truth in it. This chapter and the next describe his propositions, how I tested them, the lasting value I found in them and the shortcomings that were revealed. On the positive side:*

- *They can be a decisive help when making most kinds of painting.*
- *They turned out to have far stronger and more interesting scientific backing than the Professor could have realised.*
- *They are extremely potent as a teaching aid.*
- *It is to them that I owe the quiet excitement, fused with peace and well-being that possesses me when exploring arrangements of colours on a picture surface. Without their guidance I may never have experienced those many special and valued moments in my life when an emerging artwork takes on a life of its own and seems to be painting itself through me.*

*On the shortcomings side:*

- *The propositions are totally inappropriate for some painting goals.*
- *There is an internal inconsistency in their logic that creates a seemingly fatal flaw.*

*Fortunately the existence of the logical flaw had the important advantage that it was to lead to the research that explained the paradox and paved the way for the panoply of new understandings described in this book.*

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<sup>1</sup> At the time, he was Professor of Painting at the Academic Community of the Wilno University in London.



Figure 1 : Marian Bohusz-Szyszko, "Raising of Lazarus", 1962

### The encounter

The story of my first encounter with Professor Bohusz-Szyszko, illustrates a leitmotiv of my personal creative journey through life and, I believe, of all the creative journeys of all other people. It concerns the importance of the role of chance. In this case, chance played a particularly remarkable part, but some degree of it is always necessary if we want get beyond the confines of what we have been able to do before.<sup>2</sup>

I had just left university where I had been studying History. Before settling down to some more conventional career, I had decided to spend a year checking out a long standing, although for years set-aside and therefore dwindling, dream of becoming an artist. I needed somewhere to live and money to support myself. By chance my Father met an artist who made ends meet by teaching part time in the English School in Bologna, Italy, and who said he thought could help me if I was interested in getting a similar job. Over the telephone he suggested that we meet in the studio of an artist acquaintance of his in London. I found the address, climbed up a couple of flights of stairs and knocked on a door. It was answered by a little old man (as he seemed to my youthful perception) who, looking at me with slightly puzzled eyes, asked me, in a heavy Polish accent, what I wanted. I told him of my rendezvous and gave the name of the person that I was supposed to meet. He looked even more mystified, averring that he had never heard of anyone so-called. Nor, he added, was he aware of having any appointments that afternoon. I was feeling stranded, trying to deal with my embarrassment and wondering what to do next when, notwithstanding his puzzlement, the kindly gentleman invited me inside. "Make yourself comfortable, while you wait for your friend", he said.

When I entered his room, I was confronted with a large Victorian room arranged as a bed-sitter, whose one remarkable feature was the presence of a full-sized studio-easel upon which was propped as large a painting as it could support. I was stunned by the riot of exciting but beautifully controlled colour relationships and was immediately in some awe of my host who, having motioned me to sit on the bed, asked if I minded if he continued with his work.

Watching him proved to be quite a lesson in itself and one that has had a great influence on me and my teaching ever since. What he called "working" mostly involved sitting motionless on a chair at a respectful distance from the painting (say, three paces). The only thing that seemed to move were his eyes, which were constantly darting back and forth presumably in minute examination

<sup>2</sup> A subject to which we will return, particularly in "Fresh Perspectives on Creativity".

of some feature or relationship on his picture surface. Suddenly, there would be a burst of activity. He would leap up from his chair, take a few quick steps in the direction of his painting, engage in some rapid, urgent seeming paint-mixing and, with a decisive gesture, add a tiny touch of the result of his efforts to his painting. No sooner was it in place than he beat a hasty retreat to his chair, settled down on it and engaged in another long period of concentrated contemplation. I sat fascinated. During half an hour or so the prevailing stillness was only three or four times interrupted by a burst of painting activity.

Eventually, my host turned to me saying, “*I am afraid it looks as if your friend is not coming.*” And then, presumably out of human kindness, he took it upon himself to deliver the lesson on colour in painting referred to in the “*Introductory*” to this chapter. Although I did not realise it at the time, it was the Professor’s way of summarising the wisdom of what might be called the “*European colourist tradition*”, built on the discoveries of the Renaissance colourists and modified and, indeed, transformed by Seurat, Cézanne, Bonnard and other *Modernist Painters*. It was also very dogmatic and, even in those days, I was very suspicious of dogma. However, I was stuck in the room with him, I was in awe of his painting, he spoke with an air of authority animated by an infectious enthusiasm, and what he had to say, even if too cut and dried for my taste, was certainly intriguing.

### The dogmas

Professor Bohusz-Szyszko’s lesson consisted essentially of the five italicized propositions below. Each is accompanied by an account of my reaction.

1. *All good painting is based on colour.*

This seemed to me to be either no more than a truism, because paintings are by definition made of pigment colours, or absurd because there are many reasons for making paintings that are not primarily concerned with colour.

2. *All good colour in paintings is based on colour in nature.*

Again, this was either a truism or meaningless. Clearly, there could be no necessary reason why arrangements of colour on a picture surface could not be explored in their own right, without any external reference. However, as I was aware that various artists whom I admired, including Paul Cézanne and Paul Klee, had made statements of this kind, I felt no reason to be too antagonised.

3. *There is only one thing you need to know about colour in nature, namely*

*that the same colour never appears twice in any natural scene.*

This strong and, to me, slightly surprising assertion was backed up by recourse to the physics of inter-reflecting surfaces. When explaining this science to my students, I do so along the following lines : “We see surfaces as coloured because light capable of stimulating colour impression is being reflected from them into our eyes. No matter what scene at look at, all the surfaces that we can see in it are visible because light reflecting from them is entering our eyes. Such sources of reflected light are commonly referred to as “*secondary light-sources*”.

After this preliminary explanation, I choose a particular student and motion her to stand on the other side of the room, facing the rest of the students. I ask her to list the colours she can see in the room in front of her and explain that each of these is a “*secondary light source*” that must be contributing to the composition of the light illuminating her eye. I then draw attention to a region of skin just to the side of it. In as far as the wave-length composition of sources of illumination striking surfaces influence the colour we see, this complex array of secondary light sources must also be affecting the colour of this region as perceived by anyone looking at it.

Next I ask the student to turn her head in any direction whatever and ask her to list the colours she now sees. The list is always different and, accordingly, so must be the confluence of secondary light-sources illuminating the patch of skin in question. The point that Professor Bohusz-Szyszko was making is that it is almost impossible to imagine a situation in the real world where the confluence would not change as a result of the head movements.

The same logic can be applied to all the regions of skin that combine to make up the surface of the face as a whole. Since every one of them is situated in a slightly different location and oriented in slightly different direction, no two regions can be illuminated by the same array of secondary light sources. This being the case, it follows that, in as far as differences in their spectral composition affects appearances, each of them will appear to be different to all the others.

Marian Bohusz-Szyszko’s point was that the same variables determine the composition of the light illuminating all parts of all the surfaces in any one scene. Accordingly, he felt justified in asserting his third dogma and, by combining it with the second, he arrived at his fourth:

4. *... And, therefore, no colour should ever appear twice in a painting.*

Up to this point all had seemed to follow logically, but now there was a

break both in the argument and in the level of theoretical support offered. The fifth and final dogma was produced like a rabbit out of a hat, with no explanation provided.

5. *All colours in paintings should be mixtures, each and every one of which should contain some proportion of complementary colour, even if only a scarcely noticeable one.*

Though not explained, the fifth dogma was accompanied by a gesture consisting of rubbing the thumb against the index finger. I was later to discover that this was my host's way of signifying the feel-good factor which was central to his aesthetic.

And that was it, except that the dogma-giver very kindly said that if ever I wanted someone to talk to about my painting, I would be welcome to pay him another visit. I thanked him, assured him that I would remember his kind offer and said goodbye.

I was never to hear again of the man from Italy who had inadvertently set up this meeting but, in retrospect, my gratitude to him could hardly be greater. Even in his absence, he had managed to kick-start me on what proved to be my life's journey not only as an artist and teacher but also, in the longer term, as a scientist.

### The dogmas on trial

When first thinking about the approach to adopt in my quest to be an artist, I had decided to start at the beginning with literal representation and, as I looked at the landscapes and the arrangements of objects, colours and textures I was trying to record, I remembered the dogmas of Marian Bohusz-Szyszko. It did not take long for me to convince myself that he was right about the enormous variety of colours in nature. I searched and searched for repeated ones and found it very difficult to find any. If any pair seemed to be the same I looked back and forth between them, over and over until, almost always, a difference between them became evident.

It was in this way, I was initiated into the virtues of rigorous comparative looking. This alone was a great gift, the first fruit of which was an ever increasing sensitivity to colour difference. In the longer run, the use of comparison proved to be the key to opening doors to new ways of seeing in just about every dimension.

As for the fifth dogma, it came into its own when I set about trying to make the seemingly infinite range of colours of which I was becoming aware. Using an

admixture of complementaries in every colour painted onto the picture-surface exploded the numbers of pigment-colours I was able to mix. In numerical terms it was a matter of expanding from a few hundred to what seemed as if it might well be hundreds of thousands. For the time being this was justification enough. Later, it turned out to be the key to a very great deal more.

### Studying under the Professor

After a year of working on my own, I went to see Professor Bohusz-Szyszko again and soon after became a regular student at classes he ran on Saturday and Sunday mornings.

Despite the value I had found in the dogmas, when I first submitted myself to the Professor's teaching, I was far from convinced that his dogmas really were, “*All that I needed to know*”. I was a sceptical young man who needed much convincing. However, as time passed by, far from becoming disillusioned by what Marian Bohusz-Szyszko had to offer, I became more and more intrigued.

His sessions, which lasted two hours, were traditional in structure. Upon our arrival in the studio, we students found that the Professor had already either set up a still-life or, more usually, we were confronted with a clothed model. After a few words of introduction, he left us to our own devices, while he himself disappeared upstairs to his room, presumably to engage with his own paintings.

After about an hour, he would reappear and spend the rest off the time talking to students about their work. What above all made me persevere with his classes was what happened when he first entered the room. After a couple of steps forward, he would halt, his beady eyes darting this way and that. Suddenly, he would stiffen and, almost in the same movement, hasten over to some poor benighted student who had committed the cardinal sin either of repeating a colour or of not adding a portion of complementary. What impressed me was the speed and accuracy of the performance. It appeared that, whatever it was that needed attention, struck him not only almost immediately but also from the other side of a large room. My question was, did this trick require “*special eyes*” or could it be done by ordinary human beings like myself?

The answer was quite a time in coming but, in the end, I also learnt to detect repeated colours in much the same way as Professor Bohusz-Szyszko and I found myself being convinced that any painting which obeyed the dogmas had a unity, a richness and a harmony to it that did not seem to come in any other way.

**Working on my own: testing the claim**

Figure 2 : Image of an early dogma-testing abstract painting

**Testing the dogmas**

During this period, I had plenty of time for reflection. From the beginning, I had been impressed by the simplicity of the dogmas and it had not been long before I discovered their practical usefulness to my efforts as a representational painter, but I had not fully appreciated just how radical is the claim they were making: If it is true that the dogmas embody the only necessary laws of good painting, the unavoidable implication is that all the other laws are superfluous.<sup>3</sup> If so, any alternative rule for composition proposed in any text or by any teacher can never be anything more than a case of gilding the lily. Let there be no doubt about it, the Professor’s claim was strong stuff and here was I, beginning to take it seriously.

At home, in my own studio, I was busy testing out the dogmas on the abstract paintings which I was by now making for the purpose. I took a canvas and bashed on colours with as little thought or attention to composition or aesthetics as I could manage. My purpose was to create chaos and my project was to bring this into order, constraining myself by three rules:

- No shape was to be altered under any circumstances
- No colour was to be changed more than the minimum needed to establish it as different from all similar colours.
- All colours used were to contain some proportion however small, of complementary.

After a couple of years working in this way, I no longer doubted the force of the propositions I was testing. Although I still demurred at any idea of their exclusivity, I was totally convinced that they rested on a solid foundation.

**Implications**

*In this chapter I have told the story of my introduction to the rules of Marian Bohusz-Szyszko, how I tested them and how, eventually, I became convinced of their power to:*

- *Train my sensitivity to colour variations.*
- *Generate an astonishing number of pigment-colour mixtures.*
- *Create a certain type of harmony on the picture surface.*

<sup>3</sup> In these early days I had not learnt that Monet, Renoir and the rest had come to an equally radical conclusion concerning the essential irrelevance of the “laws”..of their predecessors.

## *PART 1 : “ALL YOU NEED TO KNOW ABOUT PAINTING”.*

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*Professor Bohusz-Szyszko never elaborated on his dogmas, except by implication for he left me in no doubt as to the significance of two more elusive considerations. These were: “Feeling” (already hinted at with the above mentioned thumb rubbing gesture), and “humility”, both fundamentally important subjects which are kept in mind throughout the four books in this series and which play a key role in “Fresh Perspectives on Creativity”.*

*But even without any additions, the Professor’s rules are sufficient to revolutionise the lives of artists who do not already know about them. Don’t forget his claim was that the dogmas contained, “Everything you need to know about painting”. Certainly, anyone who tests their power can hardly avoid finding that they open up all sorts of new possibilities worth exploring in their own right: Perhaps enough of them to support a lifetime of painting.*

*For this reason my book could perfectly well end here.*

*So why have I added so many more chapters? The best way of answering that question is to read them.*

*However, even if they are not convinced of their necessity, readers should at least consult the colour mixing chapters in Part 3 which are there to offer practical help to those who wish to explore the full riches of colour indicated by the dogmas.*

*However, before reading them, these sceptics should be warned that the information presented is likely to contain many surprises. Although all the suggestions are securely based on well know scientific principles, many of them may well be unfamiliar and some are certainly in conflict with widely taught ideas. This is necessary because much of what is written and taught about the subject of colour-mixing is misleading: Only too often, those who follow the advice given will make life more difficult for themselves.*

*However, no matter how helpful the dogmas may prove as guiding principles, my researches into their history and their scientific underpinning have shown that they have important limitations. As we shall see in the next chapters, these lie not so much in what they say as in what they omit to say. It turns out that their history is both fascinating and revealing and that the science which explains their power can hugely increase their value to painters.*