

Numerical Ladsapes by Brane Širca



"Seventy-five thousand generations ago, our ancestors set this program in motion," the second man said, "and in all that time we will be the first to hear the computer speak." ...

"There really is one?" breathed Phouchg.

"There really is one," confirmed Deep Thought.

"To Everything? To the great Question of Life, the Universe and Everything?"

"Yes." ... "Though I don't think," added Deep Thought, "that you're going to like it." ...

"Tell us!" ...

"Forty-two," said Deep Thought, with infinite majesty and calm.

Douglas Adams, The Hitch Hiker's Guide to the Galaxy

Life, the universe and everything has to do with numbers in one way or another. This conviction can be traced back to the time of the Pythagorean brotherhood and their mathematical-metaphysical philosophy, and earlier. According to Aristotle, the Pythagoreans would dedicate themselves to mathematics to the extent to think that the foundations of this science were those of all the existing things as well, whereby numbers were placed first among the foundations of mathematics. Shaken by the discovery of significance of numbers in the world, the Pythagoreans should have devoted most of their time them in particular. This is in a way not so difficult to understand. All things are countable and many of them can be expressed in numerical terms. For example, a relationship between two things related to each other can be expressed by numerical proportion. An order between individual objects or subjects can be defined by using numbers as well. There are many more things that can be done with numbers. However, the discovery that sound intervals between individual notes produced on a lyre (the most popular musical instrument at the time) could also be expressed by numbers seems to have had the greatest impact on the Pythagoreans. That is to say, the pitch of a sound depended on number if it depended on the length of a string. The intervals on a musical scale could be thus expressed by numerical proportions. Hence, musical harmony was determined by numbers. At this point, there was only a small step in reasoning for the Pythagoreans to be taken: if the musical harmony depended on numbers, why the harmony of the whole universe should not depend on them as well? If everything could be expressed by numbers, if the whole nature appeared to be controlled by them, why being surprised that the cosmic harmony, too, depended on numerical proportions? And, as if they had not had it enough: they were convinced not only that all things and the whole universe depended on numbers, but also that those same things *were* numbers.

Based on such reasoning, two characteristic relations between factuality and numbers can be distinguished. The first one, in which numbers have an essential, and yet indirect, relationship to the world and reveal the fundamental order that governs this world, leads to the development of science. The second one, in which numbers have a direct relationship to the world and are thus identical with things, leads to the field of mysticism. In the first case, numbers determine the structure of the world, in the second, they reach into the world's ontology trying to give it the meaning as well as its sense. In the 17th century, Galileo Galilei spoke in favour of the position that the book of nature was written in the mathematical language – this sacred language of modern science. This position was optimistic, for it

meant that the most profound mysteries of nature could be unravelled by using mathematics only. At the beginning of the 21st century, the same science announced that the universe is 13.7 billion years old, that it is flat, that it extends to infinity and that it consists of 73 % of exotic dark energy, of 23 % of cold dark matter and merely of 4 % of common matter (if one takes on lease that baryons and leptons are that common matter). Do these numbers tell us anything about the sense of the universe? They will tell us something about "how" and "how much", but they will not tell us about "why".

Interestingly, such a Galilean rumination was not typical of the natural sciences only. There were a number of postulations throughout the history of arts demanding the mathematisation or at least consideration of the logic of numbers. From correct proportions and the Golden Section to the Renaissance perspective. Some of these postulations were very precise. In the 13th century, for example, the Franciscan monk and philosopher, Roger Bacon, dedicated a comprehensive treatise to Pope Clement IV demanding the knowledge of mathematics from the painters. He wanted their paintings speak "the literal truth", which could only be achieved by knowing and respecting the laws of mathematics that lay behind God's plan of the world. The reason: God's mercy spread over the universe according to the laws of Euclidean geometry, which meant that the painters themselves should paint according to these laws. Science or mysticism, or both? Did not Einstein's statement that he was not interested in this or that phenomenon, but in the very thoughts that God had when He created the world, go in the same direction? Was it possible to recognize these thoughts anyway?

In the 18th century, Giambattista Vico asserted that it was not. In his opinion, we should turn our attention from the research of nature which God created and which is therefore fundamentally unrecognisable to our minds, to the research of what we created ourselves, and this was the society together with its history. His opinion exerted a profound influence on the European intellectual culture at the time and it widened the gap between humanism at the one hand and natural sciences at the other. From the point of view of the postulations directed to the field of art, his opinion was conducive to the question whether the field of art was able to present "the literal truth" of this society in which the creator was (or was supposed to be) us alone?

I can claim that the major role of the artistic works by **Brane Širca** is that of showing us (the viewers) the literal truth of the society in which we live. They make us aware of what is a well known fact to everybody. There are numbers surrounding and endangering us at all levels. Everyday life is crammed with the omnipresence of numbers. What is more, we, too, are only numbers in unimaginably huge data bases. And yet, paradoxically, numbers endanger us with the same intensity as they also fascinate and attract us.

It has been often said that contemporaneity does not have its own symbols in comparison to the past epochs. That the technological and scientific world of industry does not have the everlasting symbols for good, real, eternal etc.; that images are like material that changes quickly. Širca does not share this point of view, for he places the number at the level of a symbol which perpetually and unchangingly defines this world. Even more, it is the number with its indestructibility and ideality that bears evidence of temporaneity and mortality of all the rest. It is not the meanings of his numbers that Širca is interested in, he focuses on the relations between the painted elements of his compositions, on the visible. But nevertheless, as Jean-François Lyotard puts it down: is it not that what painting is about to really show the continuous presence of the invisible in the visible? The invisible represents what cannot be seen, what cannot be shown. The answer to this paradox seems to lie in the following: We are attracted by the visible

and endangered by the non-showable. The non-showable cannot be shown, but it is possible to give a hint to explain its existence.

In this sense, the works of art by Brane Širca stay close to what Fredric Jameson calls "the technologically sublime". This is not the sublime that Kant understands, who sees the source of this feeling in the power of nature (daring and threatening overhanging rocks, thunderclouds, an endless stormy ocean, a high waterfall of an immense river). Nature has long ceased to use power to show herself with similar fearfulness. Instead, she has been substituted for the high-tech society, in which the truth and the mechanism of its global economic system can no longer be understood by an individual. The truth is no longer showable, but somehow we know it exists. And we do know it keeps ruminating on numbers. The numerical landscapes by Brane Širca will not tell us about the system's mechanism, but they will force us to think about it. They make us aware that the profane is only the back side of the mystical. May we not be misled by the superficiality.

Ernest Ženko