

*All general statements should be considered false, including this one,*

*- P. C..*

## **7. THE GENERAL THEORY OF A SIGNATURE.**

What is a signature all about ? In my opinion everybody would be able to come up with the short and obvious answer. I do not think , that somebody ever tried to analyze the meaning of the signature from the scientific point of view. Indeed, it looks that it is so obvious that nothing can be said here.

Really ? In my mind there is something to talk about. I consider myself to be an OO programmer. Here OO stands for object oriented way of programming of computers. The fundamental thing about programming with the use of OO approach is, that everything that the programmer can imagine is considered to be an object. And among objects there is quite a democracy. Some objects can be small, some big, some more general, some more specific, some often used, some rarely used; still they are all objects, and they play a specifically assigned role in the overall picture. Objects are like stars, planetary systems, galaxies, and also atoms in the universe of programming of computers. In a sense, it is the “applied theory of everything” in the world of computer programming.

One step forward. What does the OO have in common with a signature ? Let us try to show, that a signature can be considered a separate object, in a specifically assigned relationship to all other objects. At this point we must come up with concrete examples.

Here is example number one. This book is also a kind of an object. The book is divided into chapters which are also objects. Chapters consist of sentences, which on their side consist of words. We see here more objects belonging to other objects. All objects together compose one main object, the book entitled “The Eclipse of Eclipses ...” to be precise. Last but not least the book also have the signature at the very end, with the name of the author, which in this case is my name, WN. This signature is also an object. There is more about a “signature object”, the signature is a reference to the author. The signature is an object, that has a specific relationship to the main object ( book ). What kind of a relationship ? First, I would mention placement as an important property. The signature is placed at the end of the book. This is important. Let me repeat that, the signature is placed at the end . Why at the end, and not in the middle of the book ? The reason is, that placement of the signature at the very end is in a sense enclosing the object. Say here is the main object ( a book in this concrete example ), and here at the very end, is a signature of the author, which is a reference to the author himself, and maybe the author object consists of more “book objects”. Let me rephrase it in pure English, “maybe the author wrote more books”, that is what I mean. Here I must disappoint you, the author wrote only this book, but who knows, maybe there will be more in the future.

Example number two is the document with discovery of planet PLuto. The beautiful signature of the discoverer ( Clyde W. Tombaugh ) is placed in the right place, at the very end, please look at it again. A very important discovery, one of the main properties of a signature is its placement.

**THE SIGNATURE IS PLACED AT THE END OF THE MAIN OBJECT, IN ORDER TO BE A REFERENCE TO THE AUTHOR.**

**THE SIGNATURE IS PLACED AT THE END OF THE MAIN OBJECT, IN ORDER TO CLEARLY MARK THE END OF THE OBJECT, TO ENCLOSE IT, AND TO DISTINGUISH THE OBJECT FROM THE SURROUNDING BACKGROUND.**

Please imagine the army, combat conditions, quite a drastic example I suppose. The example is selected especially, in order to picture my thinking more clearly. The army works on the principle of the “chain of commands”. High ranked officers give orders to lower ranked soldiers, and they in turn give orders to those soldiers that they are in command of. Well, again nothing difficult to imagine. Let us concentrate on the flow of orders. Let us imagine written orders. The question is, what would be the order worth without a signature ? I guess not much of a value would be placed in the order without a signature. Probably we can agree, that the order without the signature is not an order at all. A signature for the order is crucial. High ranked officers based on the signatures of the lower ranked officers, know that given orders are not important for them, and by the same token lower ranked soldiers immediately can realize the importance of orders given to them by their commanders. Let us underline the conclusion, the signature is as important as the order. The order without a signature is not an order. Typically also, the order of the officer lower ranked, can be overwritten by the officer higher in the “chain of commands hierarchy”. The conclusion is, that the signature acknowledges the validity of the order, and also has its own “weight factor”, that allows the order to overwrite other less important orders.

Here is another example. Imagine a will where somebody is passing the house with all its belongings to a descendant. The will without a signature is not a will, it is not valid. The signature is here an important part of the object; an object called a will in this concrete example.

Finally we are able to write down a conclusion from the examples above.

**THE SIGNATURE IS VERY IMPORTANT, AND THE SIGNATURE BELONGS TO THE OBJECT. AN OBJECT WITHOUT THE SIGNATURE IS NOT A VALID OBJECT.**

Let us imagine grocery shop. Say any kind of food packed for consumption by different producers. Some of the products have no name of the producer, some have only a small label with the name of the producer, and some others have very big colorful labels. In the very first case the producer prefers to be unknown, for the simple reason of the poor quality of the product. The same logic applies to two other cases. Producers want to be known, because they think that the quality of their products is good. Clearly it is understood I believe, that the existence of the name of the producer, and the size of the name of producer on the label is directly proportional to the quality of the product. What kind of stuff is packed in “no name products” ? It is better not to think about that; I for one prefer to sleep better and not to ask questions like this. On the other hand, if the producer clearly writes its name on the product, probably what is inside can be bought without any fear ( except maybe for the price of the product ). So the conclusion is that the name of the producer, which is contained in the signature of the producer on the label, is directly related to the quality of the product. It is not rare to find producers that try to come up, with the name similar to other well established producers, hoping that this kind of trick will allow to sell their products more easily. This way or that way, the relationship between the quality of the product and the signature of the producer is easily visible.

And now the prescription given to us by our family doctor. We can find there sometimes a seal of the doctor plus the signature. The signature guarantees to us that the doctor knows what he is talking about. His education plus his sometimes many years long experience is covered by the seal and the signature, that clearly shows us the relationship between the proper prescription for our illness and the signature of the trusted physician.

From here we can draw the next general conclusion, that will add more light to our general investigation entitled “What is a signature all about ?”.

THE SIGNATURE IS ABOUT THE QUALITY OF THE OBJECT, AND IT CONFIRMS THE QUALITY OF THE OBJECT.

So far we were able to show I believe, the importance of the signature, and to prove that the object and the signature are two indivisible things. The object without the signature is either a poor quality kind of object, or is not an object at all, so in a sense it does not distinguish itself clearly from the background.

If the signature is such an important property of the high quality objects, it should be time resistant. The hard cover of the book with clearly written name of the author can be used as an example here. The painting with all its colors, typically contains the name of the author written in black ( somewhere in the corner ) , what makes it more resistant to the sunlight.

Roman coins that are found from time to time here and there in Europe, can be in bad shape, destroyed by the aggressive influence of the soil. Typically however, it is possible to read the name of a given emperor, and that proves, that the signature was well placed there.

Medieval ages documents were typically sealed by the king, with exactly time resistance in mind. That is why, even today it is so easy to identify a given ruler based on the seal, even when the document was, say partly burned.

The importance of time resistance of the signature, is clearly visible here. We can probably put down here one more property of the signature.

THE SIGNATURE SHOULD BE TIME RESISTANT, BECAUSE OF ITS IMPORTANT MEANING IN RELATIONSHIP TO THE MAIN OBJECT, AS A KIND OF CONFIRMATION OF THE QUALITY OF THE OBJECT, AND VALIDITY OF THE OBJECT.

Everybody has his own signature. Well, the harder to copy somebodys signature the better. Credit card users know about that. Some people work for months in order to improve their signatures, so that they become harder to copy. For sure everybody can agree with me here, that uniqueness is also a very important feature of the signature. The signature should not be similar to anything else. Only then, the relation one object one signature can be preserved. We have here one more general property of the signature.

THE SIGNATURE MUST BE UNIQUE, IN ORDER TO CONFIRM THE UNIQUENESS OF THE OBJECT ITSELF. THE MORE UNIQUE THE SIGNATURE IS , THE BETTER.

My favorite example finally, the “HOLLYWOOD” sign, written with the use of letters visible from a very far distance. If it is a sign or a signature is debatable. For me it is the signature representing many authors. In my mind all people that contributed to the movies produced over the years have a right to see it partially as their signature. Anyway it is visible and easy to read, the writing is very well exposed in LA. The letters are huge I suppose, but on the other hand this is a signature under the object called “Hollywood”, a big object itself. In spite of the fact that letters are big, they are not too big, just in perfect proportion to the object, that they are suppose to be the sign for. The proper proportion is a very important factor. If the signature was too big, the object would be in a shadow, and in a sense a signature would be overexposed.

On the other hand the signature sometimes can be very small. I have in my hand the 20\$ bank note. On the main side we have two signatures. One of the deputy governor, and one of the governor. Both signatures are small, but the object itself is not big on the other hand. This is a bank note that can be hidden in my palm. We have one more conclusion here.

THE SIGNATURE CANNOT OVERSHADOW THE OBJECT, AND ON THE OTHER HAND IT MUST BE EASILY VISIBLE, SO IT CANNOT BE TOO SMALL IN COMPARISON TO THE OBJECT.  
PROPER SIZE OF THE SIGNATURE IS ITS IMPORTANT PROPERTY.

Every signature is written using given language. The signature consists of letters, and there is a meaning for all the letters grouped together. There are also signatures that are unreadable one can argue. This is true. People that collect signatures know about that. However typically in the case of unreadable signature we are dealing with the signature of the person that is already well known. In the case of these people, passing the information to the person reading the signature is not that important, since it is already known to whom given signature belongs to. In a sense one can say that the signature becomes an object itself to certain extend. And famous people compete against each other in the area of their signatures. Who has more original and beautiful signature than mine ?

However signatures of very well know people are very isolated cases from the point of view of statistics. Typically not well known person prefers that his/her signature would be readable. The main idea of the signature is to pass information. Even if the signature is not readable, we have the associated information typically written with capital easily readable letters about who given signature belongs to ( like for example in the case of a 20\$ note ). So we have the final conclusion.

LAST BUT NOT LEAST THE SIGNATURE MUST BE READABLE, AND IT MUST CONTAIN INFORMATION. THE SIGNATURE WITHOUT ENCODED INFORMATION IS NOT A SIGNATURE.

After such a long theoretical lesson about a signature, we are probably ready to go to the more concrete example of an object and a signature. The next chapter contains a very beautiful example of a complex object with a signature.