



Newsletter

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*Dear Reader,*

*The Animath Association (<http://www.animath.fr>) promotes the diffusion of mathematics and their teaching in the French educational system. Every year it organizes a tournament between teams of bright students in their last year of high school. Each team, supervised by one or two professors, has to create a research project (<http://www.animath.fr/spip.php?rubrique36&lang=fr>).*

*This year, in the area around Paris, ten teams have been competing. After the proclamation of the results, I was invited to give a lecture on math and art. Its interest comes from the fact that, while all the other experiences refer to lectures given to younger people, this lecture was addressing older students. The fact that they were not disappointed suggests that this experience can be renewed anywhere.*

*The video stopped after 10 minutes of lecture, but the audio record was saved so that I could write a paper with the content of the lecture ([Exposé devant les Gagnants du Concours du Tournoi régional des équipes lycéennes Ile-de-France de Mathématiques, Ecole Centrale, 2 Avril 2017](#)). However, since the questions set up at the end of the lecture are inaudible on the record, this final part of the lecture does not appear in the paper.*

*In the previous Suresnes conference, I implicitly mentioned an unsolved question: can we classify the works of art and if so, how? Such a classification would trivially depend on the set  $X$  of used materials, on the set  $Y$  of used material techniques, on the set  $Z$  of used intellectual techniques, on the set  $P$  accessible physiological abilities for instance linked with the sensitivity to color, the sensitivity to form, the ability to draw.*





## European Society for Mathematics and the Arts

The type of subject on which artists are working constitutes another significant parameter of the classification. The set  $T$  of such types contains several identifiable subsets, as for instance the subset of steady abstract (respectively physical, biological) objects, of moving abstract (respectively physical, biological) objects, or the subset of the different types of messages for which an art-work may have been created. The collection of  $(x_i 's, y_j 's, z_k 's, p_l 's, t_m 's)$  attached to an art-work, where the number of each parameter may be high, gives a rather precise characterization of the art-work, and somehow of the personality of the artist.

The reader might enjoy trying to compare between say a few of them picked from the Suresnes [Catalogue](#), and Dick Termes.

While all the other painters use flat supports, Dick uses spherical ones. Some old newsletters refer to the original Dick Termes works. We can refresh our memory by looking at:

<http://termespheres.com>

<https://www.youtube.com/watch?v=9GgnwVZN6cA&t=62s>

He explains: « This piece was created to explain one through six point perspective. The spherical environment uses the six point perspective and the six artists show what you get when you use the systems of one, two, three, four, five and six point perspective. »

A little bit of humor in this hard and sometimes ugly world. As Dali created some « montres molles » (soft watches, have a look at the [Museum of Modern Art in New York](#)), use anamorphosis to deform the Dick's spheres: enjoy!

Best wishes,  
Claude

PS : A QuickTime animation, technically made by Jos Leys, is included in the Ecole Central Exposé on page 14: [http://www.math-art.eu/videos/QuickTime/DanseNDT\\_01.mov](http://www.math-art.eu/videos/QuickTime/DanseNDT_01.mov)

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