

A transdisciplinary approach to scientific problems: closer than ever to a real holistic perspective

Abstract

Arts and humanities have not always been accepted as scientific knowledge. Even nowadays, a too common barrier to funding arts and humanities research is this, and the justification is always the same: “I love arts and humanities but there are more important subjects that need to be funded”. The kind of approach to the knowledge, being different, is still a valid one, even when many other scientific areas doubt so. No area needs to be validated by another one because everyone has his own method to analysis and to interpret knowledge.

Keywords: transdisciplinary, scientific problems, holistic perspective, art and science

Volume 6 Issue 2 - 2024

Gallur Santiago Santorum

Instituto Tecnológico de Santo Domingo, INTEC

Correspondence: Santiago Gallur Santorum, Humanities and Social Sciences Department, Instituto Tecnológico de Santo Domingo, INTEC, Dominican Republic, Tel +1 829 853 8634, Email santiago.gallur@intec.edu.do

Received: August 09, 2024 | **Published:** August 14, 2024

Editorial

One of the firsts known interpretation of reality were rock painting by the first hommo sapiens in caves. These ways of human expression were not only artistic ridden but impulse to get what we know nowadays as “to visualice goals”. Thousands of years later, this has been proved one of the most efficient method to focus oneself to get goals in real live. There’s is even a quite actual trend, in non-scientific environments, so called “law of attraction” that tries to convince people that thinking in something will let them to get it. The existence of this “weird” approach to get things “magically” in the XXI century rule by science and technology, is explained because our brain has no evolve so much from the first hommo sapiens in caves. We still need to get explanations to phenomenon, not matter what kind of method is used if science has not solve it. So, when science is not there another way of human knowledge could get in and try to explain things out. This is why faith and science have been centuries trying to understand each other, or even coexist.

At this point of the human history a different approach to solve problems is needed. This is the main reason to build and conduct transdisciplinary research to classic scientific problems. What would happen if it is used a holistic approach to study a problem? This is one of the most complex ways of analyzing situations, however, at the same time is nowadays proven like one of the most effective ones to get innovative solutions. Thus, arts and humanities are disciplines that could add to transdisciplinary research a new perspective, absolutely need to study in a new and innovative fashion. Why being constricted to “a non-connected boxes” to analysis the new kind of crisis that our societies suffer. More complex problems need innovative and holistic solutions. To get this sort of solutions we need the kind of knowledge that do not belong to a particular isolated discipline but to a product that derives from the union of three, four or five different approaches.

It is well known that the first person who developed in black and white the idea of an artificial space satellite to communicate people in different points of the planet was an artist and scientist, particularly a writer: Arthur C. Clarke. About five hundred years before, another artist and scientist created a picture that took science so long to fully understand: The Mona Lisa. The subtle face expression in this painting created using sfumato technique by another artist and scientist, Leonardo Da Vinci, was a mystery for science until some decades ago.

Thousands of years looking at the sky and until a few years mankind was not able to figure out one of the biggest mysteries of all time. Some artistic ridden artifacts like camera obscura, telescope, photographic camera or even the kinetograph, had to be developed, to let scientists start to understand the truth. Looking at the sky, the space, we are not able to see the present, but the past: Due to the fact that light last quite a long distance to get to us, the further a planet or star is, the longer that took to reach these images (this light) to us. To sum it up, finally physics and astrophysics understood that they only are able to see the past looking at the universe, but never the present. So, using a transdisciplinary perspective, history is completely linked to astrophysics, even without wanting so, because we watch at the past when we see a planet or star. The technology that we have nowadays do not allow us to see a phenomenon at the universe in real time, due to the time that light last to reach us and the humongous distances that characterize the space.

Conclusion

Thus, these few examples show that it is needed to use transdisciplinary approaches to understand the real and complex phenomena that surround us. Art and science cannot be divided even when not everybody fully understands the great and indivisible union that coexists between them. That led us to the point that, only transdisciplinary approaches to actual problems, using arts and humanities as a pivot to create holistic research, can let us to solve the most difficult and tangled topics. We are just before the opportunity to fully understand complex problems using the most powerful human technology ever existed: art.

Acknowledgments

None.

Conflicts of interest

The author declares that there are no conflicts of interest.

Funding

None.