

## An Explosion of Colors, Fauvism in Echocardiography, a New Proposal

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Recently, we have been exploring the artistic movement of Fouvism, also called Fauvism, that flourished at the beginning of the 20th century and revolutionized the way we conceive color and expression in art, being more expressive and realistic by playing with chromatic tones. “Les fauves” (wild beasts in English) Vincent van Gogh and Paul Gauguin, who originated this movement, and Henri Matisse and André Derain, challenged established conventions and dared to use intense and unnatural colors to convey emotions and vivid sensations. During an exhibition in Paris the art critic Louis Vauxcelles gave the title “fauves” to this trend. That is why the person who represents the aggressiveness that this style of work prints is called a Fauvist.<sup>1,2</sup>

This boldness and freedom in the color palette has left us amazed and has awakened our curiosity about how we could apply this unconventional approach in other fields, such as medicine, especially taking advantage of the tools in the acquisition of echocardiographic images. Today, the application of color options and filters and the harmonious use of color in different modes such as the M mode and 2D among others, has highlighted our studies in daily work.

At this point, we would like to point out an intriguing connection between Fauvism and cardiac imaging through different invasive and non-invasive diagnostic methods. For example, cardiac magnetic resonance imaging (CMR) and computed tomography (CT) provide us with detailed images of the heart and blood vessels, but they are often presented in shades of gray, white, or black,<sup>3</sup> which can limit our emotional understanding of cardiac physiology. As for the connection to medicine, we would like to mention a study that explored the application of Fauvist color theory in the interpretation of medical images, specifically cardiac images. In the publication “The ‘Wild Beasts’: Fauvism and Its Affinities,” published by The Museum of Modern Art, the author invites us to consider the possibility that incorporating Fauvist principles into medical practice, particularly in the interpretation of cardiac images, could

transform the way doctors and patients interact with the human heart.<sup>1</sup>

Instead of simply viewing the heart as an anatomical organ, we could capture the vitality and dynamism of its functioning using bold and expressive colors. Warm tones could represent healthy heart activity, while cool tones could indicate areas of concern or disease. This approach could not only improve the understanding of healthcare professionals but also help patients better visualize and understand their cardiovascular health.

In short, Fauvism offers an exciting and unconventional approach that has the potential to transform our perception not only of art but also of other fields, such as medicine. We hope our suggestion can inspire further discussion and exploration on how to integrate artistic creativity into medical practice. We would like to share several of my creations (images of my authorship and editing) with you to demonstrate how beautiful this work can be.

### Limitations

The article offers an intriguing perspective, but further scientific validation is needed for broader acceptance in clinical practice. The connection between art and medical imaging is fascinating, yet requires more exploration to establish its practical relevance and impact on patient outcomes.

### Author Contributions

Conception and design of the research and acquisition of data: Zarate JAN; analysis and interpretation of the data, writing of the manuscript and critical revision of the manuscript for intellectual content: Zarate JAN, Amaya MJ.

### Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

### Sources of Funding

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### Study Association

This study is not associated with any thesis or dissertation work.

### Ethics Approval and Consent to Participate

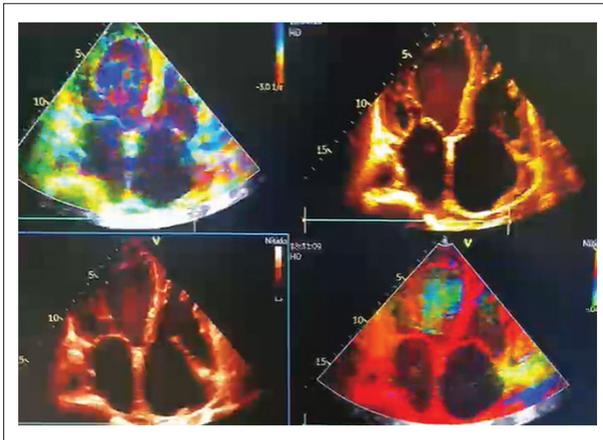
This article does not contain any studies with human participants or animals performed by any of the authors.

### Keywords

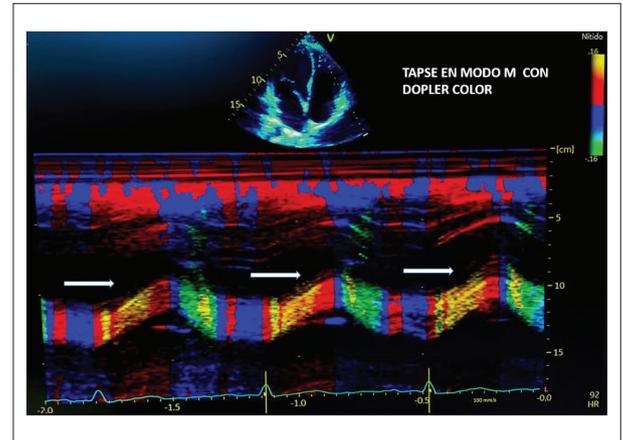
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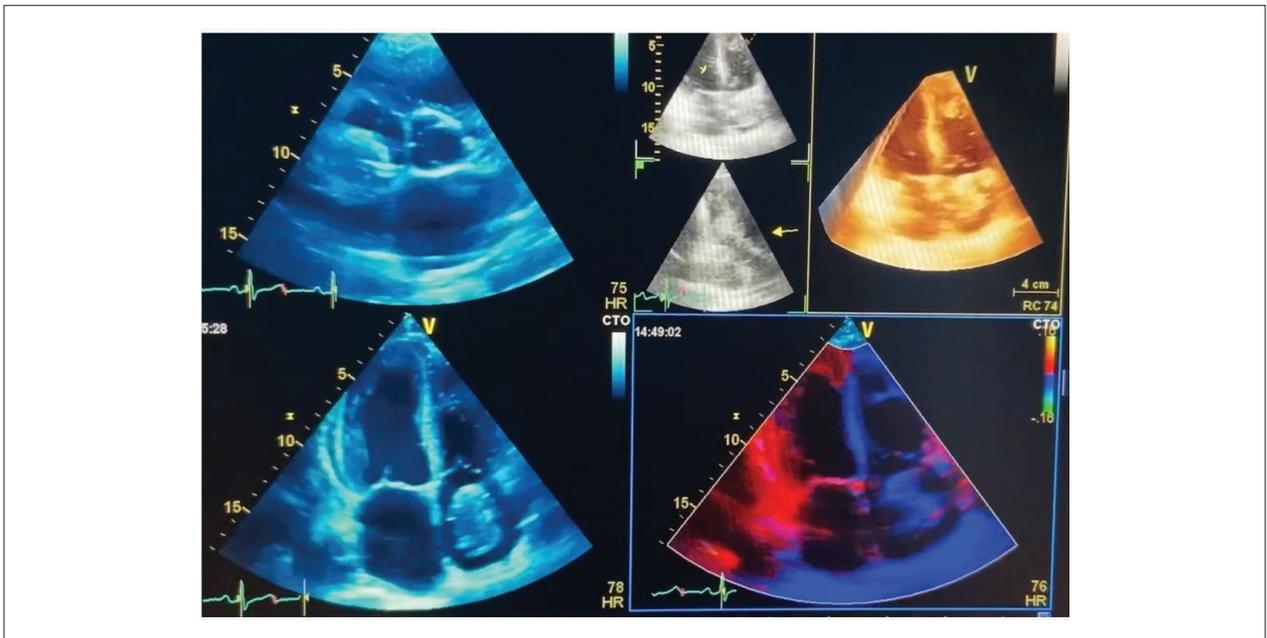
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**Figure 1** – Transthoracic echocardiogram in color 4-chamber view showing spontaneous contrast echo seen on color Doppler and tissue Doppler.



**Figure 2** – Tricuspid annular plane systolic excursion in M color mode that optimizes its spectrum.



**Figure 3** – Documentation of atrial myxoma seen on color Doppler and 3D evaluation.

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