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Utilization of X-Ray in Beauty, Art and Architectural Entrepreneurship

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ABSTRACT: Riet decided to keep experimenting and, before long, he had developed an impressive portfolio of images that get to the heart of nature. Looking with X-ray eyes to nature. That's what I like to experience with my X-ray camera. I prefer X-ray objects of ordinary scenes like a butterfly near a flower, a fish in the ocean, a mouse in the field, a haron along the riverside, a bird in a tree and so on.

I. INTRODUCTION

Each time it is challenging me to arrive at an X-ray photograph that represents the sentiment of the scene, do raise questions and excite curiosity. I hope, in most of the images presented here I succeeded.



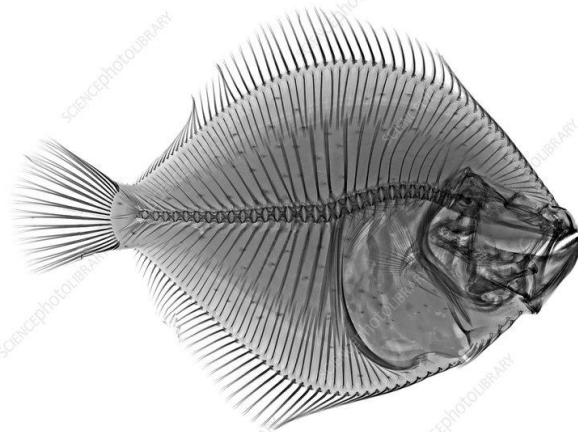
Riet is a Dutch physicist-artist who has a knack for creating stunning colored X-ray images of nature that he calls 'Bioramas.'(1)



xray photography Arie van 't Riet « Inhabitat – Green Design .



Nature From the Inside Out: Dreamy X-Ray Images Of Nature by Arie



Internal beauty fish-Science Photo Library
Brill, X-ray - Stock Image - C047/4194 - Science Photo Library



FashionTribes.com - TypePad

I See Right Through You: Trend or TMI? X-Ray Art & Fashion

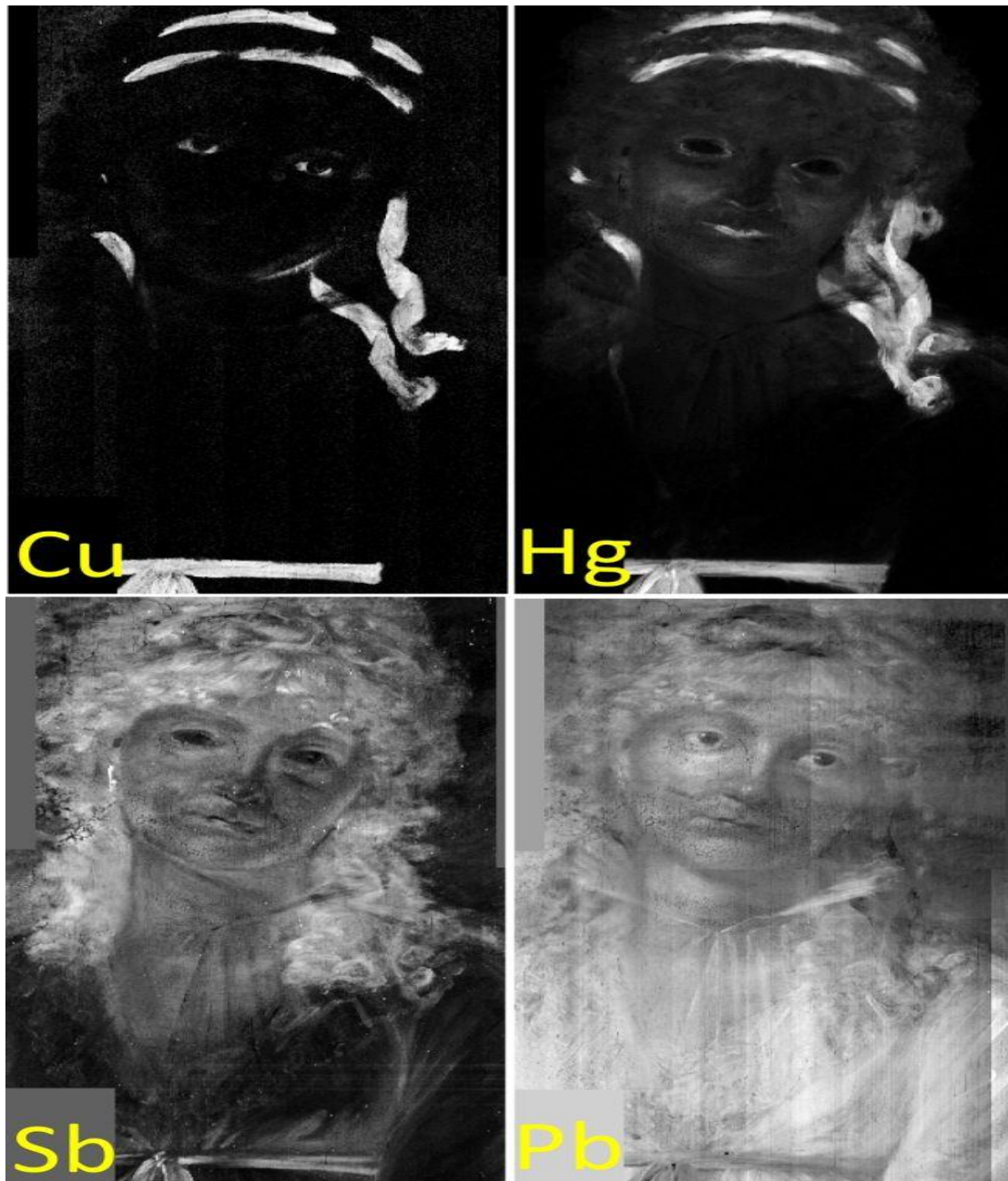


Beautiful x-ray image of structure of flower



Dead animal-x-ray art

A technique for peering under the surface of classic paintings came with a risk: The old, precious artwork had to be removed and transported through changing environments to the machine that would bombard it with X-rays.(2)



II. DISCUSSION

Different elements in each of the pigments show up differently when bombarded with X-rays. cobalt (Co [misabeled as Cu] - in blue pigments), mercury (Hg - in the pigment vermilion), antimony (Sb - yellow pigmentation) and lead (Pb - used in white pigments) shown in the painting "Pauline in a white dress in front of a summery tree scenery" and suggests that the hair once had ribbons painted into it.



III. CONCLUSION

The X-rays, which don't harm the artwork, can analyze the pigments used, which is valuable in deciding how to store or restore a painting. Different materials in the paints absorb and expel different X-rays when bombarded. The scan can also help experts determine whether a painting is genuine or a copy.

The technique is not new, but until now the paintings had to be carefully transported to a particle accelerator, and some paintings were too large to scan. The mobile instrument can be used at the museum site, so the painting doesn't have to be exposed to changes in humidity or be jostled when moved. Large or awkward paintings also can be scanned.(3,4)

ACKNOWLEDGEMENT

Sincere thanks to Dr. Naveen Sharma (Sonologist, Janta Colony, Jaipur) for guiding about x-ray studies even on plants and its utility on art and creativity.

REFERENCES

- [1] A. Gilardoni, R. Ascani Orsini, S. Taccani "X-rays in Art" Gilardoni, 1977. Definitely the best reference to learn this subject matter applied to paintings. Gilardoni really knew what he was talking about. Gilardoni is a main company manufacturing x-ray machines. Most of the Italy's airports x-ray scanners are Gilardoni's. This book covers x-ray theory, method and applications for paintings. Of course it's a bit outdated since it doesn't cover new technologies such as digital radiography. Though, This's not a big deal since you don't really need to dwell with these technical details to correctly read a radiograph.
- [2] J. Lang, A. Middleton "Radiography of Cultural Material" 2nd edition, Routledge, 2005. If you're interested to cultural objects other than paintings this is the book for you. The section on paintings is very essential but the one on "paper" it's informative.
- [3] A. Burroughs "Art Criticism from a Laboratory" Greenwood Press, 1938. I actually didn't read this book yet. I ordered it on Amazon more than 2 weeks ago but I fear it got lost. I read its review on the Burlington Magazine Volume 76, 443, 1940 and it seemed so interesting. I really like read those books wrote by pioneers of scientific art examination. Hope I'll eventually find it in the mail.
- [4] S. O'Connor, M.M. Brooks "X-Radiography of textiles, dress and related objects" Butterworth-Heinemann, 2007. As the title says, specifically covers radiography of textiles.



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