Science and art are both essentially acts of imagination, and as such, they are essentially incompatible. For as imaginative exercises, they are alternatives, different languages the imagination may employ, or more precisely, different formalisms. Science involves a literal correspondence—the terms of the theories and equations apply immediately to the world, the values to be entered into the theoretical construction are taken by direct measurement. In short, science describes. Art, on the other hand, is in no sense literal. A work of art is a configuration of materials that are basically arbitrary, and the form is metaphoric. The work of art renders meaning by gesture. In essence, art pantomimes its understandings.

Any combination of art and science is thus unlikely. But whereas art is recalcitrant to any effort to make it incorporate science, it is capable of being inspired by science. Art can transmute the scientific understanding that applies literally to the world, transforming it into aesthetic material, and thereby gathering into it another meaning entirely.

The paintings of Charles Seliger have been virtual case studies in how fusion may be achieved without falsifying either the science or the art. Seliger began painting in 1943, influenced at first by Surrealism and its experiment with automatism, and then later by Abstract Expressionism. He has produced an approach he calls “organic abstraction” in which, through the use of various styles and techniques over the years, he has attempted to render the complexity of micro-structures that underlie the forms of nature. In the 1960’s, Seliger began reading the works of the principal twentieth-century physicists, which served to spur his interest in the complexity of structure, bringing him eventually to a manner of painting that involves a remarkable intricacy of minute detailing.

The 23 paintings that comprise the current exhibition, dating from 1995 to this year, are teeming paradigmatic instances of manual dexterity and technical control. Executed in acrylic on masonite with the use of the palette knife, extremely fine brushes, and the Leroy pen (which is usually employed for lettering on blueprints) to render intricate details, the works offer up a degree of visual complexity that nearly defies the eye. Depending on your visual acuity, you might require a magnifying glass to catch all the subtlety of form. Small souvenir magnifiers are offered for sale ($2.00) by the gallery. (Hey, everybody’s gotta make a living.)

The paintings seem to coruscate with blazing, gem-like colors, arranged in abstract patterns that are still, according to Seliger, the result of automatic impulses. Without being copies of any microscopic structures to be found in nature, they are nevertheless inexplicably suggestive of formal patterns to be found at a variety of levels of scale: anatomical, cellular, molecular, planetary, cosmic. All of the works appear to pulse with energy, their minutiæ of intricacies seeming to swarm, driven by an internal power of self-direction, an inner impulse, that makes them appear almost alive, almost self-motivated.

In The Clearing, 1998, in particular, seems nearly a colorized electron-microscope image of a pattern of self-organization occurring at the molecular level. Dense layers of materials collecting around areas that are almost void of substance. Yet at the same time, it might as easily be an aerial photograph of variegated terrain—mountains rising out of densely foliated plains, or, well, clearings in a forest. The suggestion of natural structure is undeniable, yet remains non-specific, as if the same structures recur in nature at various sites and levels of magnification, as we now know they do.
What is most impressive about Seliger's artistic approach to science is that it is not literal. He knows the material of contemporary physics, yet he is interested in conveying the spirit of its discoveries, not the substance of them. He claims, in an interview included in the exhibition catalogue, that he is attempting “through my imagination, to make visible the structure of matter.” Yet, he adds, “I do not observe parts of nature under the microscope, I am not dissecting or analyzing. I have an emotional and intuitive awareness of nature.”

Seliger's forms are of his own devising. He is not trying to duplicate anything our scientific instruments have revealed to us. He is obviously interested in the conceptions of complexity theory - the theory of the spontaneous generation of organization out of chaos - yet he is not attempting to employ it in the creation of his paintings. He develops his forms spontaneously, without intention, but he seems to know this is not comparable to the spontaneous generation of form in matter. The creation of art is a psychic event, and seemingly random occurrences in the psyche are not like seemingly random occurrences in matter.

Intention, or the lack of it, is not comparable to physical causality, or the lack of it. In short, psyche is not physis. What Seliger appears to understand perfectly well is that science and art are concerned with different fields of awareness. Science deals with the meaning of ideas, what they denote and describe and the accuracy with which they do it. Art is concerned with the meaning ideas have for us, their importance and value to us, the impact they have on us and the feelings we acquire through holding them and believing in them. Science tells us about the outer world, even the outer worlds of our own anatomies. Art tells about our inner selves. Science tells us where we are; art tells us who we are. Seliger's artistic pursuit is the human impact of the most penetrating present-day scientific insights.