

NESANews

Newsletter of the New England Sculptors Association

Sept 2007

NEW IDEAS

This article was written by reorganizing content from the website www.bathsheba.com by Lisa Jeanne Graf.



3 views of the piece *Nexus*, metal print, 3 1/4" diameter

Bathsheba Grossman is an artist taking advantage of new technologies.

She explores how math, science and sculpture meet. Her work is about life in three dimensions, symmetry and balance, and always finding beauty in geometry.

3D printing in metal is the main way that she works, and she also does a lot with subsurface laser damage in glass. The reason she uses these new medias is because the shapes she has in mind aren't moldable, and she wants to make a lot of them.

3D printing is best at making things that are too complex and undercut to even think about with casting.

To create her metal pieces she starts with a plasticene maquette which she brings into the computer with a 3D scanner from Microscribe.

www.immersion.com/digitizer/

A 3D scanner can take data from an actual object and create a 3 dimensional computer version of that object. A 3D modeling program allows her to view this computer sculpture from any angle. There are a lot of 3d programs that can be used to either clean up a 3d scan (which is rarely perfect and generally needs some clean up) or create a 3D sculpture on the computer from scratch.

Some programs that Bathsheba recommends are:

Rhinoceros

She uses this 3D CAD modeling software for creating symmetrical, mathematical sculptures that will later be 3D printed in metal. This is her favorite program. It has a free demo and an invaluable support newsgroup.

<http://www.rhino3d.com>

Chaoscope

She uses this software to make subtle sculptures of molecules, astronomy and scientific concepts that later get etched into the inside of glass as a 3D shapes.

<http://www.btinternet.com/>

3D Animation software and CAD drafting software could also be used to create 3D models. Most 3D modeling programs can create 3D CAD files which is the standard file format for 3D printing.

The next stage is to get from the virtual model to a physical object.

3D printing is the process that makes physical objects from virtual 3D CAD models. There's a huge variety of 3D printing processes available, all using different materials in different ways, and mostly proprietary to competing companies.

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Here are some companies that provide 3D printing:

Prometal, a unit of Ex One

3D printing is offered in metal. She does most of her sculpture with this process, and she finds the accuracy, freedom and strength of these 3D prints without parallel. Ex One now has a minimum order of \$500.

www.prometal.com

ZCorp

ZCorp 3D printers can be used by renting time on one, or by purchasing one yourself. Rough-grained models are built from cornstarch or plaster materials. ZCorp starch models can be used with lost-wax casting, but it is quite labor-intensive.

www.zcorp.com

Ionic Models

A good deal for plaster models, and a great place to get started with 3D printing. ZCorp printers are used.

www.ionicmodels.com

Roundstone Digital

CAD design, renderings, and 3D printing on a large-format ZCorp printer is available.

www.roundstonedigital.com/

American Precision Prototyping

Stereolithography (SLA) is the most widely used 3D printing technology available and can produce highly detailed and accurate 3D prints. The process is as follows: A platform is lowered into the liquid resin (photopolymer) so that the top of the platform is one layer-thickness below the surface of the resin. The laser beam then traces the boundaries and fills in a two-dimensional cross section of the model, solidifying the resin wherever it



Quin Sconce

This lighting design is under license to Materialise MGX.



Building Life

A polymerase enzyme in the very act of replicating DNA.

The glass piece is a heavy 3 1/4" cube, with the DNA shown as a wireframe model and the enzyme as ribbons, with a translucent molecular surface outlining its form.



Bathsheba was born in Concord, MA, grew up in Lexington, and went to school at Yale. She presently lives in CA.

touches. Once a layer is complete, the platform drops the specified layer thickness and the next layer is built. This process continues until a complete 3D model is produced.

This company offers beautiful stereolithography 3D prints, and the pricing is reasonable.

[www.approto.com/
EasyOnline/index.php](http://www.approto.com/EasyOnline/index.php)

The Solidscape Modelmaker II

The Solidscape Modelmaker II, uses wax as its material, and it prints very small high-resolution models which are mostly used for making jewelry.

www.solid-scape.com/

Materialise

She also creates lamps which Materialise is printing from her designs. These are 3D printed with a durable white plastic.

materialise.com/

Another unique working method is laser etching in glass. 3D images are etched inside clear glass blocks. She uses high-resolution lasers driven by dedicated software to make fine-grained, cleanly drawn structures. One company that the artist recommends is Precision Laser Art.

Precision Laser Art

This company provides high-end laser etching, featuring the most advanced laser machines in the US. 2D photos or 3D designs can be etched into crystal glass. Quantities range from one to thousands. Their prices are reasonable and they have good customer service. I am presently working with them to laser etch a piece of bullet proof glass myself.

www.precisionlaserart.com

Member News

Sculpture by **Betty A. Gerich** will be on display in a one-person exhibition at Artworks Gallery in Hartford, CT from October 3 - 27, 2007. An opening reception with the artist will be held on Saturday, October 13 from 5-7 PM.

Figures and faces have provided a vehicle for expression in the art of Betty A. Gerich. Faces in the work, reveal thoughts and intentions, moods and feelings. Body language, in postures and gestures is often used to expand the expressive possibilities of her sculptures incorporating the figure.

The most recent work is presented with humor, resulting from the ironies of everyday life. Crash diets, vigorous fitness routines, extreme fashions and jewelry have been a source of subject matter in many of the sculptures. These works vary in size from a six-foot sculpture of a woman in a mini skirt, to a series of very small jewelry box sculptures.

Artworks Gallery,
233 Pearl Street,
Hartford, CT 06106,
860-247-3522
www.artworksgallery.org

Gallery Hours: Wed.-Friday, 11-5, Sat. 12:30-3:30
Betty A. Gerich, 860-749-2841 or GerichArts@aol.com



"A" is for Art by Charles L. Fields



Reflections on a Washer Woman by Julia T Marino

Charles L. Fields and **Julia T Marino** had a successful summer exhibiting on Cape Ann. Julia was awarded Honorable Mention at the Magnolia Library for her sculpture titled, *Reflections on a Washer Woman* and at the North Shore Art Association, the Richard Recchia Memorial Award for *A Little Bit O' Erin*. Both of these pieces were beautifully carved and high polished in Conamarra Irish marble. She was also accepted in the juried Rockport Art Association 4th Show and North Shore Art Association "Past and Present Exhibit."

Charlie was asked by the Rockport Art Association to install an out door sculpture that would create a more inviting call to attention of art within the Historic building. His large, Abstract "A" is for Art, accomplished this goal and caused a controversial stir in the town known for its conservative and traditional approach. He was awarded the Richard

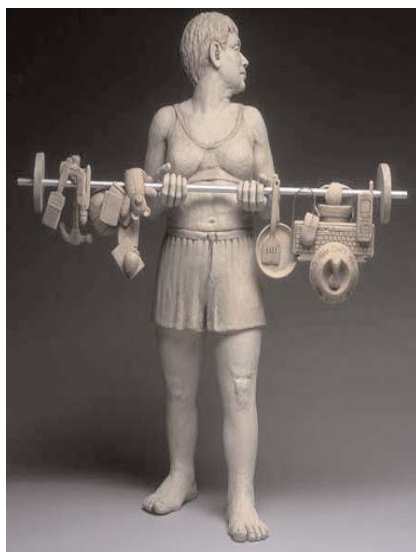
Recchia Memorial Award for Excellence in Sculpture and is currently exhibiting in the RAA 4th show, as well as the North Shore Art Association's "Past and Present" exhibition. The marble sculptures are: *Prometheus Bound*, *Prayer Feather* and *Bon Vivant*.

Lisa Jeanne Graf, **Claudia Olds Goldie** and **Debra Giller** are part of the group show "Plus One" at the Bromfield Gallery, in Boston, MA in Sept 07.



Above: *Protecting America* a ceramic sculpture by Betty A. Gerich

Right: *A Weight Bearing Exercise*, Stoneware with steel rod, 25" x 24" x 10" by Claudia Olds Goldie





Infinite Mind by Michael Alfano, 7"x4"x3", Bronze

Michael Alfano displayed over two dozen sculptures in August, 2007 at the Garden City Public Library in Garden City, NY. Also in Sept 2007 he was part of the show "Small Matters of Great Importance" at the Edward Hopper House Art Center in Nyack, NY.

MEMBERS ARE ENCOURAGED TO SEND ANY NEWS of exhibits you are in, any accolades, or just info you wish to share with your Associates for next quarterly publication. Please send content with subject line "Member News" to Cecilia DelGaudio at cjdcarving@comcast.net

Opportunities

Wave Hill Exhibition Opportunities

Wave Hill is a public garden and cultural center in the Bronx, located on 28 acres with panoramic views of the Hudson River. Wave Hill offers a unique combination of world-class horticulture, environmental learning opportunities and visual and performing arts programs for visitors to explore and connect with nature on an intimate level. Contemporary art exhibitions in the galleries and on the grounds engage the public in a dialogue with nature, culture and site.

Artists may submit their work for consideration for future opportunities and are strongly encouraged to visit before submitting. Submissions will be reviewed within two months of the deadline. Those received between deadlines will be held until the next review. The deadline is November 1, 2007

Wave Hill Galleries, Bronx, NY
Web: <http://www.wavehill.org/arts/>
Phone: 718-549-3200 x397

Call for Entries. **RED: It's more than a color**, presented by the Cambridge Art Association juried by Jane Farver, Director, MIT List Visual Arts Center. Open to artists working in New England. Drop-off (actual work): Nov 9 (10am-6pm) & Nov 10 (10am-6pm) @ 25 Lowell Street, Cambridge MA. fees - CAA members: \$10 for 1, \$15 for 2. Non-CAA members: \$15 for 1, \$20 for 2. contact info@cambridgeart.org or visit www.cambridgeart.org for more details.

EMERGING ARTISTS 2008, sixteenth annual competition for exhibition and \$2,000 cash award. Deadline November 30, mail SASE for prospectus: SlowArt Productions, 123 Warren Street, Hudson, NY 12534 or www.slowart.com/prospectus

Visual Arts Showcases at Bradley Airport

The Commission on the Arts oversees four large glass display cases for 3-dimensional artwork located at Bradley International Airport (Terminal A) in Windsor Locks, CT for the exhibition of work by state artists and cultural institutions. Use of this space may be requested by submitting a brief written proposal to: Commission on the Arts/Bradley Airport Showcase at least four months prior to the desired exhibition date. www.cjd-sculpture.com

The **Elizabeth Greenshields Foundation** aids talented artists in the early stages of their careers by aiding art students, artists, or sculptors who need further training or other assistance during their formative years. Work must be representational or figurative. To be eligible for a grant candidates are required to have already started or completed training in an established school of art and/or to demonstrate, through past work and future plans, a commitment to making art a lifetime career. No geographic requirements. The Foundation welcomes applications throughout the year; there is no deadline for sending the application form. Each grant is \$10,000 (Canadian).

For more information, contact
1814 Sherbrooke Street West, Suite #1,
Montreal, Quebec CANADA H3H 1E4
telephone 514-937-9225 fax 514-937-0141
E-mail: egreen@total.net

New Members

WELCOME new members! Lindley Briggs, Marilyn Coon, Charles Kyle R. Hanton, Karine Kadiyska, Neil Mansfield, Roland Menten, Linda Preble McVay, and John Wilkinson.

Committee News

Education - Report from Committee Chair

"We are pleased to announce that NESAs is initiating an educational component to our organization in order to educate the public about sculpture. We would like to know if our members would be willing to volunteer to present a short talk/slide presentation about their work and/or demonstrate how they work. Please let me know if you are interested in participating in this educational outreach and what you would like to present.

We are also interested in identifying a variety of venues for hosting these presentations. We are especially interested in places that would welcome us on an ongoing basis such as libraries, schools or galleries. Ideally we would like to have venues in each of the NESAs states.

Please contact me (Susan Barahal) by email at sbarahal@mfa.org by the end of October. I look forward to hearing from you and thank you in advance for your ideas and contributions.

– Susan Barahal

Quotes of Note

"Moonlight is sculpture."

Nathaniel Hawthorne

"There are three forms of visual art: Painting is art to look at, sculpture is art you can walk around, and architecture is art you can walk through"

Dan Rice

"I sometimes wonder if the hand is not more sensitive to the beauties of sculpture than the eye. I should think the wonderful rhythmical flow of lines and curves could be more subtly felt than seen. Be this as it may, I know that I can feel the heart-throbs of the ancient Greeks in their marble gods and goddesses."

Helen Keller

Important News

Dues of \$40 for 2008 are due in January 2008.

Message from NESAs's President

The recent exhibit in association with North Shore Arts in Gloucester was very successful and visited by a great number of people both from the area and tourist that every year come to Gloucester and the North Shore. North Shore Arts was very complementary to the quality of our presentation at their gallery and pleased by the response to the sculptures by all who visited. Two participating members sold their work, Fielding Brown and Glenn Szecedy, congratulations to them. We are in the process of confirming details for two exhibits at Cape Cod for July and August of 2008. These will include both indoor and outdoor presentations. More to come once the details are finalized. Efforts are being made to increase the membership through-out New England and we encourage all our members to invite sculptors that they may know to become members. Charlie has now simplified the process and it is very effective and efficient. Interested sculptors can access the information from our web page apply with images by e-mail which Charlie distributes to board members for vote once a majority of votes is received the applicant is informed, after dues are paid a welcoming letter is sent to the new member. As voted at our last board meeting we are almost finished with the nomination of representatives from each New England State.



Sirena in the Waves by Lindley Briggs

We would also like to encourage the membership to bring to my attention or Jean Dibner possible candidates for our Advisory Board. We already have three and would like to increase that number. As well as any ideas that any member has relating to activities, programs, and exhibition venues that we could follow up to increase the numbers and diverse location for membership participation and exhibition. We hope in the future to have many opportunities for our members.

– Michael A. Guadagno