

Origami in the Garden² – Interpretation

(The numbers correspond to the location on the exhibit map.)

1) Inside Out Gallery

Butterfly for Jennifer and Kevin Box by Michael G. LaFosse

Standing Crane – paper model by Kevin Box

Hero's Horse, Pegasus, Opus #633 by Robert J. Lang

Peace Pattern by Kevin Box

Pegasus Unfolded, Opus #633 by Kevin Box & Robert J. Lang

Butterfly Unfolded, Metamorphosis Mandala by Kevin Box & Michael G. LaFosse

Paper Models: Look carefully at each of these three-dimensional paper forms. Hidden within every folded origami object is a “crease pattern” – a collection of lines forming shapes, which serves as a record of each choice made in creating the object. *Can you match the unfolded patterns to their original shapes? What clues help you imagine the crease patterns?*

Unfolded Wall Hangings: Some origami artists draw or diagram crease patterns as a way to plan a new design or record their steps, developing a simple language of solid and dotted lines to define the difference between mountain and valley folds. *As you examine these patterns closely, what do you see? Can you imagine the three-dimensional forms each pattern creates?*

2) Standing Cranes

Looming Stars & Botanical Peace² by Kevin Box

These cranes represent the variety of patterns found on origami paper and the many color combinations we see in nature – from richly textured habitats to food and water for living things. But what we perceive transforms as we shift perspective. *As you pass through these cranes, look back and reflect: what do you see now?*

3) Seed AND Seed Sower

Seed by Kevin Box & Beth Johnson

Seed Sower by Kevin Box & Michael G. LaFosse

The squirrel and the oak tree have a mutualistic relationship – where they work together for both to benefit, like the three artists who created this piece. The squirrel gets food and shelter while helping the tree spread its seeds and start new growth. *What role does distance play in the relationship between squirrel, oak, and acorn?*

4) Star Unfolding

Kevin Box

This is Kevin Box's abstracted self-portrait. It refers to his work before learning origami and echoes the star at the base of *Crane Unfolding*; both tell the story of that which is beneath the surface. Life is a process, with patterns of consciousness that fold into a “self”. *Have you ever made a self-portrait? What shapes form your “self”?*

5) Crane Unfolding

Kevin Box

There is always more beneath the surface. Beauty unfolds, as origami, and each form reveals something new and often surprising. 50-80% of all life on earth lives underwater. And the soil has layers of stories to tell as well. *What else can you think of that is more than what it appears to be, or which transforms over time?*

6) Who Saw Who?

Kevin Box, Robert J. Lang, & Tim Armijo

In the relationship of predator and prey, both the raptor and the mouse are looking for food, but the mouse also has to keep a look out for the raptor. *Humans are considered an apex predator – at the top of the food web. What other animals are at the top? Why is balance within the food web so important, and how is it achieved?*

7) Nesting Pair

Jennifer Box & Kevin Box

Two cranes perch on a nest of olive branches, symbolizing peace, compromise, and working together. This tells part of the story of artists Jennifer and Kevin Box, and the creation of this exhibit. *Where in nature is there compromise? What other ways can art express or display things that we cannot see, like feelings?*

8) White Bison

Kevin Box & Robert J. Lang

This bison is an example of *duogami*, where the artists used a single uncut paper that is two-colored – white on one side, silver on the other – for their first collaboration. The bison stands as a symbol of strength and unity to many Native Americans. *What can we do to honor the stories and beliefs of other people and cultures?*

9) Folding Planes

Kevin Box

A piece of paper dreams of flying. Each fold along the way signifies a choice to make the dream a reality. Sometimes the steps are awkward or incomplete, but that's just part of the process. *Can you see yourself in this piece? Where are you in the process of setting and achieving your goals? What happens to the plane when it is finished?*

10) Rising Peace

Kevin Box

According to Japanese legend, the *Senbazuru* are strings of 1,000 origami paper cranes, said to grant the maker one wish. Over time the crane has become a symbol of peace, and this flock lifts off in all directions to spread that message. *Do you know the story of Sadako Sasaki and the thousand paper cranes?*

According to Japanese legend, the *Senbazuru* are strings of 1,000 origami paper cranes, said to grant the maker one wish. The custom of folding paper cranes has spread all over the world thanks to Sadako Sasaki, who was just two years old when the US dropped the atomic bomb on Hiroshima, Japan on August 6, 1945. She developed leukemia and, inspired by the *senbazuru* legend, began folding cranes – first for her health, then for world peace when she realized

that she would not survive. Most sources report that she made 644 cranes herself, and that her family and classmates completed the remainder, but OrigamiintheGarden artists Jennifer and Kevin Box learned from Sadako Sasaki's family that she actually folded 1,060 paper cranes before her death in 1955. There is a Children's Peace Monument in Hiroshima's Peace Memorial Park that is, in part, a memorial to her. Around 10 million paper cranes are sent to the monument from around the world every year – proof of how widely Sadako's message of peace has flown, and an example of how one person can have a lasting legacy.

CLICK HERE to learn how to fold a paper crane: <https://www.wikihow.com/Fold-a-Paper-Crane>

11) Paper Navigator

Kevin Box

Ancient explorers navigated small boats across vast oceans using the movement of stars, ocean currents, weather patterns, and the changing color of the sea to guide their journeys. People brought seeds, plants, animals, and customs to distant lands. *The land we all stand on us was once foreign soil to all but the Native Americans who lived here. Learn more below.*

ISU Land Acknowledgement: Reiman Gardens and Iowa State University are located on the ancestral lands and territory of the Baxoje (bah-kho-dzhe), or Ioway Nation. The United States obtained the land from the Meskwaki and Sauk nations in the Treaty of 1842. We wish to recognize our obligations to this land and to the people who took care of it, as well as to the 17,000 Native people who live in Iowa today.

Learn about the Baxoje people: <https://www.bahkhoje.com/about-us/>

Learn about the Meskwaki people: <https://www.meskwaki.org/>

12) Flying Peace

Kevin Box & Robert J. Lang

For this form, artist and physicist Robert J. Lang folded one of the most complicated origami cranes ever made from a single piece of paper, and Kevin Box sculpted the metal using a complex 35-step, 12-week *lost wax casting* process. *Collaboration in nature is called symbiosis – how do other living things work together in partnership?*

13) Painted Ponies

Kevin Box & Te Jui Fu

The artists folded a 30' x 30' paper square and used the technique *kirigami* ("to cut") to make the life-sized pony. The Chinese symbol on its rear is a collaborative signature. Te Jui's last name Fu, translates as "teacher" and the box that surrounds it symbolizes Kevin's last name. *What do you think the horses represent?*

14) Duo

Jennifer Box & Kevin Box

Together, these two cranes balance delicately, conveying the simple purity of a connection between individual, separate forces. The earth is also a careful balance. Cycles of water, air, and nutrients pass through all living things, and we must share. *In what ways are you connected to others? To the earth? How do you keep balance?*

15) Hero's Horse

Kevin Box & Robert J. Lang

In Greek mythology, wherever the winged horse Pegasus struck his hoof to the earth, an inspiring water spring burst forth. He once helped a hero save the world, and then unfolded into the stars as a constellation in the north sky as a symbol of overcoming impossible odds. *What does that mean to you? Who is the hero in the story? In yours?*

16) Conversation Peace

Kevin Box

Rock-Paper-Scissors is a fun and silly way to find a winner for small disputes, but for serious conflict, communication and understanding is key. Start with a conversation. *How are these three objects different? More importantly, how are they similar? How do they relate to the title? What do they mean to you?*

17) Emerging Peace

Kevin Box & Michael G. LaFosse

Like a blank piece of paper, the possibilities for transformation are endless. Here, a leaf dreams of flying, and through art, science, and imagination, the leaf metamorphoses into a butterfly. *What do you dream of that brings you great joy and peace? In what ways have you folded and unfolded to become who you are?*

A Story of Transformation: The lifecycle of a butterfly tells a complex story of transformation. In it we can see how a caterpillar, capable of destroying one plant with an enormous appetite, can change into a beautiful butterfly that helps pollinate many plants that are miles apart. Pollinators such as butterflies are a very important part of nature and the food chain that feeds us.

This story presents a comforting metaphor at a time when humanity's appetite threatens the limited resources of our planet. Scientists have discovered a mystery within the cellular structure of a caterpillar. As the caterpillar eats, 'imaginal cells' begin to emerge. These cells are so different that the immune system of the caterpillar attacks and destroys them. But as these cells persist, increase and multiply, they eventually overwhelm the immune system and cause the caterpillar to lose its appetite. The caterpillar hangs upside-down and forms a pupa, or protective shell that shelters it while it transforms. During this pupa phase, the imaginal cells reorganize the entire economy of the caterpillar to start doing something completely different. They transform from an earth-bound creature of consumption into an airborne butterfly that pollinates flowers near and far.

A Word from the Artist, Kevin Box: "The story of humanity and the lifecycle of a caterpillar have many things in common. We are going through similar cycles of consumption, growth and transformation. The plant which the caterpillar eats is like our planet, a limited resource. The caterpillar's appetite is a lot like our own and our fate is tied to our ability to transform our unsustainable capacity for consumption into balanced patterns of prosperity."

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Gardens Interpretation

Children's Garden: Shapes and Sunflowers

Scarecrow Garden – All about Shapes!

Can you find all these shapes in the plants and flowers you see?

- round blooms
- triangle foliage
- star flowers
- heart leaves
- square stems (hint: look for rosemary)

Butterfly Corral – Let the Sunshine In!

Sunflowers are *heliotropic*, which means they grow towards the sun. Humans tend to do the same – we seek out the light and grow best when we have what we need. 2021 is also the YEAR OF THE SUNFLOWER! Walk through to find different varieties. What makes all the sunflowers similar? In what ways are they different? What else do you see?

Edible Garden: Growth is a Process

Gardeners have a growth mindset; that is, we blossom when challenged, and we see every experience as a learning opportunity, every failure a lesson in how to thrive. We are not unlike plants in this way, but figuring it all out is certainly a process! Let's consider this space an experiment in growth – each of the seven beds you see feature a type of food plant and the various ways in which they can be cultivated for optimal growth.

Bed A – Pods

- *Abelmoschus esculentus* 'Clemson Spineless' Okra
- Fabaceae *Pisum sativum* 'Easy Peasy' sweet pea
- *Vigna unguiculata* 'Phenomenal' Black-eyed peas

Bed B – Roots and Tubers

- *Solanum tuberosum* 'Red Pontiac' potato
- *Raphanus sativus* 'Royal Purple' radish
- *Daucus carota* subsp. *Sativus* 'Nantes Half Long' Carrot

Bed C – Bulbs and Stems

- *Allium cepa* 'Walla Walla Sweet' onion
- *Allium ampeloprasum* 'Blue Solaise' Leek
- *Apium graveolens* 'Pink Plume' celery

Bed D – Fruits

- *Melothria scabra* 'Mexican Sour Gherkin' cucumber
- *Cucurbita maxima* 'Sweet Fall' squash
- *Solanum melongena* 'Midnight Moon Hybrid' Eggplant

Bed E – Seasonal

This bed represents the process of transitioning a single garden bed from SPRING to FALL to continually produce with proper planning.

- Spring
 - *Pisum sativum* 'Super Sugar' snap pea
 - *Lactuca sativa* lettuce varieties

- Fall
 - Brassica napus ‘Ursa’ kale
 - Brassica oleracea ‘Purple Peacock’ broccoli

Beds F and G – Edible Flowers

- Borage: *Borago officinalis*
- Tropaeolum majus ‘Alaska Mix’ nasturtium
- Eucalyptus gunii ‘Silverdrop’
- Tagetes patula ‘Strawberry Blonde’ Marigold

Pattern Garden: Fibonacci’s Sequence & the Golden Ratio

The Fibonacci sequence is one of the most famous formulas in mathematics. Each number in the sequence is the sum of the two numbers that come before it. So, the sequence goes: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, and so on. It’s been called “nature’s secret code,” and “nature’s universal rule,” because this sequence creates a pattern you can instantly recognize in nature.

Nautilus shell chambers and sunflower petals form along the Fibonacci sequence’s logarithmic spiral almost perfectly, and this “golden ratio” extends from flowers to pinecones, hurricanes and tornados, and is even a cosmic constant that shapes time and space.

Look around you and in other parts of the Gardens to find more examples of nature’s pattern power.

Herb Garden: Herbs for Healing

Plant-based healing is the oldest form of medicine, keeping humanity connected to the earth. As a focus on physical and mental health, we’ve planted this garden based on seven colors in frequencies associated with seven chakras, points representing the flow of energy through the human body.

These chakras, from root to crown, are a Western interpretation of ancient Hindu meditation practices intended to improve balance and reach a state of enlightenment through visualization. Explore below to learn more about each chakra, its associated color, and some healing herbs you’ll find in the garden.

CHAKRA & Color Frequency	NOTABLE PLANTS
Root – Red – grounding, body & earth	Yarrow, Red Beet , Turmeric
Sacral – Orange – creativity & feeling	Arabian Jasmine , Patchouli
Solar Plexus – Yellow – intellect & will	Chamomile, Lemongrass , Moujean Tea
Heart – Green – love & compassion	Ginger , Basil , Parsley
Throat – Blue – communication & truth	Rosemary, Mint
Third Eye – Indigo – intuition & wisdom	Common, Garden, & Wood Sages
Crown – Violet – universal consciousness	Red Valerian, Lavender , Echinacea

Campanile Garden: Prisms & Refracted Light

As light travels through the air and interacts with other matter, some of the light is absorbed, and some of it *refracts*, or bounces off in different directions. The human eye then works like a prism, the brain translating light into color through this refraction.

When we look at objects we only see the wavelength(s) of light that bounce off, not those which are absorbed. So green plants (or purple or yellow) contain every color *but* green (or purple or yellow). Our perception picks up that which is missing.

