FEFURION

TECHNION TOUR OF Campus Sculptures



Dedicated to the memory of Professor Emeritus Josef Singer (1923-2009), 10th president of the Technion.

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FOREWORD

The ancient Greeks believed that art and technique must be connected; not one without the other. - Santiago Calatrava

The Technion Sculpture Trail provides students, faculty, staff, and visitors with a constant opportunity to interface daily with art. Art transcends the limits of the present to the possibilities of the unknown; it inspires researchers to innovate – indeed, the basis of all technological advance is an expression of creativity, combining intellect and curiosity.

The late Prof. Josef Singer initiated the Sculpture Paths project in 1985 during his tenure as Technion president (1982-1986). Two earlier pieces were erected on campus [*Reclining Woman*, c.1956 by an unknown artist and Zvi Aldouby's *Breastplate of the High Priest (HaChoshen)*, 1975]. Major Israeli artists were approached to contribute their work. Prof. Singer continued this impetus and negotiated the acquisition of sculptures long after his term of office. Pieces which resulted from his initiative include *All Directions*, Yaacov Agam; *Composition in Stainless Steel #14*, Gideon Graetz; *Garden Organ*, Michael Gross; *Syllables 6*,

Yehiel Shemi; and Igael Tumarkin's *Chichén* Itzá Blue.

Later, a move was made to recognize major campuswide multidisciplinary projects with tangible outdoor sculptures including Dr Santiago Calatrava's monumental kinetic *Obelisk* acknowledging the gift of the Russell Berrie Foundation to the establishment of the Russell Berrie Nanotechnology Institute, and Yaël Artsi's steel and stone sculpture *Vision*, in tribute to the naming of the Irwin and Joan Jacobs Graduate School.

Similarly, independent commissions by Technion friends and faculty resulted in sculptures on display for the enjoyment of all, including *A Man and a Cat Called Yitz*, by Robert Shure - a gift of Robert (Dr Bob) Shillman.

In the words of world-renowned architect, engineer and sculptor, Dr Santiago Calatrava, "The ancient Greeks believed that art and technique must be connected; not one without the other. The *Obelisk* celebrates the very technical and the very mechanical as a thing of beauty. The same is true of science at the Technion."





Dynamic Static, 2004 Images, 2004 Ido Agam (b.1963) Aluminum Location: Berrie Promenade, Faculty of Materials Engineering

The artist Ido Agam (b. Ido Elgavish) was born in Israel. He created two pieces for Technion's Sculpture Trail, at the top and lower entrances to the Faculty of Materials Engineering.

The larger of the two, *Dynamic Static*, is reminiscent of a sine wave. The second installation, *Images*, located at the lower entrance, is a collection of silhouettes – some abstract and some of animals – placed on a patio. Both sculptures are aluminum, donated by the Alubin aluminum company.

Gift of SHL-Alubin Ltd. and the Segal family



All Directions, 1973 Yaacov Agam (b.1928) Stainless steel Location: Elyachar Central Library

The internationally acclaimed artist Yaacov Agam (b. Yaacov Gipstein) was born the son of a rabbi in Rishon LeZion, Eretz Israel. He is one of the pioneers of the kinetic movement in art as well as its most outstanding contemporary representative. Agam trained at the Bezalel Academy of Art in Jerusalem, and in Switzerland at the Eidgenossische Technische Hochschule and Zurich University. He relocated to Paris during the 1950s.

Agam experiments passionately with the 4th dimension, simultaneity and time in the visual, plastic arts, with viewer participation and frequent use of light and sound. Agam's creations are iconic landmarks in Tel Aviv and Jerusalem. In 1996, Agam was awarded UNESCO's Comenius Medal for the Agam Method, which focuses on stimulating visual talents in young children as a means to improve over-all cognitive development. In *All Directions*, nine upright stainless steel limbs move freely on their axis, anchored on a rectangular base.

Gift of Tzafira and Efraim Ilin (1986)



Breastplate of the High Priest, 1975 Zvi Yehuda Aldouby (1904-1996) *Hebron stone and bronze* Location: Ohel Aharon Synagogue

The sculptor Zvi Yehuda Aldouby was born to a Hassidic family in Carpathian Galicia, and immigrated to Eretz Israel in 1924. He studied in Jerusalem, followed by a study tour of Italy and Paris. His sculpture is figurative in style. Aldouby was among the founders of Ein Hod Artists' Village on the Carmel. Aldouby described the challenge for his creation, the *Breastplate of the High Priest (HaChoshen)*, for the Ohel Aharon Synagogue at Technion (April 1975).

"I was inspired by the beauty and splendor of the... breastplate which the high priest wore over his heart... adorned with 12 precious stones, each one different, symbolizing the 12 tribes of Israel... In our own times, the breastplate of the high priest might serve as a symbol and a hope for the unification of the Jews living in Israel and for the unity of the Jewish people everywhere."

The sculpture is a massive rectangle of flat Hebron stone, asymmetrical and rough. Protruding from the two parallel surfaces are twelve bronze rectangles arranged in four rows, set into the stone with concrete. Each bronze rectangle appears to be the continuation of the opposing one on the other side. The face of each bronze rectangle has a natural roughness with a different finish in each case.

Commissioned by the Jesselson Family



Vision, 2009 Yaël Artsi (b.1946) Stainless steel and basalt Location: Irwin and Joan Jacobs Plaza

Yaël Artsi was born in Morocco and immigrated to Israel aged 21. She studied at the Avni Institute of Art and Design in Tel Aviv, and in Paris with the famous sculptor Etienne Martin and at Cola Marini's studio. She graduated the Academy des Beaux-Arts, Paris, in 1975. Yaël creates both huge monumental objects as well as smaller, intimate pieces. Childhood influences from her native Morocco often infiltrate her sculptures.

Artsi uses materials such as stone, basalt (e.g. Yitzhak Rabin memorial in city hall, Tel Aviv), granite, metal, and wood. She curates and organizes the International Sculpture Peace Garden in Israel and Denmark. Her outdoor monumental sculptures can be found throughout Israel, and internationally in The Netherlands, Poland, Geneva, Osaka, Spain and Buenos Aires. Artsi lives on Kibbutz Sdot-Yam.

Vision comprises two elements: A metal bird soaring from a 12-ton mass of natural basalt rock. As the sculpture is built from latticed stainless steel bars, it does not obscure the view and merges with the environment. The basalt stone symbolizes the ancient, a starting point, and flight symbolizes the first condition for the evolution of science.

The sculpture was commissioned in tribute to Dr Irwin and Joan Jacobs on the naming of the Graduate School.



Breakthrough, 2006
 Hava Barkan Muzikant (b.1958) and
 Orit Elhaiany Perez (b.1967)
 Stainless steel
 Location: Sheldon R. Roth Family Plaza

The environmental artist wants people to understand the relationship between Nature and Science. Therefore, the imagery of the sculpture is borrowed from the Kingdom of Flora as a metaphor for the creation process of "scientific discovery" at the Technion: it begins with an idea, becomes grounded in a base, continues to develop, and results in a breakthrough. Hava and Orit, both graduates of Technion, established Barkan Elhaiany Landscape Architecture in Haifa.

The installation comprises stainlesssteel stems topped by buds. The desire to express perpetual renewal and regeneration through the illusion of movement creates an inspirational work that is in complete harmony with its environment.

Gift of Sheldon R. Roth Family

TECHNION TRAIL



Obelisk, 2008 Santiago Calatrava (b.1951) Stainless steel and Hebron stone Location: Berrie Promenade

The sculptor, architect, and engineer, Dr Santiago Calatrava, was born near Valencia, Spain. His extensive training including a PhD in Civil Engineering makes him one of the most interesting architects today, earning worldwide fame for several sensational and innovative architectural projects. Calatrava uses his skills as a sculptor to create unique buildings, combining the free forms of art with strict geometry and modern materials to transcend traditional limits. He received an Honorary Doctorate of Science from Technion in 2004, where he also holds the appointment of Distinguished Visiting Professor.

The Obelisk comprises a stone pedestal crowned with a 25-meter glinting tower, illuminated by lights sunk in the circular dolomite pavement. The tower houses an external skin of 224 moving stainless-steel ribs, arranged in eight levels, designed to permit a wave-like motion generated by the electric motor that sits atop the mast. Each moving rib induces the sequential motion of the next, creating an illusion of the whole monument rotating on its axis; actually, the movement is like the human ribcage moving in and out during the breathing process. The entire structure stands more than 28 m high, over 200 m above sea-level.

This kinetic construction recognizes the contribution to Technion by the Russell Berrie Foundation in establishing the Russell Berrie Nanotechnology Institute.



Unnamed, 1991 Joshua (Shuki) Einstein (b.1964) Wood, steel and gravel Location: Lower entrance to Amado Building

Architect Joshua Einstein was born in New York. He served in the Israel Defense Forces, and worked as a farm welder on a kibbutz. Shuki studied Architecture and Urban Planning at the Technion, graduating in 1991. While attending a design class in his final year and making the transition from academic architecture to the real world, Einstein got the idea to create a full installation from making a few sketches. The spatial composition, comprising wood, steel, gravel and the site, is installed in the plaza at the lower entrance to the Faculty of Architecture and Town Planning. Einstein created the sculpture over several weeks and had his fellow students help install it. Shuki Einstein is an executive board member for Architects Without Borders - Oregon.

His inspiration for this installation involves "... an element of uplifting, taking aged railway ties that typically lie in the ground... creating spaces between the rails and interesting shadows at different times during the day. There is a deliberate focus on minimalism, of materials with a simple order in space and a contrast of old and new materials. The frame of metal with gravel creates the grounding element and connects it to the existing square and campus."

Railroad ties donated by the Israel Rail Company



Composition in Stainless Steel #14,1986 Gideon Graetz (b.1929) Stainless steel Location: Shacht Park opposite the Senate Building

Sculptor Gideon Graetz was born in Tel Aviv. During Israel's War of Independence, he served in the Palmach. In the 1950s, Graetz attended the Accademia della Belle Arti in Florence and the Ecole des Beaux-Arts in Paris. Since moving to Fiesole, Italy, where he has a studio and foundry, Graetz has exhibited his work in Europe, Australia and the United States. The public spaces of Florence became the setting for his sculpture in the 1998 show, "Sculture in citta." His other public sculpture is located in Europe, the United States and Israel.

The first of the series — *Composition in Stainless Steel #1* — is displayed at the Sculpture Gardens at PepsiCo World Headquarters in Purchase, New York. The piece *Composition in Stainless Steel #14* comprises two flame-like arms standing on a cylindrical base. It is on permanent loan to the Technion by the artist, in memory of his late father Heinz R. Graetz, "who was one of the pioneers of Israeli navigation and who cherished the State of Israel and labored so greatly on its behalf."

On permanent loan by the artist



Garden Organ, 1970 Michael Gross (1920-2004) Painted iron Location: Central Library

The sculptor and painter Michael Gross was born in Tiberias, and spent his childhood in Migdal, near the shores of the Sea of Galilee. He studied in Jerusalem, and architecture at Technion (1943-1945). He subsequently studied sculpture and painting with Moshe Ziffer, Menachem Shemi, and other artists; and at Ecole des Beaux-Arts, Paris, with Michel Gimond.

His oeuvre combines different creative techniques and materials, such as white concrete and later paintings were supplemented by the textures of objects such as wooden beams, burlap and rope. Gross' consistent use of soft pastel coloring – as in the pastel yellow *Garden Organ* – suggests a direct link with the Israeli landscape. Gross was awarded the 2000 Israel Prize. His environmental sculptures are on display at sites across Israel and around the world.







Tree of Knowledge and Electronics, 1999 Asaf Lifshitz (b.1942) Bronze and printed circuits Ouri's Corner, 2007 Bronze Location: Berrie Promenade, Faculty of Electrical Engineering

Asaf Lifshitz first produced art when working at the Netanya foundry of Itzik Ben-Shalom. His sculptures can be found at Kibbutz Maoz Haim, where he lives and works, and throughout Israel.

Tree of Knowledge

Prof. Josh Zeevi commissioned Asaf Lifshitz to commemorate 60 years of the Faculty of Electrical Engineering. Lifshitz was inspired by a huge eucalyptus tree near the kibbutz carpentry facility, which, despite being subject to strong westerly winds, retained an upright trunk. Nearby, workers' footprints covered the garage floor with oil stains, which reminded the artist of fallen leaves, and, by association, an escape – perhaps from the wind. In *Tree of Knowledge*, Lifshitz substituted these footprints with printed circuits which he hung on the branches in lieu of leaves.

Gift of Zohar and Yehuda Zisapel, alumni

Ouri's Corner

Ouri Mayseless was an outstanding student in the Faculty of Electrical Engineering, who posted equations and links on the Internet as a resource for other students. In August 2003, 21-year-old Ouri was killed during a trip to Alaska. His family, who had seen Asaf Lifshitz's sculpture in Tel Aviv of the 25-year-old pilot Boaz Gafni killed in flight, commissioned the sculptor to commemorate their son. *Ouri's Corner* is a seated, life-size sculpture; his school bag – displaying a coded riddle – lays at his feet. *Gift of Ofra and Meir Mayseless*



Closet Angel, 1996 Dina Merhav (b.1936) *Iron* Location: Ring Road, Pre-university Education Center

Sculptor Dina Merhav was born in Yugoslavia, and she immigrated to Israel in 1949. She studied at Bezalel Academy of Art in Jerusalem (1953-1957) and at Pietra Santa, Italy (1984) where she explored sculpting in stone. Dina was a successful graphic designer for many years and has taught graphic design at the Technion. Dina Merhav lives in Ein Hod Artists' Village.

Her outdoor sculptures are exhibited at the Merhav Nesher Sculpture Industrial Park, Nesher; Haifa; elsewhere in Israel; and internationally. Merhav's 8-meter-high iron *Totem* was installed at the Olympic Sculpture Park in Beijing in 2008.

The image of an angel, associated with legend, myth, and religion, is a recurring theme in Dina Merhav's work. Typical of Merhav's recognition of the importance of the landscape to her sculptures, the surroundings can be seen through the opening and latticed grid in *Closet Angel*.

Gift of the artist



Israeli Summer (Series) Eli Ran (b.1946) Bronze Location: Forchheimer Faculty Center

The sculptor, curator and teacher Eli Ran was born in Baghdad, Iraq, and immigrated to Israel in 1950. A veteran of the Yom Kippur War (1973), he graduated the University of Haifa in 1978 and studied sculpture at Habustan Art School, Netanya; Megiddo Institute; and Western Galilee College. Ran has participated in numerous group and solo exhibitions, and at international symposia.

His Israeli Summer series is on display inside and outside the Forchheimer Faculty Center. The series was commissioned for display in Caracas, Venezuela, and exhibited as part of Israel's 40th Independence Day celebrations. Eli Ran lives in Haifa.

On loan from the artist



Transform, 1998 Andrew Rogers (b.1947) Bronze Location: Ring Road, near Louis Plaza

Andrew Rogers was born and lives in Melbourne, Australia. Rogers, one of Australia's most distinguished and internationally recognized contemporary sculptors, strives to represent the connection between man, nature and landscape. Formerly a painter, Rogers made his first sculpture in 1988 when in his early forties. Rogers' first works were figurative, and in 1995, he moved towards abstraction as a means of communication.

Rogers is known for his monumental global Geoglyphs project which he commenced in Israel's Arava desert. These accessible and life-affirming massive stone sculptures in the *Rythms of Life* series have since been constructed all over the world.

Rogers was artist-in-residence at the Technion in 1998 when he created *Transform*, which stands at a height of 3.8 m. This bronze sculpture, cast at a local foundry, is a literal representation of the boundless creativity that drives technological and scientific progress. Spiraling upward, swirling organic roots give rise to forms that speak to the precision of the technological innovation that propelled us into the 21st Century. This structure marks the first time an artist-in-residence has invited and welcomed the participation of students in the creation of a campus sculpture.



Peace, 1997 Aviva Shemer (b.1942) Steel Location: Ring Road, Sports Center

Painter, sculptor, and environmental designer Aviva Shemer was born in Haifa, where she continues to live and work. She has exhibited in solo shows at numerous venues throughout Israel, in Germany, Hong Kong, Poland, and the USA, and likewise has participated in group exhibitions across the world. Aviva's permanent environmental designs are displayed at multiple locations in Haifa and elsewhere in Israel.

Many of her sculptures have Jewish or spiritual motifs. The steel sculpture *Peace* was created in 1997, and donated by the artist to the Technion. It is part of a group of sculptures that share the letter "Shin" – the first letter of Shalom (Peace).

Gift of the artist



Syllables 6, 1986 Yehiel Shemi (1922-2003) *Iron plates* Location: Kislak Park

Painter and sculptor Yehiel Shemi was born in Haifa. He made his first wood and stone sculptures at Kibbutz Beit-Ha'arava in the Negev, which he joined in 1939 as a construction worker. Shemi helped found Kibbutz Kabri in Western Galilee, where he was a member from 1949 until his death; his studio and a Sculpture Garden of his work are open to the public. He produced his first metal welded sculptures from the steel found in sunken ships in Haifa harbor.

In the 1950s. Shemi led the transition in Israel from figurative stone sculpture to abstract sculpting in iron. From the late 1950s Shemi received commissions for major monumental sculptures in metal and concrete. These works are noted for their clean surfaces and compositions of intersecting angles, devoid of all associative detail. He was a prominent member of the New Horizons Group (1955-1965). Between 1977 and 1979, Yehiel Shemi taught environmental design at Technion. Shemi was awarded the Israel Prize in Sculpture in 1986 - the same year in which he created Syllables 6. Rising from a rectangular base, three metal plates connected by large bolts resemble a segment of a circle.

Gift of the artist



A Man and a Cat Called Yitz, 2004
 Robert Shure (b.1948)
 Bronze
 ▲ Location: Berrie Promenade, Faculty of Electrical Engineering

Born in Brooklyn, New York, Robert Shure graduated with a BFA in sculpture, cum laude, from the New York Institute of Technology, and received his MFA in sculpture, cum laude, from the School of the Museum of Fine Arts and Tufts University. Shure is a plaster cast and bronze expert, and restoration expert, as well as a sculptor in his own right. He is president of Skylight Studios in Woburn, Massachusetts.

The bronze sculpture, *A Man and a Cat Called Yitz*, was commissioned by Technion Guardian Robert (Dr Bob) Shillman of Massachusetts. As a young man, Shillman had spent a summer in the Faculty of Physics where he befriended one of the campus strays, Yitz.

Gift of Robert (Dr Bob) Shillman

TECHNION TRAIL



Chichen Itza Blue, 1987 Igael Tumarkin (b.1933) Painted steel Location: Coler-California Visitors Center

Sculptor, painter, and stage designer Igael Tumarkin was born in Dresden, Germany, and immigrated to Eretz Israel in 1935. He studied with Rudi Lehmann, a major pioneer of the Canaanite esthetic. He received the Israel Prize in Sculpture in 2004, and lives in Tel Aviv-Jaffa.

The composite structure Chichén Itzá Blue consists of a large ring set on a fourwheeled wagon, prevented from moving along its rails by obstacles. Chichén Itzá is a Mayan archaeological site in Mexico, with a great Tlatchli ball court. Resembling modern basketball, this postclassic game (c. 900 AD) was played by two teams who, without using their hands, tried to pass a solid rubber ball through their opponents' stone ring, set vertically in the side walls. The finished ritualistic game of Tlatchli involved human sacrifice. Tumarkin was apparently inspired that while the people of Chichén Itzá were capable of making wheel-shapes for the ball game, they never applied this skill for transportation. The indigenous population was later easily defeated by a small number of technologically savvy Europeans. Chichén Itzá Blue is both a memorial to the Mayan culture and a tribute to our greater technological know-how. Tumarkin, who is sensitive to all kinds of social violence and injustice, makes a statement about the domination of one people over another.

Gift of the artist



Reclining Woman, c. 1956 Unknown Artist *Limestone* Location: Berrie Promenade, Dean of Students

This limestone sculpture of a reclining woman is identified with Electra, a character in Greek mythology. In Greek, Electra means "shining" or "bright" and is derived from the word for "amber".

This piece of unknown origin is the first sculpture erected on campus in c.1956, near the entrance to the Fischbach building which housed the Faculty of Electrical Engineering. Electricity is a fundamental form of energy observable in positive and negative forms that can occur naturally (as in lightning). The reclining woman of the statue, leaning on her right arm, originally held lightning — the symbol for electricity — in her broken left hand, which rests on her knee. Originally naked, the contours of her clothes were added subsequently – seemingly to obscure her nudity.



Books and the Written Word, 2007 Boris Zaborov (b.1935) Bronze and platinum; concrete base Location: Kislak Park

Boris Zaborov was born in Minsk, Belarus. He studied art in Minsk, St Petersburg, and Moscow, and has been living in Paris since 1980 where he now works. His early work, before his departure from the Soviet Union, includes book illustration, notably Oscar Wilde's *Fairy Tales*. Such books reflect not only his talent but also his sense of the Word.

Zaborov says that his bronze and platinum sculpture, *Books and the Written Word*, "is a fitting monument to the importance of the book to Jews – the People of the Book." It depicts a book – the height of human civilization, now so commonly mass-produced in pocket form – from which letters in various alphabets emerge. The huge sculpture stands 2.8 m high, weighing around four tons, and is situated on a concrete base according to architects Shaul Kaner's and Michael Seltser's specifications.

Gift of Leonid and Alexandra Raiz





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