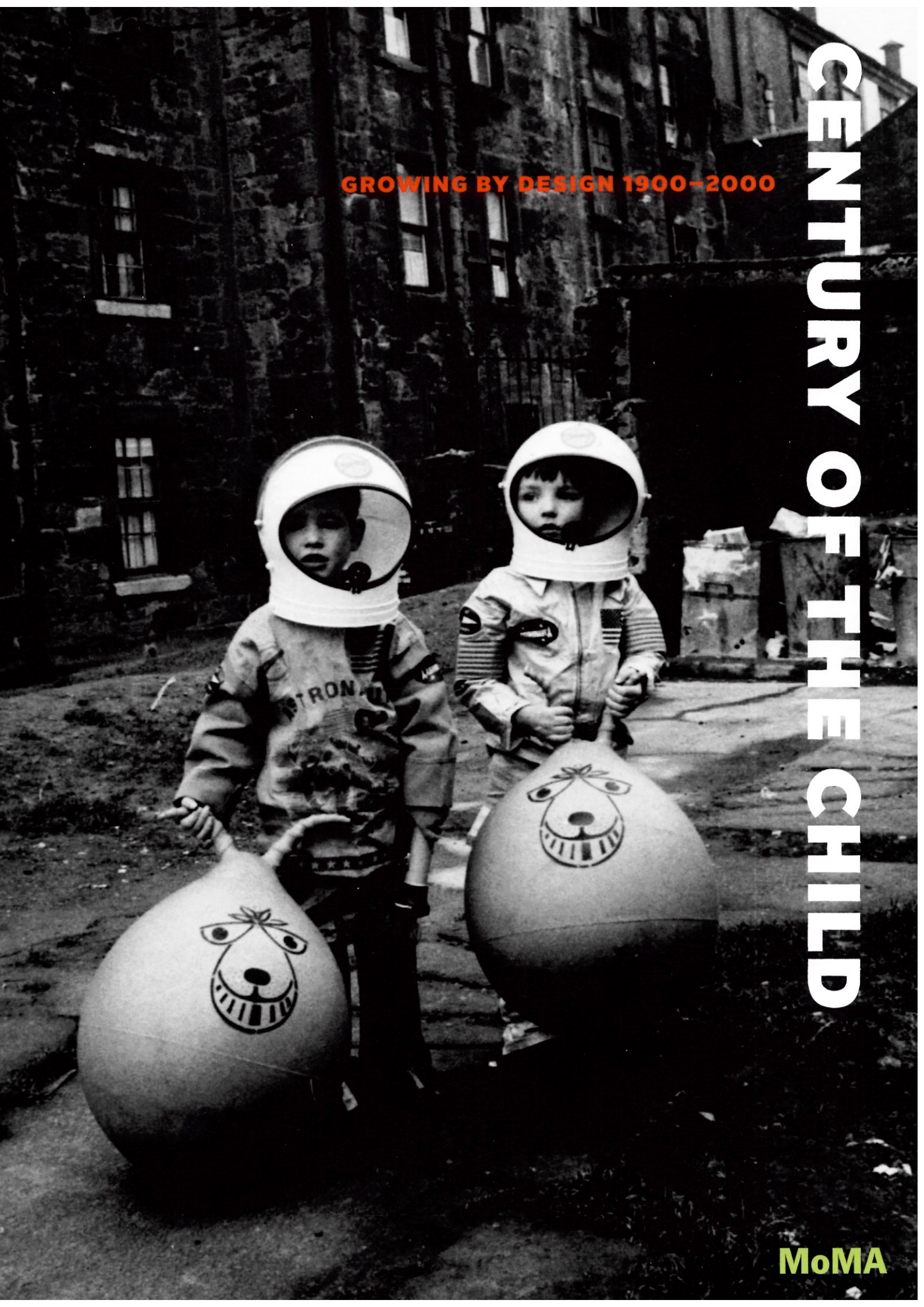


CENTURY OF THE CHILD

GROWING BY DESIGN 1900–2000

MoMA

DID THE TWENTIETH CENTURY live up to what Swedish design reformer and social theorist Ellen Key, writing in 1900, envisaged as "the century of the child"? This book, produced in conjunction with a major exhibition at The Museum of Modern Art, takes both its title and its launching point from Key's landmark book, which presaged the coming century as a period of intensified focus on and progressive thinking about the rights, development, and well-being of children. It tracks the fascinating confluence between the cultures of modern design and childhood, through an introductory essay by Juliet Kinchin, sixty-five short essays, and more than four hundred illustrations. The resulting kaleidoscopic narrative of innovative ideas, practitioners, and artifacts examines individual and collective visions for the material world of children, from utopian dreams for the citizens of the future to the dark realities of political conflict and exploitation.

Despite being the focus of intense concern and profound thought, children remain one of the most underrepresented subjects in the historical analysis of modern design. To address this lacuna, this book surveys more than one hundred years of school architecture, playgrounds, toys and games, educational materials, children's hospitals and safety equipment, nurseries, furniture, animation, propaganda, advertising, books, and clothing. The outstanding projects that emerge illuminate how progressive design has enhanced the physical, intellectual, and emotional development of children and, conversely, how models of children's play and pedagogy have informed experimental design thinking. As protean beings and elastic ideological symbols, children help us to mediate between the ideal and real: they propel our thoughts forward. But as we look back, they also reveal important new dimensions of modernism in the twentieth century.

JULIET KINCHIN is Curator of Modern Design in the Department of Architecture and Design at The Museum of Modern Art.

AIDAN O'CONNOR is a Curatorial Assistant in the Department of Architecture and Design at The Museum of Modern Art.

ISBN: 978-0-87070-826-8

CENTURY OF THE CHILD

GROWING BY DESIGN 1900–2000

JULIET KINCHIN | AIDAN O'CONNOR

With contributions by

TANYA HARROD, PABLO HELGUERA, MEDEA HOCH, FRANCIS LUCA, MARIA PAOLA MAINO, AMY F. OGATA, DAVID SENIOR, AND SARAH SUZUKI

The Museum of Modern Art, New York

CONTENTS

INCLUSIVE, THERAPEUTIC, AND ASSISTIVE DESIGN FOR CHILDREN

33 PETER OPSVIK (Norwegian, born 1939)
"Maxi" set including Tripp Trapp chair. 1972
Lacquered beech wood, 61 x 36 1/4 x 39 1/4"
(154.9 x 92.1 x 99.7 cm)
Photograph of Lars Hjelle and Kjell Heggdal
by Dag Lausund
Stokke

THE EFFORT to accommodate children in the physical world of adults, to give them equal footing, in a way characterizes all design for children as inclusive, with results that can be poignant as well as practical. Peter Opsvik designed the adjustable Tripp Trapp chair (1972) after watching his son, Thor—too big for a high chair but too small for an adult chair—struggle for a place at the family dining table; as part of the design process he produced oversize versions of the Tripp Trapp and a standard table and chair (no. 33) to help his team empathize with an average three-year-old child. More than seven million Tripp Trapp chairs have since been sold.

The term "inclusive" also refers to a moral imperative that took hold in the design world in the 1970s and '80s, to consider the perspectives of previously marginalized groups. In the subsequent shift, designers began to think carefully about people whose needs were not always met by conventional environments and objects, including people with disabilities. Since then, many talented designers have expanded the broad field of inclusive design (also called "universal design") and, more specifically, therapeutic design (to treat or alleviate specific conditions) and assistive design (to enhance abilities and independence) for people with audiovisual, motor, and developmental disabilities.[1] In some cases, such as Smart Design's Good Grips series of kitchen tools for OXO (originally conceived in 1989 to make kitchen tasks easier for arthritic hands), the results of this pursuit have been beneficial to mainstream users as well as being commercially pragmatic. Inclusive design has proved to be a uniquely thoughtful, demanding, and often quite personal realm of the profession, all the more so when it focuses on children.

The disability-rights movement began in the 1960s, in the wake of the civil rights and women's liberation movements, by agitating against discrimination and for public accommodation.[2] In the same era there was a surge in products and facilities for rehabilitative and assistive technology, both of them dependent on good design. Legislation began to have an impact on architecture and design, including, in the United States, the Architectural Barriers Act (1968), the Education for All Handicapped Children Act (1975), and the Americans with Disabilities Act, or ADA (1990).[3] As medical and therapeutic treatments improved, expanding the capabilities and extending the life spans of people with illnesses and disabilities, designers thought of ways to prevent them from being segregated or stigmatized.

Two exhibitions, one at each end of the 1980s, were important showcases for this growing field. In *Design and Disability*, organized in 1981 at the Design Centre in London, a section dedicated to children with disabilities featured toys, mobility aids, and clothing (no. 34). One of the highlights was the Rocking Spinning Toy (c. 1981), designed by

Rosemary Martin, a toy that multiple children could use, thus counteracting the isolated play Martin witnessed while visiting children in hospitals. At The Museum of Modern Art, New York, Cara McCarty organized *Designs for Independent Living* in 1988, featuring recent mass-produced products primarily for older adults and those with physical disabilities but also including therapeutic play mats and brightly colored support systems for children with motor disabilities. McCarty aligned her selection of objects with the classic principles of modernism, explaining, "In the hands of sensitive designers, these products have been enhanced by an aesthetic value not usually associated with adaptive technology. Beauty is found in their economy of design, and the purity of form is determined by their function."[4] Half of the forty-five works presented were Scandinavian, with Sweden strongly represented by Ergonomi Design, a pioneer of inclusive design, founded by Sven-Eric Juhlin and Maria Benktzon, among others (no. 35). Since 1969 the firm has specialized in progressive user-oriented design and demonstrated a commitment to equality as well as quality of life, design principles for which the Nordic countries are still known.

Teresa Kruszewska and Renate Müller are two prolific woman designers who specialized in coordinated series of objects and complete environments that provide the developmental and healing benefits unique to play. Kruszewska began working with children in the 1950s, helping her sister and brother-in-law run a rehabilitation hospital in Jastrzębie-Zdrój, Poland. She experimented with making playful furniture

34 Installation view from the exhibition *Design and Disability*, Design Centre London, 1981, showing Rocking Spinning Toy designed by Rosemary Martin
Design Council Slide Collection, Manchester Metropolitan University

35 SVEN-ERIC JUHLIN (Swedish, born 1940)
Child's cup with lid. 1971
Plastic, $3\frac{7}{8}$ x 5" (9.8 x 12.7 cm)
Manufactured by AB Gustavsberg Fabriker, Gutavsberg, Sweden
The Museum of Modern Art, New York. Friends of the Department of Architecture and Design Fund

36 TERESA KRUSZEWSKA (Polish, born 1927)
Furnitoys. 1974
Lacquered plywood with plastic inlay, largest: $19\frac{11}{16}$ x $18\frac{1}{8}$ x $16\frac{9}{16}$" (50 x 46 x 42 cm)
Manufactured by the Industrial Design Institute, Warsaw
National Museum, Warsaw

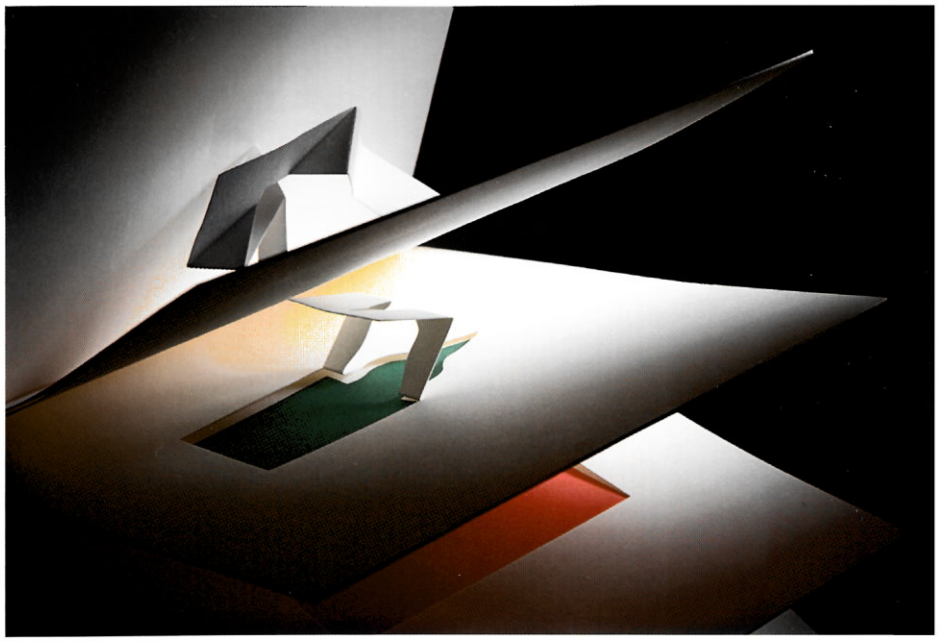
37 RENATE MÜLLER (German, born 1945)
Modular indoor play area. 1985
Jute, leather, and wood, play area: 3 x 8 x 5' (91.4 x 243.8 x 152.4 cm); largest puppet: 12" (30.5 cm) tall
Collection of Zesty Meyers and Evan Snyderman/R 20th Century, New York

before her abilities were first tested, she said, in 1959, by a commission to furnish the Krakow Prokocim Hospital.[5] A decade later, after studying ergonomics and new technologies at the Rhode Island School of Design and in Finland, she returned to Poland and, in 1974–75, revived some of her ideas from Prokocim in furnishings and toys for the Children's Health Center in Warsaw, including wheeled screens, abacuses, pin boards, blocks, and a "growing chair" system not unlike the Tripp Trapp. For this scheme Kruszewska also developed Furnitoys (no. 36), a set of neutral developmental tools based on her observations and contact with pediatricians and child psychologists. These nesting box forms, with their circles of brightly colored plexiglass, encouraged children to participate in the creation of their own spaces, enhancing feelings of independence, control, and privacy.[6]

Born and raised in Sonneberg, an East German manufacturing center known as Spielzeugstadt (toy town), Müller grew up in an environment infused with the material culture of childhood.[7] Her grandfather and father ran the toy company H. Josef Leven, which had been established in 1912, and Müller began representing it at trade fairs when she was fourteen years old. She started training in toy design in 1964 and soon launched a career in design for children with special needs.[8] Using a limited material vocabulary of jute, leather, and wood, she created high-quality therapeutic toys and environments for active play, in handmade designs that are simple, combining robust forms (ideal for strength, balance, and motor exercises) with refined tactile qualities, bright colors, and straps or handles to encourage physical engagement. Her early series of burlap beasts, marketed as "coarse but cute," made their debut in Leipzig in 1967 and were produced by the family business, which was acquired by the state and became the VEB Therapeutisches Spielzeug (Centralized distribution facility for therapeutic toys).[9] Müller worked closely with rehabilitation professionals to balance her rigorous quality standards with the economic limitations of East German industry. She founded her own workshop in 1978 and headed the Kindumwelt (child environment) department of the Verband Bildender Künstler der DDR (Association of visual artists of the GDR). In the 1980s, with her beasts already popular in kindergartens and hospitals throughout the region, Müller turned to larger objects and environments such as suspended puppet theaters and outdoor playgrounds for children with physical disabilities. Her unique modular indoor playground (no. 37) features stick-puppet characters that can be used to secure loose cushions into endless arrangements of playful structures.[10]

The tactile significance of Müller's creations is a critical part of therapeutic design function. Since her groundbreaking work, designers have sought to expand the possibilities of therapeutic play through sensory stimulation, which is important for early cognitive development and used in the treatment of certain disabilities and neurological disorders.[11] Graphic designer Katsumi Komagata understands these correlations well, and in his exquisite children's books he activates both the visual and tactile senses. In projects that adopt Bruno Munari's conception of books as objects, Komagata has explored different approaches to binding and reading, which has led him to create a series of books for partially sighted and blind children. In *Plis et plans* (Folds and planes) (no. 38), thick pages with brightly colored shapes and Braille text are unexpectedly transformed as the child folds and unfolds them.

Inspired by the Dutch therapy *snoezelen* (from *snuffelen* [to seek out] and *doezelen* [to relax]) from the 1970s, designer Twan Verdonck created the Boezels (no. 39) in 2001, a series of seventeen soft toys, each a kind of artificial pet that, by emphasizing physical contact, both encourages sensory exploration and reduces anxiety; the Boezels are suitable for all children, as well as for adults with developmental



38 KATSUMI KOMAGATA (Japanese, born 1953)
View of the book *Plis et plans* (Folds and planes). 2000
$11\,^{13}/_{16}$ x $8\,^{11}/_{16}$" (30 x 22 cm)
Published by Les Doigts Qui Rêvent, Talant, France; Les Trois Ourses, Paris; and One Stroke, Tokyo
Courtesy of the artist

39 TWAN VERDONCK (Dutch, born 1979) and NEO HUMAN TOYS (The Netherlands, est. 2003)
Tummy (warm belly monkey), from the Boezels collection. 2001
Fake fur, cotton, and cherry pits, $23\,^{5}/_{8}$ x $18\,^{7}/_{8}$ x $8\,^{5}/_{8}$" (60 x 48 x 22 cm)
Manufactured by De Wisselstroom
The Museum of Modern Art, New York. Dorothy Cullman Purchase Fund

disabilities. Verdonck incorporated unique sense-specific characteristics in the toys, using heating pads, mirrors, sound, scent, and durable textiles with different tactile properties, and the shapes are abstract, leaving freedom for imaginative interpretation and narrative. The first Boezels were developed and produced with the input of patients in a workshop at a mental health–care facility in Hapert, the Netherlands.

Recent developments in inclusive, therapeutic, and assistive design suggest that designers are increasingly considering the agency and emotions of children. Ergonomi Design (for Pfizer) has created a genotropin injection pen (1991–96), for children with growth-hormone deficiencies, that is easier for children to hold and hides the needle in a chamber that can be personalized with decorative plates and pendants.[12] The emotional and physical benefits of play are brought to the fore in a concept by the young designer Mariana Uchoa for a radical prosthetic, the Toobers & Zots Interactive Arm (2009), made of colorful foam pieces in infinite combinations, which she designed as a student in the School of Visual Arts' Prosthetics Project.[13] It is also noteworthy that major multidisciplinary design firms have entered this field; Frog Design, a global firm famous for its innovations in consumer electronics, created Tango! (c. 2006), an assistive-communication device for children with hearing or speech impairments, for the company Blink Twice, founded by the father of a boy with cerebral palsy.[14] New firms with unprecedented specializations are emerging and excelling, such as Krabat, a small Norwegian company that focuses on innovative pediatric technical aids; their active chair, Jockey, was recently acquired by MoMA.[15] Designers who consider the whole child—and reject simply making miniature versions of adult products or rendering them decoratively juvenile—continue to contribute objects and environments that extend the ability of design to improve and transform everyday life.

Aidan O'Connor