THE WINGS OF DAEDALUS: Toward a Relational Architecture

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Psychoanalysis has long been interested in the creative process, and yet architecture has rarely been studied from a psychoanalytic perspective. This paper examines the creative process of architecture in which the space between an existing problem and a physical, occupiable building is bridged. I follow the story of Daedalus, the mythic first architect, and suggest that the architect's creativity depends on the ability to utilize multiple modalities of the human mind and body and to allow them to converse with one another in what Philip Bromberg called a moment of "standing in the spaces." I use the notion of sublimation to reestablish the place of the body in the artistic process and to remind us that the physical and the psychic are intertwined, jointly participating in the creative process. I conclude by demonstrating the participation of inner and outer selves—minds and bodies—in my design process for the Czech National Library International Competition.

OPENING VIGNETTE

It was late at night and our team was exhausted, frustrated, and anxious. We had been working on an entry to the international open competition for the Czech National Library in Prague. We had only two weeks left to the submission deadline and we still needed to produce plans, elevations, renderings, and a physical model, but we did not yet have a design concept.

Entering an open competition is a rare opportunity for an architectural practice to be judged purely on the merits of its design rather than by the size and experience of the firm. This opportunity comes with an investment of time and resources, but a contagious sense of optimism makes up for the effort. Winning

a competition like this could transport a young practice into the big leagues, and the finished entry would enrich our portfolio, showing the scale and quality of architectural work we are capable of producing, something we cannot always demonstrate through our commissioned work.

But that night the team in the office felt stuck. We had spent days trying to understand the complex programmatic requirements for the 500,000-square-foot library building we were designing. We studied the site and its history and looked at numerous images of old and new libraries. Still, we did not have an idea that would guide us through organizing and forming this complex space.

THE WRITING TASK

In this paper I use the architectural design process as a case study to examine how a creative, imagined idea becomes reality. The architect's task is to bridge the gaps among an existing problem, an imaginative vision, and a physical, occupiable building; it transforms dreams into habitable structures. I suggest that the architect's creativity depends on the ability to utilize multiple modalities of the human mind and body, allowing them to converse with one another in what Bromberg (2001) called a moment of "standing in the spaces" (p. 274). Further, I argue that the freedom to utilize a wide range of mental and physical methods in order to elaborate an imagined idea is what allows these fantasies to become realities.

In the world of geometry, interpolating three lines that do not share a planar surface creates a three-dimensional, habitable, place. In the construction of this paper I weave three independent lines of investigation, allowing them to inform, question, and edit one another. The first line will follow my experience as a practicing architect, illustrating the design process through our entry for the international competition for the Czech National Library. A second line will follow the mythical first architect, Daedalus, and his inventive creation of the wings that carried him over the ocean to freedom. A third line will trace psychoanalytic ideas regarding the relationship of fantasy and reality and the role of fantasy in the creative artistic process. With these three lines I hope to

sketch a space that is open, permeable, and habitable, a space that will invite others to enter and further investigate the creative process of transforming fantasy into reality.

Attempting to write an interdisciplinary paper also poses risks. It strives to tie, compare, and translate ideas from one field into another. Benjamin (1923), in his classic paper "The Task of the Translator," suggests that the process of translation reveals the kinship of all languages but also creates an afterlife in which the translation transforms the original text. Every language, writes Benjamin, possesses meanings and structures that cannot be communicated in other languages; therefore, "it is the task of the translator to break through the decayed barriers of his own language" (p. 80). I am aware that when translating psychoanalytic ideas into architectural theory and architectural concepts into psychoanalysis I will inevitably encounter moments in which these languages are incompatible; yet these moments of nontranslatability have the potential to revitalize both fields.

THE ARCHITECTURAL TASK

Before discussing the mental processes involved in the architectural design, let us consider the architectural task. Architecture is the art and science of creating physical spaces for human activity. The primal requirement for any building is to create shelter, protecting us from the hot sun, the chilling wind, and the constant noise of the urban metropolis (Sperber, 2014). However, architecture can provide more than physical shelter; it enables us to discover the world, ourselves, and society in new ways. We build environments in which the multiplicity of human experiences, both social and solitary, can take place. We can test new ways of being as individuals and as a culture within the constructed space and through our interactions with the physical environment. "Architecture does not merely beautify the setting of a dwelling; great buildings articulate the experiences of our very existence," asserts Pallasmaa (2009, p. 19). Architecture is the setting in which life can discover and invent itself; it is the stage for the theater of life.

We are often unaware of the impact buildings have on us; we experience architecture in a state of distraction (Benjamin, 1936.) Nevertheless, we physically feel and mentally perceive the built

environment. Architecture is a product of culture and can be "read" and understood as a language (Hendrix, 2006), but it is also a sensual experience. We touch, see, smell, and hear architecture. Our eyes enjoy the façade composition, our fingers brush over a cool stone sill and the warm rich fabric of the window drapery. Patterns of light and shadow punctuate the rhythmic sound of our footsteps scaling the space, measuring it against the size of our body. And architecture stimulates our minds as present spatial experiences evoke memories of a lost past. The architect must therefore try to attend to the entire spectrum of physical and mental architectural effects, designing an embodied experience that will be thought, felt, and remembered.

LITERATURE ON PSYCHOANALYSIS AND ARCHITECTURE

Although the literature on the relationship of architecture and psychoanalysis is relatively small, I note here some of the existing studies. Psychoanalysis and architecture are generally explored together for one of two purposes. Historians of art and architecture use psychoanalytic ideas to study the hidden meanings and effects of buildings. Others, often from the world of psychoanalysis, study the psychobiographical histories of particular architects.

Most notable in the first category is Stokes (1951), who used Kleinian concepts to analyze how buildings, like surrogate mothers, both devour the visitor/child and are destroyed by the viewer/child. Dreamer (2005) rereads Stokes, noting that his writing resembles a process of self-analysis in which he works through his personal fascination and profound reactions to the built environment.

Colomina (1992) employs psychoanalytic concepts in much of her work, including her comparison of the interior spaces designed by Adolf Loos and Le Corbusier, tracing their different relationships to domesticity, femininity, and sexuality. Vidler (1992) studies the uncanny aspects of modern architecture and urbanism in his book *The Architectural Uncanny*, and Hendrix (2006) analyzes the linguistic structures in Eisenman's architectural work using Lacanian psychoanalytic ideas. Lavin (2007) traces Richard Neutra's deep connection to the field of psychoanalysis and his belief that the task of an architect, much like that of a psychoana-

lyst, is to expose the client's fantasies in order to enable a healthy, new way of living through modern architecture.

Among the studies of architect's biographies one should note Tutter's (2011) study of Philip Johnson's glass house. She suggests that architectural design is produced much like a personal dream to express wishes, fantasies, and fears. She therefore interprets Johnson's house using analytic dream interpretation techniques. Frank Lloyd Wright's childhood and his creative life have been studied by a number of psychoanalysts (Anderson, 2005; Winer, 2005; Twombly, 2005).

Two notable exceptions are the work of Elizabeth Danze and Jane Rendell, who both suggest that architectural sensibilities may widen psychoanalytic thinking rather than vice versa. Danze (2005) studies the phenomenology of the spatial experience, analyzing the ways the architecture of the analytic consulting room affects the psychoanalytic experience. I especially admire Rendell's (2010) book *Site-Writing: The Architecture of Art Criticism*, in which she suggests that at the core of the architectural event is what she calls a "situated experience," an event in which the subject and object, building and visitor, always influence one another.

FANTASY AND REALITY IN PSYCHOANALYSIS

The fields of architecture and psychoanalysis have both been interested in the mysteries of creative processes, yet they differ in their focus and methodologies. Architects most often study completed buildings, the final product of a design process. The psychoanalytic literature, on the other hand, focuses on the origins of the desire to create a work art, rarely judging the quality of these creative processes. Both fields, however, have paid limited attention to the process of transforming creative wishes into realities, ideas into text, and fantasies into buildings. This process is the focus of this paper, yet the relationship of imagination and fantasy to material reality is fundamental to the understanding of creative processes.

I recently returned to Freud's (1908) essay "Der Dichter und das Phantasieren," which we are accustomed to translating as "Creative Writers and Day Dreaming," although I prefer Laplanche's (1992, p. 223) translation, "The Poet and the Activity of Fantasy."

I was surprised by the inconsistency of Freud's terms for the different mental process he analyzes: fantasy, day dreams, and play. I expected Freud to emphasize the need to renounce the pleasure principle (Freud, 1911)—the attachment to the regressive infantile fantasies—in order to fully accept the reality principle of mature "love and work" within society. But rather than a clear distinction, I found Freud's account of fantasy and reality shifting and vague, a vagueness which perplexed and excited me. Perhaps fantasy and reality were complexly intertwined rather than opposite processes?

Isaacs (1948) distinguishes between waking imaginative processes and less conscious, dreamlike fantasies. She proposed using the spelling "fantasy" for the first type of imagination and reserving the spelling "phantasy" for the latter, primary-process, fantasies. Laplanche and Pontalis (1973) strongly opposed this suggestion, noting that "Freud's principal concern seemed to have been less with establishing such a differentiation than with emphasizing the links between these different aspects" (p. 316).Freud, in their view, believed that artistic creativity holds the promise of a reality that is linked to and invented by an internally wished fantasy; thus, the linking of fantasy and reality is the essence of the creative artistic process (Jurist, 2006). This understanding is supported by Freud's (1911) paper "Formulations on the Two Principles of Mental Functioning," where he writes that "art brings about the reconciliations between the two principles" of fantasy and reality, which the artist is able to do by "making use of the special gifts to mold his phantasies into truths of a new kind, which are valued by men as precious reflections of reality" (p. 224).

A similar linking of fantasy and reality can be found in Winnicott's (1953) notion of illusion as well as in his concept of transitional object, about which we cannot ask if it is real or imagined. According to Winnicott, the infant's first encounter with reality is through illusion, in the good-enough moment when the mother's wish to feed coincides with the baby's hunger and desire for food. This moment blurs cause and effect, subjective and objective reality, making it unclear to the baby if his or her hallucination or external reality had provided the feeding. "Fantasy," Winnicott (1958b) writes, "is more primary than reality, and the enrichment of fantasy with the world's riches depends on the experience of

illusion" (p. 153). As Knafo and Feiner (2006) contend, reality and fantasy should not be seen as binary opposites; rather, they are both constantly present, fluctuating aspects of our selves that jointly participate in our understanding of the world and ourselves.

STEPHEN MITCHELL'S VIEW OF ILLUSION

In his essay "The Wings of Icarus: Illusion and the Problem of Narcissism," Mitchell (1986) studies fantasies and their link to reality, attempting to reconcile Freud's view of illusion with Winnicott and Kohuts's understandings. Freud, according to Mitchell, saw illusion, as well as fantasy, as a regressive defense against the frustrations of reality. Illusions must therefore be interpreted, their unreality pointed out and renounced (p. 113). On the other hand, Mitchell understood Winnicott and Kohut as seeing illusion as the source of growth, inspiration, and creativity (p. 114). Mitchell offers a synthetic approach in which one must accept the reality of human limitations and mortality while at the same time experiencing the excitement of creativity. In this bifocal experience illusions hold both loss and joy; the inevitable limitations of reality add a poignancy and sweetness to the narcissistic, playful illusion and fantasy (p. 120).

Mitchell then discusses the myth of the Wings of Icarus, describing the ways in which illusion and narcissism are learned, relational patterns that a child adopts in order to maintain the connection to his or her parents. In the myth, Mitchell suggests that Icarus agrees to fly with the wings his father created because joining his father's grandiose fantasy was the only way Icarus and Daedalus were able to relate to one another. Despite Daedalus's warnings, Icarus gets lost in this illusion. He flies too high, the sun melts the wax off the wings, and he falls to his death into the sea. With this vivid image Mitchell illustrates the tragedy of how a child gets trapped in the parent's fantasy in order to maintain a connection to the parent.

While Mitchell captures beautifully the tragedy of Icarus, I would like to return to the myth from the point of view of Daedalus, who was not only Icarus's father but also the mythological first architect who, through creative imagination, built new spaces

and tools and also solved practical problems. Fantasy, in this story, is not only dangerous, leading to Icarus's death, but is also the source of Daedalus's liberation through invention.

I now follow Daedalus in the process of making the wings in order to illustrate my understanding of the design process in which imagination softens the division between fantasy and reality, enabling new realties to emerge.

EXPERIENCING LOSS

Let us look more closely at the story of Daedalus. He is imprisoned by King Minos after building the labyrinth to hide the Minotaur, the unnatural progeny born of the union of the King's wife and the bull she had fallen in love with. As told by Ovid in Metamorphoses, Daedalus hated Crete and longed to be back in his homeland Sicily, yet this dream was not very realistic; King Minos controlled the seas and the land blocking all routes of escape. Although Daedalus is a mythical figure, I would like to take the liberty of imagining him as a real person and examining the stories told by Ovid (written AD 8), Pliny (written after AD 75) and Homer (seventh or eighth century BC).

Ovid (1986) tells us that "hating the isle of Crete, and the long years of exile," Daedalus was "pining for his native land, but the seas on every side imprisoned him" (p. 176). Daedalus hates Crete, wishes to escape, and knows he is trapped.

Segal (1952), in her paper "Psycho-Analytic Approaches to Aesthetics," following Melanie Klein's concept of the depressive position, suggests the importance of the artist's ability to experience and tolerate feelings of loss and longing. "Depressive phantasies give rise to the wish to repair and restore" (p. 197), Segal writes. These feelings of loss, if tolerated, become the stimulus for the development of self and art. But the artist must first experience the intensity of his or her needs, the yearning for the lost-whole-object of the childhood unit. Only then, when this loss has been acknowledged and mourned, "re-creation can take place" (p. 199).

Following Segal and Klein, one might see Daedalus's ability to hate Crete and long for a different place as the first step toward his escape. The ability to experience pain and loss, to see the wrongs of the world, to wish for a better physical, political, and

ethical place are the motivational forces for creativity and change. Similarly, at the base of an architectural process there is always a discontent, a loss or need that motivates the search for innovative solutions.

A GOOD FANTASY

But experiencing loss and mourning does not necessarily lead to creative solutions. I propose that it is the ability to delve into the unreal and imaginary, the space of a good, or good-enough, fantasy that provides the next step.

After acknowledging his yearning to return home, I imagine that Daedalus allows his mind to wander. He searches for a solution that would bring him back to where he wants to be. Daedalus examines the boundaries of his confinement, noticing that the sky was still open to him (Ovid, 1986, p. 176). While looking at the sky, Daedalus might choose to ignore the scientific reality of the gravitational forces, and imagine himself flying home, a pleasurable daydream that would solve his predicament. In Ovid's (1986) words, "Through the sky I will set my course. Minos may own all else; he does not own the air" (p. 177). Daedalus's ability to imagine a solution that is not yet possible, to indulge in a fantasy and suspend the critical voice of reality, provide the next key to inventing new realities. It is the unreal aspect of this mental process that positions it in my mind closer to the term "fantasy" than to "imagination."

Daedalus indulges in the fantasy of flying, an act that the human body cannot accommodate without an external apparatus. Loewald (1951) suggests that in order to sustain a sense of aliveness it is important to allow an ongoing oscillation between mature consciousness and infantile unconscious, fantasies. He writes:

> In fact it would seem that the more alive people are (though not necessarily more stable), the broader their range of ego-reality levels is. Perhaps the so-called fully developed, mature ego is not one that becomes fixated at the presumably highest or latest stage of development, having left the others behind it, but is an ego that integrates its reality in such a way that the earlier and deeper levels of ego-reality integration remain alive as dynamic sources of higher organization. (1951, p. 20)

Loewald (1988) further emphasizes that sublimation, a goal for both psychoanalysis and artistic creation, occurs when a link is re-created between the more mature, rational, and differentiated mental process and the infantile, less conscious experience tied to primal narcissism that predates the experience of the self as separate from the mother and the world. (See Sperber, 2014, for further discussion of Loewald, architecture, and sublimation.)

Milner (1950), almost forty years before Loewald, noted the necessity of expanding the limits of reality. She points to the ways in which unreasonable dreaming advances scientific reality. She writes that at first she did not appreciate "how the poet and artist in us, by their unreason . . . do in fact create the world for the scientist in us to be curious about and seek to understand" (p. 161). The artist and poet in their resistance to the dualistic differentiation of real and unreal are able to open a playful fantasy space, exposing truths that will become scientific reality.

Winnicott (1971) made an important contribution in introducing the concept of transitional object and transitional phenomena. In these states, which are central to healthy human psychology, fantasy and reality are not in contradiction. The early stages of illusion foster a relationship between the baby and external reality. This link between mental inner life and relationships to others, such as the mother, as well as the inanimate world of objects (p. 11) is crucial. Winnicott calls the space in which creative play can take place "potential space" and claims it as fundamental to the maturation process as well as to the creative processes of culture, art, and religious feelings (p. 5). Playing is also what the therapist and patient do together.

Kris (1952) suggests that artistic creativity is composed of two processes that can be successive or recurrent: a process of regression and one of elaboration. The regression occurs when the artist's ego relaxes its hold on reality, allowing the artist to draw from the well of childlike unconsciousness, returning to a time filled with the pleasure of invention and discovery. The elaborative phase then converts the retrieved unconscious material into a communicable expression, which is the artistic product.

Knafo (2012) updates Kris's term "regression in the service of the ego," considering it "the ability to maintain contact with early body and self-states as with early forms of object relationships, as well as different modes of thinking" (p. 28). A similar understand-

ing is found in Ehrenzweig (1967), who sees the artist as one who preserves a childlike ability to reveal the "hidden orders of the unconscious" (p. 5), combining a dreamlike ambiguity with the tension of being fully awake. This "de-differentiation" allows the artist to expose structures and patterns within unconscious material that rational thinking obscures, thereby preventing us from seeing reality at its fullest.

Mental processes are fluid and often multilayered, allowing us not only to oscillate between imaginary, fantasy thinking, and more reality-based thinking, but also to experience these different modes simultaneously (Rose, 1999; Rothenberg, 1983). Rothenberg uses the term "Janusian thinking" to describe the ability to think about a problem from two opposing, paradoxical, vantage points at the same time. He sees this as a central aspect of innovation and creativity, bringing forth a product that is both new and valuable (Rothenberg, 1991). Ogden (2010), following Bion, discusses "Dream Thinking" in which "we view our lived experience from a multiplicity of vantage points simultaneously, which allows us to enter into a rich, nonlinear set of unconscious conversations with ourselves about our lived experience" (p. 328).

Creativity therefore depends on the ability to consider both fantasy and reality as valid ways of understanding, interacting, and experiencing the world and ourselves. Between an initial state of longing and the final created solution there is a flexible, interactive process. This process relies on the ability to experience fantasy and reality as two constantly present aspects of ourselves, experienced as loosely delineated territories in a complex field of influences with which we interact throughout life. The creative ability of a child, writer, scientist, analyst, or architect derives from the power to disregard the imposed dichotomy of real and possible versus dreamed, imagined, and impossible.

Creativity is by definition the moment when that which was previously nonexistent, perhaps impossible, enters and changes our understanding of reality.

A DIALOGUE OF MULTIPLE SELVES

We left Daedalus imprisoned, longing for home, and planning to escape by flying over the sea. We noted the importance of long-

ing as well as the need for fantasy and play in order to foster creativity. We now arrive at the place, beyond the infantile desire and need to create art, in which art emerges from that fantasy or need. I prefer using the word "place" to avoid a prevalent misunderstanding—the notion of a "creative moment," a singular point in time when inventiveness occurs. Rather, I see creativity as situated within a field of multiple creative and playful processes that unfold over time in a collaborative context.

Design is always a process that unfolds over time and in between people, a process that zigzags between ideas, images, and solutions (Kelley & Littman, 2001). While Winnicott, Loewald, and Kris all note the importance of an oscillation between more and less conscious states, they nevertheless maintain these separate categories. In my experience, creative design processes involve an array of simultaneous mental, physical, and social activities that do not benefit from the categorization as conscious or unconscious, real or fantasized.

While the relational turn in psychoanalysis has broadened the range of psychoanalytic theory and practice, it can also illuminate the creative process discussed in this paper. I suggest seeing the artist's creativity as a mode in which interacting, multiple self-states collaborate on a design solution, while not denying the power and enigmatic influences of unconscious desire.

Bromberg (2001), in an often cited passage, writes that "health is the ability to stand in the spaces between realities without losing any of them—the capacity to feel like one self while being many" (p. 274). He describes the healthy state as a constant conversation among multiple aspects of the person, a view shared by many psychoanalysts associated with the relational perspective (Aron, 2006; Davies, 1996; Ogden, 2009) who use a variety of terms to describe self-states that emerge, converge, and fluctuate within a person and in relation to those around them.

Trauma, in this view, does not result in a repression but rather creates a dissociation or splitting of emotional aspects of the self, resulting in a limited experience of authentic life (Bromberg, 2001; Mitchell, 1986). The healthy self contains various developmental levels (childlike and mature), past attachments alongside selves that relate authentically to present situations, and dreaming selves with more awake states. The analytic setting facilitates the

analyst's and analysand's ability to utilize a wider than usual range of consciousness levels to access experiences that are silenced in everyday life (Aron & Bushera, 1998; Ferro, 2006; Ogden, 2010).

Let us apply the understanding of mental health as the ability to tolerate multiple aspects of the self to our study of innovation and creativity. In our scenario, Daedalus is not satisfied by replaying in his mind the pleasurable fantasy of flying home. I suggest that he manages to make his dream come true by engaging a wide range of his human abilities, allowing them to participate in the design and construction of his imagined wings.

Drawing on my design experience, I picture the following scene: Daedalus's yearning, homesick self quietly complains to his childlike imaginative self, which playfully suggests the idea of flying as a way to escape this island and its confinement. They are joined by the investigating-self who, knowledgeable about bird wings and feathers, presents some aerodynamic forms that exist in nature. The inventor in Daedalus gets very excited and immediately sketches designs of artificial wings while a cautious voice warns that "flying is an absolutely crazy idea." The homesick, protective self answers with anger that "we cannot stay here under the ruthless rule of King Minos. Something must be done." The craftsman self, who has been listening silently to the lively exchange, finally joins in softly by saying "I know we can do it, if we all work together."

I imagine that alongside these cooperative, collaborative, and optimistic selves there might have been darker sides of Daedalus's ambition—those driven by envy, guilt, hatred, and aggression, which often fuel artistic work. Ovid (1986, p. 179) describes Daedalus's destructiveness. He writes that Daedalus was responsible not only for the death of his son Icarus but also of his nephew Talus, who apprenticed with him. Talus was very talented and invented the saw and the compass. "In jealous rage, his master [Daedalus], hurled him down, headlong from Pallas' citadel" (p. 179), claiming that the boy had fallen. Daedalus eventually also kills King Minos by boiling him to death while he was taking a bath, "using his knowledge of hydraulics to accomplish this act efficiently" (Pérez-Gómez, 1985). Daedalus's violence toward Talus and Minos reveals other sides of him, vengefulness and inability to tolerate competition. Perhaps it is this ambitious and merciless

need to succeed that countered the natural fear that would accompany a daring and dangerous project like this.

In "The Ego and the Id," Freud (1923) calls our attention to the paradoxical circularity in the emergence of aggression from the attempt to suppress aggression (p. 54). Aggression is the raw affect that sublimation transforms, yet it is also described as the by-product of this same process. "After sublimation the erotic component no longer has the power to bind the whole of the destructiveness that was combined with it, and this is released in the form of an inclination to aggression and destruction" (Freud, 1923, pp. 54-55).

The process of building Daedalus's wings, like an architectural design process, involves not only mental inventiveness and the collaboration of different mental processes, but a level of practical ingenuity, haptic ability, and physical giftedness needed to construct the wings. Greenacre (1957) links the artist's capability to his or her heightened sensitivity and unusual control of sensorimotor discharge. Similarly, Pliny (1991) describes Daedalus's extraordinary ability to invent tools: "Daedalus invented woodworking together with the saw, axe, plumb-line, gimlet, glue . . ." (p. 106). With new tools, and his unusual motor skills, Daedalus was able to actualize his fantasy by utilizing imagination and investigation, craftsmanship and inspiration, daring and meticulous assembly to make the wings that carry him to dry land. Without the longing and fantasy, the wings could not have been imagined, but without engaging the other aspects of his creative self, the fantasy would have crashed into the fierce waves of physical reality.

Seen in this way, Daedalus's creativity stems from his ability to engage the full range of his human physical and mental abilities, allowing them to negotiate, criticize, applaud, and respect what each brings to the creative process. Daedalus is able to achieve his wish to "stand in the spaces," to literally and figuratively glide, suspended between heaven and earth to his desired destination.

A DIALOGUE WITH OTHERS: LESSONS FROM AN ARCHITECTURAL PRACTICE

The psychoanalytic relational model, which suggests a dialogue of inner selves, also points to the ever-present intersubjective field

between self and others as a fundamental aspect of the human condition (Aron, 2001; Mitchell, 1993). Since architecture is always produced in a collaborative process, I turn to this aspect of creativity. We are often enamored by the image of the lone artist working in his or her isolated cold attic or rundown basement studio. Solitude and the ability to tolerate it may be essential to the artist (Knafo, 2012) and an achievement of maturity (Winnicott, 1958a), but in the field of architecture, as with film, theater, and many sciences, innovation depends on the ability to work with others (see also Sperber, 2014).

The architectural product—the building—is a physical object designed to respond to multiple personal and social needs. It is probably one of the most complex problems—technical and formal, emotional and cultural—that finds a singular physical solution in the form of a concrete structure. The building must shelter us from the elements, resist the pull of gravity, and make a space for living. It must be financially viable, technologically possible, and comply with local, legal, and zoning codes. As Allen (2009) writes, "The practice of architecture tends to be messy and inconsistent precisely because it has to negotiate a reality that is itself messy and inconsistent" (p. xi). Architecture, perhaps not unlike psychoanalysis, is always performed in dialogue with others and cannot be accomplished alone. It involves clients, municipal approvals, engineering teams, and construction crews, all of whom must participate in the design and construction process.

I find that unique, unexpected design solutions often emerge from interactions with the design and construction team, a frequently unnoticed part of transforming a design idea into a real space. For example, a client kept asking me to add arches to her foyer, which I was reluctant to; despite my hopes, she did not forget this request. After many struggles, we finally agreed on an opening that combined her wish and my vision for this area. It was a handsome, black-lacquered square door casing that framed a thin, floating, bronze arch. This solution maintained the open view and modern look that I felt were consistent with the design of the apartment, while incorporating the client's desired arch, synthesizing two architectural typologies. We were both not mere-

ly satisfied but excited; together we had created something that neither of us could have imagined on our own.

I share this vignette not because it is unique but rather to highlight the ubiquity of collaborations in the architectural practice. Architectural creativity is very often accomplished within a relational matrix, with and for others. Freidman (2007) demonstrates the central role that female clients had in the creation of the celebrated masterpieces of modern residential architecture. Sawyer (2007), in his book *Group Genius*, similarly demonstrates that creativity, across the many fields he studied, stems from collaboration and is a joint achievement rather than an individual production of a single genius. Kelley and Littman (2001) describe how the creative product design firm IDEAO is organized to maximize these interpersonal, playful interactions between design team members, which they believe to be a central aspect of their firm's celebrated success. Repositioning creativity as an interpersonal process also challenges a long-standing Western image of the artist as a male, individual genius, and makes space for acknowledging creativity through collaboration, opening the field to other modes of work and to a wider inclusion of women (Sperber, 2013; Stratigakos, 2016).

Ogden (2010) uses the term "Transformative Thinking" to describe forms of dream thinking that involve recognition of the limitations of the existing categories and a solution that emerges through a transformation of mental and relational structures. He emphasizes that one inevitably reaches a point in thinking and dreaming beyond which one cannot proceed without another person with whom we dare to challenge these limits.

Thus, a successful design process occurs when the architect is able to master, negotiate, and incorporate input from these many sources, managing the frustrating aspects of reality that threaten to void the building of the fantasy that generated it. The architect is challenged to "stand in the space" yet again, between his or her dream and the reality that demands practical consideration. The building that emerges from these negotiations is not a preconceived independent idea. Rather, it is a form that embeds within it the memories and logic of the imagined and possible and the traces of the design and the building. Its beauty is not a pure, babylike innocence; rather, it emerges as an already weathered

structure, reflecting in its newness the complexity and contradiction of creation, the scars and traces of the construction battles.

THE BODY, RETURNING TO FREUD

Sublimation, according to Freud (1908), "has the power to replace its immediate aim by other aims which may be valued more highly and which are not sexual" (p. 452). For Freud, the creative impulse, through a process of sublimation, converts and elevates the infantile, sexual and aggressive drives into an acceptable social and cultural output: art. Sublimation does so by diverting the sexual wish from the original unattainable oedipal object to a new aim.

There are a number of aspects of Freud's understanding of sublimation that may be questioned. It seems to suggest a unidirectional transformation from unconscious drives to a communicable or symbolized art product, giving the latter a higher moral value. But despite sounding old-fashioned to the contemporary ear, the concept of sublimation reveals that the physical and the psychic are intertwined in ways that are dependent, fluctuating, and inseparable. With this notion of sublimation, Freud gives our physical body, as the location of pleasurable and forbidden fantasies, a necessary role in the artistic process: It reunites the mind and the body and ensures that both participate in the creative process.

I return, therefore, to our corporeal center, to the locus from which we experience the world—our body. "Embodiment is not a secondary experience; the human existence is fundamentally an embodied condition" writes the architect Juhani Pallasmaa (2009, p. 13) following the phenomenology of Merleau-Ponty. Similarly, Fonagy (2008, p. 17) asserts that "a fundamental tenet of classical Freudian theory . . . is the embodiedness of mental life, the idea that the mind is rooted in physical experience" (p. 17). Our ability to imagine, invent, and craft, like our ability to love, is found in the intersection of our minds and our physical bodies. "It is evident," continues Pallasmaa (2009), "that the capacity of imagination does not hide in our brains alone, as our entire bodily constitution has its fantasies, desires and dreams" (p. 17). According to Loewald (1988; see also Sperber, 2014) sublimation does

not transform lower, erotic forces into a higher cultural product; rather, sublimation is a process of binding the body and mental process.

Architectural design always links the mind and the body, and all buildings are measured against the scale of the human body. Architects design with their minds as well as their bodies, that is, their "thinking hand," as Pallasmaa (2009) calls physical, haptic intelligences. When architects sketch on tracing paper, make wood models, concentrate on a floor plan, feel a new material, or roam in virtual 3-D space, they invite their bodies to participate in the design, enriching, and refining of the work. I suspect that those who write have also experienced mysterious moments when thoughts seem to emerge from the typing fingers, dancing on a keyboard, independent of the conscious mind that should be dictating them. Architects often play with physical models and discover formal and spatial possibilities while cutting, folding, tearing, and gluing. I discover myself, or perhaps my selves, through the physical action of thinking with my hands.

Creating therefore occurs not only at the threshold of fantasy and reality, self and other, but also at the threshold of our minds and bodies. While true for many fields, it is especially true for the architect who is challenged to create physical edifices designed to house human bodies. "Architectural meaning is neither intellectual nor aesthetic in a formal sense, but originates instead in our embodiment and its erotic impulse" observes the architectural historian Pérez-Gómez (2008, p. 43).

THE TRAGEDY OF ICARUS

In the myth it appears that although Icarus and Daedalus used similar wings, the consequences for each of them were dramatically different. While Daedalus was able to successfully transform (or sublimate) his wish to fly into a scientific, inventive triumph against oppressive power, this flight was a hallucinatory death sentence for his son.

There are many ways to understand Icarus's death, and I only touch on two. From a classical perspective Daedalus and Icarus might be seen as acting out concretely an oedipal struggle. The son wants to outdo his father by flying higher and going faster,

and the father enables the death of his son to triumph in this competition. We can also point to Icarus's inability to moderate his flight altitude as a sign of his immaturity, a fragile ego, and a refusal to accept the limitations of material reality.

From a "two-person" perspective we may suggest that Icarus dies not because of the flaws in either the father or son's ego structure, but rather in their flawed relationship and ways of being with one another. Mitchell (1986), as we have seen, sees Daedalus as a narcissist who needs to cast his son in his own fantasy. Icarus follows their past patterns of relating, which leads to his death.

One could also follow Fonagy, Gergely, Jurist, and Target (2000) and use the language of mentalization to understand the breach in the father–son relationship. Since the father could not articulate or mentalize the son's affective reactions to the proposed flight, the son could not understand or speak of his fears and excitement, which left him unable to regulate his emotions. Pollock and Slavin (1998) articulate yet another aspect of the parent–child dyad: the child's need for recognition and agency. This might suggest that Icarus's undeveloped agency, and his inability to influence his father, were factors in his death.

But perhaps it is the essence of fantasy that it cannot be shared. Although father and son used the same flying apparatus, they could not share the fantasy of flying, nor did they possess the same physical and mental abilities needed to operate the wings. While some fantasies are widespread and culturally shared, I believe that at their core, fantasies are custom-made, fitting their owners but hazardous to others. Daedalus's fantasy suited him, his maturity, his athletic dexterity, and his ability to glide safely at the correct altitude between the hot sun and the wet sea in order to reach his destination unharmed. It is an error for the father to assume that his fantasy would fit his son, that is, for me to impose my dream on you, or to assume you are dreaming it with me. The wish to fly home came from the inner layers of Daedalus's psyche, but transferring his dream onto the reluctant and less mature son can be a forceful, violent act. As Mitchell (1986) eloquently shows, "Like Icarus, therefore, we have all donned Daedalus's wings" (p. 123). When Icarus agreed to join in his father's narcissistic dream as a way to maintain their connection, he had to give up his own sense of reality and with it the reality of his own life.

Beyond the psychodynamic understanding of Daedalus's parental failure, one may say he also failed as a product designer. Successful design incorporates and synthesizes the designer's ideas with those of the client and future users. Contemporary codes and product safety regulations ensure that spaces and products are suitable for wide distribution. Daedalus created a magnificent product that was fitting for masterful flyers, a product that allowed a freedom too dangerous for the immature or amateur user. In current day language the wings would be recalled, or limited to licensed professionals, not because they were not functional for flying, but because they could be used in dangerous ways. The wings, therefore, were a relational design failure, a failure to keep the user in mind. One might wonder whether the wings might have suited Icarus better if Daedalus had involved him in the design and production of the wings, taking into account his level of maturity and flying abilities.

BACK TO THE ARCHITECT'S STUDIO

We finally return to our anxious design team searching for a concept that would organize the Czech National Library building. Overwhelmed by the complexity of the functions, the foreign location, and the conceptual uncertainty about the role a physical library should have in the age of accessible digital information, we began by simultaneously exploring questions, gathering data, and collecting intuitive suggestions.

It has taken me many years to realize the importance of this unstructured phase of search, in which we wander and gather the background design intelligence (Speaks, 2002) that informs our proposal. In order to create the moment of "standing in the spaces," an uninhibited conversation of inner and outer selves collaborating in the design, we need to allow these selves, within us and among our team, to explore their different suggestions without imposing too much reality onto preliminary, fragile thoughts. Like Daedalus, we need to be able to dream and to fantasize ideas and structures that are yet to have a precedent and then dare to explore these wished-for buildings with the widest range of our mental and physical capabilities.

A crucial moment in the design process took place when we constructed a physical study model and playfully explored it. As a national library, we realized, this building would be predominantly an archive of books, an inaccessible mass of knowledge and printed matter. The model abstractly represented a dense structural system based on the column spacing of a bookcase, represented by bungee cords strung between the eight floors. Twisting and distorting the cords, we carved larger usable spaces within this "book mass" by inserting pieces of cardboard representing the larger areas required by the program. These cardboard elements nested between the flexible cords created wonderful cathedral-like spaces, with soaring ceilings and a dense, almost gothic, latticework of columns that framed views of the city and the book stacks.

From the playful exploration of this physical model a building concept emerged. We then integrated the information we had gathered to organize the building formally and programmatically. Each department was located on one of the eight floors and large voids were carved from the book mass to create publicly accessible spaces such as reading rooms and lecture halls. Staff offices were positioned on the exterior perimeter creating day-lit, naturally ventilated spaces within each department.

It was through a synthesis of ideas generated in different modes of investigations that we were able to find an innovative idea to structure this library. And while our entry, one of over five hundred submitted, was not selected, it has been acknowledged as an innovative typology for future libraries.

CONCLUSION

I return to Bromberg's notion of "standing in the spaces"—the ability to be in a live and responsive relationship with different voices that are "us"—as a central part of the design process. In my architectural practice, I strive to invite a wide range of voices to participate in design, allowing these voices to negotiate, discuss, and argue with one another. From experience I have learned to create, and trust, a process in which our many selves—within each of us and within the design team—can slowly mature, express their fantasies and desires, and negotiate differences.

All too often psychoanalysis has been preoccupied with attempts to differentiate reality and fantasy and with the melancholic value of accepting the limitations of reality, human abilities, and mortality. In this paper, I have tried to show that within fantasies, and in the ability to blur the boundary of fantasy and reality, lies a powerful creative and generative force. The willingness to listen carefully to those fantasies, to go beyond where we belong within the analytic consulting room, in our architectural studios, or in our personal relationships, is what allows us to construct new wings that enable us to fly high, reach the impossible, and travel to places that were previously inaccessible. This creativity softens the harsh boundaries we construct between wishes and reality, and expands the repertoire of human experience.

REFERENCES

ALLEN, S. (2009). *Practice: Architecture technique and representation*. New York: Routledge.

ANDERSON, J. W. (2005). Frank Lloyd Wright: A psychobiographical exploration. In J. A. Winer, J. W. Anderson, & E. A. Danze, eds., *Psychoanalysis and architecture* (pp. 163–178). Catskill, N.Y.: Mental Health Resources.

ARON, L. (2001). *A meeting of minds: Mutuality in psychoanalysis*. New York: Routledge.

———— (2006). Analytic impasse and the third: Clinical implications of intersubjectivity theory. *Internat. J. Psycho-Anal.*, 87:349-368.

———— & BUSHRA, A. (1998). Mutual regression: Altered states in the psychoanalytic. *J. Amer. Psychoanal. Assoc., 46*:389-412.

BENJAMIN, W. (1923). The task of the translator. In *Illuminations, essays and reflections* (pp. 69-82). New York: Schocken Books, 1968.

———— (1936). *The work of art in the age of mechanical reproduction*. London: Penguin, 2008.

BROMBERG, P. (2001). *Standing in the spaces.* New York: Routledge.

COLOMINA, B. (1992). *Sexuality and space*. New York: Princeton Architectural Press.

DANZE, E. A. (2005). An architect's view of introspective space: The analytic vessel. *Ann. Psychoanal., 33*:109-124.

DAVIES, J. M. (1996). Linking the "pre-analytic" with the postclassical: Integration, dissociation, and the multiplicity of unconscious process. *Contemp. Psychoanal., 32*:553-576.

DREAMER, P. (2005). Adrian Stokes: The architecture of phantasy and the phantasy of architecture. In J. A. Winer, J. W. Anderson, & E. A. Danze, eds., *Psychoanalysis and architecture* (pp. 125-137). Catskill, N.Y.: Mental Health Resources.

EHRENZWIEG, A, (1967). *The hidden order of art*. London: Phoenix Press.

FERRO, A. (2006). Trauma, reverie, and the field. *Psychoanal. Quart., 75*:1045-1056

FONAGY, P. (2008). A genuinely developmental theory of sexual enjoyment and its implications for psychoanalytic technique. *J. Amer. Psychoanal. Assoc., 56*:11-36.

——————, GERGELY, G., JURIST, E. L., & TARGET, M. (2000). *Affect regulation, mentalization, and the development of self*. New York: Other Press.

FREIDMAN, A. T. (2007). *Women and the making of the modern house*. New Haven, Conn.: Yale University Press.

FREUD, S. (1908). Creative writers and day-dreaming. In J. Strachey, ed. and trans., *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, 24 vols. London: Hogarth Press, 1953-1974. *9*:141-154.

—————— (1911). Formulations on the two principles of mental functioning. *Standard ed., 12*:213-226.

—————— (1923). The ego and the id. *Standard ed., 19*:1-66.

GREENACRE, P. (1957). The childhood of the artist: Libidinal phase development and giftedness. *Psychoanal. Study of the Child, 12*:47-72.

HENDRIX, J. (2006). *Architecture and psychoanalysis: Peter Eisenman and Jacques Lacan.* New York: Peter Lang.

ISAACS, S. (1948). The nature and function of phantasy. *Internat. J. Psycho-Anal., 29*:73-97.

JURIST, E. L. (2006). Art and emotions in psychoanalysis. *Internat. J. Psycho-Anal., 87*:1315-1334.

KELLEY, T., & LITTMAN, J. (2001). *The art of innovation: Lessons in creativity from IDEO, America's leading design firm*. New York: Doubleday.

KNAFO, D. (2012). *Dancing with the unconscious*. New York: Routledge.

—————— & FEINER, K. (2006). *Unconscious fantasies and the relational world*. Hillside, N.J.: Analytic Press.

KRIS, E. (1952). *Psychoanalytic explorations in art.* Madison, Conn.: International Universities Press, 1999.

LAPLANCHE, J. (1992). Transference: Its provocation by the analyst. In *Essays on otherness* (pp. 214-233). New York: Routledge, 1999.

—————— & PONTALIS, J.-B. (1973). *The language of psycho-analysis*. London: Hogarth Press and the Institute of Psychoanalysis.

LAVIN, S. (2007). *Form follows libido: Architecture and Richard Neutra in a psycho-analytic culture*. Cambridge, Mass.: MIT Press.

LOEWALD, H. W. (1951). Ego and reality. In *The essential Loewald: Collected papers and monographs* (pp. 3-20). Hagerstown, Md.: University Publishing Group, 2000.

—————— (1988). Sublimation. In *The essential Loewald: Collected papers and monographs* (pp. 439-523). Hagerstown, Md.: University Publishing Group, 2000.

MILNER, M. (1950). *On not being able to paint*. New York: Routledge.

MITCHELL, S. A. (1986). The wings of Icarus: Illusion and the problem of narcissism. *Contemp. Psychoanal., 22:*107-132.

_____ (1993). *Hope and dread in psychoanalysis*. New York: Basic Books.

OGDEN, T. H. (2009). *Rediscovering psychoanalysis: Thinking and dreaming, learning and forgetting*. New York: Routledge.

_____ (2010). On three forms of thinking: Magical thinking, dream thinking, and transformative thinking. *Psychoanal Quart., 79*:317-347.

OVID. (1986). *Metamorphoses* (A. D. Melville, trans.). New York: Oxford University Press.

PALLASMAA, J. (2009). *The thinking hand: Existential and embodied wisdom in architecture*. Hoboken, N.J.: Wiley.

PÉREZ-GÓMEZ, A. (1985). The architect's métier. *Carleton Folio*.

_____ (2008). *Built upon love*. Cambridge, Mass.: MIT Press.

PLINY THE ELDER. (1991). *Natural history: A selection*. London: Penguin Books.

POLLOCK, L., & SLAVIN, J. (1998). The struggle for recognition: Disruption and reintegration in the experience of agency. *Psychoanal. Dial., 8*:857-873.

RENDELL, J. (2010). *Site-writing: The architecture of art criticism.* London: I. B. Tauris.

ROSE, G. J. (1999). Psychoanalysis and art: Their mutual relevance. *Psychoanal. Contemp. Thought, 22*:591-608.

ROTHENBERG, A. (1983). Janusian process and scientific creativity: The case of Niels Bohr. *Contemp. Psychoanal., 19*:100-118.

_____ (1991). The Janusian process in psychoanalytic treatment. *Contemp. Psychoanal., 27*:422-453.

SAWYER, K. (2007). *Group genius: The creative power of collaboration*. New York: Basic Books.

SEGAL, H. (1952). A psycho-analytical approach to aesthetics. *Internat. J. Psycho-Anal., 33*:196-207.

SPEAKS, M. (2002, January). Design intelligence and the new economy. *Architectural Record*, pp. 72-79.

SPERBER, E. (2013). Gender and genius: Revisiting our ideas about collective inspiration. *Lilith Magazine, 38*(3):1-10.

_____ (2014). Sublimation: Building or dwelling? Loewald, Freud, and architecture. *Psychoanal. Psychology, 31*:507-524.

STOKES, A. (1951). Smooth and rough. In *The critical writings of Adrian Stokes* (vol. 2, pp. 213-256). London: Thames and Hudson, 1978.

STRATIGAKOS, D. (2016). *Where are the women architects?* Princeton, N.J.: Princeton University Press.

TUTTER, A. (2011). Design as dream and self-representation: Philip Johnson and the Glass House of Atreus. *J. Amer. Psychoanal. Assoc., 59*:509-548.

TWOMBLY, R. (2005). Raumplan: Adolf Loos, Frank Lloyd Wright, residential space, and modernity. In J. A. Winer, J. W. Anderson, & E. A. Danze, eds., *Psychoanalysis and architecture* (pp. 191–205). Catskill, N.Y.: Mental Health Resources.

VIDLER, A. (1992). *The architectural uncanny: Essays in the modern unhomely*. Cambridge, Mass.: MIT Press.

W<small>INER</small>, J. A. (2005). Frank Lloyd Wright: Power, powerlessness, and charisma. In J. A. Winer, J. W. Anderson, & E. A. Danze, eds., *Psychoanalysis and architecture* (pp. 179–190). Catskill, N.Y.: Mental Health Resources.

W<small>INNICOTT</small>, D. W. (1953). Transitional objects and transitional phenomena: A study of the first not-me possession. *Internat. J. Psycho-Anal., 34*:89-97.

_____ (1958a). The capacity to be alone. *Internat. J. Psycho-Anal., 39*:416-420.

_____ (1958b). *Collected papers: Through pediatrics to psychoanalysis*. New York: Basic Books.

_____ (1971). *Playing and reality.* London: Tavistock.

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