Architectural Notation and the Body Condition: Tracking the Dance of E1027

Susan Hedges, Te Whare Wananga o Wairaka, UNITEC, New Zealand

Abstract: This paper will explore two modernists pieces, one a ballet, Oskar Schlemmer's *The Triadic Ballet* and the other a small holiday house on the Cote d'Azur, Eileen Gray's E1027. I would like to suggest that the notated domestic occupation within the drawings of E1027 reveal an animated scene, a mechanical ballet inferring relationships among furniture, movement and the human body. Both the ballet and the house have been referred to as mechanical ballets.¹ I propose a correlation between two seemingly unrelated projects of dance and architecture, enacted at a particular moment in history, as a means of establishing an architecture of performance and a performance of architecture.

It is argued that the house becomes a setting for a continuing *masque* celebration. Through a discussion of the forms of representation of E1027 and the performance drawings of *The Triadic Ballet* I occupy the interior, activate the furniture, the cupboards and the closets with their secret and hidden spaces. The dancers and guests become participants and move over the surfaces of E1027, tracing and re-tracing their steps upon geometric patterning.

Architectural Notation and the Body Condition: Tracking the Dance of E1027

This paper will discuss the mobile condition of interiority and activate E1027 in terms of geometry and movement. My interpretation of the house will differ from the conventional description in that I discuss the house not only through its representation and relationship to the body but also as mobile architecture, as piece and as furniture. I will attempt to create a dance within its walls, a mechanical ballet, using animated movement as a means of understanding the house. My intention is to create a domestic performance within the walls of Eileen Gray's Mediterranean retreat, E1027, using the figures of Oskar Schlemmer's ballet.

Through a discussion of the forms of representation of E1027 and the performance drawings of *The Triadic Ballet* I activate the furniture, the cupboards and the closets and their secret and hidden spaces. The dancers and guests become participants and move over the surfaces of E1027, tracing and re-tracing their steps upon geometric patterning.

Eileen Gray placed paths for her imaginary guests and drew movement patterns of their comings and goings in a plan drawing of her house E1027. Along their travels she placed signs and notes on the architecture on how to proceed. Sculptured stairs, labelled cupboards and closets, sensuous textures, hidden secrets and a warm place to catch the sun all became activated in the lines and dashes of a two dimensional sheet.

Oskar Schlemmer, like Gray, traced the movement patterns of his dancers onto the stage surface. Through a discussion of the formal nature of the ballet and costuming I would like to propose that costumes for this ballet not only distorted and restricted the movement of the dancers but also underscored the space of the stage that they moved within. The movement

of the dancers, the animate and inanimate, will be considered in terms of a relationship to E1027 and the domestic performance activated in the house.

The floor plans of E1027 and their notated movement are a record of all those in attendance within the house, [the guests, maid, owner, the architect], and orchestrate the overlapping sounds and actions of a domestic scene. They represent a sense of events that Eileen Gray wished or imagined within E1027, the bodily interference and interaction of her guests. The plan drawings for E1027, suggest both a particular attitude toward the body and a general anticipation of how the body of the projected building will interact with its future inhabitants. I suggest that the drawings showed Gray constructed the world out of bodily experience, where the experience lies in manipulations and refinement of the space where the mechanical furniture is rendered dependent on the human figure, minor, and mortal as it was engaged prosthetically. The house became a kind of body.

The Ballet

Oskar Schlemmer [1888 – 1943] was a member of the German Bauhaus who worked as a painter, sculptor, muralist, choreographer, set designer and teacher. In his artwork Schlemmer dedicated himself almost entirely to the representation of the human form, exploring the limits of tension between abstractness and humanness, the human as mathematically, geometrically defined type. He investigated experimental systems for structuring movement in space. These pictorial prototypes and their structured movement were to be images of inspiration for the architecture of the future and the human beings who would inhabit it.²

Over a period of ten years [1912 - 1922] he developed a ballet called *The Triadic Ballet*. The ballet was danced by robotic like figures whose faces were covered in masks. The choreography and costuming were intended to demonstrate and explore the space of the stage, the costuming emphasising the dancer's limited movements and at the same time underscoring the space or direction of movement.

The Triadic Ballet was a performance piece with elaborate costumes, stylised movement and a non-narrative development.³ Schlemmer made movement diagrams of his figures and these diagrams were often traced directly onto the stage surface showing graphically total courses of action. The diagrams gave a linear indication of paths of motion and projections of forward movement.

Oskar Schlemmer's *The Triadic Ballet* was an experimental system of structuring movement in space a kind of hybrid somewhere between painting and dance where the visual experience took place in a state of simultaneity and not as a series of successive images. The movement of the dancers became a form of repetition, of beats that were separated by intervals of absolute extinction, while the rhythm suggested the return of another (and another).⁴ The dancers became form and colour in literal motion through real space, stylised and abstract, the choreography, designed to demonstrate the trajectory of geometric shapes set into motion, the costuming constrained the body.

The Triadic Ballet consists of three acts each of which is governed by a different colour established by a different back drop curtain. Colours corresponded to a mood that was projected by music, gestures and movements of the dancers. It develops along a gradual

transition from the burlesque of *The Yellow Scene*, via the dignified atmosphere of *The Pink Scene* to the mystical-heroic sphere of *The Black Scene*.

The opening scenes reveal a female dancer wearing a skirt that is in the shape of an upside down bowl, upon which are painted brightly coloured concentric circles. These marks are echoed in her hat. The choreography calls for the dancer to move in circles, which resemble a spinning top. Later in the third act the dancer is enclosed in a spiral costume and, with arms out stretched, makes rotating movements with the body representing the three-dimensional form of the costume as it passes through space, the black costume dematerialising the body of the dancer. The figures move in geometric patterning across a geometrically gridded space, they play between movement and pose, between stasis and flux, a stillness of movement contrasted with ethereal lightness and speed.

The dancers appeared not as the means of individual expression, but rather they were standardized through costume and mask. What resulted was a blending of the human figure and the marionette, of the natural and the mechanistic. In this way Schlemmer was able to use a total range of expressions: from ethereal grace to monumental weight, from grotesque ornamentation to saintly perfection.⁵ The dancers become part of the stage scene and actively populate Schlemmer's design sketches; they are compressed and expanded, gesturing to and at the building. They are co-dependent. The relationship of the spirit of gravity to the wall and the floor, which recurs in the choreography, also shows the architecture of music in movement. Centres of gravity delimit the dancer's space and lightness takes on a new function, quite different from its identification with materiality or transparency.

As the dancers move through the space of the stage, the space does not just suggest transparent, immaterial geometry but also multiple manners of being and in such manners there lies the possibility of light movement, the meaning of lightness found in a certain ease or freedom of movement. The figures of Schlemmer's Ballet can populate E1027, they can test the dancing steps of Eileen Gray, animate her notation and occupy it without leaving a trace.

The House

Eileen Gray began construction of E1027 in 1926 and completed the house in 1929. It is a small house designed for a friend, Jean Badovici on the Cote d'Azur of the French Riviera. E1027 is positioned on a very steeply terraced hillside at Roquebrune, Cap Martin and faces the Bay of Monaco in the Mediterranean Sea, a remote and inaccessible scene.⁶ The proximity to the sea strongly influenced the atmosphere of the house, the stair-well pierces the roof for access and resembles a smoke stack, notation on the walls is similar to that of ocean going liners and a canvas balustrade around the deck adds to the nautical theme. Shifting planes, moving beds and cabinets, the appearance of great liners, cabins and railway sleepers suggest ideas of transitory furniture. Furniture was dissected into its elements, into systems of struts and planes. The effect was light and transparent, geometric forms and formal abstractions, the house itself is read through its relationship with the body.

E1027 is comprised of two floors linked by a central staircase. Housekeeper and guest accommodation are on the lower floor, living and the main bedroom are on the upper floor. The upper floor is essentially a large living room, extended by a terrace, and two small bedrooms – one conceived as a study / bedroom with its own small terrace, the other with a staircase giving direct access to the garden.

In the house many items of furniture could be easily removed or adjusted to serve different functions; others contained details that addressed multiple needs; tables could be pushed together, legs shortened or lengthened, cantilevered bedside tables could pivot to serve as reading stands or lowered to eat or write in bed. Like the figures of Schlemmer's ballet whose bodies are disguised and revealed under costumes of varying materials, the furniture blurred the point where nature, body and the machine intersected.

Movement through the house was an invitation etched into the walls. These etched words indicated a way of moving, a pathway into the house. Notes etched into the **surface, small** personal notes, became marks or indicators, acting like a guide through very private spaces, giving an invitation to proceed. The first inscription over the entrance hall, reads *'entrez lentement' (enter slowly)*, two doors lead off this area, the inscription works as a warning to the guests. Another inscription in the entrance warns *'defense de rire', (no laughing)*.⁷

Eileen Gray's walls fold and feed into each other each relying on the neighbouring wall to give definition to the next. Scattered through out these are inscriptions, signals, texts be to read on methods of reading certain elements. The active participation of the viewer is required by the placement of text throughout the house. It demands interpretation and engagement. The text becomes woven into the architecture, a coding mechanism leading from one point to another. The structure of the text requires mapping, repetitious tracks of many movements across the same territory. The reader is not passive, he or she must engage with the text and become producer, appropriator and assembler.

The plan drawing noting the path of the sun, becomes like dance steps, where poetic surfaces are over written with paths of movement, turnings and breaks. Varied participants (host / guest / housekeeper as well as the sun) follow unique but overlaid courses while recording the passing of time. The conventional double lines of the house are reduced to a single line, furniture and its placement is indicated, and the heaviest line weight is at the entrance for the guests indicating the main entrance and the thresholds they cross. These lines are then reduced in weight as they move through the house. Dominating this document is the hatched geometry of the path of the sun around the building envelope over which she writes the times of day, the notes shift from the plan to the walls of the house.

As these two routes became intertwined Gray indicated privacy thresholds – the main bathroom, the entrance to the stairs, and the main entrance to the house – as heavy solid lines. This resulted in a choreographic approach emphasizing qualitative aspects of the bodily occupation of space, inferring relationships between furniture, movement and the human body, engaging all the senses to enhance the occupant's consciousness of bodily immersion in a sequence of experiences. The plan drawings suggest a trajectory, a movement that is in a plane projection, flattened out; a record; a diagram substituted for a set of actions; a line which can be read in any direction, a tracing of acts.

Movement details of the lower floor were never notated; they appear hidden and secret, separate from those of the guests. The housekeeper exists under the stairs or in the neighbourhood beyond everyday encounters with guests, creating a neat distinction between two spaces. The upper floor, designed as a fluid space for guests, halts, jerks, stops, or tip toes in position behind the housekeeper, the dotted or barely registered existence of the

domestic help disappears in the stairwell and remains within the boundaries of the house. The housekeeper has a threshold existence, neither here nor there, domestic living is on the periphery, moving through rooms hugging walls.

The imaginary figures that move through the plan drawings of E1027 appear to acknowledge, suspect, test, violate, and respect, the trajectories they articulate, a series of passages that become a conversation, a language of walking and a choice of words or the choosing of a path. The tale for those of the house begins at the entrance with footsteps marked in the drawing, they are numerous and repetitive, each step has a qualitative character, of bodily sensation and occupation. The domestic scene is transformed into parts that become lines on a drawing, a surface projection making invisible the operation that it describes. They become movement records, a paper record, a substitute for the human body, so as they can be evaluated in two dimensions far from the scene of events. The prosthetic furniture and defined areas of labour check the movements of staff and guests in and around animated pieces of furniture. The drawings and dance become a means of architectural exploration, a kind of text. The drawings that initially described the interaction of guests, footsteps that traced their way throughout the house, appeared like footsteps in the sand, revealing someone who had passed without having presented themselves.

The drawings are marked by signs of absence. There is no body to cast a shadow; objects and their movements are impending, not quite present, they are both imagined and constructed from gathered absent images. Space within the house becomes a character in this scene of revelry and has a narrative of its own. The plan drawings begin this story, the activation of a domestic scene, a suggestion of chances and a method for describing the structure of the story and the structure of the house. The presence of absence in the materiality of blocks and mortar, the walls become more than just dividers they become a register of the dance.

Like the house, with its hidden corners and moveable furniture, the spirit of Schlemmer's extravagant figures lies in the fact that they come alive in the tension between that which is hidden and that which is manifest. These figures speak of space, the slightest change extends, heightens or multiplies them, they become part of the space. They dance alongside each other, and once set in motion, trace a path no wider than a pencil stroke. They animate and dematerialize a domestic scene where there are no mistakes or breaks. Each piece and member dance in unison, never colliding along the paths of E1027, neatly avoiding obstacles.

The Spiral, The Wire Figure and *The Disk Dancer*, figures from Schlemmer's darkest scenes, are the final act of the ballet, *The Black Scene*. The figures animate the mechanical ballet that exists within E1027. They activate the furniture; reveal the inanimate and the animate. They occupy the house without leaving a trace.

The Spiral, [Act III Scene I], appears in the opening of the Act tracing a large spiral that is marked onto the surface of the stage. She slowly follows the path marked for her and spins off the stage. Her costume mimics the movement of the dance and the marks on the floor. A spiral wraps around her waist. The torso is lost beneath a black costume, its outline highlighted by white dots that trace the movement of her limbs. She could be seen at the entrance hanging one's hat or turning around to hang a coat, spinning around again to change one's shoes. Here she is placed within E1207 upon the spiral stairs as an imaginary

trace of the in between, the vertical connection between floors where the domestic help disappears. Like the domestic help, she is there and not there, her costume disguising her figure and as she moves she is careful not to cross the boundaries laid out by the choreographer.

In *The Wire Figure*, [Act III Scene III], the body is disguised beneath a black costume, gleaming spirals encircle her waist and head dress. Small points of white along the length of her limbs act like points in space against the blackness of the stage. She moves *en-point* and twirls around the space of the stage. This figure, with her gleaming costume of moiré is most appropriately imagined between the dining area and the reflective surfaces of the bar. Here she will be rendered immaterial amongst the clink of glasses, reflected infinitely in the small alcove, a connecting space between the stairs and the main bedroom. This corner of the house shimmers with the voices of guests and their cocktails.

The Disk Dancers, [Act III Scene I], two figures march swinging arms their figures disguised under black costume, but encased in flat disks that run from the top of their masked heads to their lower torsos. The flat disks disappear when the figures face the viewer. Their upper limbs end in sharp points that point in the direction they travel; they traverse ramps and stairs placed in their paths, face each other and move neatly off without colliding. These figures coalesce with Eileen Gray's furniture, *The Dining Table, The Gate Leg Tea Table, The Flip Top Table*, their positions changing and swivelling to accommodate the guests of the house. Like the furniture these figures can march to their tune anywhere. The tables' silent surfaces shifting for cakes and cups, marching inside and out, are photographed on the balcony with measured rugs.

As a receptive surface, the body's boundaries and zones are composed in juxtaposition. Each system is in perceptual motion and mutual relationship with the other. These links are collections that recreate the body as a surface of interchangeable parts, surface exchanges, effects and interactions. Upon entering E1027 Schlemmer's figures are *space bewitched*, they become entranced with the domestic stage that has been set before them. The bodies become a loose assembly, a construction of parts, of found objects, of living objects and a machine creating an image of exchange between the dancers and the furniture, a transformation from one thing to another.⁸ Body and machine interactions become a connection and disconnection of part-objects and a grafting of the human and the machine, boundaries shift and transgress.

Like the mechanical dancer's of Schlemmer's ballet, Gray's furniture begins to define and explore the space it inhabits. The dancers evoke the constructive nature of the spatial container. They are dynamic and metaphoric figures outlining the spatial representation with crossing paths reflecting the disposition of the building. The body types reveal the invisible side of architecture, changing the material nature of time, tempo and weather within the transient nature of the design. The dancers and architectural drawings merge with the walls, beams and windows. The experience of force and resistance, orientation and movement, containment and connection, balance and reciprocation are understood through these bodies. While the boundaries of these bodies delimit them as an entity, their boundaries are vulnerable and liable to incursion. The surface of the house becomes the sight of the exchange, an ongoing exchange between the internal and the external, between body and world, between self and others. The costumes become us, the visitor and the reader.

The drawings for Gray become an emotional route, a synonym of coincidences, and thus become a way of describing the structure of the narrative, a method for describing the structure of the house in placing or activating the domestic scene within. The dancer's relation to space and time is not passive within the house; the space is not empty or independent of its contents. The house permits its occupants to make possible different kinds of relations but in turn is transformed according to the subjects' affective and instrumental relations with it.

The text and drawings of the house become a story. The story of a new beginning at the threshold, bound up with the ordinary and familiar. In addressing the status of the narrative, in evoking its own fictionality, I have complicated the singularity of its claims to a certain *eerie* reality. Three-dimensional objects are forced into a two dimensional representation using signals to trace the occupants. If the architecture is present in its materiality, the otherness becomes the trace, the presence of absence, the traced patterns and notations. In both the transgression of the architectural edge, the wall, the floor, the way, holds the threat of the violation of the edge of their bodies. This passage between inside and outside, the boundary, the step, marked on Gray's movement drawings makes a frame which is the necessary everyday condition of entering a house.

Conclusion:

Schlemmer's dance *The Triadic Ballet* sets the stage for the domestic performance of E1027. His written notation becames both a record of the shaping of architectural forms and the activation of bodies within the space of the stage. The dots and dashes in his notation created a moving conversation; humour, speculation, argument, conjecture, a narrative that navigated the movement of his dancers. Schlemmer's figures use dance to penetrate space, as well as locating movement in a well defined, centralized area. The dancers transposed the mechanics of the body into what Schlemmer described as 'astonishing figures in space'.⁹

Ideas of dance also populate the interiors of Eileen Gray's E1027.¹⁰ The pieces of furniture become part of the architectural forms and are activated by bodies within the space of the house, the imaginary figures of Gray's movement drawings. The plan drawings for E1027, suggest both a particular attitude toward the body and a general anticipation of how the body of the projected building will interact with its future inhabitants. Eileen Gray designed space and furniture attending to the movements and gestures that are the tasks of daily life; the mechanical furniture is rendered dependent on the human figure, minor, and mortal as it was engaged prosthetically. The body becomes the framework, and the shaping influence of the inhabited space.

The house becomes a setting for a continuing *masque* celebration. The activities within the house become performances, requiring preparation and enactment; they depend upon props and supports, lighting and furnishings, enclosure and exposure, storage, entrance and exit. These sequences, the props and qualities needed, the coming together of guests and the separation and solitude of inhabitants require discovery and choreography. The movement of bodies and objects are all expressed and investigated within the plan drawings.

The body metaphor for the modernists allowed for a total abstraction and a theorizing of sensation, movement forces and rest. Analytical science for many avant-garde modernists was necessary and became a visionary structure for a new awareness of but not a total

diffusion of the body, a balance between sensation and proportion. So it is Gray who has danced this dance in her plan drawings with 'The Tea Table' and 'The Flip Top Table'. They have spiraled down the disappearing staircase, opened the pivoting drawers, stepped lightly at the door, followed the tiptoe steps of the housekeeper, and animated the words that Gray tattooed to the walls. To inhabit but leave without a trace, to create a domestic performance, and track a scene mapped to a two dimensional sheet.

Closets, chairs, walls and dancers all begin to flicker within E1027, inhabiting but leaving the impact of habitation on geometrical forms and the impact of form upon its inhabitants. The tale becomes a tangle of images with which to consider the real, repeating and forming its reassembled images.

'And once more, after dreaming of this tiny parlour enlivened by the dancing of figurines of another day, the poet opens the casket (p.90): 'the lights go out, the guests, composed of belles and their beaux, and a few aging relatives disappear pell-mell, into the mirrors and along the corridors and colonnades without giving a thought to their dignity, while chairs and tables and hangings evaporate into thin air'.¹¹

Endnotes

¹ Constant, C. (September 1994). 'E.1027: The Nonheroic Modernism of Eileen Gray.' *Journal of the Society of Architectural Historians.* **53** (3).pp.276-277

² Lehman, A. L. and Richardson, B. (1986), (Eds.) *Oskar Schlemmer 1888-1943: the Baltimore Museum of Art.* Baltimore, Library of Congress Cataloguing in Publication Data.p.49.

³*The Triadic Ballet* began life in 1912, in an experimental collaboration between Oskar Schlemmer, Albert Burger and Elsa Hötzel, who were dancers with the Stuttgart Court Theatre. The ballet was first premiered in 1922. The piece was developed over a twenty-year period (1912-1932).

Toepfer, K. (1997) *Empire of ecstasy: nudity and movement in German body culture, 1910-1935.* Berkeley: University of California Press.p.140.

⁴ '...If the effect of mimicry is the inscription of space on the body of an organism...now this inscription of the body by space, this operation through which the seeing subject is defined as a projection, a being seen...'

Krauss, R. (Summer, 1985) 'Corpus Delicti.' October. 33:31-72. p.50.

⁵ 'The Triadic Ballet: dance of the trinity changing faces of the One, Two, Three in form colour and movement; it should also follow the plane geometry of the dance surface and the solid geometry of the moving bodies, producing that sense of spatial dimension which necessarily results from tracing such basic forms as the straight line, the diagonal, the circle, the ellipse, and their combination. This done, which is Dionysian and wholly emotional in origin becomes strict and Apollonian in its final form, a symbol of the balancing of opposites.' Oskar Schlemmer diary entry, September 1922. Cited in:

Schlemmer, O. 1888-1943. (1972). The letters and diaries of Oskar Schlemmer / selected and edited by Tut Schlemmer; translated from the German by Krishna Winston. Briefe und Tagebücher. English. Middletown, Conn., Wesleyan University Press. p.127.

⁶ Colomina, B. (1996) 'Battle Lines: E1027', in F. Hughes (Eds.) *The Architect: Reconstructing Her Practice* Massachusetts Institute of Technology. p.9.

⁷ Adam, P. (2000) *Eileen Gray: architect/designer: a biography.* New York: Harry N. Abrams. p.205.

⁸ Le Corbusier in *L'Architecture d'Aujourdhui* referred to *'objects-membres-humains'*, as being those type objects that respond to type needs and type functions and operate as liberating extensions of our limbs, *'...* chairs to sit on, tables to work at, devices to give light, machines to write with (ah! yes), racks to file things in, *'a human limb object,' properly designed to harmonize with the body, would act for all the world like 'a docile servant. A good servant is discreet and self-effacing in order to leave his master free.'*

Le Corbusier. (Paris, 1925). L'Art Decorative d'Aujourdhui. pp.76 - 79. Cited in:

Certeau, M. de (1984) *The practice of everyday life; (trans.) Steven Rendall.* Berkeley: University of California Press. p.157.

⁹ Oskar Schlemmer, 'Eléments scéeniques'. p.93. Cited in:

Lehman, R. Oskar Schlemmer 1888-1943: the Baltimore Museum of Art, 1986. p.145.

¹⁰ Adam, P. (2000). *Eileen Gray: architect/designer: a biography*. New York: Harry N. Abrams. Constant, C. (September, 1994). 'E.1027: The Nonheroic Modernism of Eileen Gray.' *Journal of the Society of Architectural Historians*. **53**.pp.265 - 279. Constant, C. and Wang, W. (1996).(Eds.). *Eileen Gray: an architecture for all senses*. Tübingen: Ernst J. Wasmuth; [Frankfurt am Main]: Deutsches Architektur-Museum; [Cambridge, MA]: Harvard University Graduate School of Design.

¹¹ Charles Cros, 'Poèmes et Prose', Gallimard, p.90. Cited in: Bachelard, G. (1994) *The poetics of space; (trans.) Maria Jolas; with a new foreword by John R. Stilgoe.* Boston: Beacon Press. p.87.

References

Adam P. (2000) *Eileen Gray: architect/designer: a biography.* New York: Harry N. Abrams. Bachelard, G. (1994) *The poetics of space; translated from the French by Maria Jolas; with a new foreword by John R. Stilgoe*, Boston: Beacon Press.

Barres, R. (2003) 'E1027: Eileen Gray 1926 -1929'. *Lotus international.* 119. (The Modern Inside Out).

Certeau, M. de (1984) *The practice of everyday life; translated by Steven Rendall.* Berkeley: University of California Press.

Colomina, B. (1996) 'Battle Lines: E1027' *The Architect: Reconstructing Her Practice*. F. Hughes (Ed) Massachusetts Institute of Technology

Constant, C. (1994) 'E.1027: The Nonheroic Modernism of Eileen Gray'. *Journal of the Society of Architectural Historians*. 53 (3 September).pp.265-279.

Constant, C. and Wang, W. (1996) (Eds). *Eileen Gray: an architecture for all senses* Tübingen: Ernst J. Wasmuth; [Frankfurt am Main]: Deutsches Architektur-Museum; [Cambridge, MA]: Harvard University Graduate School of Design.

Constant, C. (2000) Eileen Gray. London: Phaidon.

Craig, E. G. (1908) 'The Actor and the Uber-Marionette'. *The Mask; a journal of the art of the theatre.* **1** (2).pp. 3-5.

Eberle, M. (1985) *World War I and the Weimar artists: Dix, Grosz, Beckmann, Schlemmer* New Haven; London: Yale University Press.

Fiedler, J. and Feierabend, P. (2000) (Eds). *Bauhaus* Konemann Verlagsgesellschaft mbH. Galligan, G. (1986) 'Oskar Schlemmer: Divining the Human Ideal'. *Arts magazine*. 61 (December).pp.50-52.

Garner, P. (1993) *Eileen Gray: design and architecture, 1878-1976.* Köln: Benedikt Taschen Gray, E. and Badovici J. (1929) 'E1027: Maison en Bord de Mer; Eileen Gray and Jean

Gropius, W. (1961) (Eds). The Theater of the Bauhaus [by] Oskar Schlemmer, Laszlo

Haxthausen, C. W. (1987) 'Minneapolis, Walker Art Centre: Oskar Schlemmer'. *The Burlington Magazine*. 129 (February).pp.141-143.

Hecker, S. and Müller, C. F. (1993) Eileen Gray. Gustavo Gili.

Muller, S. and Hecker, C. (1996) 'Virtuele realiteit en monumentenzorg: Maison en bord de mer van Eileen Grey'. *ARCHIS*. 6 (June).pp.37-41.

Johnson, J. S. (1980) Eileen Gray: Designer Debrett's Peerage Limited.

Kliest, H. Von, (1947) 'Über das Marionettentheater (Essay on the Puppet Theatre), trans.

Koss, J. (2003) 'Bauhaus Theatre of Human Dolls'. The Art Bulletin. 85 (4).pp.724-745.

Krauss, R. (1985) *The originality of the avant-garde and other modernist myths.* Cambridge, Mass.: MIT Press.

Krauss, R. (1980) *Grids: format and image in 20th century art: the Pace Gallery, December 16, 1978-January 20, 1979, the Akron Art Institute, March 24-May 6, 1979.* New York: Pace Gallery.

Krauss, R. (1999) Bachelors Cambridge, Mass.: MIT Press.

Lehman, A. L. and Richardson, B. (1986) (Eds). *Oskar Schlemmer 1888-1943: the Baltimore Museum of Art* Library of Congress Cataloguing in Publication Data

Maur, K. Von (1972) Oskar Schlemmer: sculpture. Introd. by Peter Beye. [Translated from the German by Anne Engel] New York, H. N. Abrams.

Preston-Dunlop, V. and Lahusen, S. (1990) (Eds). *Schrifttanz: a view of German dance in the Weimar Republic* London: Dance Books.

Rayon, J. and Loye B. (1982) 'Eileen Gray architetto 1879-1976'. *Casabella*. 46 (480).pp.38-45.

Romanelli, M. (1988) 'Eileen Gray: Transat chair 1924, Bibendum chair 1926'. *Domus*. 697 (September).pp.76-110, XVII - XVIII.

Schlemmer, O. 1888-1943. (1972) The letters and diaries of Oskar Schlemmer / selected and edited by Tut Schlemmer; translated from the German by Krishna Winston. Briefe und Tagebücher. English Middletown, Conn., Wesleyan University Press.

Oskar Schlemmer. (Date Unknown). Das Triadische Ballet:Ein Film in Drei Feilen nach den Tanzen von Oskar Schlemmer. Radio Stuttgart

Segel, H. (1995) *Pinocchio's progeny: puppets, marionettes, automatons and robots in modernist and avant-garde drama.* Baltimore: Johns Hopkins University Press.

Stein, J. (1969) (Ed). *The Bauhaus: Weimar, Dessau, Berlin, Chicago / Translated by Wolfgang Jabs and Basil Gilbert.* The Massachusetts Institute of Technology. Cambridge, Massachusetts and London, England

Toepfer, K. E. (1997) *Empire of ecstasy: nudity and movement in German body culture, 1910-1935.* Berkeley: University of California Press.