# Directing the Light Flux
## Scripts for cellular movement

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The subject of human gesture is traditionally approached as a signification system, coded by isolated body movements (spontaneous and predictable) or varieties of sign language (learned and unpredictable). In 1976 I wanted to create a gestural dance technique with analogies to structures of language. My goal was a proto-language of the body that could be precise and modular, like verbal and written language, yet enjoy the flexibility of shifting contours and unfixed connotations, as are found in text sound poetry. The term *cellular* refers to the choreographer's task of simultaneously tracking and influencing the phenomenon of movement at the level of neural stimuli passing from one cluster of body cells to another. The hyperbole of the term *cellular* as I have used it allows for the imagined potential of the autonomic nervous system to undergo a degree of voluntary control in the choreography of movement, to complement the potential refinement of skills developed through the somatic nervous system. More practically speaking, cellular movement is the individual dancer's counterpart to the mutable 'contact point' of its predecessor, contact improvisation. Both approaches to movement have roots in phenomenology. Cellular movement, making use of multiple and overlapping scripts for either a choreographed or improvised event, tests the nature of the visible world for divisibility and, in doing so, models a link between phenomenology and deconstruction in art (Camp 2004: 92ff). The rhythmic drive from one gesture helps to define the shape, quality, direction, elevation, speed, etc. of the next. But that drive itself is willfully subjected to scripts favoring high levels of unpredictability. Isolated gestures may be connotative, but what they connote is divorced from an original signifying system and married to the expressionism of the cellular movement process itself.

Cellular movement uses scripts that direct the light flux, the shared medium of dancer and viewer, to alter the viewer's encounter with the human body through unpredictable figuration. Plying the gaze of the viewer as an integral component to the choreography, cellular movement places that gaze out of sync with the viewer's familiar and comfortable rhythms of processing input, so that the gestural figurations, while precisely articulated and therefore seemingly recognizable, do not exhibit known relations. If unrecognizable, how do we perceive these figurations? My gesture laboratory hasn't yet compiled the data to supply the answer.

No one knows better than the dancer-turned-photographer how and when to capture the defining moment and/or apex of a movement phrase – the landing of the dancer's weight, the turn, the uplift, the pause in midair, the moment of maximum torsion, the extended or broken line or the entanglement of lines. The photograph then offers up a semiotic reading of that moment through symbol, allegory, narration or pictorial unity (or disunity), as seen by the photographer.



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**• Author's study of cellular movement, part of Richard Lowenberg's Thermographic Imaging Project, San Francisco.** *Photo © 1979 Richard Lowenberg.*

The rhythm and sequence of the gestures arise from multiple scripts enacted 'ply over ply', a reference to Ezra Pound's technique of overlayering a subject so that a word, name or phrase assumes a complexity and history partly reliant on the synaptic agility of the mind of the reader. I have created two kinds of scripts, one conceptual and the other a practical lexicon, that serve as a performance aid for quickly generating gestures or shifting from one script to another (because it is meant solely as an aid, the lexicon does contain overlap and redundancy). The scripts introduce irrationality, interruption, contrast and incommensurability to determine sequence and qualities of gestures or gestural phrases. If the resulting optical events do conjoin to serve a narrative, according to the scripts of cellular movement, they will soon not serve that narrative.

These gestures accumulate in what I call the world's 'gesture bank,' available to all, and, like an index of roads at the back of an atlas, awaiting navigational procedures to set the coordinates. I have not written on how to form gestures, though much about this and about sequencing them will be obvious from the lexicon. Nor have I followed up on my initial statement about a proto-language of the body. That idea helped me to frame the gestural movements and provided an armature, if temporary, for a developing technique of behavioral unpredictability. It is the technique that I offer here, by way of general and particularized scripts. Finally, it remains to say I wish I had named the technique something else in 1976. Cellular movement is not based on cellular technology; I'm sure it is the other way round.

**for performance conveyed through a visual field**

Notes on the optics of choreography –

**goal:** to create something new by redefining the terms and conditions of the visual constraints.

(**rub** the collective eye has seen it all before, [sophisticated, discriminating and

**• Il Miglior Fabbro, cellular movement, the author at the American Center, Tokyo, 1984.** *Photographer unknown.*

saturated by photography, film, video, laser and software iconography (. . . traffic patterns, crime, food labels, the small print of contract, license, release-of-all-rights forms, pharmaceutical side effects and warnings, surgical procedure diagrams)]
& wants more, if new)

**Toward a solution: optics in brief**[1]

the eye = a motion-detecting system
perception of motion = perception of the light flux
retinal receptors of the eye = mediators of change in the light flux
mediation → structural change of photosensitive molecules in receptors→ the release of a flow of ions in the receptors;
the accumulation of ions flowing in the receptors → bioelectric signals that travel from the receptor into adjacent nerve cells

'Within a few milliseconds the myriad changes in signal pattern over the entire retina are combined and transformed by an intricate neural network within the retina itself, by other networks at relay stations in the midbrain and finally by the neural networks within a number of receiving terminals in the cerebral cortex. The result at the conscious level is the perception of motion in visual space.'

**Also of interest:**

- The strength of the bioelectrical signal traveling to neural network varies with the light flux;
- The moving dancer perceives motion as an optical flow of patterns across the entire retinal surface
  - The fixed viewer perceives motion as local flow patterns on the retinal surface
  → maxim regarding <u>perception of motion</u>: dancer's perception of motion ≠ that of viewer
- The moving dancer sees objects as constant even while perceiving geometric variance in spatial relations
  - The fixed viewer sees objects and the environment in relations that are constant → maxim regarding <u>perception of objects</u>: dancer's perception of objects ≠ those of viewer

**Optics applied to the aesthetics of a choreography of light flux:**

Task: Break the visual 'code' that renders relationships constant

Attraction of the viewer's eye to changes in the light flux depends on:

a) qualities of contrast:
rhythm, color, speed, direction, strength, proportion

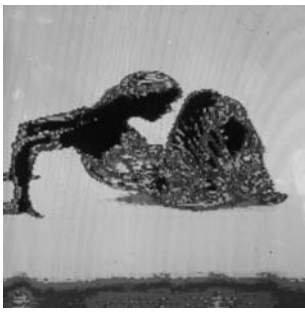
b) recognition through association and interpretation
1) recognition with interpretation
2 non-recognition with or without interpretation
3) recognition fails to interpret, through lack of will (e.g., boredom or depression) or loss of ability (e.g., dementia), what is <u>clearly</u> seen

<u>[these three are everyday occurrences.]</u>

4) recognition mismatched or unmatched to what is known
(There is no predisposition, prior optical/cerebral reconciliation ['wiring'] that joins what is seen to what is known. What is <u>clearly</u> identified by sight defies the viewer's store of available logics of outline, association, relationship, pattern and thought; eg,
a first glimpse of the scale of the Grand Canyon.)

<u>this fourth holds potential for a new visual experience based on a threshold level of unpredictability, a threshold that is always, already undergoing a changed state.</u>

[1] The information presented under this section is a radical abridgment of this article, with many phrases directly quoted (marked as such with quotation marks) or lightly paraphrased. The language and ideas are Johansson's. The signs = (equals), ≠ (does not equal) and → (leading to) are introduced for brevity. See Johansson (1975).



**• Cellular movement studies, continued, Thermographic Imaging project.** *Photo © 1979 Richard Lowenberg.*

(These statements are also the underpinnings of an aesthetic based on fragment and collage.)

**• The False and True Occult, cellular movement, the author at Mills College, Oakland.** *Photo © 1984 Toyoji Tomita.*

Table 1 Scripts for cellular movement to be applied to a personalized lexicon for gesture

1 calculate irrational rhythms
2 calibrate the entire spectrum of tension and the release of tension and create irrational relationships between the two (especially for the angles of the joints, angles of body curves, and proportions or altered proportions between body parts)
3 control the light flux, the binding medium between dancer and witness to the dance by means of irrational rhythms
4 chronicle gestures as incommensurable events
5 use any one of the four methods above to contextualize the other three.
6 invent several exit, interruption and obfuscation strategies and employ them frequently.

Table 2 Lexicon for the formation of gestures, with abbreviations (MaFishCo, 1976–1994)

| | |
|---|---|
| E.P. | Energy Pathway (term common to Contact Improvisation) |
| A | Accumulation (term and technique formulated by Trisha Brown) |
| A.S.L. | American Sign Language |
| G.B. | Gesture Bank |
| C.N. | Charged Neutrality |
| T & R | Tension and Release of Tension |
| S.D. | Structural Display |
| G.C. | Gestural Cluster |
| C.M. | Characteristic Movements |
| U.C.M. | Uncharacteristic Movements |
| E.G. | Energy Generator |
| R.D. | Rhythmic Drive |
| A.R. | Asymmetric (irrational) rhythms |
| S | Sequence (chronicle) |
| I | Interruption |
| H | Hieroglyph |
| D | Dialect (regional gestural cluster) |
| 1 J | One-joint gesture |
| 2 J | Two-joint gesture |
| C.G. | Clichéd gesture |
| P. G. | Playful gesture |
| G.G. | Gentle gesture (extreme) |
| S.G. | Stolen gesture |
| C | Complementary movement |
| F | Frame |
| L.F. | Light Flux |
| Z.G. | Zero Gravity |
| L.T.Z.G. | Lion Training in Zero Gravity (a specific exercise) |

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