the handbook
on
psychochoreography

by Nora Bayer
act 1: a change of pace
lesson 01
exercise 01
exercise 02
exercise 03
labanotation 6
personal BPM 9
relative pace 17
scale of rest 25

act 2: sense of comfort
lesson 02
exercise 04
internal clock 30
the waltz 33

act 3: rhythm of facade
lesson 03
exercise 05
exercise 06
visual rhythm 38
perceived rhythm 41
role of the window 49

act 4: watch your step
lesson 04
exercise 07
exercise 08
liminal space 54
follow your gaze 57
sight lines 65
All architects are spatial choreographers. Every individual subconsciously partakes in a unique choreography when occupying space. This reality is unavoidable. When an architectural site is considered in the urban landscape, there is an existing choreography that’s already in play. Thus architects must consider how their project will entwine with the existing composition. There is great responsibility for architects to be mindful of this choreography and to consider, in an incredibly rigorous manner, the way in which bodies will move and feel when existing within their designed space.

I was trained in classical ballet for 15 years. The training was intensive and exhausting. I loved it. Every lesson is spent not only carefully refining technique, but also studying every minute way in which the body moves. Dance offers a unique form of intense observation that I carry with me through all parts of life. The most beautiful dancers turn this collection of meticulous movements into a graceful and seemingly effortless routine. Even when movement appears facile, it is the result of great detail and thousands of subtle decisions.

In order to understand how choreography can inform architecture, let’s first consider the way in which architecture is expressed on paper. Historically, the architectural plan is a gracefully choreographed drawing filled with a deep understanding of relative geometries. The goal of the plan is to create a legible image through diagramming that can be translated into a built space. Like architects, choreographers require a notational system in order to transform three-dimensional movement into a two-dimensional form. Rudolf Van Laban created Labanotation in the 1920’s. This analytical notation consists of the five-bar staff, with the center line being the center of the body. It is read left to right, where the location and shade of geometric symbols instruct movement to specific parts of the dancer’s body. Similar to a plan, the poché, line, and direction allow this system to be legible and transformed into movement. While this method is effective in transcribing the intended choreography, it lacks the dynamic qualities that bring emotion. Though this might be absent in written form, the choreographer brings the piece to life.

The missing emotive layer of Labanotation does exist on musical sheets—symbols such as time marks, dynamic notes, and crescendos inform the musician how to bring expression to the more literal musical language. Each piece begins with a set BPM, the trusted home base of speed. Throughout the piece, this number may grow and shrink with the original marker in mind. I often consider this as I occupy space—when my feet become synchronized with the rhythm of a facade, and when I feel my internal time mark speed up or come to a rest in relation to my surroundings.

This handbook is a proposal for a system of notation that maps the everyday choreography of the urban landscape. This is not only a study on language and mapping, but also a proposed reframing of site analysis. We exist in a constant state of subconsciously responding to our surrounding environment; why then is this existing rhythm not included in site analysis? Designers are given the opportunity to meaningfully embrace the urban choreography at the scale of the individual. The one whose daily practiced piece will forever be altered by the design. A new instrument is being introduced to an established orchestra: we must understand the existing composition before writing a new piece.
Psychogeography originated in Paris in the 1950’s with philosopher Guy Dubord. Dubord defines this term as “the specific effects of the geographical environment (whether consciously organized or not) on the emotions and behavior of individuals.” This concept addresses the intersection between psychology and geography, along with the behavioral impact of the urban environment on the individual.

Dubord proposed the significance of the dérive: “an unplanned journey through a landscape, usually urban, in which participants drop their everyday relations and let themselves be drawn by the attractions of the terrain and the encounters they find there.” The dérive is not only refreshing as it takes you out of the repetitive choreography of the everyday, but it offers unpredictability and excitement that might have gone unnoticed.

I am proposing that a dérive take place, not at the scale of the city, but at the scale of the site. This sets the stage to rethink the subtle observations of the passerby and remove all expectations from the site. In doing so you are given the opportunity to intensely study the emotive effects of the urban landscape on space and time.

This handbook is a collection of lessons and exercises that outlines psychochoreography notation. To partake in the exercises, acquire a blank sheet of music paper (draw your own if you prefer) and a pen of your choosing.

For the purpose of this handbook, we will demonstrate the notation on Wickenden St. in Providence, RI. All photographs included were taken in this region between South Water St. and Governor St.

**choreography:** (1) the technique of representing the various movements in dancing by a system of notation, (2) the arrangement or manipulation of actions leading up to an event

**psychochoreography:** a notational system mapping the everyday choreography of the individual and their interactions, both physical and mental, with the urban environment.

**lesson 00**

**psychogeography**

[Image: Wickenden St. Providence, RI]
Rudolf Von Laban was a Hungarian-born dance theorist who developed Labanotation: a written system of recording human movement on a staff by means of symbols. Laban studied Philosophy and Architecture in Paris where he worked as an illustrator before becoming part of the dance world. His interest in architecture influenced the development of Labanotation, which documented the structure of movement itself. This notation became widely studied and continued to be developed by researchers in Germany, England, and the United States.

Labanotation is transcribed on a vertical staff representing the one performing. The center line being the center of the body, the right line being the right side, and so on. The staff itself is written from the viewpoint of the performer. The notation is comprised of a series of symbols in which shape dictates direction, length defines the duration of movement, and placement notates which part of the body is moving. From this base, there are additional symbols which modify the main action in play.

“Any of these fleeting experiences may in turn trigger, unbidden, a specific memory: perhaps a sound or a smell of a space we once knew. This slowness of pace better enables us to enter what psychologist Christopher Bollas calls the ‘evocative object world’, where buildings engage us on both a somatic and psychological level, framing our present experiences while simultaneously recalling past associations.”

- Christy Anderson and David Karmon
choose a street with 0° slope and limited topographical interruptions.
walk as you typically would without a time restraint guiding your pace.
set a timer for 60 seconds and find your personal BPM. this will be the base of your composition.

beats per minute (BPM): tempo set at the beginning of a composition

a tempo ("in time"): a return to the BPM set at the beginning of the composition

crescendo: a gradual increase in the loudness of music ("increase in pace")

decrescendo: a gradual decrease in the loudness of music ("decrease in pace")

rest: an interval of silence with symbols used to indicate the length of the pause
steps per minute
everything that is black leads down.
everything that is grey leads up.
anything that is white with a dot in the center results in middle level.
all wedges in the reading direction move forward.
all wedges in the reading direction move backwards.
all signs above the midline are performed from the left half of the body.
all signs below the median line are performed from the right half of the body.
all wedges in the direction of the top edge of the sheet lead to the left.
all wedges in the direction of the bottom edge of the sheet lead to the right.
crossing compositions, sakura restaurant

preparing for opening, amy’s place
beats per minute (BPM): tempo set at the beginning of a composition

a tempo ("in time"): a return to the BPM set at the beginning of the composition

crescendo: a gradual increase in the loudness of music ("increase in pace")

decrescendo: a gradual decrease in the loudness of music ("decrease in pace")

rest: an interval of silence with symbols used to indicate the length of the pause

focus on your perceived pace and identify the points at which you accelerate and decelerate.

note these moments with a crescendo and decrescendo. the length of the symbol should align with the distance that your pace has changed. mark the change in BPM at the end of the symbol.

reset your BPM by writing "a tempo" with a vertical line through the staff.
crescendo
decrescendo
a tempo "In time", reset BPM

BPM = 120

130

100

150
intersecting choreographies, wickenden st. & brook st.
“A poem moves, and inevitably carries us along with it. In its stops and pauses, as in all its rhythmic elements, the interplay of the expected and the unexpected satisfies two of our fundamental desires: our desire for regularity and our wish for variety.”

- Joan Larkin
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rest: an interval of silence with symbols used to indicate the length of the pause

we experience rests on multiple levels. a rest can be a brief pause brought on by a visual queue, a mental break after a crescendo, or a physical stop for a temporary repose.

sixteenth rest: a brief, fleeting pause

eighth rest: a full break in pace

whole rest: a prolonged stop
a collection of rests at the coffee exchange

a whole note rest at the shop
Perception of time is an innately personal experience. We will consider this concept as your internal clock, one that doesn’t run on a fixed 60 seconds. There are a myriad of variable factors that affect your internal clock from the scale of the urban landscape to the layout of an individual room. While architectural drawings and digital models can perfectly describe a built space, with every fixture detailed and door hinge drawn, the experienced time and movement through that space is only observable in person. A plan alone cannot express this phenomenon.

Let’s consider the waiting room. One study showed that the architectural layout of a room has a direct impact on a participant’s internal clock. Despite no changes in time elapsed, the results supported the theory that certain spatial characteristics of a room had a direct impact on a person’s estimated waiting time. “Narrow spaces without the possibility to direct the gaze into a distance, be it through a window into nature or a picture, throw us back on ourselves and the waiting situation we are in. We pay more attention to the elapsing time and time stretches. A space with escapes that allows the feeling of vastness creates a future perspective that distracts us from ourselves and allows time to run faster. This is the direct experience of time in space.”

“For the phenomenon of music is nothing other than a phenomenon of speculation... The elements at which this speculation necessarily aims are those of sound and time... consequently music is a chronologic art... All music is nothing more than a succession of impulses that converge toward a definite point of repose.”

- Igor Stravinsky
exercise 04
the waltz

**flat**: notes that are played a semitone lower than notes on the staff

**neutral**: an interval that is neither a major nor a minor, but instead in between

**waltz**: a type of classical dance music based on the $3/4$ time signature

consider three degrees of energy while walking down the street. this exercise is deeply subjective.

1. **flat**: off center and unbalanced, something is not quite right

2. **neutral**: neither askew nor rhythmic, this feeling might go unnoticed

3. **waltz**: everything is aligned, the ideal walking rhythm
Our eyes find balance and rhythm in all that we see. We are comforted by patterns and symmetries. The most compelling patterns occur naturally in our environment. Consider the complexity of a snowflake, structure of a honeycomb, or Fibonacci’s sequence in a sunflower. Instinctively, we are drawn to these forms and their beauty.

Architectural facades have similar magnetic qualities grasping for our attention. They play a rhythmic composition through the use of repeated geometries and shifts in materiality. These rhythms cannot be fully appreciated alone. They are inherently sequential. If every structure carried the same beat, the rhythms nearly vanish and the streetscape becomes monotonous.

The language created by these sequences goes beyond the clear visual queues. It is deeply connected to site, street, and the individual. When built structures mindfully respond to existing rhythms, some relationships are interrupted while others are enhanced, but the overall composition moves one note closer to harmony. 

“We find beauty in different things at different times; however the joy found in architectural space and form is universal. As spatial compositions continue to evolve so too will our understanding of the meaning behind beauty.”

- Rina Thapa
**rhythm:** the pattern of regular or irregular pulses caused by the occurrence of strong or weak melodic and harmonic beats

**time signature:** notation to specify how many beats (stress points) of a particular note are contained in each measure

**visual weight:** the perceived weight of a visual element, a measure of how much something on the page attracts the eye

membrane: a thin pliable sheet of material forming a barrier or lining

selective permeability: a property of cellular membranes that only allows certain molecules to enter the cell

porosity: a measure of the void spaces in a material, a fraction of the volume of voids over the total volume

drill 05

perceived rhythm

this exercise is about finding rhythm within the exterior fabric of architecture; this is especially subjective.

consider the numerical rhythm of a facade when passing a building.

some buildings create comfort from the balance and familiarity in their symmetry (1 2 1 or 1 1 2 1 1)

other facades quicken the collective choreography of the streetscape with repetition in design (1 2 3 4 2 2 3 4)

there is no right or wrong rhythmic assignment, but rather an observation of visual balance in pattern and geometry.
rhythm, with assigned beat

no rhythm
mirrored windows through liminal space
"Rhythm is not simply a beat or a tempo. It is always the product of a relationship: there are two elements present, and we experience them simultaneously. One is the pattern we expect to hear; the other is what we actually hear. The intricate relationship between these two is a combination of the familiar and the surprising that gives us the sense of language that is alive and worth listening to."

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consider four window conditions:

1. **no window**

2. **window as window:** surface for light and fresh air

3. **window as barrier:** selectively permeable to the outside

4. **window as membrane:** completely permeable, blurring line between exterior and interior
appliance porosity

windowless wall
As we meander down the urban streetscape, we exist in a fluid zone between liminal space and built structure. Liminal space is defined as a transitional space often associated with a forlorn atmosphere and a disconnection from the concept of reality.

These openings in the urban fabric offer an opportunity to glimpse into parallel choreographies. The energy offered by this view can be stabilizing and familiar. Consider the comfort found in a well placed window or curious pathway.

Transitional zones have the ability to alter your sense of time and space. These spaces are essential in defining the experience of a building, and must not be forgotten. When a disconnect arises, they might feel unsettling or bring on an existential feeling of ephemerality.

“In these spaces the vertical hierarchy of power is spontaneously replaced with networks of horizontal relations. These spaces become capable of materializing freedom because they are able to escape the established order.”

- Paola Pittaluga
**sonder:** the realization of the complexity, scale, and vividness of your surroundings

**liminal space:** a space which is a transition between two other locations or states of being

sight line: the hypothetical plane from someone's eye to what is seen

parallel: extending in the same direction, equidistant at all points, and never converging or diverging

infinite: limitless or endless in space, extent, or size, impossible to measure or calculate

**exercise 07**

follow your gaze

where are your eyes being drawn?

are they reacting to a sound or a smell? are they drawn to a pleasant color or reflection in a window?

your experience is guided by a series of glances and their associated forces. this exercise is about understanding the visual balance of the street and its impact on your choreography.
glimpse into adjacent composition
gaze at curious addition of a table and chair
“When the building is at arm’s length we may be no longer able to perceive its overall shape, but we can acquire new information in recompense: details of surface texture that were invisible before, a range of architectural stimuli registered not just by the eyes, but by the fingertips, ears and nose, or underfoot. Walking ensures a slowness of pace that allows for contemplation of the details of architecture. We regulate our pace in order to look closely.”

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this exercise defines line of sight and sense of scale.

Focus on the negative space, the space in between built structures, perhaps a playground, an alley, or simply the intersection of a street. these moments give a snapshot into a larger network of compositions, some comforting others unsettling.
feeling of infinite viewpoint

view into parallel network

BPM = 120

180

1234 234 323 423

a tempo
storybook tree in front of house

visual network blocked
This notation is not a rigid rule set. It is a foundation of a language that can be manipulated to create a personalized analysis. Every site offers different conditions where new layers and symbols can be incorporated. Our emotive reactions to our surroundings are fundamentally subjective. We all occupy the streetscape individually and have unique perspectives shaped by our cultural and personal experiences.

The next exercise in the handbook is not defined. For exercise 09, ask yourself: what layers of information are missing from your analysis? Are there factors in your site that the notation itself cannot express? Are there local histories not visible to the eye? Is there a reason that some blinds on the windows are pulled? Identify these invisible forces and allow yourself the freedom to incorporate them into your analysis.

Current site analysis doesn’t fully capture the emotive ways that the body occupies space. While architects write in a well-defined language, it stops at the physical and the structural. Many architects create beautiful spaces with harmonic compositions, but they don’t have the tools to express their choreography on paper. We must change the way we use notation. There is so much unwritten in what we create.

Use the tools in this handbook to thoughtfully analyze site. This is an opportunity to meaningfully document the network of compositions surrounding your project. Study your choreography, your neighbor’s choreography, and the choreography of the city as a whole. Document your findings and define how your proposal will impact this ecosystem.

Dérive translates to “drift”. Psychochoreography notation allows us to drift into the streetscape and appreciate the psychological and emotional ways that we interact with our surroundings. As architects, we are privileged to have the opportunity to introduce designs into the streetscape that will become vital pieces of a larger web of interconnections. We must accept our role as choreographers and rethink the design process to create spaces that play a lasting role in defining the urban composition.
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**infinite:** limitless or endless in space, extent, or size, impossible to measure or calculate
infinite siding

numerous windows
choreography to be continued