(Re)discovering the Slow(er) City in Sneakers: Running as a tool for guiding design in the virtual sonic age

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Still from Orson Wells, The Third Man, 1949
In loving memoriam

For Nathan Brightbill
runner, landscape architect, friend
Our trajectory… a running history I course.

I. Who runs, how and why?
Typologies, mechanics, evolution, health and inspiration

II. How do we *imagine* running in the city?
Representing movement and how storytelling and imagination can create compelling reasons to run

III. When do design and running intersect?
Trends, standards, opportunities, examples, speculations
"Running: If there’s any happier activity, more exhilarating, more nourishing to the imagination, I can’t think what it might be."

~ Joyce Carol Oates, quoted in John Bale “Running: Running as Working”
Mo Farah leaves his Kenyan 10,000m rivals trailing in his wake on the final lap to win gold at the world championships in Beijing. **SOURCE:** Adam Davy/PA
With a population of 319 million, the US has approximately 38 million people who run for exercise and personal well-being. The Community of Runners
“Sedentary time (time being still except for sleeping) is rapidly growing in Holland for all ages up to 64 both during work and free time. Together with increased food intake this trend can be seen as a cause for the rise of obesity in the Netherlands. Two-thirds of people over 15 years in the EU are not physically active at recommended levels by the World Health Organization (WHO). Approximately 20% of children are overweight with a third of this figure declared obese.”

~ From Mart Reiling and Thijs Dolders, Running Amsterdam: Designing a Runner Friendly City, MsC Thesis, Wageningen University and Research Centre, Netherlands, 2016
The Urgency to Run
Running makes us human

“You were born to run. Maybe not that fast, maybe not that far, maybe not as efficiently as others.

But to get up and move, to fire up that entire energy-producing, oxygen-delivering, bone-strengthening process we call running.”

~ Florence Griffith Joyner
The Mechanics of Movement

First Steps

Jane
See Jane.
See Jane run.
Run, Jane, run!

From the William H. Elson and William S. Grey, *Elson Basics Pre-Primer*, 1930
The Mechanics of Movement
First Steps

SEE
JANE
RUN

HANNAH
JAYNE

One secret will change everything...
The Mechanics of Movement
First Steps

See Jane run.
See Dick run.
“Stop!” said Earth.
“See me dying.
What the f*#@?
Everyone is running around,
pretending there’s not a problem.
I need your help.”
Walking is generally distinguished from running in that only one foot at a time leaves contact with the ground: for humans and other bipeds running begins when both feet are off the ground with each step. (This distinction has the status of a formal requirement in competitive walking events, often resulting in disqualification even at the Olympic level.).

~ Rebecca Solnit, *Wanderlust*
The Mechanics of Movement

Walking versus Running

Eadweard Muybridge, Man Walking, 1887
The Mechanics of Movement

Walking versus Running
“Over time, running has aided in hunting, helped carriers of messages, provided sensuous pleasure, and been a form of recreation, fun and entertainment. It has also been a means of punishment and become an occupation within the realm of serious sports. So there are numerous motivations for running.”

~ John Bale “Running: Running as Working”
From survival to recreation
Humans evolve
The Human Body Is Built for Distance

By TARA PARKER-POPE  OCT. 26, 2009
From survival to sport
Greek competitions

Attributed to the Euphiletos Painter, Terracotta Panathenaic prize amphora, ca. 530 BCE Source: Metropolitan Museum of Art
From survival to sport

Irish religious ceremonies

Tailteann Games, Army Officers with wolfhounds (above), 1924


Program, Aonac Tailteann Games, 1924

“According to Shearman, training meant ‘diet’. In the late nineteenth century, two pints of beer a day had been recommended as the liquid input of a runner in training.”

~ John Bale “Running: Running as Working”
From survival to sport

20th century competition

Dan Fuehrer, text by Scott Douglas, A Brief History of the Running Shoe

From survival to sport

20th century competition

Frank Shorter running through streets of Munich during the 1972 Olympic Source: Associated Press
From survival to sport

20th century popularization
Human health

Physical well-being

Improved brain function, learning and memory through estrogen-related receptor gamma (ERRγ), found in high levels in the brains of long-distance runners*

* Mark Prigg, “Are Marathon Runners Smarter?” Daily Mail, April 2015
Human health
Physical well-being

Raises levels of good cholesterol and lowers risk of developing blood clots.
Boosts immune system...
Human health
Physical well-being

Increases lung function....
Human health
Physical well-being

- 2009 publication by Finnish scientists on running and health
- Study lasted 17 years for 2,560 middle age men.
- Ran for 30 minutes a day
- Exhibited 50% reduction in the risk of death from cancer.

~Sudhir Kurl, medical director of the School of Public Health and Clinical Nutrition at the University of Kuopio
Human health

Physical well-being

6%

Improves hearing at high and low frequencies

SOURCE: Tustin Hearing Center http://www.tustinhearingcenter.com/hearing-blog/good-communication-builds-good-relationships
Human health

Emotional and cognitive well-being

Marathon time: Alan Turing 2 hours and 45 min
Human health
Emotional and cognitive well-being

- Purges body of kynurenine, which can precipitate depression
- Encourages body to release serotonin, which improves mood
PART II. How do we imagine running in the city?
Representing movement and how storytelling and imagination can create compelling reasons to run

Experiencing Movement
Mental Mapping, Imagining and Exploring the City

“Moving elements in a city, and in particular people and their activities, are as important as the stationary physical parts. We are not simply observers of this spectacle, but ourselves part of it, on the stage with other participants.”

~Kevin Lynch The Image of the City
Experiencing Movement
Psychogeography: “drifting”, discovering, defying

“Cities have a psychogeographical relief, with constant currents, fixed points and vortexes which strongly discourage entry into or exit from certain zones.”

~Guy Debord, Introduction to a Critique of Urban Geography, 1955
“…the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.”

~ Guy Debord

Guy Debord, Guide to the Psychogeography of Paris, 1957
Experiencing Movement
Psychogeography: “drifting”, discovering, defying

Experiencing Movement
Psychogeography: “drifting”, discovering, defying

Experiencing Movement

Psychogeography: “drifting”, discovering, defying

Claire Wyckoff “run drawing” on GPS
Experiencing Movement
Psychogeography: “drifting”, discovering, defying

Experiencing Movement
Psychogeography: “drifting”, discovering, defying

“When I'm running I don't have to talk to anybody and don't have to listen to anybody. This is a part of my day I can't do without.”

~ Haruki Murakami
What I Talk About When I Talk About Running
“People sometimes sneer at those who run every day, claiming they'll go to any length to live longer. But don't think that's the reason most people run. Most runners run not because they want to live longer, but because they want to live life to the fullest. Exerting yourself to the fullest within your individual limits: that's the essence of running, and a metaphor for life – and for me, for writing as whole. I believe many runners would agree.”

~ Haruki Murakami, What I Talk About When I Talk About Running
Experiencing Movement
Psychogeography: “drifting”, discovering, defying

“...avoid the consumeristic mood, by running away from it, along side of it—run unmediated—immediately in any direction—towards the free solicitation of desire.”

~ Guy Debord, Situationist Internationale
Experiencing Movement
Psychogeography: “drifting”, discovering, defying

Tom Courtenay in Tony Richardson’s The Loneliness of the Long Distance Runner, 1962

Alan Sillitoe, The Loneliness of the Long Distance Runner, 1959
A serious subject in popular culture

The Loneliness of the Long Distance Runner

Tom Courtenay in Tony Richardson’s *The Loneliness of the Long Distance Runner*, 1962
A serious subject in popular culture

Marathon Man

William Goldman, Marathon Man, 1974

Dustin Hoffman in John Schlesinger’s Marathon Man, 1976
A serious subject in popular culture

Chariots of Fire

Ben Cross and Nigel Havers in Hugh Hudson's *Chariots of Fire*, 1981
Nigel Havers in Hugh Hudson's Chariots of Fire, 1981.
As well as the object of parody
The many iterations of “Chariots of Fire” on YouTube
"A well chosen Prospect: which I will call the Royalties of Sight. . . . There is Lordship likewise of the Eye (as of the feet) which being a raunging and Imperious, and (I might say) an usurping Sense; can indure no narrow circumscription; but must be fedde, both with extent and varieties."

Experiencing Movement
Vision and Landscape

William Gilpin, aquatint engraving from *Remarks on Forest Scenery*, 1791

Frederick Law Olmsted, *Prospect Park*, New York, 1867
Route maps of Versailles in Louis XIV’s guidebooks: 1689 (left), 1691 and 1695 (center), and 1702 to 1704 (right); redrawn by Soon-Hui Long (from *Manière de montrer les jardins de Versailles*, with introduction and commentary by Simone Hoog [Paris, 1992], 68–69)
The procession or ritual

“...[R]itual movement that follows both a preordained path and purpose, which is, on account of its prescription, repeatable on innumerable occasions; indeed, such reiteration is expected....Undertaken collectively by a group of visitors who follow an orderly succession of moves and do so on special occasions, whether designated festivals or ad hoc fêtes. [Entails a... ] specific route with designated paths and even activities, with socially constructed and endorsed purposes and with some higher objective than the mere performance of the rite and with a wider reference than the site of the ritual itself.”

~ from John Dixon Hunt, “Lordship of the Feet”: Toward a Poetics of Movement in the Garden”
The stroll

“Involves undertaking or **giving of oneself to movement** [but] implies an ultimate purpose within the site and a sense of destination… and deliberation, as suggested in the word *saunter*, which **implies self-conscious activity and even some anticipation of being watched by others**. Strolling also implies a defined route between whatever incidents punctuate and give rhythm to the movement. As a pastime, it tends to be a small group activity, but individuals may also engage in it.”

--- from John Dixon Hunt, “Lordship of the Foot”: Toward a Poetics of Movement in the Garden"
The ramble

“[Also]…involves undertaking or giving of oneself to movement [but]… entail[s] **movement with no external prompt**; they are promoted largely by **the will or curiosity of an individual** enjoying the leisure to wander. Rambles are for **the pleasures of movement itself, without definite or preordained routes or destinations**; a ramble implies impulse, spontaneity, a disconnected wandering, and therefore it is more likely that a ramble is solitary, since one person’s disconnections would distract from another’s ramble.”

~ from John Dixon Hunt, “Lordship of the Feet”: Toward a Poetics of Movement in the Garden"
III. When do design and running intersect?
Trends, standards, opportunities, examples, speculations
“Designed environments which are thought out, formalized, and complete are usually ‘lifeless’ and unapproachable because a) they do not invite interaction and modification to suit immediate human needs; b) they are unable to grow, develop and become extended through human use…. Oddly enough, many environments which ‘work’ well for people meet few, if any, aesthetic criteria ordinarily employed by designers.”

~Lawrence Halprin, 1968
Designing movement
Choreographing I Connecting the City

Lawrence and Anna Halprin, RSVP Cycles (Resources, Score, Valuation, Performance), 1969
Designing movement
Choreographing I Connecting the City

Lawrence and Anna Halprin, *Rotation (applied to a walk)*
“In Portland I attempted to do two things: the first of these was to develop a long eight block sequence of open spaces, promenades, nodes of plazas and parks with a mix of public space and private space interwoven.... The space is **choreographed for movement** with nodes for quiet and contemplation, action and inaction, hard and soft, yin and yang. ... [T]hese places were for the first time designed to be used to be **participatory** - NOT just to look at - they say COME IN, not stay off.”

~ Lawrence Halprin
Designing movement
Choreographing I Connecting the City

Lawrence Halprin, *The Source*, Portland OR, 1965

Lawrence Halprin, *Lovejoy Fountain*, Portland OR, 1966

Lawrence Halprin, *Pettygrove Park*, Portland OR, 1966

Lawrence Halprin, *Ira Keller Fountain*, Portland OR, 1965
"Walkers are 'practitioners of the city,' for the city is made to be walked. A city is a language, a repository of possibilities, and walking is the act of speaking that language, of selecting from those possibilities. Just as language limits what can be said, architecture limits where one can walk, but the walker invents other ways to go."

Designing movement
Choreographing I Connecting the City

Frederick Law Olmsted and Calvert Vaux, Central Park, New York City, NY, 1857
Designing movement
Choreographing I Connecting the City


“A connected system of parks and parkways is manifestly far more complete and useful than a series of isolated parks.”

~ Frederick Law Olmsted Sr. *Report to the Portland [OR] Park Board*, 1903
Designing movement
Choreographing | Connecting the City

Frederick Law Olmsted and Charles Eliot, Back Bay Fens, Boston MA, 1879
“[There is a]... preference of an extended system of boulevards, or ornamental avenues, rather than a series of detached open areas or public squares.”

~Horace W. Cleveland, 1883
You may be asking, “What does running have to do with the practice of landscape architecture?”

**DESIGN**

Your quality of experience is based not on standards such as time or ranking, but on finally awakening to an awareness of the fluidity within action itself.

— Haruki Murakami

**SYSTEM**

The design response begins with a kit of parts of a deployable module for installing program along the trail system. The base connector would be installed all along the central spine trail and incorporate lighting to serve as a trail marker day and night. Modules can be attached to these base pieces over time to create spaces for stretching, shelter, and gathering.
Designing movement
Choreographing I Connecting the City

International Standard Track

The 400-meter standard IAAF track can enclose an American football field, as well as an international soccer field, and still have room for several field events on or in the facility itself.

There are two types of tracks: the standard oval and the straight line. The standard oval is used for the 100-meter dash, while the straight line is used for the 200-meter dash.

Surfacing

It finally happened! Your school has the funding in place for the track you've always wanted.

Now what?

You know you want a 400-meter track. But what do you do next? Here are some tips for making the most of your new track.

1. Choose the right location: Make sure the location is accessible, safe, and level.
2. Plan the layout: Consider the track's width, lanes, and lanes per side.
3. Budget: Make sure you stay within your budget.
4. Hire professionals: Hire experienced track builders to ensure quality construction.

Indoor Tracks

Indoor tracks are ideal for training and can be used year-round. They also provide shelter from extreme weather conditions.

This indoor facility, the Indiana Wesleyan Indoor Sport Complex, provides track & field athletes an opportunity to train in a variety of disciplines.
“Running can also be read as resistance and the growth of the street... [which has] contested the dominance of the motorised vehicle and provided a way of claiming back the street for human locomotion.”

~ John Bale “Running: Running as Working”
"Design is both process and product. It is the process of decision making about forms, arrangements, means and ends which becomes necessary whenever change occurs in our environment. Environment is everything, social as well as physical, that surrounds us and effects us throughout our lives. Change occurs constantly, in increments of varying scale, and at varying rates of speed. One typical characteristic of the 20th century has been the continuous acceleration of change in our lives."

~ Garrett Eckbo
Designing movement
Choreographing I Connecting the City I Reclaiming the Streets

Boston Complete Streets

City of Boston
Mayor Thomas M. Menino
Boston Transportation Department
Commissioner Thomas J. Tinney
Designing movement
Choreographing I Connecting the City I Reclaiming the Streets
Designing movement
Choreographing I Connecting the City I Reclaiming the Streets

Second Avenue Protected Bicycle Lane, Seattle WA

Former Pronto Bike Share, Seattle WA
Designing movement
Standards for Running

Jump, Puff.
Jump, jump, jump.
Jump, Puff, jump.

Run, Puff.
Run, Puff, run.
Run, run, run.
Jump, jump, jump.
Designing movement
Standards for Running... Or what do runners need?

From Mart Reiling and Thijs Dolders, Running Amsterdam: Designing a Runner Friendly City, MSc Thesis, Wageningen University and Research Centre, 2016
“When running at 10 – 12 km (6 – 7 mph), we can still perceive and process sensory impressions and thus gain an acceptable level of control over the situation, assuming that the road is even and the surroundings reasonably easy to comprehend. It is interesting that the running experience largely corresponds to cycling at an ordinary speed of 15 - 20 km/h (9-12 mph).”

~ Jan Gehl, Cities for People
Running is work

Running and walking connects us viscerally to the shape of the earth

Unlike walking environments, where we are designing for full access, runners look for challenges, including grade change

Running is interface with time, space and material
Designing movement
Standards for Running… sight distance and light(ing)

The runner is looking ahead and/or looking down

The future is in front, the past is in back

Avoid trip hazards—the feet want to operate separately from the mind

Designing movement
Standards for Running... Surface and texture

We formulate a vision and a program of activities based on the type of life (activities and attractions) that are inherent in a given area.
“We know the City when we move through and interact with it when we see it, touch it, and remember the way in which it challenges us.”

From Jan Gehl Architects
Designing movement
Standards for Running... Surface and texture

TOP 10 RUNNING SURFACES
Not all running surfaces are created equal - we've rated the top 10, from asphalt to woodland

By Marc Bloom Posted on June 1, 2002
“In the summer, when I run mainly on grass, my whole body seems to relax... Concrete sends shock waves through [my] body and was a surefire route to long-term damage. I’m convinced that if you run on softer surfaces, your career will last longer.”

~ Marcus O’Sullivan, professional miler and two-time indoor champion winner mile race, "Top 10 Running Surfaces", Runner’s World
Designing movement

Standards for Running... Top 10 Surfaces

1. Grass parks, golf courses, fields and soccer
   • **Pros:** soft and easy on the legs in terms of impact, muscles work harder and builds strength, flat areas provide speedwork surface, open areas that don’t demand turns
   • **Cons:** uneven, potentially slippery when wet, dangerous for runners with unstable ankles, difficult for runners with allergies, softness can tire legs quickly, private/inaccessible

2. Woodland Trails parks, forest preserves, private acreages
   • **Pros:** Usually easy on the legs, scenic areas that are interesting and repeatable, can be level, longer distances
   • **Cons:** uneven, steep, muddy and slippery, tree root trip/slip hazards, may be isolated/unsafe

3. Earth informal/undeveloped paths/trails, eroded routes across playing fields, undeveloped areas
   • **Pros:** medium to soft surfaces decrease the risk of overuse injuries and reduce impact on downhill, interesting/challenging
   • **Cons:** Wet, slippery mud, increased risk of injury to calves and Achilles tendons, may be isolated unsafe

4. Cinders running tracks and parks from pre-synthetic era may of fine rock, carbon, ash and slag
   • **Pros:** easier of on legs, if well-maintained, provide good, even surface, measured distance on tracks
   • **Cons:** in heat becomes loose and slippery, in the rain muddy and wet, new cinder surfaces not built, can be slower than synthetic materials

5. Synthetic Track schools, parks, rec/community centers
   • **Pros:** forgiving surface, easy measurable and timeable surfaces, useful for speedwork
   • **Cons:** curves on every lap stress ankles, knees and hips, tedious

6. Treadmill homes, schools, gyms, community centers
   • **Pros:** smooth surface easy on the legs, pace adjustable, external factors such as dogs, wind and bad weather minimized or eliminated, precise level of control for speedwork, accessible to a variety of runners and practical alternative in inclement weather
   • **Cons:** hardness of running surface varies between machines, lack of interest running on the spot, without natural breeze treadmill runners tend to sweat profusely. Too expensive for most individual runners, gym membership may be uneconomical

7. Asphalt roadways, bicycle and pedestrian paths and trails, parking lots
   • **Pros:** fastest surfaces, easy to measure distances on it, predictable, even surface that puts less strain on the Achilles tendon than softer or uneven terrains.
   • **Cons:** potential cambers, pot-holes, traffic and unforgiving surface that strains body.

8. Sand beaches, dunes, volleyball courts
   • **Pros:** provide deep muscle work out and resistance training with risk of injury and impact to joints, can run barefoot, potentially pleasant environments (beach, lake side), firm sand near water’s edge
   • **Cons:** softness can pose higher risk of Achilles tendon injury, tilt (camber) of surface puts uneven stresses on the body, potential for blisters and injury from foreign objects, limited to shorter distances

9. Concrete roads, sidewalks, parking lots
   • **Pros:** easily accessible, very flat
   • **Cons:** most shock of any surface to a runner’s legs, up to 10 times as hard as asphalt, trip hazards, conflicts with other sidewalk users

10. Snow northern, alpine conditions
    • **Pros:** forces slow pace beneficial for muscles recovering from injury, opportunity to be outside and moving
    • **Cons:** slippery, with slush, ice and frozen footprints creating unpredictability due to hidden objects, unstable surface and lack of visibility
Designing movement
Standards for Running… Engaging Infrastructure

Designing movement
Standards for Running... Fostering community
Designing movement
Standards for Running... Fostering community

Flying Bike Co-op Brewery RUN CLUB!

Seattle, WA
Founded Feb 21, 2016

Flying Bike RUN  564
CLUB Runners
Group reviews  2
Upcoming Meetups  10
Past Meetups  62
Altra Torin IQ powered by iFit running shoe with embedded sensors to measure distance, pace, etc. **SOURCE:** Shape http://www.shape.com/topics/technology

**SOURCE:** https://www.strava.com/
Designing a runner friendly city
Case Study

Running Amsterdam
Designing a runner friendly city

Mart Reiling & Thijs Dolders
MSc thesis Landscape Architecture
Wageningen University
2015
Designing a runner friendly city

Case Study

Design Goals

• Create healthier cities

• Provide convincing slow traffic networks that are:
  o Recognizable
  o Uninterrupted
  o Fine-grained
  o Clear start/stop locations
  o Specific or measurable distances
  o Tranquility
  o Vibrancy
  o Safety
  o Limited nuisance
Designing a runner friendly city

Case Study

Designing a runner friendly city

Case Study

From Mart Reiling and Thijs Dolders, Running Amsterdam: Designing a Runner Friendly City, MsC Thesis, Wageningen University and Research Centre, 2016
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From Mart Reiling and Thijs Dolders, Running Amsterdam: Designing a Runner Friendly City, MsC Thesis, Wageningen University and Research Centre, 2016
Thank you!