

# Designing an Appalachian forest path through walking

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## Abstract

*Contemporary walking paths are often composed of static surfaces, limiting pedestrians to prescribed routes. Piazzas and streets allow for wandering, but are likewise inert; one's passage leaves no trace. A forest path, branching from a well-used hiking trail in the Appalachian Mountains records the passage of time through the pressure of the walker's feet on leaves and soil. Negotiating topography and vegetation, fallen trees become thresholds and standing trees mark portals as the pedestrian wanders through rooms framed by living columns. On most days, the walker retraces the path, solidifying the route, but occasionally the walk branches freely. The forest path is a co-design, evolving by the action of walking and myriad life processes in the woods. Drawn on the earth by walking, a literal route has become the author's figurative path, stimulating an imaginative drawing practice.*

## Keywords

*Walking, forest architecture, co-design, imaginative drawing, Appalachian Mountains.*

## Introduction

Walking routes are typically fixed paths with defined centerlines and edges. Even where paths are more loosely constructed, such as hiking trails, walking directions are set and singular routes encouraged, if not required. On the other hand, fields, lawns, piazzas, and patios offer spaces where one can wander, but their surfaces are often prepared so that footsteps leave no mark. There are exceptions, of course, such as sandy beaches. Beaches register every step taken, but the depressions are ephemeral, quickly erased by wind, rain, and tides. There are few opportunities for modern walkers to create a path through walking, in which their feet shape the route over time. It would be wonderful if contemporary landscapes invited more chances for exploratory and repetitive passages, in the way artist Richard Long walked (Long, 2002).

This paper presents a case of walking off the beaten path in the Appalachian Mountains. The author's feet have marked a path through the forest by hundreds of successive passages. Through walking alone, the author has designed a new route, one that is responsive to the terrain; it follows existing animal traces and results from the whims of the walker. The paper focuses on three aspects of the path: its architecture, how it results from co-design, and links between walking, drawing, and imagination.

The path navigates the continuum between architecture and bushwhacking, uncovering lost passages, revealing new ways. It shows how in the forest the walker designs with the ecosystem. While one may walk alone, a forest path is always a co-creation; the walker is one agent among many. Each time one travels the same path it is a fresh encounter and new intersections appear, deepening one's sense of belonging and encouraging imaginative journeys. The paper shows how walking can be a significant act of design, an act which typically doesn't register in the built environment, but is clearly visible through this forest path.

## Background

Walking is a creative act. In *Wanderlust, A History of Walking*, Rebecca Solnit (2000) explores links between walking and literature over the past two millennia. Walking, thinking, and writing work in unison, whether one looks to the Sophists of ancient Greece, Jean-Jacques Rousseau's famous words on walking, Henry David Thoreau's essay *Walking* or Solnit's own rhythmic prose. In architectural literature, Ben Jacks (2004, 2007) discusses various walking practices and connections between walking and reading or interpreting landscapes. In particular, Jacks (2007, p. 271) argues that when walking one may achieve "flow" through

gh the process of “merging”, a state of heightened awareness. In such a state of being, walking helps people find meaning in life. Given that walking is a key ingredient to finding one’s way in life both physically and metaphorically, it is perhaps important for landscape designers to create opportunities for people to get off prescribed paths and find their own walking rhythms. Moreover, Jacks (2004, p. 5) argues that walking is a “rebellious and subversive act”. Perhaps it is a natural right to walk where and when one wishes. Paths are examples of do-it-yourself (DIY) design, a method of design which has gained increased attention and traction in the past decade (Finn, 2014), but has deep roots.

### Methods

The method for this paper is description. The descriptions consist of journal entries in the first-person, third-person characterizations of the path and the terrain, and drawings made in situ, showing the qualities of the forest and the forest path. The design described is made through the process of walking. It is a path made by two feet, covering the same ground repeatedly, until the way has become clearer. The path reveals itself slowly, emerging over two and a half years, dashed lines overlapping so many times that they become solid. The more one walks the more evident the path becomes, but of course the forest has ways of erasing and concealing one’s work. The path is a dialogue between the topography, soil, water, forest life, and one’s imagination.

### The terrain

The making of the forest path began in August 2019. It is in the Jefferson National Forest in Southwest Virginia, USA. The National Forest is one part of the sweeping landscape of the Appalachian Mountains. This particular part of the forest was purchased by the United States government in the 1930s and designated a national forest (Forest Service, 1981).

Earlier acquisitions of the Jefferson National Forest bore the name Unaka National Forest. Unaka comes from the Cherokee word for white (Mooney, 1972, p. 542), which was the color of the mountain slopes in spring when the chestnuts bloomed prior to their loss by the chestnut blight 100 years ago. Native Americans and the chestnut trees were long vital presences in the mountains. Their tracks are still evident. This new path now mingles with theirs.

The reason for creating a path was to get to and from a forest dwelling. Since 2019, the author has spent 300 nights in the national forest in a tent on the southeastern slope of Brush Mountain (Fig. 1). Brush Mountain is one of the many parallel ridges that make up the Appalachian Mountains. The Appalachian Trail, the famous walking path of these mountains, traverses a ridge 30 km to the northwest. The slopes of Brush Mountain are composed of a series of small spur ridges and hollows. Each hollow has a stream. The Gateway Trail begins along a stream and then wraps its way up and around the nose of a ridge. About 15 minutes walking up the Gateway Trail there is a big pine with exposed roots sprawling across the path. It was from this point of beginning that this exploration in path-making began on a hot and humid August night.

The following passage from the author’s journal describes the first iteration in the design of the path.

I struck out from the pine straight up the ridgeline. The land fell away on both sides. Pushing my way through a thicket of young pines, evidently the offspring of the mother tree, I entered a grove of oaks, with an understory of sour gum. The silhouette of a massive chestnut stump rose above me on the ridge. I had reached the end of my first line (Fig. 2). I pitched my tent in the lee of the stump, a bastion that has endured a century on the ridge, cut soon after the chestnut blight swept the Appalachians and just before the forests turned over to the federal government. Between the great pine and the chestnut stump, I had a baseline.



Fig.1 - Plan of tent site and path made by walking (drawing: Nathan Heavers, 2020)



**Fig.2** - Second point of baseline, a 100-yr. old chestnut stump (drawing: Nathan Heavers, 2020)

### Path and forest architecture

Two and a half years later, the baseline is not significant to the path. Eager to find a site, it is not unusual for one to charge up a steep slope, which is too challenging for daily use. The emergent path descends through the oak grove to where it intersects an old road from the ridge into the valley (Fig 3). For weeks, the easiest descent was down the old road. But on the ascent, the gentlest slope possible was most desirable. Footsteps traced a soft cradle scalloped out of the side of the ridge, moving in a wide arc through the oaks to reach the commanding chestnut remnant. This was the first tenting site, near the big stump for a week, before shifting to a second site just over the crest, and finally settling at the same elevation, but deeper into the hollow. The final site perched on the slope where walking transitions from comfortable to clinging to the trees for support.

Deep into the valley, away from the Gateway Trail, the more particular and efficient the charted route had to be. It needed to be convenient and easily navigable. The final design follows the gentle arc of the cradle to the big stump and then follows a contour below the crest of the ridgeline, in all about 300 m. This the second leg is a route traveled also by deer.

The bulk of the trips to and from the tent(home) are now along this two-part path, whether ascending or descending. On occasion, such as after a fresh snow, one might break with routine and plunge down the steepest slopes into the hollow, or on a slow morning, walk down the crest of the ridge, pausing by the lichen covered sandstone ledges to chew on winterberries. In these moments, one recalls the first naïve steps in the place. But most evenings and mornings, the author crosses



**Fig.3** - Old road leading into valley, path in the making along ridge (drawing: Nathan Heavers, 2020)

the same threshold from the Gateway Trail to the path and back again. After reading Amos Clifford's (2021) guide to forest bathing, the author noticed that a log lies along the trail where it branches off. Stepping over the log, one enters the space of the forest path. This end of the path is unbraided, rough and frazzled so as to obscure the track, following the rule of the national forest: leave no trace. Putting one's foot somewhere along the length of the log, one launches himself upslope and into the leaves, dispersing the footfalls. Conversely, on the way down, it is important to fan out one's steps on the approach to the Gateway Trail, so that no singular track emerges.

This passage from the author's journal describes the experience of the final iteration of the path, as it has become clear.

Heading uphill again, from the threshold, I aim for a sturdy oak. Some days I pass on the right, others on the left, dividing the impact of my feet around this marker. At the base of the next oak is an exposed stone. The soil is thin, the slope steep. I always walk to the low side of the tree turning with the slope and skirting into an area with a thick shrub layer. The path becomes visible. The track runs through knee-high huckleberry bushes now, my feet do the pruning and tamping, but when arm size branches fall, I let them be. They make more thresholds to cross (Fig. 4), room by room, deep into the space of the forest, like the unfolding spaces of the Forbidden City. Standing trees also form portals. There is one spot where my shoulders pass narrowly between two oaks. In other places the path glances by trees and I am compelled to greet them with my hands on their bark. In these woods there are no straight lines, no allées, but looking through the trees into deep space, the forest frames itself.

The forest is a regenerative architecture, columns holding a living canopy aloft (Fig 5). When one tree comes down, others rise to take its place. However, the forest path-maker is preoccupied by winding through the shrub layer, finding marker trees along the way, passing over fallen trees and between columnar trunks as thresholds, and watching the ground as one walks, always watching the ground. The ground or the forest floor is a dynamic surface, the path-maker's medium.

### Co-designing the path

Working in the landscape medium, the designer negotiates with a variety of given conditions, and is wise to embrace the effects of time. This is especially true of the living layers of a landscape, in this case a forest. What drives the creation of the forest path? The thresholds and portals between spaces, meandering lines between masses of shrubs, guidepost trees, all are drivers. The forest path is co-created. On the Gateway Trail, when a tree falls, it is cleared within 24 hours. But in the forest, the walker must adapt to the new conditions. Ducking under, stepping over, or going around, the path changes with the changed circumstances (Fig. 6).

Sections of the path have been long trod upon by deer. They are among the most frequent large mammals observed, but the forest is home to a wide variety of walkers, climbers, fliers, and burrowers, each making signature contributions to the network of paths that is the forest. Months into the first season in the forest, when the valley became cold at night, the deer moved into the warmth of the woods. They often settle down for the night in a young pine thicket back of the large chestnut stump. The author would sometimes startle them, coming home late at night, picking a way through the underbrush. This part of the path winds excessively through the mountain laurel and huckleberry bushes. The rule though is not to break branches in the making of the path.



Fig.4 – Forest path architecture, fallen tree thresholds  
(drawing: Nathan Heavers, 2020)

So, one is forever walking around. Depending on the sweep of a particular branch, in one direction one might pass through it, while in the opposite bearing, it is given a wide berth. The path has been formed by such micro-negotiations and decision making. In close encounters with trees and stones, the sequence of steps taken, which was at first an innate move, is now a known rhythm. The living things of the forest guide every step.

On 13 November 2019, the author experienced the walk in this way:

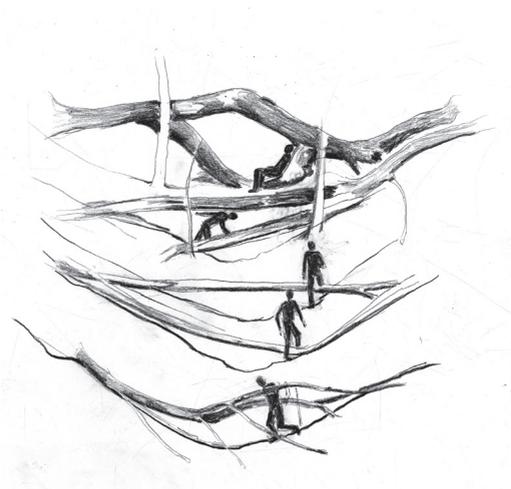
The freshly fallen leaves in moonlight show the topography of the mountain. The forest floor rises above me, drops beside me, surrounds me as I climb a valley, dips as I cross to another ridge. I step over the log, leaving the Gateway Trail, through small pines, scratching at me with dead lower branches, to the multi-stemmed oak with a stone at its base. I turn right, skirting the low side of a huckleberry patch, along a trail of sorts to a human height stu-



**Fig.5** – Regenerative space in the forest  
(drawing: Nathan Heavers, 2021)

**down**

**Fig.6** – Moving through the forest  
(drawing: Nathan Heavers, 2020)



mp, passing on right, staying left, the great chestnut stump on the left, more pine branches intervene, my first tent site in a dip, an old pit and mound, rocks and decayed stumps sticking from the ground, my head rest. Through a true huckleberry patch, a double path, I get to choose. Halt, turn left toward two small oaks to get around a three-pronged fallen oak, a forest trident, just below my second site. Pressing on, passing a pair of medium sized oaks, a small log to follow on the ground, another to step over, bear uphill a bit, over an old mound, now covered in leaves, once bare soil and stone, going toward a multi-stemmed oak, the pitch increases, passing small trees; duck under a mountain laurel, placing one foot off the deer trail to keep balanced, past a 100-year old chestnut stump, moving through the underbrush in the oak grove, past a dead trunk in the trail, a terrace above my sleeping quarters. I hop down a two-meter slope to a bit of level land: home. All this by the light of the moon. I know this territory better than the lines of my hands. Trees, upright, fallen, shattered, propped up, mark the way (Fig 7).



Fig.7 - Forest territory by moonlight (drawing: Nathan Heavers, 2021)

The design of this path is a reaction to the changing forest terrain, braiding its way through the brush. Though a somewhat extreme example of letting nature do the work, it is presumptuous in any case to think of the designer as a sole author. The other forest inhabitants have a greater share in the creation of this path than the author, who thanks his feet for choosing the route. The most singular impression a walker leaves in the forest is a steady pressure and crushing, like mortar and pestle in use (Fig. 8). One's feet gradually grind leaves and sticks to a fine pulp along the way. Where there is a side slope a micro-terrace appears. One's soles dig into the cut slope and press soil downhill. Rain acts on any exposed earth until the seasons change and a fresh blanket of leaves descends, concealing the footwork. The forest inhabitant lets go of any pretense that he walks and designs alone.

The design of a forest path is a reciprocal process and it is less about human creation than the work of the more-than-human world. The greatest value in such path-making may not be the route itself, but the thinking it inspires.

### Walks imagined

Many have claimed that walking stimulates thinking and that the cadence of poetry is akin to the rhythms of walking. Some Romantic poets, such as Wordsworth (1850), composed on foot. The drawings of landscape architects are also often about journeys taken, recording movement through time and space, places traversed, transects measured, as in the work of Anu Mathur and Dilip da Cunha (2006). Such drawings require walking and staying, following phenomena and lingering with processes. Catherine Dee (2004, p.58) refers to the later as dwell-



**Fig.8** – Leaves tamped by feet form a path (photo: Nathan Heavers, 2021)

ling drawings, which record landscapes seen as well as felt and experienced. Just as the feet lead the walker (body ahead of mind), so too is the hand at the mercy of the limbic system and how one feels. Tacit knowledge of drawing and unconscious thought guide the designer as much as any desire to interpret the world empirically. They take one's hand on a walk across the page, exercising and drawing on the imagination.

In making the forest path, the author has drawn with his feet, but he has also recorded the experience through dwelling drawings. The drawings explore the physical qualities on the forest path as revealed by walking and staying. They cover actual and imaginary terrain stimulated by walking. Some drawings rely on topographic memory, memory of the folds of the earth accumulated over dozens of walks (Fig 9). Others create new terrains and spaces, extending

actual forest walks into imagined territories (Fig. 10). Yet others draw out specific experiences traversing the forest (Fig. 11). This type of representation records fleeting encounters in which multiple senses were engaged, encounters such as climatic events, wildlife sightings, and unexpected thoughts triggered by walking.

The path provides creative stimulation, which is to say that it is more than a means of getting from one place to another. It has utility and it is an aesthetic experience. It happens that walking a path of one's choosing unconsciously motivates the author's hands as well as his feet. The path is an outward expression of the choice to inhabit the national forest and drawing is a side effect of going down this path. It allows one to cross a threshold and enter a space of making, a liminal space between what seems to exist out there in the world and imagined places (Fig. 12).





Fig.10 - Imaginary forest (drawing: Nathan Heavers, 2021)

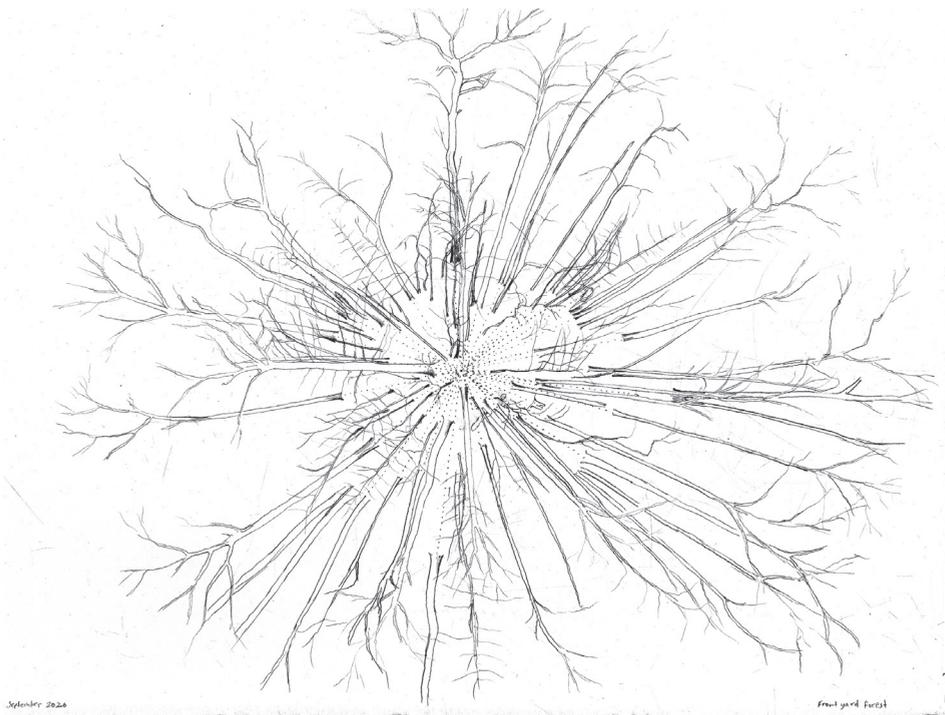


Fig.11 - Forest experienced staying at a point in space (drawing: Nathan Heavers, 2021)

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Fig.12 – Imaginary forest walks  
(drawing: Nathan Heavers, 2021)

Having crossed this threshold, landscape drawing is no longer a practice about representing what is or could be, but rather it is like a walker's high, a feeling of oneness with the world and truth in being. The path takes the designer to other worlds.

### The "right" to walk

National forest land is held in the public trust, accessible to all for a wide range of uses. It is land to be treasured, not individually owned. This is ironic given that it was forcibly taken from Native Americans, whose concept of land was as a gift to be shared and honored with the utmost respect, like how one ought to view the national forest. This experiment in making a forest path and living in the national forest is only possible because of the collective ownership of United States citizens of the woods. In the forest it is possible to exercise "roaming rights" and to go "off trail", but there is also something wonderful about shared paths, like the Appalachian Trail, where hikers follow in the footsteps of others before them. On the Gateway Trail, the passing of many feet excavates the ground like an archeological dig. In the places of greatest disturbance, Native American arrow points wash out of the earth connecting contemporary walks with the deep human history of the landscape.

However strong or faint one's tracks, walking marks a terrain.

The walker claims space by either following or subverting the "garden rules". Walking and drawing in the Appalachian Mountains, the author has claimed a territory through subtle lines and reformations of the land in leaves, soil, graphite, ink, and watercolor wanderings. The experience suggests that it is critical for landscape designers to set up conditions for people to follow their own paths, to create fields for wandering and forests for bathing. This is not so much because it is important to leave an impression on the ground, but rather because such landscapes shape the walker and walking shapes the landscape. Walking off the beaten path is an important means of self-expression for some. It is a natural right. How might landscapes allow more for walking as an act of design?

### Conclusion

Artists, such as Richard Long, have demonstrated that walking is a creative act, and writers over the past several centuries have shown that walking can be significant to the creative process. Less explored is walking as an act of design. "Desire lines" or shortcut paths crisscrossing landscapes are a similar to the path described in the paper. They are efficient routes made by many feet.



In urban situations, such beaten paths are often viewed negatively or as a failure of design. Jacky Bowring (2020) analyzes such paths not as failures, but as critiques of sites by the public, as statements showing what the landscapes could be. In this way the public have an important role in design. An example of this sort of contribution is the Drillfield of Virginia Polytechnic Institute and State University. Co-incidentally, the Drillfield is very close to the Appalachian path described in this paper. The Drillfield is a very expansive 9-hectare lawn at the heart of the campus, which students must cross multiple times daily to get their classes. For years it was a grass field lined with dirt paths pounded out by thousands of feet. The students' feet designed the paths, which have since been paved, calcifying the spontaneous work of the student body. In this situation, walking was a creative act, at least for a time, until the routes became clear.

While "desire lines" are similar to the forest path described here, they differ in a couple of ways. First, this forest path is more subversive. It is in line with do-it-yourself (DIY) urbanism as discussed by Donovan Finn (2014). Finn makes the argument that DIY design in urban areas, at least, is "unorthodox" and defies rational explanations. There is an aspect of this forest path that deliberately goes against the grain of established routes as an as-

sertion of individual rights to occupy and change the forest. Second, making a path can be an act of self-discovery, so while it is interesting how desire lines might become more formal routes over time and eventually transform into the great avenues of cities, the point of this forest path is the experience of its making, more than the end product. The forest will subsume the path over time, and that is just as well. Furthermore, walking in the context of the Jefferson National Forest gave the author much freedom to chart a path away from rules and outside eyes. The context made the project possible. In urban areas, it is difficult to claim and alter space in a similar way, although skateboarders, parkour traceurs, and homeless people, for example, do occupy territories through movement and staying, thereby altering the terrain of the city.

This forest path demonstrates that a significant and unique design negotiation can occur between an individual and the forest through walking. The architecture of the forest and the process of walking inform each other and the result is a co-design. Similar to the way the walking seems to trigger the writer's imagination, forest walking engages design-thinking and can itself be an act of design.

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