

**Excavating Cobblestones:
Obsolescence and the Reinterpretation of Stones**



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Objects, Consumption, Desire

Spring 2006

Introduction

The roads of a country are accurate and certain tests of the degree of its civilization. Their construction is one of the first indications of the emergence of a people from the savage state; and their improvement keeps pace with the advances of the nation in numbers, wealth, industry, and science – all of which it is at once an element and an evidence. (W. M. Gillespie, 1848, p. 15)

While we interact with roads every day, that interaction generally takes place on a subliminal level. While we are conscious of traffic on the street, or maybe its dimensions, or how it winds through a city, very rarely does the street command our attention as an actual ‘object.’ And even then, this usually occurs only when there is something amiss or unusual. A sinkhole or construction work (as in the photo¹ on the frontispiece) may attract our momentary interest, but it is quickly forgotten.

This paper takes and analyzes a certain type of road – the cobblestone, or stone block road. More specifically, it analyzes the cobblestone itself: its genesis, development, obsolescence, and occasional reuse. As the quote above indicates, the development of a specific form of road stone could (and would) be cited as an exemplar of rational Positivistic progress: by 1900, a very specific shape and type of cobblestone had emerged as best suited to urban traffic throughout North America and Europe. However, these roads lost their primacy in the urban environment at about the same time the automobile overtook the horse as the primary means of conveying people and goods.

What this paper argues is that the rise of the automobile does not completely account for the replacement of cobblestone roads with asphalt – the process was well underway by the middle of the 19th Century. Sanitary, health, aesthetic, and even civil control reasons were also at play. Furthermore, the very obsolescence of cobblestones and cobblestone streets eventually led to a partial reevaluation of their merits. This reevaluation took place for a different set of reasons: while the earlier period of creation justified them as the best, most rational and Modern choice, the current period values them *for* their obsolescence: their linkage with an historic landscape.

¹ Unless otherwise stated, photos are my own.

This reinterpretation is partial, however: context is everything, and the concept of just what an ‘historic’ landscape consists of is central.

Definitional Notes: Cobblestones

“Cobblestone” itself is a messy term. Strictly defined, it refers to a rounded water-worn stone used for paving streets. However the term often refers to any number of stone paving types. While the concept of a ‘cobblestone’ is central to this paper, the wider definition of paving stones is used and analyzed here. This paper attempts to refer to ‘cobblestones’ when referencing the larger family of paving stones or the mental construct of what they mean; the terms ‘stone blocks’ or ‘paving stones’ are used when discussing the actual stone type in question. This looseness in terminology is itself discussed later in the paper.

It should also be noted that this paper limits itself to actual paving stones and not aggregates. This means other paving bricks and concrete blocks have not been analyzed, even though the historic elements of brick and the aesthetic elements of concrete blocks could be closely related to the narrative.

Another central feature to how the cobblestone is conceived of is that their use is defined in multiples. It takes many cobblestones to make up a road, and while a single cobblestone may occasionally be found (as a doorstep? as a paperweight? for throwing at authorities?), the discussion here focuses as much on the multiple ‘cobblestones’ as the singular ‘cobblestone.’

Rationality, Progress, and Modernity

Using stones for paving streets is not a new idea. The Romans began paving the Clivus Publicus as early as 238 BC (Staccio 17), generally settling on a type of street with large and irregular but interconnected and smoothed stones (106). As the saying goes, “All roads led to Rome,” and the concept of the road was central to Roman culture. The continuing existence of many Roman roads points to the care taken in constructing them. These roads were made up of multiple layers: stone chips at the bottom, topped by smaller rocks set with lime or lava dust, topped with sand or crushed stone, and finally topped with stone slabs placed in a bed of sand (ibid.). Roads were created throughout the Empire, and often serve as reminders to the engineering feats of

Rome (Figure 1). The complicated and many-stepped process, involving everything from quarrying and shaping stones to placing them, was a lash-up (Molotch 1) even celebrated in poetry (the poet Statius):

How many teams working at once!
Come cut down trees and excavate
stones from the hills; others smooth the
blocks and plane the wood beams with
irons. Some lay the stones side by side
and complete the fabric with lime and
pozzolana; others with great effort
drain marshes and divert the courses of
small streams. (Stacciolo 106)



Figure 1: Street in Pompeii

Even in the Middle Ages, the importance of paving streets was important enough that in the 1350s, King Edward ordered and levied tolls for the paving of the high road from Temple Bar to Westminster (Rose 25).

By the time of the Industrial Revolution, the improvement of roads was linked closely with progress. An 1848 tract on road construction argues that the conditions of roads are signs of civilization: “The roads of a country are accurate and certain tests of the degree of its civilization. Their construction is one of the first indications of the emergence of a people from the savage state (Gillespie 15).” The author of this tract even provided a ranking of road surfaces according to their perfection (189):

1. Earth
2. Gravel
3. Broken Stone or Macadam Roads/Telford Roads
4. Paved Roads
5. Roads of Wood
6. Roads of Other Materials
7. Roads with Trackways (railroads)

This reflects a basic positivism and sense of natural scientific and technical progress, ending naturally with the most advanced means of transportation known to Man: the railroad.

As of 1848, traditional cobble-stone streets were still quite prevalent in the United States, although apparently ranking quite low on the scale of progress: “A common but very inferior pavement, which disgraces the streets of nearly all our cities, is constructed of rounded water-worn pebbles, or ‘cobble-stones’ (216-217).” Regularly-cut stone blocks were considerably more useful, especially those that were sized according to the needs of horses.

The horse played an integral role on how stone blocks evolved throughout the 19th century, and on how they converged to have a specific width by 1900 (Durham 193-194). The 4 inch width that developed was sized to enable a horse to get a toe-hold on the spaces between the stones (Gillmore 153). This was especially important in warehouse and industrial districts where horses, weighed down with heavy loads, needed especially dependable traction. (Durham 20). A larger stone surface, while it would have been better for humans, would have been too wide for horses. This also is part of the reason while stone blocks were laid out perpendicular to the street edge – the stones had to be oriented to the direction of horse movement.

The other reason for laying these stones perpendicular to the street edge was to promote drainage. The ruts in between the stones were oriented in such a way that water and sewage would be more likely to make it to the gutters, even though this was an imperfect solution. Liquids regularly pooled in the spaces between the stones and even seeped into the joints (Gillmore 137).

The material of stones was also not arbitrarily chosen. Granite (and to a lesser extent sandstone) blocks were used because their natural cleavage points meant that they could be broken into blocks relatively easily (Bateman 3) and also would not wear completely smooth over time with use (Gregory 138).

The Patented Stone

Even though the development of the stone block was a gradual, generally anonymous process, occasionally an individual could be linked to some allied improvement. An 1876 treatise noted that a specific pavement type was especially well adapted to heavy street traffic in New York,

and had been placed on Broadway south of 14th Street (Gillmore 156). This stone type was referred to as the 'Guidet Pavement' after Charles Guidet, its inventor and patent-holder. According to the patent documents (original patent in 1869; re-patent in 1870), Guidet's pavement was a large improvement on the existing Russ or Belgian pavements in use at the time. The close jointing of those pavements meant that they gave no footholds for draft animals. Guidet claimed that his pavement offered a firm foothold for animals, provided a relatively smooth surface for the wheels of vehicles, and was constructed in such a manner that the blocks would remain firmly in place (Guidet 1870).

What the 1876 text did not note in its discussion of the Guidet Pavement was that Charles Guidet had a lawsuit in process against the City of Brooklyn for using his stone paving process. This case eventually made it up to the United States Supreme Court, which ruled in October 1881. Guidet alleged that the City of Brooklyn was making and using the same type of stone pavement as described in his 1870 patent (no. 4106). The City argued in its defense that this pavement had been in general use before Guidet had patented it, and that Guidet did not actually 'invent' the method in any event.

Guidet stated that he did not claim a broad patent on blocks in the form of parallelepipeds, generally. So what exactly did his patent consist of? The 1870 patent re-issue states:

A pavement composed of stone blocks made in the form of parallelepipeds, having their narrow edges or ends cut smooth, and their broad sides purposely cut rugged or uneven, when the blocks are arranged with their rugged surfaces transversely to the street, substantially as described. (Guidet 1870)

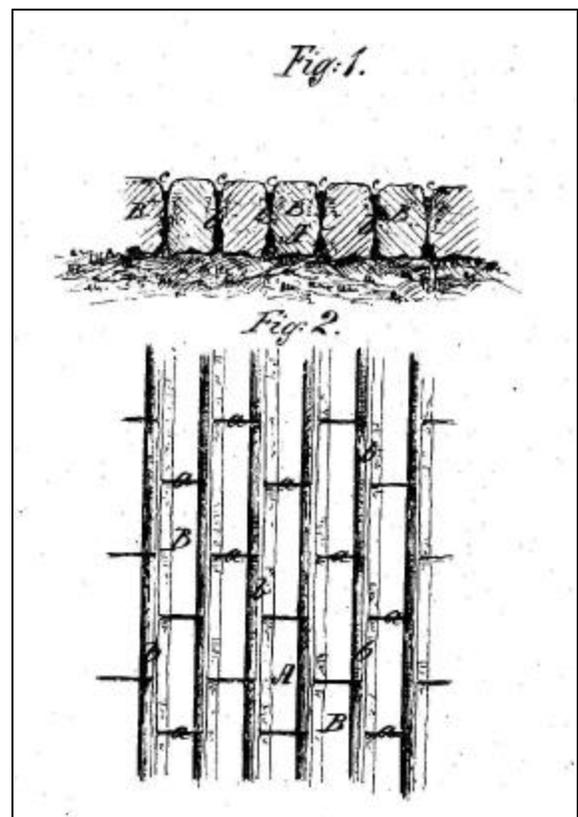


Figure 2: Diagram of Guidet Pavement (Guidet 1870)

As the Supreme Court ruling makes clear: “How large the blocks should be, how smooth the ends, or how rough the sides, is nowhere stated. All that is left to the judgment and skill of him who does the work (United States Supreme Court 1).”

Guidet’s patent consisted of how he produced the spaces *between* the blocks. His interest in doing this was to create an easy and foolproof way to maintain regular spacing for draft animals. The original 1869 patent called for the blocks to be ‘chamfered’ at the top in order to create a small and dependable surface space for horse toe-holds while keeping the stones close together (visible as *c* in Figure 1, Fig. 1). However, by the time of the 1870 patent reissue, Guidet had discovered that rough stone sides were enough to retain this spacing, and chamfering off was optional.

While the Supreme Court allowed that Guidet’s original patent for chamfering stone blocks was potentially patentable, they argued that Guidet’s re-patent had taken him out of the field of invention and into the (unpatentable) field of mechanical skill (*ibid.*). The Supreme Court ruling against Guidet stated that his revised patent “was simply carrying forward the old idea, and doing what had been done before in substantially the same way, but with better results. The change was only in degree, and consequently not patentable. Clearly the reissued patent cannot be sustained (*ibid.*)”

This case shows that while rational progress was central to how paving blocks developed, it was seen and described as a gradual and anonymous one. Guidet’s attempt to individualize and claim control over that process was unsuccessful. Especially notable is the Supreme Court’s distinction between invention and mechanical skill. Although there was a clear process of refinement of and improvement in stone paving blocks throughout the 19th century, this process was deemed to be outside the realm of any one individual. Refinements took place in multiple locations and were built upon elsewhere – as the Supreme Court ruling noted, pavements similar to Guidet were already in place in Buffalo and Rochester (*ibid.*)

What's in a Name?

As briefly discussed in the introduction to this paper, the meaning of the term 'cobblestone' is a fuzzy one. The strictest definition (of rounded water-worn stones) leaves out nearly all of the extant stone-paved streets in the United States. The removal of actual cobblestone roads from the built environment was nearly complete by the end of the 19th century, so the term itself became gradually disconnected from any actual object of reference. This in turn allowed the general meaning of the term 'cobblestone' to be broadened to include a wider range of stone blocks.

While this gives the term 'cobblestone' greater usefulness, it also collapses the differences between these stones, lumping a wide range of sizes and shapes together. As noted above, the size of these stones had generally converged in important aspects by the beginning of the 20th century, but calling all paving stones 'cobblestones' hides differences that *did* exist.

Some of this definitional looseness is likely attributable to the wide variety of names over time for these stones, resulting in an inability of any one name to stick. The various names given to these stones did reflect real distinctions, but the slow evolution of size also precluded any one name from taking hold over time. As the two tables below show (Table One from Gillmore's 1876 text, and Table Two from Bateman's 1939 text), both sizing and naming for paving stones changed significantly over time.

Table One: Dimensions and Names of Stone Blocks, 1876

| | Length (in) | Width (in) | Depth (in) |
|---------|-------------|------------|------------|
| Guidet | 10-15 | 3.5-4.5 | 8-9 |
| Russ | 10-18 | 5-12 | 10 |
| Belgian | 5-7 | 5-6 | 5-7 |

Source: Adapted from Gillmore 156, 158, 160

Gillmore notes that the Guidet stone was the best at fulfilling its stated goals – the Russ stone,² at 5-12 inches wide, was too wide for effective spacing for draught animals, as was, to a lesser extent, the Belgian block.

Table Two : Dimensions and Names of Stone Blocks, 1939

| | Length (in) | Width (in) | Depth (in) |
|----------|-------------|------------|------------|
| Durax | 3-4 | 3-4 | 3-4 |
| Standard | 8-12 | 3.5-4.5 | 3.75-5.25 |
| 4 inch | 7-11 | 4-4.5 | 4-4.5 |
| Hassam | 6-12 | 3.5-4.5 | 4-4.5 |

Source: Bateman 303

There are two especially notable differences in the second table. The first is the decreased depth of the stones. The second is that variation in width has almost disappeared – a process that had already been in place across the United States and Europe by the turn of the century, as the dimensions of these stones came to be standardized to fit horses (Durham 193-194; Miller 44).

In both tables, the cubical stones (earlier the Belgian, later the Durax) are noticeably different. In North America, at least, neither form are particularly prevalent. This makes the current use of the term ‘Belgian Block’ as a general descriptive term for stone blocks (Miller 44) a somewhat curious choice given its relative minor status in the United States (although there may be another reason why this moniker has taken hold, which will be discussed below).

A later stone type, the Durax Block, apparently first used in the Brooklyn Navy Yard in 1913 (Bateman 303), was a four-inch cube. This meant any side could serve as the surface, and the importance of perpendicular layout was irrelevant given its square-ness (Bateman 303). The relative lateness in its development is presumably because the added technical skill needed to properly quarry and create these stones.

² Although, in *The Innocents Abroad*, Mark Twain was quite taken with the pavement he found in the Azores: “They talk much of the Russ pavement in New York, and call it a new invention--yet here they have been using it in this remote little isle of the sea for two hundred years! Every street in Horta is handsomely paved with the heavy Russ blocks, and the surface is neat and true as a floor--not marred by holes like Broadway.” (Twain chapter 6)

The other named pavement, the Hassam Block, was named after the Hassam Paving Company, of Worcester, Massachusetts. While the Hassam Company did have a patent (dated August 6, 1918; Number: 1,275,165), it did not concern the stone block itself, but rather what lied underneath. Specifically, the patent called for a process in which wood (placed vertically, so the strength of the wood grain was fully utilized) was used in place of finely broken stone as filling for both strength and cost-effectiveness, given that wood was cheaper than stone (Hassam 1). Although Table Two shows the Hassam Block as consisting of a certain size of stone, the importance of the stone itself was not what was important to the company.

The Decline of the Stone and the Rise of Asphalt

Cobblestones played a central role in the urban environment at the turn of the 20th century. The size, layout, and even spacing between these stones all had developed so as to increase their general utility. And where were they most useful? Warehouse districts, docks, railroad terminals, and wherever there was heavy horse-drawn traffic. It was an extremely effective lash-up between materials, design, and transportation; this would fall apart with the development of the automobile (Bateman 4). However, the loss of utility is not the only explanatory factor here: even before the ascendance of the automobile, cobblestone streets were already being paved over by asphalt and other similar pavements throughout cities.

Q. A. Gillmore, a Lieutenant Colonel in the Army Corps of Engineers, writing a treatise on paving and roads in 1876, extolled a number of the virtues of asphalt paving: there was no mud or dust such as associated with dirt roads, it was comparatively noiseless (stone was notoriously loud), ‘noxious liquids’ were discharged into gutters for drainage and did not seep into the joints (as happened with stone blocks), it kept noxious vapors from the sewers underground, and by reducing the force of traction also reduced wear-and-tear. While not being as good as stone for animals gaining footholds, asphalt did not become slippery with wear, either (Gillmore 192-193).

The concern of noxious liquids from below was not a new one: in the late 1500s, King Philip the Second of Spain had some streets paved to “avoid the stench when the mud in the street opposite his palace was stirred up by the wheels of passing carts (Gregory 152-153).” While cobbles and

other paving stones were better than dirt, the broken nature of their paving meant they were considerably less efficient than asphalt in moving sewage into gutters, or in keeping existing sewage below street-level.

There were other, non-technical reasons for asphalt as well. Gillmore cites the example of the city of Paris, which justified repaving roads with asphalt on four grounds:

1. The want of connection and homogeneity in the elements of which the stone paving is composed,
2. The incessant noise produced by them,
3. The imperfect surface drainage which they secure by reason of which the foul waters are not carried off but filter into the joints,
4. The ease with which they can be displaced, and used for the construction of barricades, breastworks and rifle pits in time of civil war. (Gillmore 172)

Grounds 2 and 3 relate to the basic civil-engineering technocratic concerns, and were two weaknesses that even a highly-evolved form of cobblestone could not overcome. However, rules 1 and 4 are different: 1 is an aesthetic argument, and 4 is a civil-control one. Gillmore's book was written in 1876, only a few years after the events of the Paris Commune.

The use of cobblestones (as well as any other items available) in the streets of Paris during the Commune has been well documented (Figure 3). One of the most notable aspects of these barricades was their makeshift construction. An observer described one such barricade as “a rather meager fortification: a wall of cobblestones between 4 1/2 and 5 feet high and 3 to 4 1/2 feet thick. It is sometimes faced or crenellated with cobbles (Edwards 162).”



Figure 3: Barricade in Paris (1870?) Source: Northwestern University: Siege and Commune Collection

There were two reasons for this, however. The more obvious reason was that the goal was to create as many fortifications as possible within the shortest amount of time. Quality was less important than quantity:

It is therefore not necessary for these barricades to be perfectly constructed; they can very well be made of overturned carriages, doors torn off their hinges, furniture thrown out of windows, cobblestones where these are available, beams, barrels, etc. (Gustave-Paul Cluseret, quoted in Ross 36)

The other reason for the makeshift construction was that the barricades were *not* intended as direct protection for insurgents. They were designed to impede the circulation of the invading forces, turning them into targets that the Communards could fire upon from the surrounding buildings (Ross 37). The result is an inversion of the utility of cobblestones: laid horizontally, they enable progress; stacked vertically, they impede it.

Although Gillmore is silent on the importance of this civil-control reason's relevance in the U.S. context, it is notable that one of the first asphalt pavements in the U.S. was Pennsylvania Avenue in Washington, D.C., running from the White House to the U.S. Capitol Building (Bateman 3) as early as 1870 (Miller 43).

The aesthetic argument – ostensibly the most important argument listed in the Parisian context (it was number '1' on the list) – was also central to the growing popularity of asphalt. Streets with paving stones were paved that way for utilitarian reasons in mind. Visual continuity, and to a lesser extent, noise, were not central concerns in an industrial context. However, in a residential setting, the advantages to other paving methods became more important. As an 1874 London report stated: “asphalt is the smoothest, driest, cleanest, most pleasing to the eye, and most agreeable for general purposes, but wood is the most quiet (cited in Gillmore 200).”

Given these aesthetic, noise, and sanitary issues, it is not surprising that cities were paving over streets even before the rise of automobile culture. With development and refinement of these new paving techniques, the use of stone paving blocks was an anachronism: the joints between the stones, once deemed important enough to merit a patent, simply became an annoyance.

Still, many stone streets remained: in alleys, in occasional industrial streets, or even hidden beneath layers of asphalt. Even though the stones themselves may have been obsolete surfacing, they still made good foundations. This happened to be the same fate that had befallen the original, rounded, cobblestones as more ‘perfect’ stone blocks were introduced throughout the 19th century (Gillmore 143). These stones still retained utility, only it was now a hidden one.

A Reinterpretation

Although somewhat taken out of context, given that he was discussing the rural countryside, a quote by Raymond Williams is instructive: “A working country is hardly ever a landscape. The very idea of a landscape implies separation and observation (Williams 120).” It can be as easily posited for the city as the country, and begins to explain how something like a granite paving stone can be reinterpreted. At the turn of the 20th century, cobblestone streets were most likely to be found in working industrial districts. The noise and smell were undoubtedly overpowering, and the small, repeated blocks were just another visual signifier of congestion.

As the 20th century progressed, these stone streets often lost their place in the public consciousness. While some stone streets continued to serve busy industrial districts, most were paved over, and many others were forgotten and hidden in plain sight as the previously congested working landscape was replaced with a barren idle one. Asphalt had become the standard, working environment. The aesthetic benefits of asphalt were no longer assumed:

We have not managed to do without tarmac on our road surfaces. This relatively modern invention does nothing for historic streets. It is a destroyer of spaces and surfaces and wherever possible should be removed. This is especially important where it has cheaply replaced stone pavement slabs (Design Council 32).

This tract goes on to state that original paving in historic districts should be reinstated, or at least resurfaced with local materials in order to attain “instant maturity” for the district (ibid.).

Another unintended consequence of asphalts was that it was possibly *too* effective at encouraging automobile movement and speed. The growing centrality of automobiles in city life led to a reassessment of the value of the small scale and bumpy texture of paving stones. Their

very small scale and bumpiness had advantages. Small scale creates a psychological deterrent to high speeds, and the physical bumpiness also slows down traffic. Cobblestones found new utility as traffic-calming instruments (McCluskey 245).

Additionally, as the 20th Century progressed, stone blocks became more and more associated with a past (McCluskey 245). This historical linkage, by way of Williams, plays a central role in the reinterpretation of the aesthetic value of stone pavement vis-à-vis asphalt. The aesthetic value attributed to the paving stone changed because its role had changed. In the end of the 19th century, it was one of the most prevalent forms of street paving, and especially so in urban industrial districts. Asphalt did not have these associations, but did have associations with progress and cleanliness, which reflected back upon how people perceived the pavement aesthetically. By the 1970s, these associations with paving stones had been weakened, and they could be aesthetically re-interpreted within a new cultural context. What is notable is that while the aesthetic valuation of asphalt in the 19th century was based on progress and the future, the aesthetic reevaluation of paving stones in the 20th century is based on historicity and the past.

Cobblestones Today

Cobblestones last a long time. This durability means a couple of things. One, they are difficult to get rid of. Two, they can be reused and refit a number of times and into a number of places. The drawback of this durability is their expense (McCluskey 247). Stone paving blocks had always been expensive; even when common in the 19th century, they were the highest cost surfacing material, even if their maintenance costs were lower than wood or asphalt (Gillmore 197). Today, given the widespread use of brick and other aggregates as paving stones, the market for actual granite blocks is considerably smaller. They are a niche product, and are not created new but salvaged from existing roads that are being torn up.

Because of the durability of the cobblestone, it retains a physical link with the past, even when taken out of its original context. Some companies specialize in reclaiming antique stones and re-selling them to private or public consumers looking for an “old world look”. One business, probably taking this historical linkage to its limit, claims that the granite stones salvaged from various Midwestern (the business is located in Iowa) cities “were used as ship ballast on ships

traveling from Europe over 200 years ago (Gavin Historical Bricks)!” The very anonymity and durability of the cobblestone makes this claim almost plausible. Apparently, the historicity of the cobblestone in the Midwestern city is not enough – it has to be linked back to Europe to give the stone more gravitas – and also helping to explain the continuing terminology of “Belgian” blocks.

The association with cobblestones and old Europe is very closely linked. The painter Thomas Kinkade has multiple paintings using this connection: “Cobblestone Bridge”, “Cobblestone Brooke”, “Cobblestone Christmas”, “Cobblestone Lane”, “Cobblestone Mill”, and “Cobblestone Village”. As he describes one painting on his website, “The pace of life in Cobblestone Village seems a century removed from what we typically find in our fast-paced culture. English country life is slow, rich, satisfying (Kinkade).”

This signifier of the ‘cobblestone’ even shows up in brand-new subdivisions: Cobblestone Park in South Carolina (a private, and gated ‘club’ community), the Cobblestone Subdivision in Phoenix, Cobblestone Lake in Minnesota, and Cobblestone in Utah. Figure 4 shows that these streets are not actually *paved* with cobblestones



**Figure 4: Street in Cobblestone Subdivision; Phoenix, Arizona;
Source: www.desertwide.com**

(Figure 4). The Cobblestone Lofts development in New York City is made of brick (Cityrealty Website).

The cobblestone has become a signifier of domesticity – physical stones are no longer needed.

Mixed Heritage and Shifting Meanings

Only this is known for sure: a given number of objects is shifted within a given space, at times submerged by a quantity of new objects, at times worn out and not replaced; the rule is to shuffle them each time, then try to assemble them. (Calvino 108)

Because of their durability, granite paving stones never completely disappeared from the urban landscape. Often as not, they were simply covered up by asphalt, to be used as just one more foundational layer for the road. Stone roads often remained uncovered in industrial districts, where residents would not complain about the bumpy roads, and where asphalt pavement would get torn up by trucks too quickly to make it worth the municipality's expense and time.

As the aesthetic value of the 19th century industrial urban landscape into a potential residential landscape, cobblestones were, as it were, taken along for the ride. These stones helped define and complete the historical milieu, and their disappearance from much of the rest of the cityscape accentuated the singularity of these streets. Instead of being linked to an industrial working landscape, they were now beginning to be associated with historic landscapes. This landscape now consisted of restored buildings converted into residences and stores. Cobblestones began to be associated with this historicized milieu.



Figure 5: Street in South Street Seaport, Manhattan

This has been taken to an extreme in South Street Seaport in New York, where cobblestone streets rule, and asphalt has been banished to alleys (Figure 5), forming a sort of alternate-universe narrative. However it is also apparent that this historic district is a thing apart – the stone paving of the pedestrian mall is clearly separated from the rest of the city and its asphalt.

There also seem to be a trend of extending this aesthetic reinterpretation of cobblestones outside of historic neighborhoods. In New York, numerous sidewalk and park paving projects have used these stone blocks as landscaping features. As shown by the photo of Battery Park City (Figure 6), they are often not used as actual paths but as edging – people go on the stone surface to sit down and to stop moving, not to get somewhere else. Stone blocks have also been increasingly used to frame street



Figure 6: Stone Paving in Battery Park City, Manhattan

trees. As a tree grows, the blocks occasionally rise outside of the ground as roots push them upwards. In this way, they are healthier for growing trees than metal grates, which limit a tree's growth to the radius of the hole. The aesthetic revaluation of paving stones, even though only originally possible through a historic filter, has now proceeded far enough that these stones are used by landscapers as aesthetically valuable in their own right.

Cobblestone streets, however, still exist in places that have not been reinterpreted and gentrified. Still active industrial neighborhoods throughout the city often still have uncovered cobblestone streets. This leads to the question: is the significance of the cobblestone different in SoHo, than in, say Sunset Park? If nobody is around who appreciates its aesthetic virtues, is it still aesthetically virtuous?

Like many of the objects in the urban environment, this meaning is contingent on what people make of it and what people are making it. Lowenthal, in *The Past is a Foreign Country*, cites two different cities described in Italo Calvino's *Invisible Cities* that are relevant for this discussion: Clarice, where each successive developmental stage of the city "reshuffles the fragments of what remains from former uses, scared or profane, functional or decorative" (Lowenthal 289); and Maurilia, where the old city seems beautiful only because a new one has

superseded it (p. 406). Clarice represents the shuffled meaning of cobblestones, although their inherent mundane nature probably keeps them from reaching the heights or depths of the ‘sacred’ or ‘profane,’ their meaning – in some contexts – has shifted from functional to decorative. Over time, cobblestones have been shifted around, hidden, replaced, and unearthed, often without even needing to be physically moved.

Maurilia is an especially illuminating illustration. Calvino claims that the old and provincial Maurilia found in old post cards can only be appreciated in context of the current city; in the old Maurilia, “one saw absolutely nothing graceful and would see it even less today, if Maurilia had remained unchanged (Calvino 30).” While Calvino is describing the city as a whole, this also helps explain contextual variation in the appreciation of cobblestones. Their aesthetic value is contingent on their context. In areas where that context has remained relatively unchanged over time – the older still-industrial warehouse districts scattered around cities – they are still viewed as part of a working industrial landscape, or as decrepit no-mans-lands (Figure 7) However, in areas where the industrial built environment has changed into a residential ‘historic’ one, their context, meaning, and therefore aesthetic value, has also changed (Figure 8).



Figure 7: Street in Red Hook, Brooklyn



Figure 8: Street in South Street Seaport, Manhattan

Lowenthal’s concept of the homogenizing effect of obsolescence is also instructive in understanding the reinterpretation of cobblestones; once obsolescence has been reached, ten years might as well be ten centuries (Lowenthal 350). The general obsolescence of cobblestones

has collapsed the variation between stone paving types – the most advanced stone paving block is no less obsolete than the first rounded pebble taken from a stream. Their differences no longer really matter, and their historical development is practically irrelevant. However, this dichotomy overstates the importance of differences in the earlier period as well. As long as similar stones were placed with similar stones, to provide as smooth a road as possible, a road could be paved with multiple sizes of stones. As Figure 9 shows, the two rows of Belgian Blocks at the foreground are interspersed among a field of narrower stones.

The other central point, however, is that the value of these stones is almost completely contextual. They are a peripheral part of an historic scene – an icing under the cake, as it were. A single cobblestone taken out context loses its value and simply becomes a stone. While the lack of distinguishing marks allows one to make potentially



Figure 9: Paving types; notice the two rows of Belgian Blocks in the foreground

spurious claims as to its provenance (see Gavin Historic Bricks), this also means it cannot be actually linked to any one particular place (even though dimensions may give a hint as to age). The worn patina of a cobblestone traversed by innumerable horses does not increase its value on the open market. A stone is a stone is a stone.

The limited contextual value of cobblestones also explains why the current market is generally satisfied through salvage. The demand for these stones is generally limited to ‘historic’ projects. The sheer numbers of these blocks still being torn up from city streets and otherwise discarded means that there is no shortage in stones available to be obtained in this way (which of course also bypasses the actual quarrying and cutting processes).

Arjun Appadurai, in his introduction to *The Social Life of Things*, provides a framework for better understanding this cultural history of cobblestones as commodities. The value of

cobblestones has shifted significantly over time, and even today value is still contingent depending on context. Cobblestones were originally quarried and shaped for the specific use of city paving. Depending on the ownership of the quarry, an exchange was possible at this stage. However, once set into roads, these stones became ‘ex-commodities’ (Appadurai 16).

As this paper has demonstrated, many stones remain firmly in the ex-commodity state. However, there has been a partial and occasional metamorphosis, as businesses like Gavin Brick have salvaged unwanted stones and converted them back into commodities. This exchange is made possible and profitable (presumably) for Gavin Brick based on divergent perceptions of value of these objects (14). The municipalities getting rid of these blocks do not see them as commodities, they see them as nuisances. The market for reuse of these stones is limited enough that the potential commodity value of these items is worth less than the value of getting them off city property. The value regimes of cobblestones remain highly contingent and unstable. This is due both to the limited nature of their re-valuing as markers of historicism, and also to the large number of stones still remaining in an ex-commodity state, waiting to be reappropriated. However, their value is so contingent on place and context, that often their aesthetic reevaluation has taken place *in situ* without their ever re-entering the sphere of the commodity. They illustrate a tangential, diffuse, and unstable conceptual model, which is all the more ironic given their stasis and durability.

Bibliography

- Appadurai, Arjun, ed. 1986. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge Cambridgehire, New York: Cambridge University Press.
- Bateman, John Henry. 1939. *Introduction to Highway Engineering; A Textbook for Students of Civil Engineering*. New York: J. Wiley & Sons.
- Calvino, Italo. *Invisible Cities*. 1974. New York: Harcourt brace Jovanovich.
- CityRealty Website. Cobblestone Lofts Webpage. Accessed April 25, 2006: http://www.cityrealty.com/condos/building_iframe.php?lid=7197.
- Desertwide Website. Cobblestone Subdivision Webpage. Accessed April 25, 2006: http://www.desertwide.com/subdivisions/Phoenix_Cobblestone.shtml.
- Design Council. 1979. *Streets Ahead*. New York: Whitney Library of Design.
- Durham, Henry Welles. 1913. *Street Paving and Maintenance in European Cities: A Report*. New York: Press of C. S. Nathan.
- Edwards, Stewart, ed. 1973. *The Communards of Paris, 1871*. Ithaca: Cornell University Press.
- Gavin Historical Bricks Website; accessed April 18, 2006: <http://www.historicalbricks.com/cobblestone.html>.
- Gillespie, William Mitchell. 1848. *A Manual of the Principles and Practice of Road-Making: Comprising the Location, Construction, and Improvement of Roads (Common, Macadam, Paved, Plank, etc.) and Rail-Roads*. New York: A. S. Barnes & Co.
- Gillmore, Quincy Adams. 1876. *A Practical Treatise on Roads, Streets, and Pavements*. New York: Van Nostrand.
- Gregory, John Walter. 1938. *The Story of the Road: From the Beginning to the Present Day*. 2nd ed. London: A & C Black.
- Guidet, Charles. January 12, 1869. Patent #85,814: *Stone Pavement*. Washington, DC: United States Patent Office. Accessed April 25, 2006: <http://www.uspto.gov/patft/index.html>.
- Guidet, Charles. August 23, 1870. Patent Reissue #4,106: *Pavement*. Washington, DC: United States Patent Office. Accessed April 25, 2006: <http://www.uspto.gov/patft/index.html>.
- Hassam, Walter E. August 6, 1918. Patent # 1,275,165: *Pavement*. Washington, DC: United States Patent Office. Accessed April 25, 2006: <http://www.uspto.gov/patft/index.html>.
- Kinkade, Thomas Website. Accessed April 25, 2006: www.thomaskinkade.com .

Lowenthal, David. 1985. *The Past is a Foreign Country*. Cambridge; New York: Cambridge University Press.

McCluskey, Jim. 1979. *Road Form and Townscape*. London: Architectural Press.

Molotch, Harvey. 2003. *Where Stuff Comes From: How Toasters, Toilets, Cars, Computers, and Many Other Things Come to be as They Are*. New York: Routledge.

Northwestern University. *Siege and Commune Collection*. Photo # 300: "Paris Boulevard with Barricade and Cannon." Accessed April 25, 2006:
<http://www.library.northwestern.edu/spec/siege/docs/PAR00300.html>

Rose, Albert Chatellier. 1952. *Public Roads of the Past*. Washington: American Association of State Highway Officials.

Ross, Kristin. 1988. *The Emergence of Social Space: Rimbaud and the Paris Commune*. Minneapolis: University of Minnesota Press.

Staccioli, Romolo Augusto. 2003. *The Roads of the Romans*. Los Angeles: J. Paul Getty Museum.

Twain, Mark. 1869. *The Innocents Abroad; or, The New Pilgrim's Progress*. Etext accessed April 25, 2006: <http://etext.virginia.edu/railton/innocent/iahompag.html>.

United States Supreme Court. 1881. *Guidet V. City of Brooklyn, 105 U.S. 550*. Accessed April 25, 2006: <http://supreme.justia.com/us/105/550/case.html>.

Williams, Raymond. *The Country and the City*. 1975. New York, Oxford University Press.