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200th Birthday for the Map That Made New York

By **SAM ROBERTS**

Henry James condemned it a century ago as a “primal topographic curse.” Rem Koolhaas, the architect and urbanist, countered that its two-dimensional form created “undreamed-of freedom for three-dimensional anarchy.” More recently, two historians described its map, regardless of its flaws, as “the single most important document in New York City’s development.”

Two hundred years ago on Tuesday, the city’s street commissioners certified the no-frills street matrix that heralded New York’s transformation into the City of Angles — the rigid 90-degree grid that spurred unprecedented development, gave birth to vehicular gridlock and defiant jaywalking, and spawned a new breed of entrepreneurs who would exponentially raise the value of Manhattan’s real estate.

Today, debate endures about the grid, which mapped out 11 major avenues and 155 crosstown streets along which modern Manhattan would rise.

The grid was the great leveler. By shifting millions of cubic yards of earth and rock, it carved out modest but equal flat lots (mostly 25 by 100 feet) available for purchase. And if it fostered what de Tocqueville viewed as relentless monotony, its coordinates also enabled drivers and pedestrians to figure out where they stood, physically and metaphorically.

“This is the purpose of New York’s geometry,” wrote Roland Barthes, the 20th-century French philosopher. “That each individual should be poetically the owner of the capital of the world.”

The grid certified by the [city’s street commissioners](#) on March 22, 1811, spurred development by establishing seven miles of regular, predictable street access. It also laid the groundwork for nearly 2,000 acres of landfill that would be added to the island over the next two centuries. The commissioners concluded that New York “is to be composed principally of the habitations of men, and that straight-sided and right-angled houses are the most cheap to build and the most convenient to live in.”

The grid, which incorporated some existing roads, would also prove surprisingly resilient. It

accommodated motor vehicles (after sidewalks and stoops were pruned). It allowed planners to superimpose Central Park in the 19th century and superblocs like those of Stuyvesant Town and [Lincoln Center](#) in the 20th. In the 21st, the grid was extended west to include apartment houses on Riverside Boulevard.

“The 200-foot-long block is short enough to provide continuous diversity for the pedestrian, and the tradition of framing out the grid by building to the street-wall makes New York streets walkable and vibrant,” said Amanda M. Burden, the director of city planning.

“The grid does not limit us,” said [Scott M. Stringer](#), the Manhattan borough president. “It gives us a foundation to adjust to and a way to navigate Manhattan.”

But some have reservations. Tony Hiss, author of [“In Motion: The Experience of Travel,”](#) said that while the grid contributes orderliness, “I still think it distances us from our natural surroundings, and it has given us a slightly spurious and diminished mental geometry.”

“We think more in terms of linear blocks than neighborhoods,” Mr. Hiss continued.

What made the grid plan, formally called the Commissioners’ Map and Survey of Manhattan Island, so farsighted was that in 1811 a vast majority of New York City’s population lived below what became Houston Street — tellingly named North Street then. When City Hall was completed that year, its rear facade was covered with cheaper brownstone (in part, legend had it, because of the notion that since most New Yorkers lived south of the building, they would see it only from the front).

Yet while largely exempting the existing village of Greenwich, the visionary commissioners imposed their 2,000-block matrix on the forests, farms, salt marshes, country estates and common lands that extended north for nearly eight miles to what would become 155th Street, and expanded the city’s plotted land area by nearly fivefold.

“To some it may be a matter of surprise that the whole island has not been laid out as a city,” the commissioners — Gouverneur Morris, Simeon De Witt and John Rutherfurd — wrote. “To others it may be a subject of merriment that the commissioners have provided space for a greater population than is collected at any spot on this side of China.”

“To have gone further,” they noted without irony, “might have furnished materials to the pernicious Spirit of Speculation.” They concluded nonetheless that “it is perhaps no unreasonable conjecture that in half a century” the 1811 city of some 60,000 would be “closely built up” as far as 34th Street and would “contain 400,000 souls.”

The commissioners were prescient, but they underestimated. In 1860 (38 years before the

four other boroughs were consolidated into the city) and decades after the commissioners' surveyor, John Randel Jr., had staked out the intersections with marble monuments and iron rods, an army of laborers had begun to level and even pave the undulating landscape (Manahatta, by one definition, meant Island of Hills). New York was already bursting with more than 800,000 souls.

“What I found absolutely remarkable,” said Hilary Ballon, an urban studies professor at [New York University](#) and curator of a future exhibition on the grid for the [Museum of the City of New York](#), “was how the city had a commitment to executing this vision, which required a pretty significant transformation in how the city worked — a greater degree of governmental authority, changes in the taxation system to fund this road building, and a multigenerational commitment to its implementation.”

In contrast to Pierre L'Enfant's grandiose national capital, the street commissioners adopted what [Reuben Skye Rose-Redwood](#), a geographer and expert on the grid, described as “a physical representation of the Cartesian coordinate system.”

The urban grid goes back beyond [Hippodamus of Miletus](#), the Greek urban planner, who, like the street commissioners, viewed the matrix as a manifestation of “the rationality of civilized life.” New York's grid inspired planners elsewhere. But nowhere, wrote Edward K. Spann, an urban historian, “was the triumph of the grid as decisive as in America's greatest city.”

Concerned about averting fire and disease, the commissioners rejected crooked, narrow streets like those downtown. Yet they provided for relatively few parks, reasoning that Manhattan was flanked by two refreshing rivers. They conceived a 240-acre military parade ground and a public market connected by a canal to deliver produce from the East River.

Without envisioning mass transit, motor vehicles, tenements or skyscrapers (the vertical grid), they mapped more crosstown streets than avenues because they figured most traffic would go between the rivers. Officials later extended Broadway, originally a meandering Indian path, and added Lexington and Madison Avenues.

The grid constituted a high-stakes chessboard for speculators (the value of property in Manhattan more than doubled from 1842 to 1860). Corrupt politicians also profited from inflated construction contracts.

Dr. Rose-Redwood calculated that in 1811, of the 1,865 buildings north of Houston Street, 721 stood on newly mapped streets and had to be either razed or moved. As executed, natural topography was ignored (stranding some houses on bluffs). Driving streets through private property sparked not-in-my-backyard revolts. Owners were compensated, though tax

assessments also rose on properties bordering the new streets. Clement Clarke Moore, before making a fortune parceling out his Chelsea property and claiming authorship of “A Visit From St. Nicholas,” characterized the commissioners as “men who would have cut down the seven hills of Rome.”

But Joel Towers, the executive dean of Parsons the New School for Design, suggests that the grid presents an opportunity, now that [climate change](#) and rising sea levels elevate topography to the urban agenda.

“What will the city look like over the next 200 years?” he asked. “Maybe we can start to think of all those backyards and roofs as sponges, as a permeable landscape. Over the course of 200 years, our infrastructure will be built piece by piece, block by block, community by community. That’s very different from 1811, when you could just bulldoze the land.”

This article has been revised to reflect the following correction:

Correction: March 24, 2011

An article on Monday about the 200th anniversary of the Manhattan street grid misspelled the surname of one of the street commissioners who certified the plan. He is John Rutherfurd, not Rutherford.