“As Free as Air and Water”: A Note on Institutional History

Peter G. Buckley

Talk to the Trustees, the administration, and invited guests,
The Great Hall, September 15th, 2009

<image 2>

In '59, crowds of students gathered expectantly around the cornerstone of the new building, the mayor made some kind remarks about the importance of The Cooper Union to the future of the city, the trustees, only six back then, pledged to uphold the wishes of the founder in providing a education ”equal to the best.”

<image 3> 1959, that is. (Thursday, September 17, 1959)

Much was expected of the new engineering building. According to trustee chairman Irving Olds it was “appropriate to scientific and engineering study in an age of electronics, nuclear energy and space exploration.” <image 4> (AR v 101, 59-60, 5.) Along with a copy of The Times, an isotope of cesium was placed in the time capsule, and then buried under the corner stone, to represent our faith in the atomic age. This act also signaled the hope for an expanded program in the sciences leading to a PhD in physics. <image 5> And there were other hopes as well: in April 1957, the William Wollman Foundation gave $300,000 for the auditorium and for a lounge in which work was forbidden, and a dress code encouraged, so that new forms of sociability might be acquired. <image 6> Yet the most important long run programmatic change brought about by the new building was the creation of degree granting programs in art and architecture. (first awarded in ‘63 for Art and ‘64 for Arch) State accreditation for baccalaureate degrees had required more full time faculty and more space devoted to studios. The liberation of space in the Hewitt Memorial building at last made that possible. No doubt the person most enthused by the events of that day was Esmond Shaw, <image 7> who had pushed for degrees in architecture since 1944 and who had secured the renaming of the school to that of “Architecture and Art.”

How were these new programs going to be sustained? <image 8> A centennial development fund, chaired by Herbert Hoover, had proved remarkably successful in securing construction funds for the new building.

Alumni contributions alone in 1957 of $900,000 covered about 1/5 of its total cost, but by 1961 the fund raising had started to flag leaving the new President, Humphreys, to return to the standard lament about operating revenues. However in his address the following year he reiterated one central institutional truth: that education at The Cooper Union was to be "as free as air and water."

The phrase still stirs us. It sounds biblical in its authority though it cannot be found there. It conjures up an elemental truth, referring to two of the fluid states, but its sense of self-evident truthfulness is almost lapidary. "Of course," we have to say, "that's the natural condition for education!"

If the college historian at the time, Richard Bowman, who had received a year's release from teaching to prepare for the centennial anniversary, had any qualms about the claimed origin of this phrase none are recorded. "As free as air and water" cannot be found in the Charter, it cannot be found in the deed of trust, or the letter to the trustees, or can it be unearthed in any of the fragmented autobiographical writings that Peter Cooper has left to us. It certainly *sounds* as if Cooper at the time of this building's dedication might have penned it. After all, he specified in those documents that there be free courses at night on the application of science to the useful occupations of life, free lectures on social and political science, and free access to a "reading-room," "galleries of art", and "scientific collections." These detailed elements of the original plan were clearly to be free of charge. However the only universal, elemental freedoms Peter Cooper ever talked about were the moral and political conditions under which instruction at his union was to operate. Education at Cooper was to be free from "theological and party issues." Free, in this case, was a moral imperative, not a market condition. He might have said, in the interests of accuracy, that education was to be as free to *flow* "as air and water, "unencumbered by dogma or ideology. Indeed Cooper, having imbibed the currents of the radical enlightenment, stated that the whole of material creation was centered on the creation of "free intelligent beings — beings formed to rise through instinct into knowledge."

So if there's no direct record of the founder using the phrase where did it come from? It arose at another hinge moment in our institution's history, the 1901 commencement address by the president of the Trustees, Abram Hewitt. <image 9>

Hewitt's normal mode on such occasions, and in his private correspondence, was to lament about the lack of space and cash, and complain

about the struggle the trustees faced in extending the free courses at night given the manifest demand. But at this moment Hewitt could celebrate, in an extended discourse, an extraordinary development. Andrew Carnegie <image 10> had given three hundred thousand dollars. Carnegie's acceptance of a position of trustee promised more cash to come. Already the monies, given in the closing days of the 19th century had liberated most of the foundation building from the dreaded renters, only five retail stores on the first floor remained and they were to be out by the end of the year. <image 11> The liberated space and the new capital could at fulfill at last the final element of the founders mandate in the deed of trust – the creation of a "thorough polytechnic school; which school shall..... be made equal to the best technological schools now established, or hereafter to be established."

What constituted a "thorough" polytechnic school was still not absolutely clear. Hewitt had consulted far and wide, that is from Cornell to Columbia, in search of appropriate models for a polytechnic. Many had recommended the creation of a technical high school (minutes of the trustees, a scheme recommended by N. Butler Murray and William H. Maxwell) to "complete the system of public education." Others thought this phrase signified a new private day school of engineering. By the time that Hewitt spoke in June 1901 the latter plan looked certain so a relatively simple rhetorical task remained before him. He had to link Peter Cooper's older vision from 1859 with Carnegie's contemporary largesse. This required, first of all, a parallel biographical effort. Hewitt noted that both as boys had few prospects in life. They were born into poverty, (Hewitt laid on the trowel of pauperism at bit thick). Both as young men followed a succession of honest but unremunerative manual trades, and then, through intelligence, hard work, good health (there was a bad joke about Scottish thrift) they rose to great wealth and fame, so much wealth in Carnegie's case that he came "into possession of the greatest fortune ever under the control of any single individual."

If this comparison fitted nicely into the template of 19th century rags to riches narratives, the contrast proved more difficult to work. Hewitt could have left the matter with the obvious genealogical point that Cooper's older philanthropy begat Carnegie's modern benevolence. Indeed there was more than enough evidence in Carnegie's "Gospel of Wealth," published a decade before, that the great benefactor had learned about giving from Peter Cooper, ranking his example as high as Count Tolstoy's. <image 12> However Hewitt

did not leave the comparison at that. Carnegie, he said, wanted to "get there." He accumulated money because it was there to be accumulated. Early in his career the canny Scot had learned to drive an engine, and there was a simple locomotive effect in his travels though mid century capitalism.

Cooper's career, however, from early life, had a distinctly moral purpose. To establish this point Hewitt painted a particular scene, one told to him by his father-in-law:

"I have often heard him say that out of small savings he bought a book and a tallow candle and at night, in the room which his grandmother had assigned to him, by the light of the tallow dip, he was able to make himself master of the book. Then and there he determined that he would make a fight for means enough to found in the City of New York an institution, where ambitious young men or young women might acquire an education without cost." (page 3)

The details are nice: One can imagine the cheap, guttering tallow candle at night, the young boy, staying with his grandmother, perhaps homesick while his parents remain upstate. It's a moment of loneliness perhaps, and poverty, but also radical potential --- the young Cooper makes himself "master of the book," his thrift makes him own both the light and the illumination" --- not, in Peter's case, for personal advancement but rather for opening a career of benevolence. Hewitt drove the point home:

"Now I want to call attention to this fact, because it is peculiar, Mr. Cooper did actually found the first institution for the free education of the working classes in this country. Other institutions have been founded where fees are taken, and very properly taken, but Mr. Cooper's aim was to found one, where education should be as free as water and air."

Now it is perfectly possible that our origins can be traced back to this moment two hundred years ago, though it's odd that Cooper himself never related the story in the same way. The grandmother, moreover, was certainly wealthy enough to provide the boy with a beeswax candle and a book. But whether it's true or not is beside the point, or rather besides Hewitt's immediate rhetorical effect point. Cooper, unlike Carnegie, Hewitt claimed, was almost religiously inspired. Whereas Carnegie came to his benefaction through example, Cooper arrived at his through piety. Hewitt surely knew enough about the history of painting to know that the boy with the candle was a set-piece of protestant devotionalism. <image 13> Cooper had a conversion experience, and though the book might have been secular, the

effects of mastering it were not. There's another nicety in the fact that mastering tallow, animal fat, was to be the first source of Cooper's fortune. <image 14>

Cooper seeing by "the light" and determining "then and there" that education was to be free meant, so the image determined, that the trustees exclude tuition as a way of maintaining the new costs of the day school of engineering. We know that one had argued for such a course and two others had suggested that ongoing expenditures might be defrayed by the city in a new legal arrangement. Hewitt would countenance none of that. The phrase also erased the previous history of the women's school of design, though its first decade, changing full tuition to one third of its students, the so-called "amateur class." It also glossed over the fact that science students were charged six dollars per semester for every lab attended, roughly equivalent to one weeks manual wages per course. The class in oratory had always been fee based.

The following year, 1902, Hewitt gave what proved to be his last presidential address. <image 15> The tone was even more strident and inspirational. As he said he no longer spoke with the "wail of Jeremiah" regarding expenses. A volcano of funds had arrived, doubling endowment in less than a year liberating not only the foundation building but also prompting plans for future growth. The scene of the candle was retold now with a date supplied for the Pauline moment, "1804, or 1805." The grandmother had disappeared from the narrative leaving the young Peter as a totally "friendless boy." <image 16>

The moment of giving is also more precise:

"When he called the trustees together to receive the property at his hands, he said to them "Here is this building. I want it to be appropriated as soon as possible to the education of the young men and young women of New York City and appropriated to free education. There must be no fee paid in the cooper union, for education ought to be as free as air and water."

Hewitt now makes Peter Cooper speak, not in a familial way to his son-in-law but to the trustees directly, commanding them, at the moment of his sacrifice to remember the spirit of the gift. The passage is explicitly Christ-like and sacramental, something to be repeated forever, adding the role of disciple to a trustee's fiduciary responsibilities. Cooper is appropriately invested with messianic foreknowledge, so that he anticipates the exact moment of that day's address:

"And he said to the trustees, "I hope, before you die, the day will come when someone will give money enough to free this institution from the encumbrance of tenants and devote it entirely to the work of free education."

Twenty minutes into the talk Hewitt declared, almost through a spiritual medium that "The Cooper Union is now complete." Or almost..... because there was now sufficient funds to move beyond the foundation building. His daughters Eleanor and Sarah had convinced him that The Union needed a new school, one that would teach "the application of the arts to the finer classes of construction work and materials"...it would be a school of design in line with the demands of the aesthetic movement....."A mechanics art school by day" But where might space be found? <image 17> Hewitt looked longingly at two pieces of city owned property, the 69th regiment armory (41 Cooper square) for the second art school, and the Astor library as a new home for the museum and the reading room. <image 18>

Relating the story of what happened to these particular plans would take too long, but in short form the drive for a second art school faded and the demands for a laboratory based engineering education increased. The Hewitt Memorial building, when it opened, contained state of the art equipment demanded by a thorough polytechnic institute, equal to the best. <image 19, image 20>

Since 1902, "as free as air and water" has returned to us, as in 1959, at critical moments in our history. The phrase still establishes an immediate link with the wishes of the founder. It has served since the turn of the 19th century as our foundational myth. It ratifies a continuity and community of purpose. What better phrase to cover the uncertainties of the present with the verities of the past. But on the other hand, on an evening like this, we might step back from its benevolent blandishment and see how much we have changed. Almost all of the parts of the union mandated as free in the charter no longer exist – the night school, the lectures on social and political science, the free reading room, and the scientific collections are all gone. So to, in statistical terms, is our charitable target --- the local working class. Where once our annual reports boasted about the volume of students admitted, now we are now stunned by our own selectivity. We do not aim to improve the life chances of those already employed in the manual trades, rather we aim to educate undergraduates for the professions. Most of these changes were made long ago now, before the centennial celebrations in 1959. <image 21> Indeed we have changed less in the last fifty years than in any twenty year increment

in our first century.

A final note on the uses of institutional history: knowledge of history hardly stops one making the same mistakes twice, look at Afghanistan; nor are professional historians any longer very good at three of their traditional tasks, making heroes, creating myths of national origin, or justifying empires. By asking questions, however, history can free us from the dead weight of the past. History, rather than myth, shows how the past is contingent on human action that its effects do not present us with an unchangeable given. Aided by history the only questions we can ask are in the present.... "Education as free as air and water".....but **in what**.... and **for whom**?
