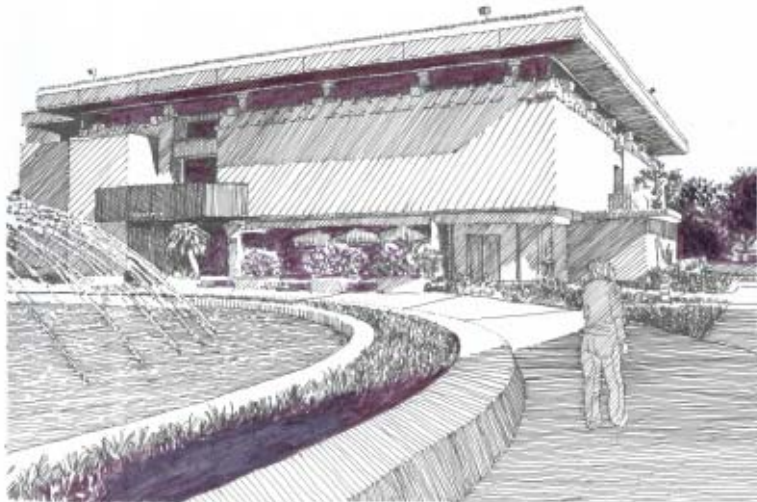




Sketch (Library), Florida Southern College, Lakeland, FL, © 2011 Ladd P. Ehlinger



Roux Library, Florida Southern College

The print of a sketch by Ladd P. Ehlinger, AIA in this month's issue is of the Roux Library Building that was completed in 1946 on the north side of the "Water Dome" in the main square at Florida Southern College (FSC) in Lakeland, Florida. FSC is a treasure house of Frank Lloyd Wright designed buildings and contains ten Wright designed buildings of the seventy total buildings on the 113 acre campus. Wright began the design of the campus master Plan in 1936 when Ludd M. Spivey, FSC President from 1925 to 1957, visited Wright in his Spring Green, Wisconsin Studio and home and commissioned him. Spivey envisioned a "college of tomorrow" as an inspiration to build enrollment at the United Methodist facility. 1936 was the middle of the "great depression" and college enrollments were hard hit as a result. The two visionaries shook hands, Wright began work and ground was broken in 1938. The campus is listed on the National Register of Historic Places as an historic district due to the historical significance of the Frank Lloyd Wright and other architect designed buildings.

FSC has recently commissioned Robert A. M. Stern, the Dean of the Yale University Architecture School, to lead

Life Center completed in 2009, which includes Nicholas and Wesley Halls that house 235 students in lake-view rooms. This complex was designed to complement the Wright designed buildings nearby. The 4,000 SF Rinker Technology Center opened in March 2010 in response to a gift of \$1.5 million to FSC by Marshal and Vera lee Rinker in 2008. According to Stern, his new buildings are intended to "honor Wright's historic legacy while putting my own mark on the campus by complimenting, not copying, Wright."

Wright was at the peak of his career at the time of his work at FSC. Wright began with a Master Plan that incorporated all existing buildings at that time and those that he and Spivey envisioned would be needed in the future. He then proceed to methodically fill in the blanks. Some of the other notable buildings on the Florida Southern campus are the Annie Pfeiffer Chapel, completed 1941 (featured in E&A 2012 4th Quarter Newsletter); the Administration Building and Water Dome, completed 1949 (featured in E&A 2012 3rd Quarter Newsletter); the Ordway Building (Industrial Arts), completed 1952, the Danforth Chapel, completed

their most recent expansion and preservation efforts beginning in 2005. Stern is an accomplished designer as well as an educator: he won the Driehaus Architecture Prize in 2011. Stern has designed and built several buildings on the FSC campus: the Barnett Residential

1955; the Polk Science Building (contains a planetarium), completed 1958; and the Esplanades, with various completion times, and currently being restored in some areas. These are the distinctive covered walkways that connect most all of the buildings, the roofs of which are razor thin concrete slabs and supported on upside down tetrahedron bulky concrete columns set to one side of the walkway with the roof slab cantilevering to cover the entire walk. Visit our website at www.ehlinger.com for previous editions mentioned.

As said before: like most Wright projects, this one is both a blessing and a curse. A blessing because of its beauty and daring, simplicity, and almost pure art - a delight to the eyes. A curse because of the oft-times experimental components failing by not weathering well, and the sometimes dictatorial personal idiosyncratic nature of some of the spaces. Wright used here what he termed his "Textile blocks". These were concrete blocks designed and fabricated by the architect himself - these cannot be replaced "off- the-shelf" when one cracks or is damaged in any way. One has to manufacture them.

The Stern firm has had its hands full dealing with the remediation and repair of the Wright designed buildings because of this. new textile blocks have been manufactured and inserted in existing walls, roof repairs have been made on numerous buildings, and the Water Dome has been fully restored with the addition of powerful pumps to supplement the chronically low municipal water pressure. One critic remarked that the Water Dome finally worked for the first time.



Early Frank Lloyd Wright conceptual drawing of Florida Southern College Campus
Image courtesy of Special Collections, Florida Southern College | Spring, Lakeland, FL

The Coming Impact on American Architecture by the Driverless Car.

By: R. Perrin Ehlinger

The automobile has had a profound impact on architecture and urban planning, perhaps most greatly in America. Before the automobile, it was advantageous to live in a compact community, either in the city, or near a railway line.

After the automobile, there was a freedom to live anywhere, and wide open spaces became developed, with great expanses of land between, because cars were inexpensive, and gas was cheap. Fast forward a couple of decades, and suddenly everyone has a car or two, freeways and interstates are the norm, and the design of structures and urban planning is centered around the automobile - how to park them, how to move them, how to fix them and fuel them and find them. Instead of a luxury; the car is a necessity for most in America - there's simply no way way to get to work, get home, move the kids around, shop, or entertain oneself without a car. The car has become both a blessing and a curse.

Newer cities are too spread out for walking, and even where they aren't, little planning attention has been given to the pedestrian, because everyone has cars. Some areas don't even bother with sidewalks, because no one walks. No one can be reasonably expected to walk - because all of the space has been dedicated to the cars. For most properties and buildings, space for parking is usually equal to or up to 4 times greater than the footprint of the building served. Cities have become littered with parking garages - because people have to put their cars somewhere. Shopping centers are so massive, it's often more convenient to get back into your car and drive to the other side of the center than it is to walk there.

So what will happen when cars can drive themselves? Will the average family still try to maintain 3 cars - one for each working parent, and 1 for the the children to go to school and back? Why take on that extra expense when one car can do all of those things when it doesn't need to be parked, and can, by itself, return to your house and wait to be called for its next task?

The average cost of owning, maintaining, and insuring a car is about \$25/day, or about 1 hour of work each day for the average in-

come family. What if you could just use your phone, call a car, and take care of all of your travel for \$10/day or less - would one bother buying a car at all? To a certain extent, the Uber taxi service is filling this role already in cities and outlying suburbs where car ownership is prohibitive and not strictly necessary, but what about the rest of America?

I suspect the answer will be a mix; those who need to travel more frequently will still want to own their own car, but a lot of people won't bother with this expense once driverless cars have populated the streets to an extent where hailing one isn't a tedious wait, or an expensive proposition. There will certainly be a segment of the population that still desires to drive themselves everywhere, but this will soon be considered eccentric, and will be expensive as insurance rates on human drivers will go up.

One of the impacts on architecture from these changes will be the addition of *Porte Cocheres* nearly everywhere. *Porte Cocheres* are covered entrances large enough for a vehicle to pass under and let people in and out. If your car can park itself, then the next step in accomodation is to be dropped off directly at the entrance of any destination. A familiar sight at hospitals, hotels, and expensive restaurants, the *Porte Cochere* will be the next great architectural revolution at movie theaters, shopping centers, and likely even to the new, typical residential home.

We're no longer concerned with where the car goes, just in delivering people conveniently to their destination. Required parking spaces will be much fewer, and will no longer be required to be in the front of the buildings they service. Newer shopping locations will be positioned much closer to the streets, and parking for those who actually own their vehicles will be hidden behind them, and the cars can park themselves.

Existing shopping centers, no longer in need of vast fields of asphalt, will likely adapt by tearing up unused parking, building more shopping destinations, and, of course, adding *Porte Cocheres* at the anchor stores and covered walking to the neighboring stores, instead of having a blank 100 yard stretch of sidewalk in open sun or pouring rain that no one uses, just to walk from Target to Pet Smart.

There will still be a need for parking ga-

rages in compact city areas, but not nearly as many as exist now. Given the new convenience of travelling to downtown areas without the need to find, fight, or pay outrageously for a parking spot (you can just send your car home, and call it back in 2 or 3 hours when you're done at the Jazz performance). Downtown areas will thus see more pedestrian traffic. The combined loss of parking required and increased travel convenience will result in a great number of parking garages being demolished and new structures taking their place, as the property value tips towards use and against vehicle storage.

On the streets, with buildings and businesses desiring to be closer to the curb for exposure, and now being able to do so without ridiculously expansive parking requirements, walking from one building destination to the other will become both safer and a more desirable proposition than hopping back into the car. Street side parking will become a rare commodity, allowing streets to grow narrower and less cluttered. As traffic becomes more and more automated, the huge stretches of strip-mall shopping centers along 6-lane highways will slowly die off, relocating and clustering into pedestrian accessible centers with centrally located *Porte Cochere* drop-off points.

How soon can we expect these changes to occur? The driverless car is essentially already here and viable for the future. They're being tested under multiple conditions by multiple companies. Tesla recently announced they expect to be selling driverless cars within three years, and that's if Google or someone else doesn't beat them to it. The societal changes will occur more slowly - it will take time for the technology to propagate, for zoning and building codes to catch up, along with other laws and regulations. The life expectancy of existing cars is also a factor - most cars last about 10 years. So it will likely be a good decade before self-driving cars begin tipping the scales, but it may be even quicker, particularly if a large company like Hertz or Enterprise buys a fleet of them and adjusts their rental rates to compete with fleet taxis and Uber for short trips.

Architecturally, the adaptations described will happen more slowly, over the span of decades, but they will happen as the use of space changes, the convenience of the technology is fully realized, and the fields of parking spaces become increasingly empty and unnecessary.