

Outline

I. Introduction

- A. Personal connection to major
- B. Without the legacy of ancient practices and equipment, the future cannot be innovated.

II. "Piggybacker" Loading Milwaukee Road Flatcar

- A. Artist, style, coloration
- B. Description

III. Norwegian Dawn, Meyer-Werft Ship Yard

- A. Artist, style, coloration
- B. Description

IV. Gantry Cranes

- A. What are they?
- B. Usage in the world
- C. Connecting gantry cranes to transportation

V. Personal Connection to cycling

- A. Wheel and Sprocket
- B. History on Wheel and Sprocket crane

VI. Conclusion

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Gantry Cranes: Static Arbiters of Motion

While gantry cranes may seem like an obscure topic for an essay, I think these machines carry significant intrigue because of the applications for their use in software engineering. For example, automation is a topic gaining traction surrounding industrial machines. Automation allows large machinery to be controlled with little to no human interaction. This has various benefits towards safety, efficiency, and scale. In terms of future careers to look forward to, automating large machines such as gantry cranes would certainly make the top of my list. Having control over such a powerful machine must truly make one feel akin to a god. Gantry cranes are large, stationary cranes which are depicted carrying a semi trailer and in a shipyard in the paintings *"Piggybacker" Loading Milwaukee Road Flatcar* by Albert W. Miller and *Norwegian Dawn, Meyer-Werft Ship Yard* by Hans Dieter Tylle respectively. Miller's painting was made in 1968 and Tylle's was created earlier, in 1954. The prominence of gantry cranes in the transportation industry is, in a way, ironic because of their static nature. Without the legacy of ancient practices and equipment, the future cannot be innovated.

The first painting that caught my eye in the gallery is actually on my journey to my college writing class. The bright yellows of the "Piggybacker" crane stood out to me as a clear choice for a painting to study further. This oil painting depicts a gantry crane, nicknamed "piggybacker" loading a semi truck trailer onto a flatbed train car. The crane is a bright emergency yellow with green and blue highlights. The bright piece has more yellows reflected off the ceiling and ground as well as some distant reds of a trainyard. The semi trailer being loaded contains the text "MILWAUKEE" which makes the location of the painting clear. The style of this oil painting

feels like impressionism with its visible brush strokes. The painting has more abstract coloration with shadows painted in bright greens and blues instead of more traditional dark hues.

I chose this Tylle's painting depicting a German shipyard while looking for other paintings that could connect to my primary selection. The massive green gantry crane which spans the enormous ship central to this painting, was a detail I couldn't miss. Nestled in a corner of the second floor of the Grohmann Museum, I was elated when I discovered such clear connections between the two paintings. Besides the gantry crane, the style of this painting is also quite similar to Miller's work, both employing a near impressionistic oil technique with bright primary colors. Contrasting with Miller's work, this painting contains primarily blue colors, especially in the scaffolding laced above the ship. This shipyard is likely located in Germany with Meyer-Werft being a German shipbuilding company.

Gantry cranes, which are depicted in both works, are a special type of overhead crane which can vary greatly in size but typically has a static base and moving winch mechanism. Gantry cranes are used in many manufacturing and transportation industries for hoisting building materials, large vehicles, or other cumbersome objects; even for facilitating art installations. Within the paintings chosen, a gantry crane is shown lifting a semi trailer onto a train car as well as a much larger crane likely unloading cargo from the massive ship in Tylle's *Norwegian Dawn*. These two different uses of the crane present an interesting similarity. Both cranes are encouraging some form of transportation, be it a trailer or shipping containers. Without transportation, it is impossible for diversity to exist in industry. Transportation allows materials to be moved from all around and enables manufacturing in locations where it may not have previously been possible. The usage of ships on the Great Lakes, for example, allowed industry to flourish in Milwaukee which reveals a major connection between the freighter depicted in Tylle's painting and the "MILWAUKEE" semi trailer shown in Miller's piece. From massive ships to railyards to semi trailers, gantry cranes are significant for encouraging each step of the transportation process.

One form of transportation which is mostly unused in industrial settings but remains my

favorite pastime, is cycling. A bike shop I've been going to for years to get flats changed and see the latest road bikes is Wheel and Sprocket Bike Shop in Bay View. Aside from supportive staff and interesting bikes to look at, built into the roof of this shop is a large yellow gantry crane similar to the "piggybacker" depicted in Miller's work. This is because the building that now houses hundreds of bikes was formerly a lumber equipment manufacturing plant. The Wisconsin-based company that owned the building was called Cream City Iron Works and manufactured various iron parts for the lumber industry. Although the crane no longer hoists newly produced engines and saw blades, as transportation evolves to meet individual needs, its legacy of empowering movement lives on through the various bikes sold and repaired from beneath its iron gaze.

To conclude, within "*Piggybacker*" *Loading Milwaukee Road Flatcar* by Albert W. Miller and *Norwegian Dawn, Meyer-Werft Ship Yard* by Hans Dieter Tylle, a special type of crane known as a gantry crane, is present. These cranes caught my eye because I had seen an uncannily similar machine housed in the rafters of my favorite bike shop, Wheel and Sprocket. Within the two paintings, different cranes are shown with some similarities. Both cranes are assisting with some form of transportation, despite being stationary themselves. This irony stood out to me as significant and powerful and remained true in the Wheel and Sprocket bike shop as well. In my own future, I could foresee myself programming software to automate and control such machines, enabling the massive cranes to continue facilitating movement built on these longstanding machines.

Works Cited

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