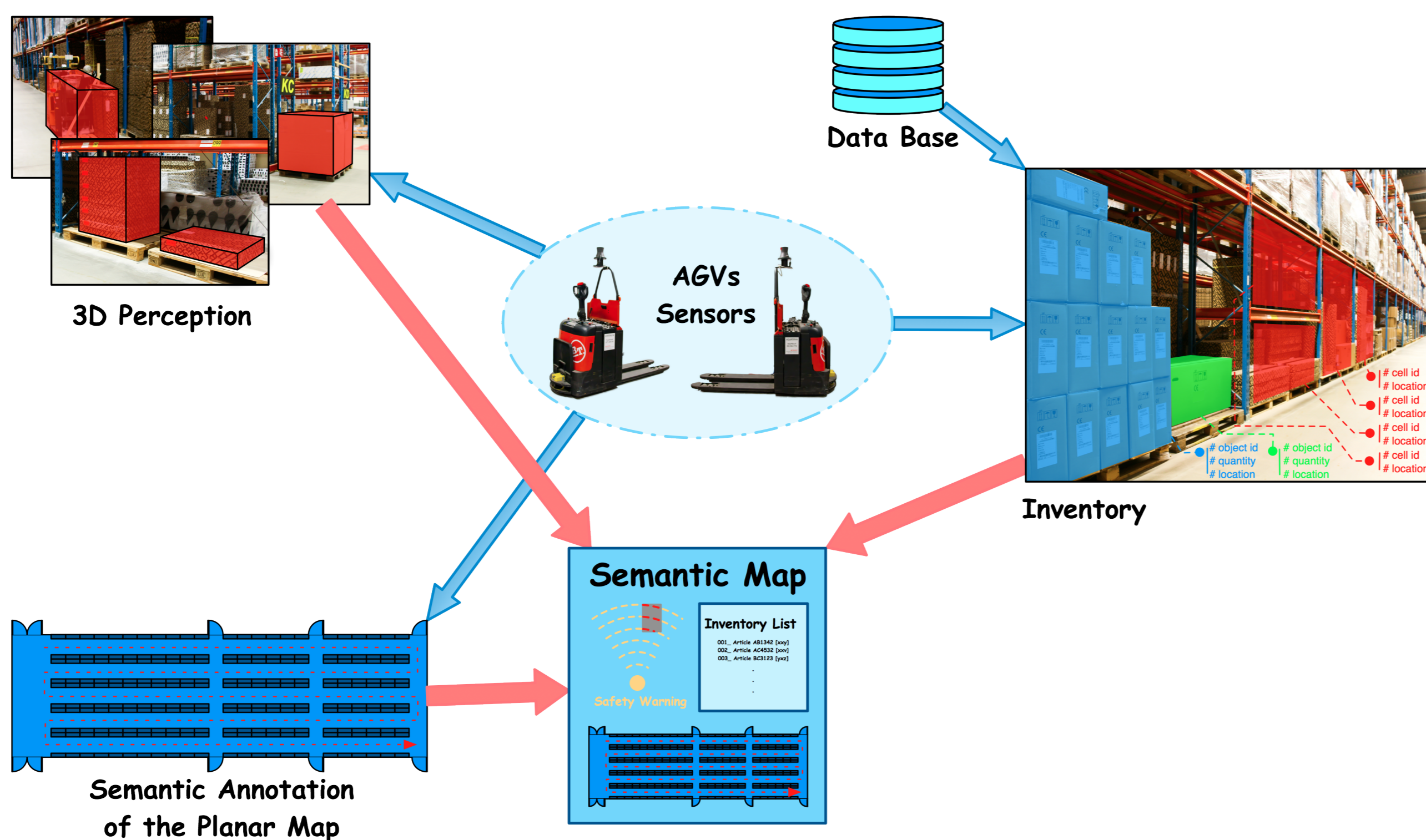


AIMS

Automatic Inventory and Mapping of Stock

Overall Goal - An intelligent warehouse environment that autonomously builds a map of stock articles, and relates article identity from the database of the management system with the article's position (metric) and visual appearance in the environment.

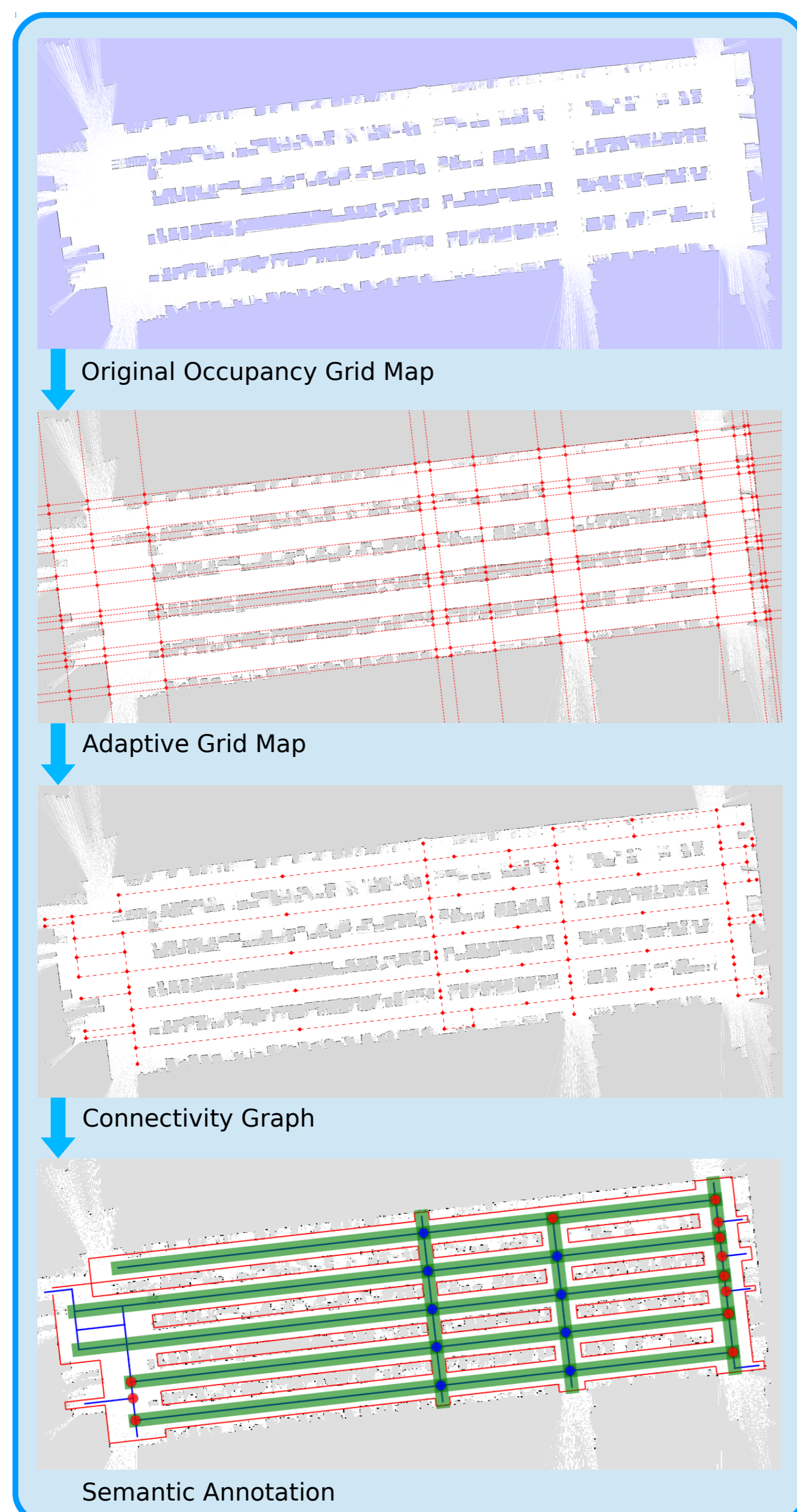


Motivation - Important skills for future robots and automated guided vehicles (AGV's) are:

- ✓ The ability to recognize and describe objects that the robot shall handle and the environment in which it operates (situation awareness).
- ✓ The ability to structure and sort information provided by sensors (flexibility and adaptability).

Objective:

- ✓ Mapping and semantic annotation.
- ✓ Inventory list maintenance.
- ✓ 3D perception.



Results so far - An abstract and semantic interpretation of Occupancy Grid Map (OGM) is overlaid with the map of pillars, to speed up the process of AGV installation in the warehouse, and as a foundation for addressing the articles in the warehouse.

