

Generating configurations

Prof. François Marechal

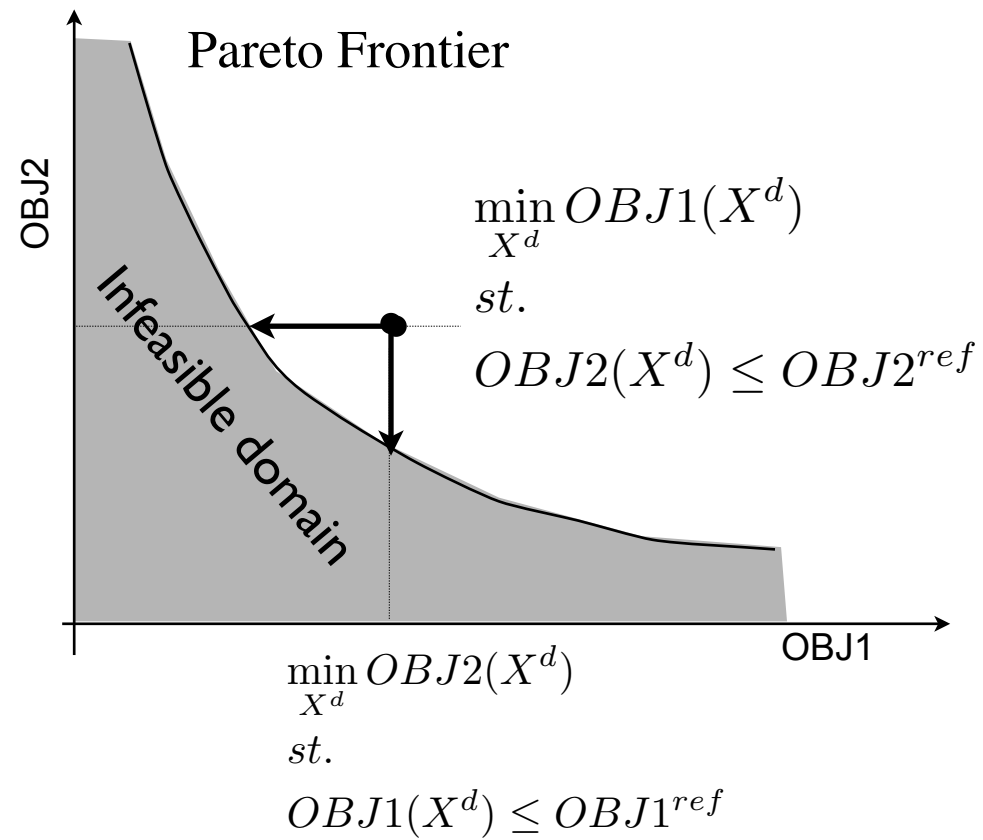
- Integer cut constraint on the equipment set $\{y_u\}$
 - assuming that we know already the solution k
 - The problem k + 1 is defined by adding to the previous MILP problem the integer cut constraint

Problem^{k+1} :

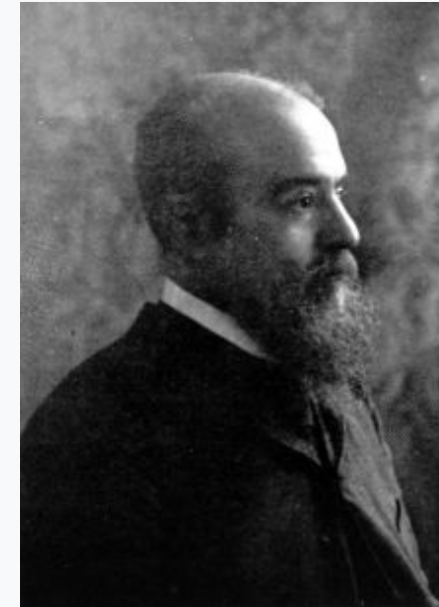
Problem^k

$$\sum_{i=1}^{n_y} (2y_i^k - 1) * y_i \leq \sum_{i=1}^{n_y} y_i^k$$

where y_i^k value of y_i in solution of problem k



Vilfredo Pareto



Born	15 July 1848 Paris, France
Died	19 August 1923 (aged 75) Céligny , Switzerland
Nationality	Italian
Institutions	University of Lausanne
Field	Microeconomics Socioeconomics

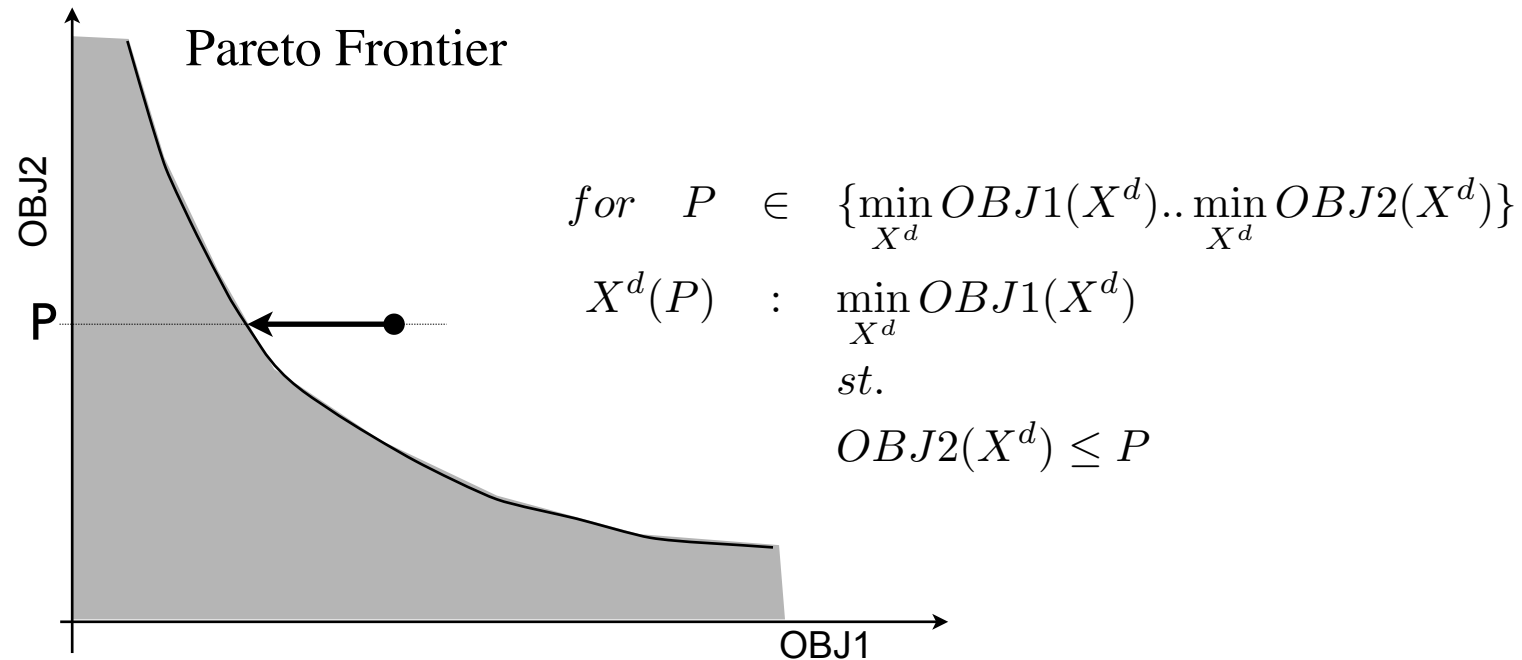
source : wikipedia

- Single objective parametric
 - Weighting

$$X_d(w) : \min_{X_d} (1 - w) \cdot OBJ_1(X_d) + w \cdot OBJ_2(X_d) \\ \forall w \in [0, 1]$$

- Note : if OBJ1 is a cost function

$$\frac{w}{1 - w} \text{ is a tax on } OBJ_2(X_d)$$



Note : the Lagrange multiplier of inequality gives the slope of the Pareto curve