# Erratum to the Ph.D. thesis <br> "Aggregation Operators for Multicriteria Decision Aid" by Jean-Luc Marichal 

- Page 2, line -13: "In order to avoid a heavy notation"
- Page 5, line -5: "in more detail"
- Page 6, line 11: "the formulation"
- Page 8, Eq. (1.12) : " $M\left(u_{1}\left(x_{1}^{a}\right), \ldots, u_{n}\left(x_{n}^{a}\right)\right) "$
- Page 19, line 14: "which is"
- Page 23, Definitions 2.2.18-2.2.20: "comonotonic vectors $x, x^{\prime} \in E^{n}$."
- Page 38, line 15: Replace "in the sequel" with "as we continue". Idem page 48 line 7 , page 59 line 5, page 137 line $9-10$, page 140 line -3 .
- Page 38, line 18: "for all $x, y \in[a, b]$ ".
- Page 48, line 11: "all $x \in[a, b]^{n} "$.
- Page 65, line 14: "which cover $\mathbb{R}^{n "}$ instead of "which partition $\mathbb{R}^{n "}$.
- Page 65, Definition 3.4.1: Since the function $B_{c}^{\vee \wedge}$ is defined in $\mathbb{R}^{n}$, its first expression given in line 9 is not correct. Instead, we just write

$$
\mathrm{B}_{c}^{\vee \wedge}(x)=\bigvee_{\substack{T \subseteq N \\ c_{T}=1}} \bigwedge_{i \in T} x_{i} .
$$

- Page 66, idem in line 3. We just write

$$
\bigwedge_{\substack{T \subseteq N \\ d_{T}=0}} \bigvee_{i \in T} x_{i} .
$$

- Page 87, line 16: "Here we follow..." instead of "In the sequel, we follow..."
- Page 88, line 17: "From now on..." instead of "In the sequel...". Idem page 204 line 13, page 217 line -4.
- Page 96, Lemma 4.2.3: "and if $\theta_{S} \in\{0,1\}$ " instead of "and if $\theta_{S} \in\{0,1\}^{n}$ "
- Page 98, line -8: Replace ',' with '.'
- Page 116, line -16: The displayed formula should be

$$
\operatorname{owmin}_{\omega^{\prime}}(x)=\bigwedge_{i=1}^{n}\left(\omega_{i}^{\prime} \vee x_{(i)}\right), \quad x \in[0,1]^{n}
$$

- Page 143, Eqs. (5.49) and (5.50): Replace ';' with '.'
- Page 149, line 3:"With a matrix notation, this..."
- Page 149, line 8: "correspondence"
- Page 160, line 3: "in more detail"
- Page 181, line -11: "the conversion formulas". Idem page 183 line 14, page 185 line -9 , page 185 line -6 , page 186 line -11 , page 202, line -8 .
- Page 197, line -10: "strictly concave function"
- Page 199, line 14: "all $x, x^{\prime} \in[0,1]^{n}$ "
- Page 199: Theorem 6.5.1 and its proof are not correct. The correct version can be found in: J.-L. Marichal, An axiomatic approach of the discrete Sugeno integral as a tool to aggregate interacting criteria in a qualitative framework, IEEE Transactions on Fuzzy Systems 9 (1) (2001) 164-172. (see Theorems 3.1 and 3.2).
- Page 217, line 5: "Using the notation"

