

Errata to the master thesis ‘Systems of Morphisms over Gödel Fuzzy Logic’

- The definition 2.1.7 (page 10) should have been as follows: A partially ordered set $\mathbf{L} = \langle L, \leq \rangle$ with the least element $0_{\mathbf{L}}$, the greatest element $1_{\mathbf{L}}$ and together with the operations of minimum $\min(x, y)$, maximum $\max(x, y)$ and residuation $x \Rightarrow y$, defined as $z \leq (x \Rightarrow y)$ iff $\min(x, z) \leq y$, is called a *G-algebra*. We say that a G-algebra is *linear* (or a *G-chain*) if its ordering is linear, i.e. if $x \leq y$ or $y \leq x$ holds for each $x, y \in L$.
- Following the definition 2.2.1 (page 18), there should have been a common conventional note concerning simplified writing of formulas of GFCT: For the sake of simplicity we will not explicitly distinguish among all the (different) kinds of predicate symbols ($=$ and \in) between the respective sorts of objects, since it is evident from the context which sorts are in the given relation. Similarly for other (defined) symbols.
- Preceding the definition 2.2.2 (page 19), there should have been a note concerning a hierarchical nature of GFCT: The following notions, concerning objects of particular orders, are defined similarly for all higher orders as well.
- The first item of the definition 3.2.1 (page 39), and similarly the first item of the definition 3.3.1 (page 44), should have contained \mathcal{V} instead of V , since in both cases we are dealing with the set of all fuzzy sets.
- Preceding the proposition 3.4.4 (page 48), there are introduced the constants 0 and 1, which are then used within the rest of the section 3.4. These constants should have stood for two different objects of the same order, which is not the case, since 0 denotes a fuzzy set of the first order, while 1 denotes a fuzzy set of the second order. A correct introduction of 1 is e.g. as follows: let 1 denotes the set $\{a\}$.