List of Known Errata

A current list of known errata is maintained on the WWW at `https://Randall-Holmes.github.io/errata.txt` The author's e-mail is `rholmes@boisestate.edu`. Please tell me about anything you find!

The worst error is:

p. 128 The object G used in the definition of sums and products of indexed families of cardinals is not described correctly. Currently, the text introduces G, incorrectly, as an element of the Cartesian product of the indexed family F of cardinals. It is necessary to stipulate further that the "index set" (the domain) of the indexed family F of cardinals is a set of singletons; G is then correctly specified as an element of $\mathrm{SI}^{-1}[\prod[F]]$; i.e., $\mathrm{SI}\{G\}$, not G itself, belongs to the Cartesian product of F.

It would be even better to start with G: "Let G be an indexed family of sets. Let F be the associated indexed family of cardinals, defined by $F(\{i\}) = |G(i)| \ldots$" We could then define $\prod[F]$ and $\sum[F]$ in the same forms given in the text. In the proof of König's theorem on p. 132, the $\mathcal{A}$ and $\mathcal{B}$ functions are examples of the correct construction of G.

p. 132 It should be $\mathcal{P}^2_1\{B\}$ in the proof of König's Theorem, not $\mathcal{P}^2\{B\}$.

Other errors:

p. 71, repeated p. 74: There is an extra parenthesis in the definition of Cartesian products of indexed families of sets, which might be initially confusing.

p. 116: An obvious printer glitch; it should be possible to decipher.

p. 125: In the last proof, the occurrence of $|A-Y|+|A|$ should be $|A-Y|+|Y|$.

p. 173: The statement and proof of a theorem is missing here. I assume without proving or even noting the assumption that for any rank X at or before Z_0, $T[X]$ is also a rank. This is true, and not hard to prove, but it does need a proof (supplied on my web page).

p. 183: Both of the occurrences of $T^2\{\Omega\}$ in the proof of the (correct) Theorem that No is an iterated cut system need to be replaced with something else; in the first case we need to say that the ranks are those indexed by elements of $T^2[\mathrm{Ord}]$ (the image of the set of ordinals under the T^2 operation), and the second instance of $T^2\{\Omega\}$ should be replaced by the limit of $T^2[\mathrm{Ord}]$, which is Ω itself, not $T^2\{\Omega\}$. The fact that $\lim T^2[\mathrm{Ord}] = \Omega$ is discussed in the next chapter.

p. 190: In the definition of beth numbers, I neglected to stipulate that each of the collections intersected to form the set of beth-numbers must contain $\aleph_0$.