Correction to: Codes, Designs and Graphs from the Janko Groups J_1 and J_2, J. D. Key and J. Moori, JCMCC 40 (2002), 143–159

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Proposition 1 on page 145 is incorrect and should be replaced with the following:

Proposition 1 *Let G be a finite primitive permutation group acting on the set Ω of size n. Let $\alpha \in \Omega$, and let $\Delta \neq \{\alpha\}$ be an orbit of the stabilizer G_α of α. If*

$$\mathcal{B} = \{\Delta^g : g \in G\}$$

and, given $\delta \in \Delta$,

$$\mathcal{E} = \{\{\alpha, \delta\}^g : g \in G\},$$

then $\mathcal{D} = (\Omega, \mathcal{B})$ forms a symmetric 1-$(n, |\Delta|, |\Delta|)$ design. Further, if Δ is a self-paired orbit of G_α then $\Gamma = (\Omega, \mathcal{E})$ is a regular connected graph of valency $|\Delta|$, $\mathcal{D}$ is self-dual, and G acts as an automorphism group on each of these structures, primitive on vertices of the graph, and on points and blocks of the design.

Proof: The first paragraph of the proof is correct. For the second and third paragraphs we need Δ to be self-paired for those statements to be correct; that is, looking at the action of G on $\Omega \times \Omega$, if $\bar{\Delta}$ is an orbit in this action then $\bar{\Delta}^* = \{(\alpha, \beta) \mid (\beta, \alpha) \in \bar{\Delta}\}$ is called the paired orbit of $\bar{\Delta}$. In the proposition, $\Delta = \{\delta \mid (\alpha, \delta) \in \bar{\Delta}\}$. If $\bar{\Delta} = \bar{\Delta}^*$, i.e. the orbit is self-paired, then Γ is a graph rather than only a digraph. □