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A CORRECTION TO: DISCRETE OPEN AND CLOSED MAPPINGS ON GENERALIZED CONTINUA AND NEWMAN'S PROPERTY

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In this paper, domains have compact closures.

On pp. 1087 and 1093, lines 6- and 11-, there is no homeomorphism h defined on $M(X)$ onto $M(X)$ having the properties listed.

The proof of Lemma 5.2 has an error on p. 1107 which can be easily corrected.

On p. 1108, line 9, σ commutes on n-chains with the special projections.

On p. 1109, line 13-, delete "special".

Theorem 6.2 should read as follows: Suppose that X is an n-dimensional generalized continuum. Furthermore, for each domain A in X, $\bar{A}$ compact, the Čech homology group,

$$\check{H}_n(X, X - A, Z_p) \cong Z_p \quad \text{for the prime } p > 1.$$

Then X has Newman's Property with respect to $C(p)$.

In Theorem 6.2, we consider the class $C(p)$, $p > 1$, of all finite-to-one open and closed mappings f on an n-dimensional generalized continuum such that

(1) f maps X onto a generalized continuum Y_f,
(2) if $F = f(B_f)$, then $\dim F < n$,
(3) $N(f) = p$, and
(4) $\{x|N(x,f) = N(f)\}$ is dense in X.

We could consider $C(k)$ where p is the smallest prime divisor of k.

The projection $\pi:N(B) \to N(U)$ takes an essential n-cycle $Z^n(B)$ mod $X - D$ to an essential n-cycle $Z^n(U)$ mod $X - D$.

The Lebesque number ϵ of B is relative to the subcollection B each of whose members meets $\bar{A}$.

Note that $\sigma\sigma Z^n(G_f) = x^2 Z^n(G_f)$. Either $x = 0$ or $x = 1$ in case $p = 2$. It follows that $x = 0$. For $p > 2$, a similar argument yields that $x = 0$. Thus, $\sigma Z^n(G_f) = 0$. This means that the sum of the coefficients of the n-simplices in $Z^n(G_f)$ which belong to the same distinguished family is 0 mod p. Indeed, each n-simplex in $Z^n(G_f)$ belongs to a distinguished family

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consisting of p n-simplices no one of which meets $f^{-1}(F)$. Thus, $\pi Z^n(G_f) = 0$ (the 0-cycle) on A. By construction of G_f, $\pi Z^n(G_f) \neq 0$ on A. Hence, it is false that

$$\operatorname{diam} f^{-1}f(x) < \epsilon \quad \text{for each } x \in A.$$

The theorem is proved.

In Corollary 6.21, the conclusion is that X has Newman's Property with respect to $C(p)$ as defined above.

In Corollary 6.22, the conclusion is that X has Newman's Property (as stated in Section 3), i.e., with respect to the class of all finite-to-one open and closed mappings f on X with $N(f) > 1$.

The statement that σ takes essential n-cycles to essential n-cycles is false and is never used in the paper.