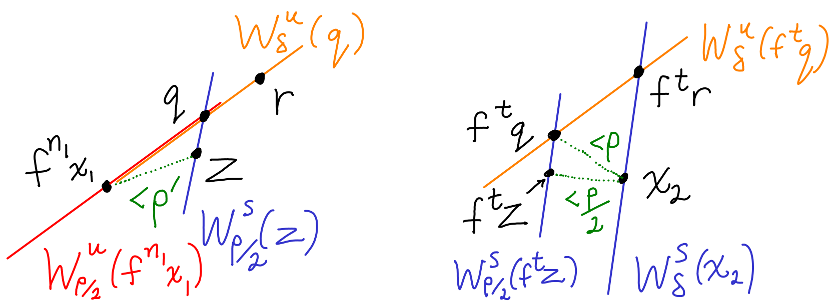
The proof of Proposition 1.7 (Proposition 5.11 in the arXiv version) contains the following incorrect statement: "By topological transitivity and compactness, there is $\tau \in \mathbb{N}$ such that for every $x, y \in X$ there is $t \in \{0, 1, \dots, \tau\}$ with $d(f^t x, y) < \rho$". This can be seen to be false by taking x to be a periodic point (or any other point whose orbit is not dense). The corrected proof should read as follows (edits are marked in blue).

> By Lemma 1.2.4.1, it suffices to show that for every sufficiently small $\delta > 0$, there are $\chi \in (0,1)$ and $\tau \in \mathbb{N}$ such that for every $(x_1, n_1), (x_2, n_2) \in X \times \mathbb{N}$, there are $t \in \{0, 1, \dots, \tau\}$ and $y \in X$ such that (1.2.4.7) holds. To prove this, let $\delta > \rho > \rho' > 0$ be such that
>
> - every $x \in X$ has local stable and unstable leaves $W^s_\delta(x)$ and $W^u_\delta(x)$ with diameter $< \delta$, and
> - for every $x, y \in X$ with $d(x, y) < \rho$, the intersection $W^s_\delta(x) \cap W^u_\delta(y)$ is a single point, which lies in X, and finally,
> - for every $x, y \in X$ with $d(x, y) < \rho'$, this point of intersection actually lies within $\rho/2$ of both x and y.
>
> By topological transitivity and compactness, there is $\tau \in \mathbb{N}$ such that for every $x, y \in X$ there are $z \in B(x, \rho')$ and $t \in \{0, 1, \dots, \tau\}$ with $d(f^t z, y) < \rho/2$; by the third property above, we have $W^u_{\rho/2}(x) \cap W^s_{\rho/2}(z) \neq \emptyset$.
>
> Using this fact, given $(x_1, n_1), (x_2, n_2) \in X \times \mathbb{N}$, we can let $t \in \{0, 1, \dots, \tau\}$ and $z, q \in X$ be such that $\{q\} = W^u_{\rho/2}(f^{n_1}(x_1)) \cap W^s_{\rho/2}(z)$ and $d(f^t(z), x_2) < \rho/2$, as shown in the picture. Then $f^t(q) \in W^s_{\rho/2}(f^t(z))$, so $d(f^t(q), x_2) < \rho$, and we conclude that $W^u_\delta(f^t(q)) \cap W^s_\delta(x_2) \neq \emptyset$. Writing $f^t(r) \in X$ for the point of intersection, we see that $r \in W^u_\delta(q) \subset W^u_{\delta+\rho/2}(x)$. Putting $y = f^{-n_1}(r)$, we see that y satisfies (1.2.4.7) with $\delta_1 = \delta + \rho/2$ and $\delta_2 = \delta$, and thus Lemma 1.2.4.1 proves the proposition.



The same incorrect statement appears in the proof of Proposition 1.8 (arXiv Proposition 5.13), with δ in place of ρ. After (1.2.4.10) (arXiv (5.20)), the proof should read as follows.

> As in the previous proposition, we use the following consequence of topological transitivity and compactness: given $\delta > 0$, there is $\tau \in \mathbb{N}$ such that for every $x, y \in X$ there are $z \in B(x, \delta/2)$ and $t \in \{0, 1, \dots, \tau\}$ with $f^t(z) \in B(y, \delta/2)$. Now given $(x_1, n_1), (x_2, n_2) \in X \times \mathbb{N}$, there are $z \in B(f^{n_1}(x_1), \delta/2)$ and $t \in \{0, 1, \dots, \tau\}$ such that $f^t(z) \in B(x_2, \delta/2)$, and thus (1.2.4.10) gives
>
> $$f^t(f^{n_1} B_{n_1}(x_1, \delta)) \supset f^t B(f^{n_1} x_1, \delta) \supset f^t(B(z, \delta/2)) \supset B(f^t z, \delta/2) \ni x_2.$$

The last sentence of the proof remains the same.