

Supplement to “Weak Domination Principle”

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Lemma 4 in the previous paper “weak domination principle” in the volume 28 of this journal is true without the assumption on non-degeneracy. Namely, *if G is a positive kernel on $\Omega = \{x_1, x_2, x_3\}$ satisfying the weak domination principle, then it satisfies the ordinary domination principle or the inverse domination principle.* To see this, let $r_{12} = 0$. Since $r_{23} = 0$ implies $r_{31} = 0$, it is sufficient to notice the incompatibility of $r_{23} > 0$ and $r_{31} < 0$.

Thus the main theorems in the paper are to be stated without assuming non-degeneracy as follows.

THEOREM 6. *Let \check{G} satisfy the continuity principle. If G satisfies the weak domination principle, then it satisfies the ordinary domination principle or the inverse domination principle.*

THEOREM 8. *Let \check{G} satisfy the continuity principle and let G satisfy the weak domination principle. If there exists a point x_1 such that $G(x_1, x_1) = +\infty$, then G satisfies the ordinary domination principle.*

THEOREM 9. *Let G satisfy the continuity principle and assume that every non-empty open set $\omega \subset \Omega$ is of positive G -capacity. If G satisfies the weak balayage principle, it satisfies the ordinary balayage principle or the inverse balayage principle.*

THEOREM 10. *Under the same assumption as in Theorem 9, G satisfies the weak balayage principle if and only if it satisfies the weak domination principle.*

THEOREM 11. *Under the same assumption as above, G satisfies the ordinary balayage principle if it satisfies the (elementary) weak balayage principle and if there exists a point x_1 such that $G(x_1, x_1) = +\infty$.*

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