DOWN,
BECKENHAM, KENT.
RAILWAY STATION
ORPINGTON. S.E.R.

Nov 30. '78

Dear Professor Semper,

Since writing I have recalled some of the thoughts & conclusions which have passed through my mind of late years. In North America, in going from N to S, or from E to W, it is clear that the changed conditions of life have modified the organisms in the different regions, so that they now form distinct races or even species. It is further clear that

in isolated districts, however small, the inhabitants almost always get slightly modified; & how far this is due to the nature of the slightly different conditions to which they are exposed, & how far to mere interbreeding in the manner explained by Weismann, I can form no opinion. The same difficulty occurred to me (as shown ~~under~~ in my Var: of An: & Pl: under Dom.) with respect to the aboriginal

breeds of cattle, sheep &c in the separated districts of G^t Britain, & indeed throughout Europe. As our knowledge advances, very considered & systematists as of no importance slight differences in structure are continually found to be functionally important; & I have been especially struck with this fact in the case of plants to which my observations have of late years been confined. Therefore it seems to me rather rash to consider the slight differences between representive species, for instance those inhabiting the different islands of the same archipelago, as of no functional

importance & as not in any way due to Natural Selection. With respect to all adapted structures, & these are innumerable, I cannot see how M. Wagner's view throws any light. Nor indeed do I see at all more clearly than I did before from the numerous cases which he has brought forward, how & why it is that a long isolated form should almost always become slightly modified. I do not know whether you will care about hearing my further opinion on the point in question, for as before remarked I have not attended much of late years to such questions. Thinking it prudent now that I am growing old to work at easier subjects

Believe me yours very sincerely

Charles Darwin

I hope & trust that you will throw light on these points.)

P.S. Semper 5

I note add another mark,
which I neither account
for nor when I first
read M. Wagner. —
When a species first
appears on a new
island; it will ~~[illegible]~~ probably
increase rapidly &
all its individuals
will be changed
simultaneously (which is
in particular in highest
degree) the chance more
or less modifying offspring

must intervene on its
entire & with their
modified parts or
~~to select~~ any species
not as yet modified.
The case with them
be like that of
domestic animals
which have slowly
become modified, either
by the action of the
altered conditions, or by the
process which I have called
the unconscious selection of
man. i.e in contrast with methodical selection.