

Comment on Sterns Letter:

1. True, word observer given many connotations — —
but all these connotations can be used consistently
within the scheme of Chap IV (abstract disc. of observation).
Such usage deliberate to show how general the
treatment is. Technically, "observer" can be
applied to any physical system capable of
changing its state to new state with some
fairly permanent characteristics which depend
upon the object system (with which it interacts).
— i.e. any measuring apparatus could be called
observer — and criteria for observer same as
for meas. app. . . Only possible distinction
is often one might use word "observer" for
more complex automatic mechanism, capable of
carrying out actions according to its past experience.
Dictionary meaning must also be included since
otherwise human observer not ordinary phys. system
and PPP violated.

2. Statistical ensemble of observers is, within the context of the theory, a real, in distinction to a virtual, ensemble.

3. Stearns remarks about misunderstanding of fundamental view of measurement proc. indicate rather clearly that he has had insufficient time to read the entire work. Several rereadings on his part seem to be called for.

Also -- Stearn is quite guilty in these remarks of begging the question --
- one of the fundamental motivations of the paper is the question of how can it be that mac. measurements are "irreversible", the answer to which is contained in my theory, ^(see remarks Chap IV) but is a serious lacuna in the other theory.