

## V. Supplementary Topics

We have now completed the abstract treatment of measurement and observation, with the deduction that the statistical predictions of the usual form of quantum theory (Process 1) will appear to be valid to all observers, we have therefore succeeded ~~in~~ <sup>in</sup> ~~in~~ <sup>solving</sup> in putting our theory in correspondence with experience, at least insofar as the ordinary theory correctly represents experience. We should like to emphasize that this was carried out by using only the principle of superposition, and the postulate that an observation has the property that if the observed variable has a definite value in the object system ~~it will remain definite and~~ the observer will perceive this value. This treatment is therefore valid for any possible quantum interpretation of observation processes, i.e., any way in which one can interpret wave functions as describing observers, as well as for any form of quantum mechanics for which the superposition principle for states is maintained. Our abstract discussion <sup>of observation therefore</sup> is logically complete, in the sense that our results for the ~~objective~~ subjective experiences of observers are correct, if there are any observers at all describable by wave mechanics.

In this chapter we shall consider a number of topics from the point of view of our pure wave mechanics, in order to <sup>supplement</sup> the abstract discussion and give a feeling for the new viewpoint. Since we are now <sup>mainly</sup> interested in elucidating the reasonableness of the theory, ~~in particular the existence of systems which can agree with observers~~, we shall often restrict ourselves

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to plausibility arguments, rather than detailed proofs.

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