DATE: October 7, 1963

To : Halsey L. Royden, Associate Dean
School of Humanities and Sciences

FROM : Patrick Suppes

SUBJECT: Appointment of Marvin Minsky

After a good deal of reflection on the matter and a serious attempt to weigh the positive and negative aspects of the matter, I am happy to write a letter in support of the appointment of Marvin Minsky to the faculty of the Division of Computer Science. I know the kinds of problems the Dean's office and the Appointments and Promotions Committee are faced with in considering this appointment. Minsky does not have the substantial body of published scientific research that would normally be expected of a full professor in one of the science departments. He does, on the other hand, have some papers of considerable interest. One of his papers on mathematical logic is quite a nice piece of work. His general article on artificial intelligence has probably been more widely read and discussed in an exposition of this new subject than any other single piece of literature yet written about artificial intelligence.

However, I think the real case for Minsky is not to be made by a defense in terms of his published papers. The real point about Minsky is that together with McCarthy he is one of the few people of faculty status anywhere in the United States who is able to think creatively and originally about the non-routine problems of large computer systems. The magnitude of the operation now being put together at Stanford both in terms of research and teaching (I think it important and in fact emphasize that teaching in the Computer Science Division is no longer a negligible matter) is much too great for the system side of the work to be carried by McCarthy alone. It seems to me that too much is at stake in the University both in terms of important interaction with a large number of scientific research persons, as well as in terms of Stanford continuing to provide a role of strong leadership nationally in computer developments, for us to hope that the entire load can be carried by John McCarthy, although I certainly have a favorable opinion of John's work and knowledge of computer systems.

I think it is also important to realize that mathematicians, particularly those interested in numerical analysis, although they are important and necessary to a large scale computer computation center, do not operate at the machine level, that is, in terms of the actual organization and creative use of hardware in the same way that do people like McCarthy and Minsky. It seems to me that with the addition of Minsky to the Stanford faculty a good claim could be made for Stanford having in Minsky and McCarthy the most creative team of computer systems developers in the country.

I should also like to emphasize that the magnitude and complexity of problems of large scale computer systems are very likely to be underestimated by

academic colleagues whose research eventuates in standard fashion in the usual
journal articles. It is a hard but unpleasant fact as far as I'm concerned that the
kind of original and creative thinking required to do imaginative things in compu-
ter systems is not the sort of thing that easily leads to publication, but that cer-
tainly is of an intellectual order comparable to research in many academic fields.
At least this is my own judgment, and it is on the basis of this judgment together
with my estimation of Minsky's place on the national scene with respect to
computer systems that I urge his appointment as a member of the Stanford faculty.

                                        Patrick Suppes

Dictated but not read

cc: Prof. Gilbarg