

A PHYSICIST LOOKS AT THE JAVANESE  
SHADOW-PUPPET PERFORMANCE.

M.S.A. SASTROAMIDJOJO.  
ENVIRONMENTAL RESEARCH INSTITUTE, SAMBISARI, YOGYAKARTA  
BULAK SUMUR J-6,  
YOGYAKARTA  
INDONESIA

Because of the lifelong preoccupation of the author with physics and philosophy, and in particular Javanese philosophy, it is not surprising that he has been looking for a common conceptual ground for both physics and the Javanese philosophy as expressed in the Javanese shadow-puppet play.

Why should physics be brought into juxtaposition with what is essentially art? The shadow-puppet play is not only an art but more significantly a "sacral" art which even at the present forms part and parcel of Javanese culture.

Physics and art are but human attempts to get at the ultimate truth. Physics, since Descartes, Newton and Bacon has developed into a search for the fundamental building block.

The underlying philosophy being, that once the "fundamental building block", in this case a sub-nuclear particle, has been found, everything else will be deducable. This world view is essentially mechanistic. If this world view was limited to the field of physics, it would be of interest only to physicists. However this has not been the case.

Locke based his philosophy on the findings of Newton. Descartes had a deep influence in psychology and Bacon can be traced in almost all disciplines of science.

In short the present fields of sociology, biology, medicine economics, politics, all are based on the mechanistic world view, which holds that the world consists of separate parts. This world view is therefore fragmented or non holistic.

Since the findings that there is no such thing as a "fundamental building block" no "ultimate sub-nuclear particle" but only "fundamental dynamic relationships" are so clearly portrayed in both matter and substance or if you will "hard-ware" and "soft-ware" of the Javanese puppet-play, an attempt has been made to re-view the contemporary fragmented world view in the Western world and compare it to Javanese philosophy and see if heuristically new developments are possible..

The puppets are curiously enough, "shadow"-like, so that holding a puppet, one is holding in fact a "solid-shadow". The generic name of these puppets are "shadows" so that the shadow on the screen is nothing less than a "shadow of a shadow".

It should be noted here that the "dalang" himself, insofar as he is the prime mover of the puppets, is the symbol of a higher level, or higher order. But at the same time he himself is a puppet in the hands of a "still higher" order.

The sequence, 1) shadow-of-a-shadow. 2) solid-shadow in the hands of the dalang and 3) the dalang himself, is the way "things" or "events" are projected from deeper and deeper levels of ordering.

It should be noted that "shadow" in Javanese culture stands for the physical phenomenon and also, for essence, spirit, and soul.

In sum the whole puppet play both in outward form en inner content depicts the world view of the Javanese, to wit :

- 1). that everything is connected with everything else.
- 2). that nothing is static, everything is only "becoming" or process.
- 3). the source of all power is the primogenial void.

It has been said that the Javanese philosophy is syncretic, which means that it consists of bits and pieces of all kinds of believes and religions.



SYMMETRY: Confrontation of "Bima"  
by his own self e.g, "Dewa Ruci"

Recommended reading

1. Bohm, David. : "Wholeness and the implicate  
order". Routledge & Keagan, 1982.
- 1a. Briggs, John P and Peat D.F. : "Looking glass universe".  
"The emerging Science of whole-  
ness". Fontane Paper back 1984.
2. Capra, Fritjof. : "The turning point".  
Fontana Paperback 1983.
3. Metzner, R. : "Maps of Consciousness".  
Collier Books. London. 1971.
4. Ornstein, Robert, E. : "The nature of Human Conscious-  
ness". Freeman & Co. San  
Francisco. 1973.
5. Sastroamidjojo, A. Seno. : "Dewa-Ruci" Kinta Publications  
Jakarta 1962.
6. Talbot, M. : "Mysticism and the New Physics".  
Bantam Books 1981.
7. Worff, B. Lee. : "Linguistics".  
Harper and Row, London. 1964.
8. Yasadipura. : "Serat Dewa-Ruci" Publ. Student  
Book store Solo, 1960.