

GOVERNING TRANSFORMATIVE TECHNOLOGICAL INNOVATION: WHO'S IN CHARGE? by Peter W.B. Phillips, Edward Elgar, 2007; ISBN: 978-1-84720-237-6; 320 pages.

*Reviewed by* Jack Boan, University of Regina

Phillips says in the Preface that research in this field tends to be disciplinary dominated and therefore unsatisfactory in that identifying true causal relationships in transformative technology has been impeded. He chose an interdisciplinary approach so as to be able to utilize information from any discipline that helps to find “who’s in charge”. As a result, he has given us a book that is awesome in its breadth, relying as it does on nearly five full pages of carefully selected bibliographical material taken from across the board. It is also home to a great many strange terms, but two full pages of abbreviations and acronyms helps. It explores how new consumer goods come into being in quantity and quality, and why sometimes they don’t! Above all, it is a search for the authority responsible for ensuring that the general public is protected.

Finding the answer to “who’s in charge” turns out to be a bit of a “Who Dunit?”, as the author searches for the “butler”. What he wants to find out is “who is the boss” when it comes to approving new things having in mind the protection of society and the need to make sure that acceptance of the entity, at the minimum, does no harm. In what follows, I will, first, summarize the contents, and then comment on the significance of the book.

The stage is set in Part 1, in which he uses the lowly potato and all of the combinations and permutations in which it is to found to demonstrate the unbelievable complexity of the task he has taken on. Leaving aside the obvious uses, think of the introduction of transgenic potatoes in the mid-1990s. A potato was developed by Monsanto that was insect- and viral-resistant, which made the farmers who adopted it, and some environmentalists, happy because of the reduced spraying required. Although having been approved by all the relevant authorities, it was withdrawn in 1999 because it was unsuccessful socially. “The reason is buried deep in the governing structures that underlie the potato system” (p. 9).

Part 2, titled “Grounding the Analysis” is devoted to definitions. The subjects of concern like “transforming technology, innovations and governing are each put into perspective. In Part 3, “Tools of Analysis” are laid out. One way to get a handle on the problem, is to look at who is doing the governing, so there are chapters on Governing by the state, by the market and by civil authorities (most all of which, it turns out) play a role. In Part 4, “Governing in Practice” the plot gets thicker as he slices “the cake” another way. The four chapters discuss governing knowledge, governing invention, governing the gestation of an invention, and governing production, marketing and consumption. Part 5, titled simply “Implications” has only one chapter: the author’s conclusions. After summarizing what has gone before, he says, “In summary, all governing institutions need to aspire much more to be accountable, responsible and transparent in order to create and sustain the legitimacy of the overall governing system

and its decisions. Our long-term economic and social future will depend on how we take up this challenge. (p.282)

A reader unfamiliar with the way inventions of various kinds eventually get into the retail store will be aghast, as I was, at the complexity of the matter. Some inventions come into use quite easily, but others, like genetically modified entities may not get to the consumer for years, if at all, as they wind their way through the maze of agencies and regulations, and finally may face public resistance, as with the potato.

It is a book that will be in high demand in universities and even in high schools. It will be read happily by those individuals, private and public, who have an interest in the process of change. The author is to be congratulated for making such a timely book available to the general public.