Kripke: Rigid Designators

An ambiguity in the definition?

Which of these three definitions is the intended one?

1. α is rigid$_1$ iff α designates the same object in every possible world.
2. α is rigid$_2$ iff α designates the same object in every possible world in which that object exists.
3. α is rigid$_3$ iff α designates the same object in every possible world in which α designates anything at all.

Some test cases:

In which sense(s) are these designators rigid?

‘The inventor of bifocals’

‘Richard Milhous Nixon’

‘17’

‘The politician Richard Milhous Nixon’, i.e., ιx (x is a politician $\wedge$ x = Nixon)

‘The positive square root of 16’

Answers

‘The inventor of bifocals’ is not rigid in any sense. It designates Franklin in the actual world and Spinoza in some other possible world.

‘Richard Milhous Nixon’ is rigid$_2$ (it designates the same thing—Nixon—in every world in which Nixon exists). Even if he hadn’t been **named** ‘Nixon’, he would still be the same **man**. It is also rigid$_3$. Whether it is rigid$_1$ depends on whether a designator can designate an object with respect to a world in which that object does not exist.

‘17’ is rigid in all three senses, since numbers (if they exist at all) exist necessarily.

So far, it looks like names are rigid (in every sense) and descriptions are non-rigid (in every sense). But this is not so.

‘The politician Richard Milhous Nixon’ is not rigid$_1$, since there are worlds in which it does not denote anything at all. And it is not rigid$_2$, since it does not designate Nixon in worlds in which Nixon exists but is not political. But it is rigid$_3$, since it designates Nixon in any world in which it designates anything. So *rigid$_3$* is not Kripke’s notion of rigidity.

‘The positive square root of 16’ is rigid in every sense. It denotes the number 4 in every world in which that number exists, i.e., in every world, and hence in every world in which it has a designation.