## III RUSSELL ON DENOTING

## Knowledge by Acquaintance and by Description

Knowledge of individuals comes in two forms. We can know an individual by being directly acquainted with it. Or we can know it (or know of it, as we might say), via a description. Russell makes it clear that he thinks knowledge by acquaintance is primary:

All thinking has to start from acquaintance (212)
Every proposition which we understand must be composed wholly of constituents with which we are acquainted (Problems of Philosophy p. 32)

Much of Russell's later work consists in trying to analyze the ways that this grounding is supposed to work: reducing each proposition to its constituents. (Russell ultimately thought that the only things we were truly acquainted with were momentary sense data.) 'On Denoting', however, is concerned with the prior question of how expressions of language can come to be about things that we know only via description. This relation is the relation of denotation; it contrasts with the reference relation which obtains between terms and objects with which we are directly acquainted.

## Quantifiers

Russell wanted to make do with just one quantifier: the universal. He does it here by a rather cumbersome metalinguistic method:
$C$ (everything) means ' $\mathrm{C}(\mathrm{x})$ is always true'
C (nothing) means ' " $C(x)$ is false" is always true'
C (something) means 'It is false that " $\mathrm{C}(\mathrm{x})$ is false" is always true'
(Russell says that ' $\mathrm{C}(\mathrm{x})$ is always true' is to be understood as 'ultimate and indefinable'; but we can get some grip on it by thinking that 'always' here (p.213) means something like: 'for every instantiation of the variable').

We would now do it rather differently, saying (roughly) that a sentence of the form

$$
\forall x C(x)
$$

is true just in case every object in the domain satisfies ' $C$ ' (an object $\alpha$ satisfies ' $C$ ' iff $\alpha$ is $C$ ), and then defining the existential quantifier in terms of the universal:

$$
\exists \mathrm{x} C(\mathrm{x})=\operatorname{def}^{\operatorname{def}} \boldsymbol{x} \sim \mathrm{C}(\mathrm{x})
$$

## Definite Descriptions

On Russell's account
The father of Charles II was executed
becomes:
It is not always false of x that x fathered Charles II, and that x was executed, and that
'if $y$ fathered Charles II, $y$ is identical with $x$ ' is always true of $y$
Or, simplified, and without the problematic metalinguistic component:
$\exists_{x}(x$ fathered Charles II, and $x$ was executed, and $\forall y$ if $y$ fathered Charles II then $y=x$ )

## Informativeness of Identity

How should we analyze
George IV wanted to know whether Scott was the author of Waverley?
Not as
George IV wanted to know whether $\mathrm{a}=\mathrm{b}$
But as
George IV wanted to know whether $\exists_{\mathrm{x}}$ ( x wrote Waverley, and $\forall \mathrm{y}$ if y wrote Waverley then $y=x$ and $x=$ Scott)
Note that if you think of Frege's senses as being given by definite descriptions, then Russell's theory here is a version of Frege's not an alternative to it.

Note too that Russell distinguishes his solution from
$\exists x$ ( $x$ wrote Waverley, and $\forall y$ if $y$ wrote Waverley then $y=x$, and George IV wanted to know whether $x=$ Scott)
In this sentence the definite description has a primary occurrence (or as we would more normally say today, has wide scope). Compare Russell's example of the touchy yacht owner (p. 217).

## Excluded Middle

The Law of the Excluded Middle states that all sentences of the form

$$
(\mathrm{Fa} v \sim \mathrm{Fa})
$$

are valid. (This is actually subtly different from the claim that either ' Fa ' or ' $\sim \mathrm{Fa}$ ' must be true, which is what Russell gives; this latter is now usually called 'bivalence'. According to some theories (most notably supervaluation) the two come apart sometimes.)

But we don't want to assert:
Either the King of France is bald, or The King of France is not bald
However, on Russell's account, that is not naturally read as an instance of the Law of the Excluded Middle. The natural reading is one in which the definite description in the second conjunct has wide scope over the negation:
$\exists \mathrm{x}$ ( x regally rules over France, and $\forall y$ if $y$ regally rules over France then $y=x$, and $x$ is bald) or $\exists x$ ( $x$ regally rules over France, and $\forall y$ if $y$ regally rules over France then $y$ $=x$, and $\sim x$ is bald)

In contrast, the instance of the Law of the Excluded Middle is one in which the negation has wide scope over the
$\exists x$ ( $x$ regally rules over France, and $\forall y$ if $y$ regally rules over France then $y=x$, and $x$ is bald) or $\sim \exists x$ ( $x$ regally rules over France, and $\forall y$ if $y$ regally rules over France then $y=x$, and $x$ is bald)
or, as we might put it in (rather stilted) English
Either the King of France is bald, or it is not the case that there is a unique King of France who is bald

## Empty terms

All meaningful terms do refer. But meaningful descriptions need not denote. If they have wide scope, they will always be false. But if they have narrow scope, they may be true (as in the last conjunct of the last example). There is no need for a Meinongian notion of subsistence. (But what of terms?)

