Whatever you need to accomplish in a medical workflow, you will face one of two principal tasks: collecting clinical data or processing clinical data. DICOM was designed to assist you with both in a consistent, clinically-sound manner. To eliminate ambiguity in data interpretation, the standard uses a formal set of rules for representing and encoding data. This part of the book introduces you to these rules.

In many ways, this might sound like an introduction to a foreign language spoken by bulb-eyed robots from planet DICOM. This language might not sound pretty to the human ear, but it definitely serves the purpose of making many DICOM conversations easier. Its longevity has become the best proof of its value: despite all the Sturm und Drang changes that the medical and computer industries have experienced since the inception of DICOM in the mid-1980s, it is still spoken and – with occasional updates to the vocabulary – will be spoken for many years to come.

Knowing the basics of DICOM lingo is indispensable for any human venturing into the DICOM world – the bulb-eyed robots may get moody. As with any language, DICOM learning begins with an introduction to its dictionary and its grammar.