1 Making sense of nominalization in unfamiliar text
When we read an academic text in a field with which we are familiar, we typically do not notice the grammatical metaphor: we have become used to decoding it through training in the subject. It is revealing, however, to look at discourse from an unfamiliar field, because it makes the process of working out what is being said harder and more explicit. Below is another short extract from Clinical Orthopaedic Examination; this is about things that can go wrong after a patient has had a total hip replacement operation. The extract has particularly dense use of nominalization. Identify the nominalizations and convert each into a full clause, as far as possible re-inserting or adding all the participants (i.e. avoiding the use of passive forms). Don’t attempt to turn it into continuous text, just treat each nominalization separately. Are there any cases where you find you cannot decide with certainty on what the clausal paraphrase is?
Example:
Component loosening and infection = “components loosen and something infects them”

Component loosening and infection
When this occurs, it is usually at the interface between the cement and bone. The complaint is of pain and impairment of function, and the diagnosis is made on the basis of the radiographic appearance. Loosening may be the result of infection introduced at the time of the initial operation, which may also lead to bone absorption and distal migration of the femoral component. The treatment of these complications requires a high degree of specialisation. Investigation by blood culture and aspiration, immobilisation and the prompt administration of the appropriate antibiotics may occasionally lead to resolution.

2 Identifying nominalization in more familiar text
Below are two extracts of similar length from my own writing. The first is from Chapter 9 of this book (so you should recognize it!). The second is from a draft of a research article that I wrote on certain aspects of scientific discourse including nominalization. The extract is from near the beginning of the article, and I discuss the same example as in this book (about comparing statistics) to introduce the idea of resources which writers in academic written registers can use in order to ‘elide’ key participants from the text – that is, to avoid explicitly mentioning the researchers.
Before reading the extracts, predict what you think the main differences will be in the way the ideas are presented, bearing in mind that the first is from a textbook, with me as the ‘expert’ passing information to less knowledgeable readers, and the second is from an academic
article, with me as a researcher writing for other linguists. Then identify the nominalizations in the extracts. In each case, underline the whole of the nominal group centred around the nominalisation, in order to highlight any elements that would realize participants in a clausal paraphrase.

*from the textbook*

If we think in terms of the meaning being expressed, we can see that, just as with the first example, we can ‘translate’ it into something like:

Whenever people compare statistics about the north and the south, they find that the north is significantly poorer than the south.

This way of expressing the meaning is intuitively closer to what we can think of, in oversimplified terms, as the physical and mental events in the external world that are being represented: we know that it is people who compare statistics and interpret what they find. But in terms of transitivity the representation is very different. In the original, the process of ‘comparing’ is represented as an entity or location from which something else can ‘emerge’ of its own volition; whereas the re-worded version represents it as an event involving human participants which results in those participants understanding a phenomenon. Using the terms introduced above, we can say that the ‘translation’ is more congruent – in other words, the term congruent can be informally glossed as ‘closer to the state of affairs in the external world’.

The metaphor is no longer simply in the non-congruent use of a lexical item (as was the case with ‘crippled’); instead it is in the grammar (which, amongst other things, makes it more difficult to do a transitivity analysis that captures the meanings adequately). In simple terms, nouns congruently encode things, and verbs congruently encode happenings. The original wording above is an example of grammatical metaphor because there a noun (‘comparison’) encodes a happening, and a verb (‘emerges’) encodes a complex meaning which is only partly a happening: it also involves the logical relation of cause and effect (‘as a result of comparing, people find’). We can therefore give a provisional definition of grammatical metaphor as: the expression of a meaning through a lexico-grammatical form which originally evolved to express a different kind of meaning. The expression of the meaning is metaphorical in relation to a different way of expressing the ‘same’ meaning which would be more congruent. This description is deliberately formulated in a broad enough way to include cases like the declarative command in the first example above.

*from the academic article*
The researcher is elided from this sentence in (at least) three ways. The first resource that the writer draws on for this purpose is nominalisation. One of the consequences of construing a process as a ‘thing’ is that mention of the participants involved in the process becomes structurally optional. Here the nominal group ‘every statistical comparison’ can be ‘paraclaused’ (i.e. paraphrased as a clause) as ‘every time someone compares the statistics’: the ‘comparer’ has been elided from the nominalisation. The second resource is passivisation: this involves elision of the Agent by whom the comparison ‘can be made’. With passivisation, it is easy to probe for the elided participant (‘Who by?’); and even with nominalisation, recovery of the participant is relatively easy (particularly by means of congruent expression of the process as a verbal group – ‘Who compares the statistics?’). In other words there are traces in the text of the participant, as inherent arguments of the verb.

In the case of the third resource, on the other hand, recovery is less straightforward: the eliding of the participant is more radical. The reconfiguration of meanings brought about by the nominalisation allows the interpretation of the results of the comparison to be represented as ‘emerging’ from the comparison. Of course, interpretation in this way depends on there being an interpreter – a more congruent wording would be: ‘every time someone compares the statistics they understand that the north is significantly poorer’. However, recovery of the participant who interprets means a more radical recasting of the wording than with nominalisation or passivization. It involves the reconstruction, at least in part, of a plausible version of a physical and mental event (people looking at statistical data and drawing conclusions) which is referred to in the clause. The arguments of the verb ‘emerge’ do not map at all onto the participants in this event, and it is only by reference ‘outwards’ to that event that identification of the potential participants which have been elided is possible.

3 Discussing nominalization in more familiar text
Now consider how the differences in the patterns of nominalization reflect the writer’s awareness of the different audiences for whom he (= I) was writing.