# 2 A Causal Model for Translation Studies

#### ANDREW CHESTERMAN

Abstract: Three basic models of translation are used in translation research. The first is a comparative model, which aligns translations either with their source texts or with parallel (untranslated) texts and examines correlations between the two. This model is evident in contrastive studies. The second model is a process model, which maps different phases of the translation process over time. This model is represented by communication approaches. and also by some protocol approaches. The third model is a causal one, in which translations are explicitly seen both as caused by antecedent conditions and as causing effects on readers and cultures. The four standard kinds of hypotheses (interpretive, descriptive, explanatory and predictive) are outlined in this chapter and illustrated with reference to the phenomenon of retranslation. Only the causal model can accommodate all four types of hypotheses, and it is hence the most fruitful model for future development in translation studies. Descriptive hypotheses (such as statements about universals or laws) can have explanatory force, but almost all causal influences are filtered through the individual translator's mind, through particular decisions made by the translator at a given time.

# 1. Models

'Theory' and 'model' are slippery concepts. The recent Dictionary of Translation Studies (Shuttleworth and Cowie 1997) refers only to the following as theories: skopos theory, polysystem theory, and the interpretive theory of translation. The only entries containing the word 'model' are on the ethnolinguistic model of translation (Nida) and the operational model (Bathgate). This is interesting: some approaches are designated as theories and others are not (there is a manipulation school), and some models but not others seem to have attained proper-name status. There is obviously much conceptual work still to be done in translation studies on clarifying what we mean by a theory or a model.

This theme will not be pursued further here, but it is necessary to explain how the relation between the terms 'theory' and 'model' is perceived in this chapter. The term 'theory' is used in a wide and rather loose sense that derives from the etymology of the word: a theory is taken to be a set of concepts and statements (claims, hypotheses) that provides a systematic perspective on something, a perspective that allows us to understand it in some way, and hence perhaps to explain it. The notion of a model often overlaps with this sense of theory, but models are usually less abstract; they are often understood as being intermediate constructions, between theory and data. A model typically illustrates a theory, or a part of a theory. For

instance, Nord's 'looping model' (1991: 32-35) provides a visual representation of certain aspects of skopos theory.

This intermediary status of models is also exemplified in the expression 'research model'. Here, the assumption seems to be that there are several possible
research models available, i.e. different ways of testing or developing a theory or
producing or exploring new data to stimulate new theories or test existing ones.
Good examples of research models, in this sense, would be think-aloud protocol
studies, or corpus studies, or deconstructionist studies. The first two would share a
more general research paradigm, that of empirical or descriptive studies. The last
would belong to a different paradigm, with different assumptions about research
goals and means.

In this chapter, the term 'model' is used in a sense that combines its theoretical aspect and its methodological aspect. 'Models of translation' are referred to, by which is meant preliminary, pretheoretical ways of representing the object of research. It is claimed that any model of translation has specific methodological consequences: translation models constrain research models, and hence the construction of translation theories.

### 1.1. The comparative model

In the history of translation studies we can distinguish three basic models of translation: comparative, process and causal. Each of these has several associated theories and approaches. The three models (or types of model) are outlined here in turn, and it is subsequently suggested that the causal one is the most fruitful.

The earliest theoretical model of translation seems to have been a static, productoriented one, centred on some kind of relation of equivalence. This may be called a comparative model. At its simplest, the comparative model looks like this:

$$X = Y$$

That is, a relation is posed between two entities. In this case, the relation is one of equality or identity – this was one of the earliest ways of conceptualizing the notion of equivalence, of course. Applied to translation studies, this becomes:

Source text 
$$(ST)$$
 = Target text  $(TT)$ 

However, it has long been clear that this is an inaccurate representation of translation, so the relation between the two texts is better represented as being more approximate, one of similarity, or indeed difference:

$$ST = TT$$
 or  $ST \neq TT$ 

This way of looking at translation underlies the contrastive approaches taken by scholars such as Catford and Vinay & Darbelnet. The problem of translation is primarily seen as one of alignment: the task is to select the element of the target language which will align most closely (under contextual constraints) with a given element of the source language. This is an approach that obviously has close links with contrastive linguistics, but there the traditional variant of the model has placed languages systems (langues) rather than texts (instances of parole) on either side of the relation:

Source language (SL) = Target language (TL)

The comparative model is useful for charting clear equivalences, for instance in terminology work. It is also useful for discovering cases of complex equivalence or facunae, as illustrated thus:

SL item X = 

TL item A (under conditions ...)
TL item B (under conditions ...)
TL item C (under conditions ...)

SL item X = 
TL item Ø (i.e. no equivalent)

For a classic example of complex equivalence, see the section on conditioned probabilities in Catford (1965: 29-31).

A more recent variant of the comparative model is used in corpus studies which compare translations with non-translated, parallel texts. Here too we have the same basic picture, centred on a relation between two entities:

Translated texts ≈ Parallel texts

The research task here is to discover the nature of the similarity relation, with respect to a given linguistic feature. In what respects do translations tend to differ from parallel texts? If there is a difference (for instance in the distribution or frequency of a given feature), is this difference indeed significant?

The goal of research based on a comparative model is therefore to discover correlations between the two sides of the relation. These may be correlations between features of language systems (including stylistic features), or texts, or sets of texts. The compared texts may be in different languages or in the same language. Comparative models allow statements about language-pair translation rules (Catford), about language-system contrasts, or about translation product universals.

### 1.2. The process model

The second model represents translation as a process, not a product. It introduces the dimension of time and is thus a dynamic model. At its simplest, it represents a change of state (from state A to state B) over a time interval (between time 1 and time 2), like this:

$$A(t1) \rightarrow B(t2)$$

Several variants have been proposed to represent the translation process. Some are based on the familiar communication model. Here are some examples:

Sender → Message → Receiver

 $S1 \rightarrow M1 \rightarrow R1/S2 \rightarrow M2 \rightarrow R2$ 

ST → Translation process → TT

Specification → Preparation → Translation → Evaluation

Input → Black box → Output

Problem 1  $\rightarrow$  Tentative Theory  $\rightarrow$  Error Elimination  $\rightarrow$  Problem 2

These variants are represented in a linear form here, but most of them acknowledge that in reality the process they describe is more complex, with feedback loops etc. Process models are well illustrated by Nida's river-crossing metaphor (1969), Sager's industrial process model (1994), Nord's looping model (1991), Garcia-Landa's semiotic model (e.g. 1990), Schiavi's narratological model (1996), some think-aloud protocol models, and my own Popperian model (Chesterman 1997).

Process models are useful if one is interested in sequential relations between different phases of the translation process. They allow us to make statements about typical translation behaviour, such as the micro-level use of time (e.g. the TRANSLOG project, see Hansen 1999), or the temporal distribution of different translation tasks (Mossop 2000), or decision-making in a sequence of choices that we can represent as a flow diagram (following Krings 1986). They thus enable us to say something about possible process universals.

#### 1.3. The causal model

Neither of the model-types considered so far are explicitly causal. True, they may well be open to a causal interpretation. For instance, a comparative model could be said to be implicitly causal to the extent that the relation can be read as a cause-effect sequence;

If X (in the source text), then Y will follow (in the target text)

Similarly, process models are also open to a causal reading, as soon as you say, for instance, that an output is caused by an input, or that what a translator does during a given phase is determined by what was done in a preceding phase, or indeed by the skopos. (For that matter, one could also argue that Vinay and Darbelnet's model (1958) is implicitly dynamic, insofar as they seek to follow the mind of the bilingual as it moves from one language to another.) However, in the above two types of model, causality is not overt, not central, and not explicit. Comparative and process models help us to describe the translation product and its relation with the source text, but they do not help us to explain why the translation looks the way it does, or what effects it causes. The questions asked are 'what?' and 'when?' or 'what next?', rather than 'why?'

Causality (cause and effect) has already entered translation studies implicitly, in several ways. Nida's dynamic equivalence includes the idea of achieving the same effect. Skopos theory foregrounds one kind of cause, i.e. the final eause (intention), and skopos itself could be defined as intended effect. The polysystem approach and scholars of the 'cultural turn' use causal concepts such as norms, in both source and target cultures, to explain translation causes and effects; they also build in other causal constraints such as patronage and ideology. Gutt's application of relevance theory makes explicit appeal to cognitive effects, and posits optimum relevance (in the technical sense of the term) as an explanatory factor to account for communicative choices in general (Gutt 1991 and this volume). Toury's (1995) proposed laws of interference and standardization seek to take us beyond description into explanation. Some protocol studies look for the proximate (cognitive etc.) causes of a translator's decisions.

Further, the long tradition of translation criticism and assessment can be seen in terms of translation effects. A translation criticism is the reflection of an effect that a given translation has, in the mind of the reviewer/teacher/client. Prescriptive statements about what translators should or should not do are implicit hypotheses of effect; they predict good/bad effects of particular translatorial choices. Reception studies also look at translation effects.

All these aspects of translation studies can be logically linked if we adopt a causal model of translation (see, for example, Chesterman 1998). At its simplest, any causal model can be represented like this, where the symbol '⇒' signifies 'causes' or 'produces':

Applied to translation studies, we get:

Causes  $\Rightarrow$  Translation(s)  $\Rightarrow$  Effects

Causality itself is a complex phenomenon. There are many kinds of causes, Aristotelian and otherwise. Some causes are deterministic (gravity causes things to fall), others are more like vague influences (social pressures, literary influences). Different types of causes are linked to different kinds of explanations. (For a thorough discussion of this, see von Wright 1971; for applications to translation studies, see Chesterman 1998 and 2000; Pym 1997; 83f.) In an attempt to reflect this range of causality we can refer more loosely to causal conditions (CC) rather than simply causes. So we can write:

 $CC \Rightarrow TT \Rightarrow EF$ 

where TT = target texts and EF = effects, broadly understood.

There are obviously many levels of causation that we must consider: at least cognitive (the translation act), situational (the translation event) and socio-cultural. There are also corresponding levels of effect. So our model can be expanded as in Figure 1:

Socio-cultural conditions (norms, history, ideologies, languages...) Translation event (skopos, source text, computers, deadline, pay...) Translation act (state of knowledge, mood, self-image...) Translation profile (linguistic features) 11 Cognitive effects (change of cognitive or emotional state...) Behavioural effects (individual actions, criticism...) Socio-cultural effects (on target language, consumer behaviour, discourse of translation, status of translators...)

Figure 1: The causal model

This looks like a causal chain here, but in reality the situation is of course more complex, and with no clear first cause or last effect.

A causal model like this allows us therefore to make statements and hypotheses about causes and effects, in response to questions such as the following:

- · Why is this translation like it is?
- · Why do people react like this to that translation?
- · Why did this translator write that?
- · Why did translators at that time in that culture translate like that?
- How do translations affect cultures?
- What causal conditions give rise to translations that people like/do not like?
   (What people ...?)
- Why do people think this is a translation?
- What will happen if I translate like this?

And of course it is always possible to continue asking 'why?'

A causal model is the richest and most powerful of the three models discussed here, because it also contains the other two. The source text and source language are present in the model as part of the causal conditions of the translation. And the dynamic time element is automatically present in any cause-effect relation. However, the most important reason for the primacy of a causal model is a methodological one: it encourages us to make specific explanatory and predictive hypotheses.

# 2. Hypotheses

Any rigorous academic discipline progresses by way of hypotheses: first discovering and proposing them, then testing them, then refining them. Otherwise we are condemned simply to go round and round in circles and to reinvent the wheel for ever. There is no difference here in principle between hard or soft sciences, nor even between empirical and hermeneutic approaches. Where methodological differences arise is in the kinds of hypotheses that are used and in the ways they are tested. Four kinds of hypotheses are commonly distinguished in the philosophy of science. These are outlined below, with some examples concerning the phenomenon of retranslation. It is then shown how our three models seem to allow (or at least encourage) the formation of different kinds of hypotheses.

# 2.1. Interpretive hypotheses

An interpretive hypothesis is based on the concept as. If we want to understand something new or complicated, a good way to start is to consider what it seems to be like, what we might compare it to. Hence the usefulness of metaphors in science.

To cite a classical example: if we want to understand the significance of the witches in *Macbeth*, we can propose an interpretive hypothesis to the effect that we should see them as representing Macbeth's subconscious. We thus 'interpret' the witches, we interpret what they 'mean' in the play, in a way that seems to be revealing or useful, a way that makes sense in relation to other aspects of the play, etc. This constitutes a hypothesis, because what we are really saying is: *if* we see the witches in this way, *then* we gain some good insight. More specifically, we can state the typical forms of interpretive hypotheses as follows:

- that something can be usefully defined as, or seen as, or interpreted as, X
- · that X is a useful concept for describing or understanding something
- · that something means X

Interpretive hypotheses are fundamental to any scientific endeavour, because they provide the concepts, definitions, classifications, etc. that we can use. They are tested against evidence of course, and also in use: do they or do they not turn out to be useful, offering good insights, leading to other hypotheses, etc.? Translation studies is full of them. Indeed, sometimes it seems that we have been spending more time thinking about what concepts to use and refining our conceptual tools than actually doing anything with these concepts.

Let us look at some examples from the study of retranslation, that is, situations where there is more than one translation, in the same target language, of a given source text. (For some background on retranslation, see Gambier 1994, and the special issue of *Palimpsestes* 4, 1990.) Here are some interpretive hypotheses:

- (a) Retranslation can be distinguished from revision as follows: revision focuses on a previous translation, retranslation on the original.
- (b) Goethe's three phases can be reduced to a dual opposition between 'freer earlier' and 'closer later'.
- (c) The distance between ST and TT can be validly measured in terms of...
  - · frequency of strategies ABC
  - · analyses of formal/semantic/stylistic equivalence
  - Leuven-Zwart's model of transeme analysis...
- (a) Only retranslations can become great translations. (Berman 1990)

Hypothesis (a) concerns a conceptual distinction, based on the belief that it is useful to make such a distinction, in this way. Hypothesis (b) proposes a conceptual move from a tripartite distinction to a simpler one, presumably in the belief that this will be useful, or easier to test. The hypotheses grouped under (c) propose various ways of operationalizing the concept of distance, i.e. they propose that 'distance' be understood as this or that. Hypothesis (d) plays with the definition of a 'great translation'; it proposes a definitional constraint on the class of 'great translations',

in that they must be retranslations. In other words, this hypothesis implicitly claims that it would be somehow beneficial for us to classify great translations in this way. Empirically, we could test this last claim for instance by listing lots of translations that are considered (by whom?) great, and seeing whether they are in fact all retranslations. Conceptually, we could argue about the interpretation of 'great', and perhaps propose competing definitions of great translations, i.e. competing interpretive hypotheses.

A frequent problem in translation research is that interpretive hypotheses are not presented explicitly as such, to be tested like any other hypothesis.

# 2.2. Descriptive hypotheses

A descriptive hypothesis makes a claim about the generality of a condition. That is, it claims

that all instances of a phenomenon X have feature Y

It thus makes a descriptive claim, to the effect that feature Y is a valid element of the description of all instances of X. It is important to note that the condition or feature must be empirically observable: the claim is an empirical one, not a conceptual one. For example, it might be claimed that all deciduous trees lose their leaves in winter. If a tree does not lose its leaves in winter, it therefore does not belong to the class of deciduous trees. In many fields, including translation studies, descriptive hypotheses are probabilistic rather than universal. So they take the form: instances of X tend to have the feature Y; or, most instances of X have feature Y. This is obviously a weaker claim, and is therefore harder to falsify.

In translation research, descriptive hypotheses concern translation universals or laws. At a lower level of generality, we also find descriptive hypotheses pertaining to translation types (not all translations) or translator types (not all translators), or text types. With respect to retranslation, the so-called retranslation hypothesis is a descriptive hypothesis that can be formulated as follows:

 Later translations (same ST, same TL) tend to be closer to the original than earlier ones. (See, for example, Palimpsestes 4, 1990)

The jury is still out on this one: there seems to be evidence both for and against. Much depends on how 'closeness' is to be measured, of course.

Descriptive hypotheses are thus attempts to answer 'what?' questions. What are translations like? What special features do they exhibit? What are translations of this kind like? How do they differ from source texts/from parallel texts/from other kinds of translations/from earlier translations?

### 2.3. Explanatory and predictive hypotheses

An explanatory hypothesis proposes an explanation for a given phenomenon, and a predictive one claims that under given conditions, this phenomenon will occur. Predictive hypotheses are often used to test explanatory ones; but it does not always follow that if you think you know the cause of something you can therefore predict exactly when it will occur, or even that it will occur every time the conditions seem right. Knowing the causes, being able to explain something, may simply lessen your surprise when it does in fact occur. (Examples: volcanoes erupting; children being sick after too many sweets; the consequences of revolutions and election promises.) The general form of these hypotheses is as follows:

### Explanatory hypothesis:

- · that the cause of /reason for explanandum E is X
- · that E is (probably) caused by/influenced by conditions ABC

### Predictive hypothesis:

- · that factor X will cause event or state Y
- · that in conditions ABC, event or state Y will (tend to) occur

In our general causal model of translation, there are two places where explanatory hypotheses fit in, and similarly two for predictive ones. Explanatory hypotheses refer (i) to the relation between the target text (TT) and the causal conditions (CC): the translation, we propose, has this particular feature or features because of suchand-such a cause; and (ii) to the relation between effects (EF) and translation (TT): a given effect was caused by such-and-such a feature of the translation. Similarly, we can make predictions either (iii) from causal conditions to target texts, or (iv) from target texts to effects. Thus (where '\installer' signifies 'is caused by'):

$$CC \Leftarrow (i) TT \Leftarrow (ii) EF$$

$$CC (iii) \Rightarrow TT (iv) \Rightarrow EF$$

More complex explanatory and predictive hypotheses can also be proposed, e.g. that these conditions will give rise to this kind of translation, which will in turn have those effects.

Let us return to the retranslation example. If indeed our descriptive hypothesis holds water, why should this be true? Explanatory hypotheses include the following: Retranslations tend to be closer to their original texts because

later translators take a critical stance to the earlier translation, seek to improve on it

- the existence of the earlier translation in the target culture affects the potential reception of the new one, and the translator knows this
- the target language has developed and allows the translator more freedom of movement
- TC translation norms have become more relaxed, allowing a closer link to the source text.

It is not yet clear which of these (or other) explanations carries most weight, or even if any such general explanation could be valid for all the cases where the descriptive hypothesis seems to be corroborated.

As for predictive hypotheses, we could formulate one as follows:

Later translations of a given text will be found to be closer than earlier ones.
 [Later = (a) not yet in existence now, or (b) not yet studied.]

Much testing obviously remains to be done.

# 2.4. Hypotheses and models

I would now like to propose a relation between the three models of translation and the four kinds of hypotheses. My point is that only a causal model allows us to make all four kinds of hypotheses, and that this model is therefore one that we should explicitly seek to develop in translation research.

All three models obviously make use of, and rely on, interpretive hypotheses. All three models also allow the formulation of descriptive hypotheses. The comparative model does not allow predictive or explanatory hypotheses; not, at least, unless causality is covertly introduced. The process model allows predictions to some extent – it can be claimed that phase B will follow phase A (although there may be an implicit causality relation embedded here) – but it does not allow explanations. Only the causal model explicitly makes it possible to posit explanatory predictions. Since the primary goal of any science is to understand and (somehow) to explain the phenomena it investigates, a causal model seems essential also in translation studies. The explicit use of such a model would also encourage the formulation of explicit hypotheses.

# 3. Conclusion: universals and laws

A causal model thus offers a comprehensive empirical research programme for translation studies, a basis on which to construct a translation theory or theories. From the extensive research already done, we need to distil specific explanatory and predictive hypotheses that we can test. We need to develop better conceptual and empirical tools for defining and systematically analyzing translation effects. We need to create new hypotheses that link causal conditions, translation profile features and translation effects. And then we might be able to develop corroborated hypotheses into probabilistic laws, as envisaged by Toury.

It is worth noting in conclusion that the above discussion of hypotheses also bears on the issue of the status of translation laws and universals. Product universals – like "Translations tend to have a simpler style than parallel texts" or "Translations are always marked by interference" – are in fact descriptive hypotheses. Process universals – like "Translators tend to reduce the amount of repetition" or "Translators tend to explicitate" – are also descriptive hypotheses. However, such hypotheses (especially if they seem to be well corroborated) can also be used as explanatory hypotheses. If I discover that a translation manifests less repetition than its original, or has a lower index of lexical variety than comparable parallel texts, I can argue that this is (partly) because, indeed, all translations (of this kind) tend to be like this. I can thus offer a subsumptive explanation, whereby a feature of a particular instance (this translation) is explained by reference to a general law which states a regularity pertaining to all such instances. Descriptive hypotheses can thus have explanatory force.

With respect to the causal model, a crucial role is played by cognitive causes, in the mind of the translator. We could also call these proximate causes, because these are the ones that are most immediately responsible for the appearance of a given feature in a translation profile. Why this additional phrase in this translation, why this reduction of repetition? First answer: because the translator decided to translate in this way. We can then go on and ask why the translator made this decision, but, insofar as explanatory hypotheses appeal to situational factors such as the skopos or socio-cultural factors such as translation norms, it must be borne in mind that these only actually affect the translation via the translator's own mind. This realization places the translators themselves at the centre of a causal model. If we exclude alterations made to a translation after it has been submitted to the client, there are no causes which can bypass the translators themselves. They themselves have the final say. It is their attitudes to norms, skopos, source text, translation theory, etc. that ultimately count, rather than these external factors per se. All statements about laws and universals, if they are given causal force, must thus accept that all causal influences are filtered through the translator's own mind, through subjective decisions taken at a given moment. In this sense, such statements are relative ones, contingent on individual translation decisions.

So far I have stressed the theoretical importance of developing a causal model. One useful practical consequence of research based on a causal model would be its applicability in translator training and quality assurance. If we can demonstrate specific links between causal conditions, translation profile features, and observed effects, this should lead to a greater understanding of how to produce translations that have more desired effects and fewer unwanted ones. And this in turn might

highlight the importance of the circumstances under which translators have to work. If we want high quality, let us establish empirically (and make publicly known!) what the appropriate conditions are.

### References

- Berman, Antoine (1990) 'La retraduction comme espace de la traduction', Palimpsestes 4: 1-7.
- Catford, John C. (1965) A Linguistic Theory of Translation, Oxford: Oxford University Press.
- Chesterman, Andrew (1997) Memes of Translation: The Spread of Ideas in Translation Theory, Amsterdam and Philadelphia: John Benjamins.
- ----- (1998) 'Causes, Translations, Effects', Target 10(2): 201-230.
- ——— (2000) 'What Constitutes "Progress" in Translation Studies?', in Birgitta Englund Dimitrova (ed.) Översättning och tolkning: Rapport från ASLA:s höstsymposium, Stockholm, 5-6 november 1998, Uppsala: ASLA, 33-49.
- Gambier, Yves (1994) 'La retraduction, tour et retour', Meta 39(3): 413-417.
- Garcia-Landa, Mariano (1990) 'A General Theory of Translation (and of Language)', Meta 35(3): 476-488.
- Gutt, Ernst-August (1991) Translation and Relevance: Cognition and Context, Oxford; Blackwell.
- Hansen, Gyde (ed.) (1999) Probing the Process in Translation: Methods and Results, Copenhagen: Samfundslitteratur.
- Krings, Hans P. (1986) Was in den Köpfen von Übersetzern vorgeht: Eine empirische Untersuchung zur Struktur des Übersetzungsprozesses an fortgeschrittenen Franzözischlernern, Tübingen: Narr.
- Mossop, Brian (2000) 'The Workplace Procedures of Professional Translators', in Andrew Chesterman, Natividad Gallardo and Yves Gambier (eds.) Translation in Context: Selected Contributions from the EST Congress, Granada 1998, Amsterdam and Philadelphia: John Benjamins, 39-48.
- Nida, Eugene (1969) 'Science of Translation', Language 45(3): 483-498.
- Nord, Christiane (1991) Text Analysis in Translation, Amsterdam: Rodopi.
- Pym, Anthony (1997) Pour une éthique du traducteur, Arras: Artois Presses Université.
- Sager, Juan C. (1994) Language Engineering and Translation: Consequences of Automation, Amsterdam and Philadelphia: John Benjamins.
- Schiavi, Giuliana (1996) 'There is Always a Teller in a Tale'. Target 8(1): 1-21.
- Shuttleworth, Mark and Moira Cowie (eds.) (1997) Dictionary of Translation Studies, Manchester: St. Jerome Publishing.
- Toury, Gideon (1995) Descriptive Translation Studies and Beyond, Amsterdam and Philadelphia: John Benjamins.
- Vinay, Jean-Paul and Jean Darbelnet (1958) Stylistique comparée du français et de l'anglais, Paris: Didier.
- von Wright, Georg Henrik (1971) Explanation and Understanding, London: Routledge and Kegan Paul.