

Introduction

Translation differs from the wider domain of communication in two ways: the mediating presence of the translator and the equivalence relation that constrains text production in a second language. Commentators speak of the voice of the original author and the voice of the translator and suggest that translators work in the space between languages. Translations, according to Gentzler, ‘open up new ways of seeing, which tend to subvert any fixed way of seeing’ (p. 30). But the translator is always constrained by the limiting presence of the original text. In searching for equivalents the translator becomes aware of the differences—nuances, associations, connotation and relationships—which are lost in translation. Yet the text in translation generates new relationships, acquires new resonances and takes on a life of its own.¹

A translation is produced non-deterministically. It does not follow a fixed set of rules but is subject to convention, and hence deviation. For this reason, translation is understood as a creative activity, which is never complete. (However, this is not to imply that there are no empirical standards of correctness.) Translations are viewed as different realizations of a common property, never equal to the original but approaching it. As Rambassa wryly observes, ‘[w]ishful thinking and an early training in arithmetic have convinced a majority of people that there are such things as equals in the world’. Weaver offers an insight into Holmes’ ‘black box’ or cognitive approach to the ‘elusive process’ of translating. He describes his reactions to the task of translating all sorts of implicit information and he details the effort to maintain various balances observed in the original: maintaining the balance between commonplace words or structures and more exotic or marked variants; maintaining ambiguity; maintaining the connotations of a particular referent, register or intertextual allusion, and so on. He observes that there are no rules, no laws, and that once

¹ Zlata Kufnerova, ‘Literary Translation and Linguistic Creativity’, in *Translation, a Creative Profession: Proceedings of the XIIIth World Congress of FIT, Belgrade, 1990*, ed. by Mladen Jovanovic (Belgrade: Prevodilac, 1990), pp. 211-214 (p. 211); *The Craft of Translation*, ed. by John Biguenent and Rainer Schulte (London: University of Chicago, 1989), back cover; and Edwin Charles Gentzler, ‘Contemporary Translation Theory’ (unpublished doctoral dissertation, Vanderbilt University, 1990), pp. 30, 62-64, revised as E. Gentzler, *Contemporary Translation Theories* (London: Routledge, 1993).

a translation is published he never re-reads it, confiding that: 'if I did, I would soon be reaching for a pencil, to make further additions and subtractions, in the futile pursuit of a nonexistent perfection' (p.124).²

Given that there is no ultimate translation, that no two translators will ever come up with exactly the same translation, Biguenent and Schulte ask how equivalences can be established, and what kind of interpretive reading the translator must engage in to do justice to a text before the actual translation can take place. They illustrate how different perceptions or angles of approach shape the translation, suggesting the translator must visualize the situation in the original text to decide how it should be translated and to capture some unusual distortion in a particular device or other. The translator's methodology 'introduces the readers into the complexities of cultural thinking and expression rather than reducing these complexities to a common denominator' (p. xiv).³

Since a text comprises more than fixed expressions, many view the task of translating as an exercise in interpretation.⁴ As Levenston warns, a text is not an object to be converted from one language into another:

The source text records an event, an act of communication between writer and audience in the source culture. And the task of translation is to create the conditions for a further event, an act of communication between a translator and a reader of the target language. (p. 62)

Hatim and Mason speak of translation as a process of negotiation, and consider a translated text as evidence of a transaction, as 'a means of retracing the pathways of the translator's

² Robert Feleppa, *Convention, Translation, and Understanding: Philosophical Problems in the Comparative Study of Culture* (New York: State University of New York, 1988), p. 188; Ranko Bugarski, 'Translation as Creation', in *Translation, a Creative Profession...*, pp. 29-39 (p. 36); Peter Newmark, 'Truth and Culture in Translation' (unpublished paper presented at the 'Teaching and Translating Arabic: Issues and Prospects' conference held at the School of Oriental & African Studies, University of London on 12-14 December, 1991), p. 2; Gregory Rabassa, 'No Two Snowflakes Are Alike: Translation as Metaphor', in *The Craft of Translation*, pp. 1-12 (p. 1); William Weaver, 'The Process of Translation', in *The Craft of Translation*, pp. 117-124; and James S. Holmes, 'Describing Literary Translations: Models and Methods', in *Translated!: Papers on Literary Translation and Translation Studies* (Amsterdam: Rodopi, 1988), pp. 81-91 (revised text of a paper presented at the International Colloquium of Literature and Translation held in Leuven, 27-29 April 1976).

³ John Biguenent and Rainer Schulte, 'Introduction', in *The Craft of Translation*, pp. vii-xvi (pp. ix, xiii-xvi).

⁴ Jean Delisle, *Translation: An Interpretive Approach*, trans. by Patricia Logan and Monica Creery (Ottawa: University of Ottawa, 1988), p. 76; Edward Levenston, 'Implied Author, Implied Reader and Translation Theory', in *Translation in Teaching and Teaching Translation*, ed. by G. M. Anderman and M. A. Rogers, 3 vols (Surrey: Centre for Translation and Language Studies, University of Surrey, 1988), I, pp. 57-78; and B. Hatim and I. Mason, *Discourse and the Translator* (London: Longman, 1990), pp. 3-4.

decision making procedures' (p. 4). When considered in conjunction with the translator's mediating presence, this view of expression as evidence of wider communicative purposes inevitably focuses attention on the translator's attunement to information from a number of distinct yet associated sources: to the original text, to the situation described in the original text, and to the situation in which the original communication took place. But how fundamentally different, if at all, are the potentials for interpretation imposed in the mediating act of translating from the general process of communication in which a listener imposes interpretations on a speaker's utterance? A few illustrations drawn from popular culture may help to illustrate this.

The importance of point of view in the process of interpretation is highlighted in the following mono-lingual, mediated communication: journalistic reporting. The original text was an address given by a professor of constitutional law to his colleagues on Australia's republican movement, and the derived text was a contentious newspaper report quoting segments of the address.⁵ A subsequent denial and clarification of the report indicates that the professor took issue with the false impression created by quotation in the initial report:

He said the front-page article was a 'gross misrepresentation' of his comments and contrary to positions he had espoused publicly for years.⁶

But truth in reporting, a kind of referential equivalence, is validated in the clarification by implied claims about the journalist's professional competence (evidenced with quotations 'recorded in shorthand'), and by recourse to a Queen's Counsel (holding an opposing position on the issue and presumably not present at the address). The QC is quoted in the clarification as saying that despite the professor's denial of elements reported in the initial story, everything he had said was objectively true: 'The statements attributed to Professor Winterton are correct in themselves'. Furthermore, the clarification goes, the alleged misrepresentation resulted from ambiguity in the situation referred to in the original address: it is claimed that the professor 'had not made this [reference] clear'. No apologies are offered and the presumption of honest reporting is maintained, yet three (or more)

⁵ James Woodford, 'A Republic Can't Work, Says Expert', *Sydney Morning Herald*, 8 September 1993, p. 1.

⁶ Mike Steketee and Daniel Lewis, 'Republican Hits Back Over Story', *Sydney Morning Herald*, 9 September 1993, p. 4.

distinct positions are held in relation to a fragment of mono-lingual text repeated verbatim. An apparent (unspoken) explanation is that the angle or spin on a story depends on the unique way in which information is retrieved from a communication event. In short, interpretation reflects point of view.

Further instances illustrate how the choice of words in a translation and aspects of a communication situation may reflect a speaker's attitude. The *Times* of London raised front page doubts about the Japanese government translation of a key speech delivered in Buckingham Palace on the first day of a state visit to Britain by Emperor Akihito, reporting discrepancies between the Japanese original (1) and the English translation (1a):

- (1) (lit.) Our hearts feel deep pain.
- (1a) At the thought of the scars of war that they bear, our hearts are filled with deep sorrow and pain.

Suggestions that the translation is incorrect are rejected as 'unfounded', according to a Japanese embassy spokesman. The seemingly gratuitous addition of *At the thought of the scars of war that they bear...are filled with...sorrow*, is said to reflect 'the true and faithful meaning and intention of the Japanese original'. At issue would appear to include pragmatic aspects of the communication situation—namely *who* was speaking—as evidenced in the telling comment from a Japanese Palace insider that 'to have the emperor say the words "deep sorrow" would have come unacceptably close to an apology for some people in Japan'.⁷ Five months later a similar contention is reported over the first written government apology for colonial rule over the Korean peninsula, by the Japanese Prime Minister Keizo Obuchi. Concern centred around the major differences between the Korean and Japanese versions of the statement, with claims that the Korean translation was stronger than the original, giving the apology 'gravitas it does not deserve' according to South Korean survivors. In this case, dispute centred around the speaker's choice of term among a range of possible options. Mr Obuchi picked the word *owabi*, which ranks 'one notch lower as a term of apology in the Japanese language than *shazai* or *shai*, the highest and most sincere form of apology'.⁸

⁷ London AFP, 'Doubts Raised Over "Regret" Translation', *Bangkok Post*, 29 May 1998, p. 8.

⁸ Seoul AFP, 'When Is an Apology Not a Real Apology?: Semantics Row Has "Sex Slaves" Upset', *Bangkok*

The effect of attitudes carried by the choice of expression may assume ideological proportions, as demonstrated in struggles over the representation of history. Attitudes implicit in the choice of terms (such as *massacre* over *dispersal*, *concentration camps* over *reserves*, and *sterilization* over *planned contraception*), became the catalyst for a rift in the New South Wales Teachers' Federation in the face of a ban threatened against the neutralization of the term *invasion* in the NSW Board of Studies syllabus for primary schools. At issue was the replacement of *invasion* with *arrival*, and *colonization* with *settlement* instanced in the following:

- (2) What changes occurred in NSW as a result of the British invasion of 1788?
- (2a) What changes occurred in NSW as a result of the arrival of British people in 1788?
- (3) [...] the legacy of invasion today.
- (3a) [...] the legacy of what was for Aboriginal people the invasion and colonization of their land.
- (4) Events could be associated with Aboriginal Australia, British invasion and colonization, Federation [...]
- (4a) Events could be associated with Aboriginal Australia, including invasion, British settlement, Federation [...]

Interestingly, samples (3a) and (4a) retain the offending term *invasion* but still effect changes in perspective. This is accomplished with the addition of 'what was for Aboriginal people' in sample (3a). The altered viewpoint in (4a) is brought about by inverting the relationship of the referents: the grammatical agency of *British invasion* is removed, and *invasion* is implicitly attributed to *Aboriginal Australia*.⁹ A similar report of ambiguous (or misleading) reference noted in (4a) concerns a vitriolic radio commentary on an unlawful discrimination finding for an Aboriginal woman against a real estate agent who refused to offer her accommodation. The racist implications of the commentary were countered with the subsequent claim by the commentator that 'comments were not about the woman but about the rights of real estate agents to exercise judgment when seeking tenants'.¹⁰

Post, 9 October 1998, p. 8.

⁹ Julie Lewis, "'Invasion' Softener Enrages Aborigines', *Sydney Morning Herald*, [n.d., n.p.]; Julie Lewis, 'Teachers Threaten Syllabus Ban', *Sydney Morning Herald*, 29 June 1994, p. 9; and Lydia Miller 'Agenda: Comment', *Sydney Morning Herald*, 19 May 1995, [n.p.].

¹⁰ 'Jones Offends Aborigines', *Daily Telegraph Mirror*, 30 November 1995, p. 9.

These illustrations highlight the pervasiveness of contextual factors in the interpretation of expressions. They indicate that expressions exist as communication resources for getting at a desired interpretation, and that interpreting attitudes and beliefs rests on the coordination of information from sources beyond the meanings of words in a text.¹¹ Language is best viewed not as a code or instrument, but as an environment which is utilized according to the wishes of those who own and use it. Understanding text involves an awareness of the nuances conveyed by surface forms of expression in a unique communication in addition to the meaning or propositional content that such expression has independent of its textual context and situation of utterance.

Some argue that a text is not the product of an intending author, but that texts have properties that are the product of the mechanisms by which they are produced. Hawkes emphasizes that the value of Shakespeare to contemporary society is the meaning with which we load his text—that we create meaning in Shakespeare. Its impact resides in the states of mind and described situations generated by processing of the text rather than in the meanings of the words:

words are not in themselves beautiful. Take Leonte's words about the statue of Hermione in *The Winter's Tale*—'Oh she's warm'. One of the most overwhelming phrases in Shakespeare, but very ordinary words. What gives them impact is the context of the play.¹²

The Translation Salience model seeks to explain what is mediated in the translator's claim to have translated. To understand something is to have a working model of it, proposes Johnson-Laird; and to explain something, suggests Moravcsik, is to provide independently motivated principles from which the facts to be explained naturally follow.¹³ States of mind and described situations are taken as uniformities in the process of

¹¹ Jon Barwise and John Perry, *Situations and Attitudes* (London: Bradford, 1983).

¹² James Wood, 'Was Shakespeare Really a Genius?: Interview with Terence Hawkes', *Sydney Morning Herald*, 21 March 1995, [n.p.].

¹³ P. N. Johnson-Laird, *Mental Models: Towards a Cognitive Science of Language, Inference and Consciousness* (Cambridge: Cambridge University, 1983), p. 4; and Edith A. Moravcsik, 'Agreement and Markedness', in *Agreement in Natural Language: Approaches, Theories, Descriptions*, ed. by Michael Barlow and Charles A. Ferguson (Stanford: Centre for the Study of Language and Information, 1988), pp. 89-106 (p. 90).

translating, and the translator's attunement to these uniformities is expressed through the reflexes in text of the independent principles of markedness, implicitness and localness.

Methodological issues in translation research are broached by Campbell in his model of translator competence for second language translator education. He rightly criticizes the use of hypothetical examples employed in earlier research (such as Catford). But he also questions the validity qualitative empiricism in Malone's model of text analysis, with its use of 'a vast collection of citations':

In the end, very little of this work is truly empirical since examples are not systematically collected, and the examples that do occur are usually cited to illustrate a predetermined theoretical point. (p. 19)

Translation research is, perhaps correctly, characterized by 'a thread of quasi-empirical thinking' according to Campbell (p. 20). But in this instance, he seems to be equating empiricism with quantitative methodology. While establishing protocols for the systematic measurement of a translator's textual competence, disposition and self-monitoring, Campbell's own corpus seems to consist of two 650 word texts translated by 16 subjects, as well as a survey of 26 subjects for self-assessment ability and a classroom translation of two texts in a self-monitoring study of real-time editing from which three subjects are profiled. His profiling of translators' textual competence yields normative and diagnostic tools and reflects a pedagogical purpose. It is modelled on Biber's quantification of genre variation which uses, by comparison, the Lancaster-Oslo-Bergen Corpus of British English and the London-Lund Corpus of Spoken English totalling 1.5 million words. Campbell actually employs qualitative methodology in his translator disposition profiling. He measures contextually determined word choice strategies as a reflex of stylistic interpretation: 'where a translator uses an equivalent that carries a connotation that supports the overall tone of the text, such as *affluent* rather than *rich*' (p. 104).¹⁴

¹⁴ Stuart Campbell, *Translation into the Second Language* (London: Longman, 1998), pp. 19-20, 54-56, 72-73, 80, 103-104, 122-129, 138, 150; J. C. Catford, *A Linguistic Theory of Translation* (Oxford: Oxford University, 1965); Joseph L. Malone, *The Science of Linguistics in the Art of Translation: Some Tools from Linguistics for the Analysis and Practice of Translation* (Albany: State University of New York, 1988); and Douglas Biber, *Variation Across Speech and Writing* (Cambridge: Cambridge University, 1988), p 66.

Appropriate uses of data rest on three issues: objective verification, representativeness and the complementary nature of quantitative and qualitative methodologies. Frequency-based data provide a reliable and systematic approach to the analysis of language. Statistical tools enable the complex relationships between many different variables to be examined and the significance of variation to be objectively measured. But categories for classification must be identified before linguistic phenomena can be counted and classified, and in this sense qualitative research is often a precursor to objective verification. Furthermore, the recursive nature of phrase structure rules indicates that language is non-enumerable or infinite, and so a corpus is by nature incomplete. Sampling procedures can safeguard for maximal representativeness. But stratificational sampling (pre-determining the hierarchical structure of the sample to enable fuller probabilistic sampling of each individual stratum) is itself an act of interpretation. As McEnery and Wilson point out: ‘different linguists may specify different genre groupings according to their theoretical perspectives on linguistic variation’ (pp. 65-66). While there is general agreement on the essential point that studies in linguistic communication require naturally occurring data, the use of quantitative and qualitative methodologies should be viewed as complementary. As Fillmore puts it: ‘the two types of linguists need each other’.¹⁵

These complementary methodologies suggest a fundamental dichotomy in the nature of linguistic communication. Quantitative analysis gives a solid empirical foundation and allows findings to be generalized, classified and idealized, enabling a precise picture of frequency or rarity and hence normality or abnormality. Qualitative analysis focuses on delicate variation and fine distinctions, allowing for complete and detailed description of rare phenomena. It therefore lends itself to the contextualization and interpretation of infinite variation and motivated ambiguity. McEnery and Wilson note:¹⁶

¹⁵ Tony McEnery and Andrew Wilson, *Corpus Linguistics* (Edinburgh: Edinburgh University, 1996), pp. 1-18, 62-66, 84; J. Schmied, ‘Qualitative and Quantitative Research Approaches to English Relative Constructions’, in *Corpus Based Computational Linguistics*, ed. by C. Souter and E. Atwell (Amsterdam: Rodopi, 1993), pp. 85-96; Douglas Biber, ‘Representativeness in Corpus Design’, *Literary and Linguistic Computing*, 8 (1993), 243-257; and Charles J. Fillmore, “Corpus Linguistics” or “Computer-Aided Armchair Linguistics”, in *Directions in Corpus Linguistics: Proceedings of Nobel Symposium 82, Stockholm, 4–8 August 1991*, ed. by Jan Svartvik (Berlin: Mouton de Gruyter, 1992), pp. 35-60 (p. 35).

¹⁶ McEnery and Wilson, pp. 62-63; and Biber, *Variation*, p. 52.

The fact that qualitative analysis is not primarily classificatory also means that the ambiguity which is inherent in human language—not only by accident but also through the deliberate intent of language users—can be fully recognised in the analysis: qualitative research does not force a potentially misleading interpretation. (p. 62)

This basic dichotomy is what the Saliency model brings to the fore: that meaningfulness for the purpose of translation resides in the translator's contrasting awareness of the transfer of typological, backgrounded information *and* the unique interpretation of finer, salient distinctions which often convey the point of an utterance.

Accounts of world output of translated books place literature and sciences at roughly equal production. Other estimates of the total translation market put the ratio of literary to non-literary material (including publicity, patents, notices etc.) closer to 1:99. The notional cost of a single page of United Nations documentation, according to one source, is \$US916. Of this, \$US602 stems from translation between the organization's six official languages.¹⁷ The translation data used to support the model presented in this study are from published Arabic and English sources. Qualitative empirical research into Arabic linguistic phenomena informs much of the discussion on contextually determined interpretation. Quantitative techniques applied in statistical approaches to machine translation are described in relation to nascent multilingual corpora in order to address issues of measurability and extending the model.

Chapters One and Two consider the nature of equivalence in translation from several perspectives. Sections 1.1 and 1.2 review a number of English and Arabic approaches to translation. Section 2.1 offers an explanatory proposition. Section 2.2 explores the notion of meaning as it relates to translation and suggests uniformities in the translation process. Sections 2.3 and 2.4 address relevant issues in the machine translation literature. Section 2.5 overviews the contrastive analysis framework. Section 2.6 elaborates the principles underlying the Translation Saliency model. Chapter Three illustrates saliency in translation with reference to Arabic and English, focusing on contextualized interpretations associated

¹⁷ Peter Newmark, 'Introductory Survey', in *The Translator's Handbook*, ed. by Catriona Picken (London: Aslib, 1983), pp. 1-22 (repr. in Peter Newmark, *About Translation* (Clevedon: Multilingual Matters, 1991), pp. 14-31), pp. 2-3; and Anthony Goodman, '\$1,160-a-page Conference Costs Revealed', *Sydney Morning Herald*, 19 October 1996, [n.p.].

with certain configurations of linguistic features. Section 4.1 notes the relativity of constraints on the postulate of markedness, and Section 4.2 explains the relevance of recent corpus-based statistical tools to quantitative validation of the model.

The model presented in this work is fairly straightforward and simple. But it draws on a wide range of research which brings with it the potential for unduly importing terminology from the disparate approaches. For this reason, I have generally tried to address the principles underlying various frameworks without, hopefully, too much simplification and opinion.

To avoid cumbersome transliteration of Arabic textual material, a reading knowledge of Arabic is assumed. Arabic-English and English-Arabic data are presented with the original fragment preceding its published translation. Each parallel datum is numbered once only to the left of the English (whether original or translation), as illustrated in the following:

بعثني انا والزبير
sent-he-me I and-zubayr

(5) He sent me and Zubayr.

(6) Shampoo the hair with a mild WELLA-SHAMPOO.

يُغسل الشعر بشامبو من "ويللا" على ان يكون من نوع الشامبو اللطف
is-washed(PASS) hair with-shampoo of wella on that it-is of type shampoo mild

The data generally support discussion of contextually determined aspects of interpretation. However, morphemic glossing (left to right) is supplied where appropriate to facilitate analysis of selected features. Parts of speech are not indicated where these are self-evident in the gloss or not focal to discussion. In this way, features such as definiteness and verb aspect are generally omitted or underspecified. Transliteration of Arabic is limited to personal names and the technical word *fus-ha* الفصحى *classical/literary Arabic*. Arabic personal names are rendered in their common English spellings and cited in Arabic in the first instance. Diacritics indicating emphatics and long vowels are therefore not displayed. Arabic vernacular samples are presented in Arabic script, with any relevant phonological points included in the accompanying discussion.

List of Abbreviations

M	masculine	DEM	demonstrative
F	feminine	EMPH	emphatic
		EXPL	expletive
SING	singular	IMP	imperative
DUAL	dual	INTERROG	interrogative
PL	plural	PART	particle
BPL	broken plural	PARTICIP	participle
M PL	masculine (sound) plural	PASS	passive
F PL	feminine (sound) plural	PREP	preposition
COLL	collective	PRON	pronoun
		REL	relative pronoun
NOM	nominative	SUBJ	subject
ACC	accusative	VOC	vocative
GEN	genitive		
		TOP	topic
DEF	definite	N-FOC	new focus
INDEF	indefinite	C-FOC	contrastive focus
V	verb	(lit.)	literal translation
S	subject	<i>fus-ha</i>	classical Arabic
O	object	MSA	modern standard Arabic
		ECA	Egyptian colloquial Arabic
N	noun	b. /d.	born /died
ADJ	adjective	A.D. / <i>ʔ</i>	anno Domini /hijra
VN	verbal noun	<i>ca</i>	circa

Chapter One

Translation as a Subject Area

A theoretical account of translation equivalence inevitably approaches the subject area of translation from the vantage of several disciplines—addressing the nature of human and machine translation, the wider context of philosophy of meaning, and empirical studies on the use of individual languages.

The Translation Saliency model of equivalence satisfies three specifications. It is:

- observable, by establishing meaningfulness with recourse to the behaviour of expressions in naturally occurring text (rather than cognitive processes);
- expressive, by defining equivalence as a relation between interpretations implicated in communication (rather than between meaning representations); and
- constrained, by anchoring interpretation in the surface features of text (rather than meaning-based paraphrase).

Taking the use of language for the purpose of communication as universally rational behaviour, invariants in the translation process are construed as the situations described in communication and the states of mind of communicators. The Saliency model explains equivalence as a process of attunement to communication resources in the interfacing languages. Translation Saliency is defined in terms of the independent notions of markedness, implicitness and localness (Sections 2.1, 2.2 and 2.6).

The eleventh century Arab linguist Jurjani (d. A.D. 1078/هـ ٤٧١) عبد القاهر الجرجاني placed special emphasis on the situational and textual context of language analysis. He investigated communicative function, judging the value of speech against its effect on the listener. (Owens notes Jurjani's frequent use of the term السامع *listener*.)¹⁸ However, modern semantic accounts of communication tend to restrict the scope of communicated

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عبد القاهر الجرجاني، « دلالات الإعجاز »، تحقيق محمد رضى (بيروت: دار المعارف، ١٩٧٨) cited in Jonathan Owens, *The Foundations of Grammar: an Introduction to Medieval Arabic Grammatical Theory*, Amsterdam Studies in the Theory and History of Linguistic Science Series III: Studies in the History of the Language Sciences, 45 (Amsterdam: Benjamins, 1988), pp. 248-249.

information to the meanings of expressions. In contrast to a very broad view of communication as a kind of social interaction ('the response of an organism to a stimulus'), Lyons proposes a narrower scope limited to intended meanings: 'the intentional transmission of factual, or propositional, information' (p. 32). While conceding that it is impossible to account for meaning except in terms of communication, Lyons apparently contradicts this narrower definition with the correct assertion that communication theory must embrace contextualized inferencing of implicatures. Lyons distinguishes two aspects of meaningfulness: intention and significance. He believes that a signal (utterance) may be meaningful to the sender (involving the notion of intention) as opposed to informative to the receiver (involving the notion of significance). But in the case of uninformative utterances (where the receiver knows whatever fact it is that the speaker is drawing attention to), successful communication can still be said to have taken place. A non-informative utterance can be:

produced with the intention that the receiver should *infer* from [its utterance] *something that is not said* and in the context need not be said. It may be assumed, however, that the *interpretation* of non-informative utterances trades upon our ability to interpret the same utterances in contexts in which they would be informative. (p. 35 emphases added)

Creating and understanding text requires communicators to process information which need not be linked to propositional content.¹⁹

Current language research trends suggest a need for any model of translation equivalence to include information about the states of mind of participants in the communication (such as attitudes) in addition to concerns about the expressions used and the propositions conveyed. Meaningfulness for the purpose of translation involves reference to culturally determined contextualization. The Salience model of translation takes the process of interpretation (contextualized inferencing) as a frame of reference. The translator coordinates interpretations according to the communication resources separately available in each of the interfacing language systems and according to the constraints of unique communication situations (as receiver in an original communication event and as

¹⁹ John Lyons, *Semantics*, 2 vols (London: Cambridge University, 1977), I & II, 305-311 (pp. 32-35, 607-613).

producer of a translation). The translator has recourse to information outside the meanings conveyed by the expressions in a text. The information to which the translator is attuned includes information about situations described in communication and information about the communication situation itself. The Translation Saliency model provides explanatory principles by which the translator's mediatory presence can be described and tested, without recourse to unmeasurable, innate cognitive processes.

1.1 Preliminaries

Current thinking on the nature of the relationship between a translation and its original is predominantly rationalist. Many valuable insights into the analysis of text for translation have been developed, often with a pedagogical purpose. But the underlying theoretical premise is informed by innate cognitive processes and the rationalist transfer metaphor which has prevailed for half a century. The transfer metaphor (Figure 1) proposes that an original text undergoes some (generally deterministic) process of analysis to a level of abstraction, followed by transfer and finally synthesis into translation (Sections 1.2.1 and 2.4).

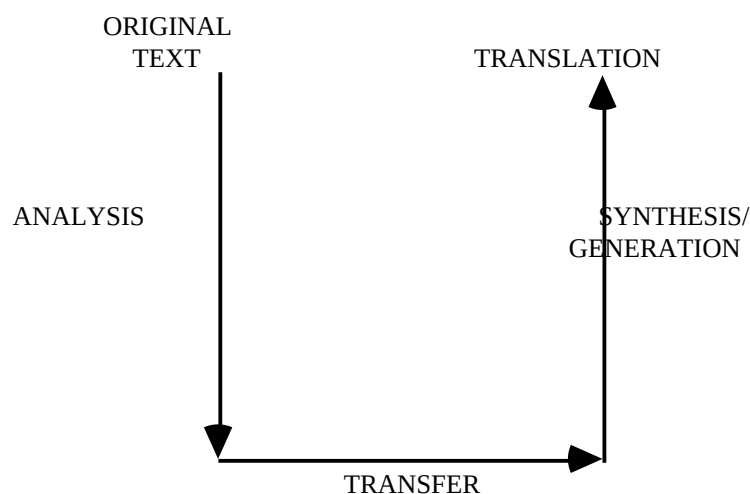


FIGURE 1 *Transfer Metaphor of Translation Equivalence*

The Saliency model demonstrates that this widely held view describes only part of a much bigger picture. While information can be transferred through the typological analysis of meanings, it is possible that the whole point of an utterance can be lost in translation.

The notion of salience explains meaningfulness for the purpose of translation with three underlying principles: markedness (a criterion for determining meaningfulness in the original), and implicitness and localness (constraints on the transmission of meaningful information at the nexus of translation). These primary descriptors combine to explain the translator's relative perception of information in the process of interpreting situated text for the purpose of translating. In so doing, the model offers a principled account of equivalence in translation (Section 2.6).

1.2 Approaches to Translation Theory

Translation is generally understood to involve a sequence of communication events whereby some original communication event constitutes a pre-existing point of reference for a subsequent communication event—its translation. In describing the dynamics of translating, Newmark schematizes a dozen or so influences on text production. These include the writer, culture, readership, norms, setting and traditions constraining the original, and a complementary set constraining the translation. Each component influences the translation process in some individual way. But the translator is at the centre of the process. The translator's orientation toward various parameters constraining translation affects the translation's reception: its naturalness, impact and transparency as a translation. The translator assigns interpretations based on the complex interaction of external factors with a reading of the original text. In trying to make sense of a text, the variables involved in processing and interpreting are too elusive and too numerous to describe. The translator mediates between the model of the world presented in the original text and the model with which the receiver of the translation is likely to be familiar. Baker implicates two main factors in the translator's mediating presence: the translator's ability to access the knowledge and expectations of the receivers of the translation, and the translator's own view of his or her role in the process. Anderman and Rogers suggest that the translation of a text is 'always oriented towards a particular goal, and that particular translation decisions can only be made within the context of that goal'. Pérez observes that 'equivalence changes notably when the translator decides to bring the source text to the readership or

vice versa'. Researchers such as Farghal comment that translation models tend to focus on certain levels of analysis at the expense of others.²⁰ Section 1.2.1 reviews the fundamental issue of orientation addressed by the major approaches to human translation. The section argues that the equivalence relation (by which an original communication event partially constrains translation) responds to the translator's unique orientation towards some set of constraints on translation.

The translator's mediating presence implicates the controversial notion of indeterminacy (Section 1.2.2). Indeterminacy in translation revolves around the problem of reconciling the translator's interpretive processes with the objective determination of meaningful information in an original text. Sections 1.2.3 and 1.2.4 provide an Arabic perspective on translation—with its long tradition in the practice of translation and as an empirical basis for developing and testing the Translation Salience model.

1.2.1 Translator's Orientation

The most comprehensive critique of modern translation theory to 1980 is provided by Gentzler. He criticizes theories of translation for their general tendency to subsume the study of translation into their own theoretical frameworks. The criticism implies that rationalisation of the translator's mediatory presence stems from the inquirer's desire to govern the object of study rather than be content merely with identifying parameters. Approaching translation theory from the discipline of comparative literature, Gentzler sees the main failing of contemporary approaches as their incapacity to deal with those repressed, secondary aspects of language which do not fit into any of the theories: the

²⁰ Peter Newmark, 'Introductory Survey', in *The Translator's Handbook*, pp. 1-22 (p. 11), repr. in Peter Newmark, *About Translation* (Clevedon: Multilingual Matters, 1991), pp. 14-31; J. C. Sager, 'Quality and Standards—the Evaluation of Translations', in *The Translator's Handbook*, pp. 121-128 (p. 124); J. D. Graham, 'Checking, Revising and Editing', in *The Translator's Handbook*, pp. 99-105 (pp. 104-105); Juliane House, *A Model for Translation Quality Assessment* (Tübingen: Narr, 1981), pp. 189-200; Mona Baker, *In Other Words: A Coursebook on Translation* (London: Routledge, 1992), pp. 253-254; Gunilla Anderman and Margaret Rogers, 'Introduction to Volume I', in *Translation in Teaching and Teaching Translation*, I, pp. vii-ix (p. vii); and María Calzada Pérez, 'Trusting the Translator', *Babel*, 39 (1993), 158-174 (p. 158-159); Farghal, Mohammed, 'Evaluativeness Parameter and the Translator from English into Arabic and vice-versa', *Babel*, 37 (1991), 138-151 (p. 139).

‘surface features of texts with all their gaps, errors, ambiguities, multiple referents and “foreign” disorder’ (p. 12). What remains of these surface features of text are precisely those ‘useful and enjoyable’ aspects that need to be ferried across by translation (p. 11).

Hatim and Mason cite Venuti’s study of the ideological consequences of translator choices. The study shows the normalizing and neutralizing effect predominant in the domesticating Anglo-American translation tradition of the last three centuries:

depriving source text producers of their voice and re-expressing foreign cultural values in terms of what is familiar (and therefore unchallenging) to the dominant culture.²¹

Venuti believes that a translator may choose a domesticating, assimilationist approach conforming to the values of the receiving culture, or adopt a foreignizing strategy. He quotes an 1813 lecture by Schleiermacher which argues that there are only two translation strategies:

Either the translator leaves the author in peace, as much as possible, and moves the reader toward him. Or he leaves the reader in peace, as much as possible, and moves the author toward him.²²

The domesticating strategy can be traced to the appropriation of Greek texts by Latin translator-poets. Venuti describes a Latin tendency to delete culture specific referents, add Roman cultural allusions and replace the names of the Greek poets with their own in order to pass translations off as original.²³

Of the translation movements which Gentzler identifies, three have relevance to the notion of equivalence in translation: the Science of Translation, Translation Studies and the closely associated Polysystems Theory.

The Science of Translation is perhaps the most influential approach in the translation theory literature. It has its roots in American Protestant theology. Bible translating fieldwork training programmes are practice oriented and informed by a proselytizing,

²¹ Basil Hatim and Ian Mason, *Translator as Communicator* (London: Routledge, 1997), p. 145; and L. Venuti, *The Translator’s Invisibility: A History of Translation* (London: Routledge, 1995).

²² Friedrich Schleiermacher, ‘On the Different Methods of Translating’, quoted in Lawrence Venuti, ‘Strategies of Translation’, in *Routledge Encyclopedia of Translation Studies*, ed. by Mona Baker and Kirsten Malmkjær (London: Routledge, 1998), pp. 240-244 (p. 242).

²³ Venuti, ‘Strategies’, p. 241.

populist evangelical Christian stance. The Science of Translation movement is primarily concerned to make the Word of God accessible to all: ‘making translation of the Bible effective as an instrument of evangelism’.²⁴ The approach is receptor oriented in that the perceived interpretation of the scriptural message in the receiving culture serves as the ultimate criterion of translation adequacy: that ‘the validity of any translation can only be judged by the extent to which the intended receptors rightly understand the message’.²⁵ The relationship between an original text and its translation is said to involve ‘cognitive content’ and ‘emotive response’.²⁶

General criticisms levelled against the approach are that it is reductionist, anecdotal and based on a fragile theoretical premise. The predetermined principle which governed the development of Nida’s theory is the primacy of communicating the spirit of the original message. This emphasis on function over form and its receptor orientation are reflected in Nida’s definition:

Translating consists in reproducing in the receptor language the closest natural equivalent of the source-language message, first in terms of meaning and second in terms of style.²⁷

Nida favours sense for sense translation over literal accuracy, preferring metaphorical shifts and exegesis. He licenses reinterpreting or naturalizing the content of the original text because he believes that literal rendering places too many demands on the reader to become informed about the original text’s culture. Gentzler argues that the approach posits an omniscient missionary-translator who does not trust the readers to decode the text for themselves and whose goal is ‘to dispel the mystery, solve the ambiguities, and reduce the complexities for simple consumption’ (p. 108). Translation is equated with revelation, the distinction between translation and exegesis is blurred, and the roles of translator and missionary are conflated. Faced with texts from cultures of which the recipient of the translation has absolutely no knowledge, the translator becomes the authority and is

²⁴ Eugene A. Nida and C. R. Taber, *The Theory and Practice of Translation* (Leiden: Brill, 1969), p. 31.

²⁵ Eugene A. Nida, ‘The Nature of Dynamic Equivalence in Translating’, *Babel*, 23 (1977), 99-102 (p. 100); and Nida and Taber, p. 23.

²⁶ Nida, ‘Nature of Dynamic Equivalence...’, p. 100.

²⁷ Nida and Taber, p. 12.

expected to provide all the contextual information. Subtleties are interpreted and simplified, and the energy of the original is lost as emphasis is placed on explanation. The form of the message becomes expendable as surface manifestations assume secondary status. Gentzler suggests that exegesis obscures the original text to such a degree that the original itself becomes unavailable. So in solving translation problems, the Science of Translation approach ‘simultaneously covers up other aspects inherent in the nature of the subject being studied’ (p. 76). Differing interpretations and variable reception are expunged. The presumption of some accessible, underlying meaning or message ignores the complex relationship between a work and its author. The empathy presumed in the prescriptive translation procedures contradicts what literary critics refer to as the intentional fallacy: that what a work says and what the author intended it to say are two different things.²⁸

Gentzler argues that the Science of Translation movement used generative linguistics to lend itself credence in an attempt to resolve the perennial issue of literal versus free translation. He believes that Nida appropriated the transformational component of Chomsky’s *Syntactic Structures*, having received it in mimeographed form two years before it was published.²⁹ However, Nida traces his handling of problems of exegesis to a 1952 paper in which he advocated ‘the backtransformation of complex surface structures onto an underlying level’.³⁰ Yet, the idea of transformations and an underlying level of analysis was certainly not limited in its currency. Chomsky’s notion of transformation rules is predated by Harris’ work on symbolic representation of structural relationships. Harris attempted to define differences between languages and proposed a transfer grammar based on the distributional analysis of grammatical categories using transformations as a descriptive mechanism for relating surface structures. Chomsky’s model used transformations to derive surface structures from deeper structures.³¹ In the context of

²⁸ Gentzler, pp. 5, 67-76, 95-114, 128-129, 133; and W. K. Wimsatt, *The Verbal Icon* ([n.p.]: University of Kentucky, 1954), cited in Levenston, p. 57.

²⁹ Gentzler, p. 68.

³⁰ ‘A New Methodology in Biblical Exegesis’ (1952), cited in Eugene A. Nida, ‘A Framework for the Analysis and Evaluation of Theories of Translation’, in *Translation: Applications and Research*, ed. by Richard W. Brislin (New York: Gardner, 1976), pp. 47-91 (p. 71).

³¹ W. J. Hutchins, *Machine Translation: Past, Present, Future* (Chichester: Ellis Horwood, 1986), p. 50; and

translation, Weaver had suggested in 1949 that ‘translation make deep use of invariants’ (p. 22). He described a metaphor for interlingua (Sections 2.3–2.4). Individuals living in tall towers erected over a common foundation try to communicate with each other by shouting back and forth from within each closed tower but find it difficult to penetrate even the nearest tower. ‘To translate from Chinese to Arabic’, the analogy goes:³²

is not to attempt the direct route, shouting from tower to tower. Perhaps the way is to descend from each language, down to the common base of human communication—the real but as yet undiscovered universal language—and then re-emerge by whatever particular route is convenient. (p. 23)

The transformational-generative approach to grammar is described as rationalist for its purpose of elucidating the innate, abstract knowledge of language that enable us to generate an infinite number of sentences from a finite set of grammatical rules. Linguistic rationalism relies on induced, introspective judgements based on a theory of mind that has a fundamental goal of cognitive plausibility. Transformational-generative grammar involves a process of abstracting away from the surface manifestations of linguistic expression to ideal grammatical representations and it is not concerned with external factors that affect communication. Deep structure representations are generated by phrase structure rules and modified by transformational rules.³³ Chomsky argued that the base forms of representation go much deeper than the structures of sentences in any given language: that ‘they pertain to the form of language in general rather than to the form of particular languages’.³⁴ He cautioned against the use of these putative universals as procedures for translation:

The existence of deep-seated formal universals [...] implies that all languages are cut to the same pattern, but does not imply that there is any point by point correspondence between particular languages. It does not for example, imply that there must be some reasonable procedure for translating between languages.³⁵

Zellig S. Harris, ‘Transfer Grammar’, *International Journal of American Linguistics*, 20 (1954), 259-270.

³² Warren Weaver, ‘Translation’, in *Machine Translation: Fourteen Essays*, ed. by William N. Locke and A. Donald Booth (Cambridge, Mass.: MIT, 1955), p. 15-23 (first published as a memorandum July 15, 1949).

³³ McEnery and Wilson, p. 4; Geoffrey Leech, ‘Corpora’, in *The Linguistic Encyclopedia*, ed. by Kirsten Malmkjaer (London: Routledge, 1991), pp. 73-80; and Gentzler, pp. 77-82, 89-91.

³⁴ Noam Chomsky, *Aspects of the Theory of Syntax* (Cambridge, Mass.: MIT, 1965), p. 117 quoted in Gentzler, p. 89.

³⁵ Chomsky, *Aspects*, p. 30 quoted in Gentzler, p. 90.

The inherently reductionist nature of the rationalist approach is generally noted. Its misapplication in the wider context of communication results in an idealized view of language:

divorced from all the *problems* of translation—from verb tenses, to archaisms, to dialects, to ironies, to proper nouns, to metaphors, to mistakes, and all those knotty problems that make translation both impossible and fascinating.³⁶

In the course of trying to represent some underlying message, Gentzler suggests, the Science of Translation approach obscures the object which it claims to be representing. It allows surface features of the original text to ‘fall through the cracks between generative lines of production’ (p. 91).

The rationale underlying adoption of the rationalist approach is that ‘to protect the content of the message, the form must be changed’.³⁷ In an extension of the intentional fallacy, Nida proposes that the intended message can be determined with reference to the ‘dynamic norm’:

What leaders of opinion say M [the message] ought to mean to R [the receptor], irrespective of what S [the source] may have intended.³⁸

In contrast to formal equivalence, Nida and Taber describe a receptor oriented equivalence relation termed dynamic equivalence:

the degree to which the receptors of the message in the receptor language respond to [the message] in substantially the same manner as the receptors in the source language. (p. 24)

House rejects response-based methodology for judging the adequacy of translation. She notes the total lack of reference to the original text and questions the testability of equivalent response.³⁹

The theoretical core of the Science of Translation approach and justification for the dynamic equivalence procedure resides in the notion of kernels. Nida comments that ‘[t]he kernel constructions in any language are the minimal number of structures from which the

³⁶ Gentzler, p. 90.

³⁷ Nida and Taber, p. 5.

³⁸ Eugene A. Nida, *Toward a Science of Translating* (Leiden: Brill, 1964), p. 53.

³⁹ House, pp. 8-15.

rest can be most efficiently and relevantly derived'. In contradistinction to Chomsky, he purports 'the remarkable similarities between the basic structures of different languages', claiming the existence of 'many more parallelisms between kernel structures than between the more elaborated transforms'.⁴⁰ Nida and Taber propose that at this abstract level, structures 'can be transferred more readily and with a minimum of distortion' (p. 39). The procedure is explained as follows:

It is both scientifically and practically more efficient (1) to reduce the source text to its structurally simplest and most semantically evident kernels, (2) to transfer the meaning from source language to receptor language on a structurally simple level, and (3) to generate the stylistically and semantically equivalent expressions in the receptor language.⁴¹

But rationalist theories provide introspective judgements on innate, cognitively plausible theory of mind and are by nature unobservable and not 'evident'.

No detailed explanations are supplied in the Science of Translation literature as to how deep structure transfer occurs. Scant reference is, however, made to the method involving backtransformation, contextual consistency and forward transformation:

Frequently, the form of the original text is changed; but as long as the change follows the rules of backtransformation in the source language, of contextual consistency in the transfer, and of transformation in the receptor language, the message is preserved and the translation is faithful.⁴²

Backtransformation is a kind of intralingual paraphrase that reduces surface features with 'no changes in the semantic components [...] only a different marking of the same relations between the same elements'. The kernels formed from this process are the basis for transfer and provide 'the clearest and least ambiguous' statements of the relationships between elements and are supposed to 'correspond most closely with those expressions likely to occur in the receptor languages'.⁴³ Transfer is said to take place on the basis of contextual consistency, which is 'more important than verbal consistency'.⁴⁴ Context

⁴⁰ Nida, *Toward a Science...*, p. 66; also Eugene A. Nida, 'Science of Translation', in *Language Structure and Translation*, ed. by Anwar Dil (Stanford: Stanford University, 1975), pp. 79-101 (Presidential Address to the Annual Meeting of the Linguistic Society of America, first publ. in *Language*, 45 (1969), 483-498, p. 91; and Nida, 'Framework for Analysis and Evaluation...', p. 72.

⁴¹ Nida, *Toward a Science...*, p. 68.

⁴² Nida and Taber, p. 202.

⁴³ Nida and Taber, p. 47.

⁴⁴ Nida and Taber, p. 101.

relates to some form of situation, but the situation of utterance and the situation described in the original text are not explicitly distinguished, though emphasis is placed throughout the literature on analysing constraints on the communication situation in the receiving culture. Modification of abstract syntactic structures during transfer is said to be dictated by obligatory contrasts in representation of the interfacing languages. Forward transformation involves the optional modification undertaken to restructure the text in the language of the translation.⁴⁵

By equating successful translation with dynamic equivalence, the historical use of the attribute faithful is reversed. Traditionally, the term has been associated with formal accuracy, but in Nida's usage it denotes the spirit, sense or intention of freer translation, naturalized to accommodate the world view of the receiving culture.⁴⁶

Reconciling the world view in the receiving culture with the message determined from the original text is ultimately what motivates this translation movement. Two main directions in research are promoted: decomposition of concepts conveyed by expressions; and the analysis of the receiver's conceptual framework to create an awareness of constraints on the processing of text in the receiving culture. Procedures for accommodating or modifying the text in translation are accomplished on the basis that '[w]hatever concepts are communicated are reinterpreted in terms of the total conceptual framework of the different context [of the receiving culture]'.⁴⁷ Theological motivation privileges the response to the sign rather than the sign itself. The dynamic equivalence orientation establishes a dialogue 'not between the receiver and a text or symbols, but between the receiver and God'. The approach emphasizes behavioural aspects of communication at the expense of other components, 'not "what" language communicates, but "how" it communicates':⁴⁸

⁴⁵ Nida, 'Science of Translation', p. 91.

⁴⁶ Gentzler, p. 101.

⁴⁷ Eugene A. Nida, *Message and Mission: The Communication of the Christian Faith* (New York: Harper, 1960), p. 87 quoted in Gentzler, p. 96.

⁴⁸ Gentzler, pp. 97, 100.

one is not so concerned with matching the receptor-language message with the source-language message, but with the dynamic relationship, that the relationship between receptor and message should be substantially the same as that which existed between the original receptors and the message.

A translation of dynamic equivalence aims at complete naturalness of expression and tries to relate the receptor to modes of behaviour relevant within the context of his own culture; it does not insist that he understand the cultural patterns of the source-language context in order to comprehend the message.⁴⁹

To achieve these goals, Nida appends a cultural or communicative context absent from Chomsky's model. Modification of the referential component of the original text to maintain equivalent effect hinges on inquiries into non-linguistic, encyclopaedic knowledge for a functional perspective on interpretation.⁵⁰ An illustration of how the connotations conveyed by an expression may effect the impact or reception of the message is provided in the rejection of the Arabic name *Isa* (for translations of references to *Jesus*) advocated by Nida and Taber. They show how variant expressions can pick out contrasting attitudes even when pointing to the same referent, by indicating that the Christian name *Jesus* entails 'the Son of God, resurrected from the dead' while the Muslim name *Isa* connotes 'a prophet [who was] not resurrected'.⁵¹ Investigating the situations in which an expression occurs in the receiving culture focuses attention on the role of expectation or linguistic norms in the interpretation of utterances. But by a sleight of hand, pragmatic aspects of communication are not differentiated from the rationalist methodology. Rather, they are added on at the level of abstract representation. Because of this, contextual constraints at the surface level assume universal status, helping to reinforce the abstract, timeless reinterpretation of the original text.⁵²

Practical guides in the Science of Translation tradition are offered by Barnwell and Larson. Barnwell's work exhibits the classic chain of loaded presumptions which typify the approach: that translation is a deterministic process aimed at capturing some entity called meaning, which is prior to the form of expression; and that transferring components of this message into the language of translation will ultimately evoke the same effect as

⁴⁹ Nida, *Toward a Science...*, p. 159.

⁵⁰ Nida, 'Framework for Analysis and Evaluation...', p. 64.

⁵¹ Nida and Taber, pp. 83-84 n. 13.

⁵² Gentzler, pp. 98-100.

putatively intended in the original. The handbook includes a few naturalizing strategies for translating metaphorical usage and unknown concepts such as: ‘messenger of God’ for *angel*, ‘a precious oil called myrrh’ for *myrrh*, and ‘white as egret’s [sic] feathers’ for *white as snow* (pp. 80-81, 83). Referential substitution is advised for contexts with a didactic function: where it is ‘the communication of the teaching point which seems to be more important than the surface form of what is referred to’ (p. 82). Larson provides a comprehensive survey of text-linguistic principles for analysing discourse functions as they relate to the cultural distances characteristic of contemporary scriptural translation. Her main purpose is to make explicit the communicative force of textual relationships or the organization patterns in text. Typical of the Science of Translation literature, it suffers from the determinism resulting from adherence to the intentional fallacy. The work provides copious practical examples but promotes naturalizing strategies motivated by its prescriptive orientation toward evoking in the receiving culture ‘the same response as the source text attempted to evoke’ (p. 6).⁵³

Larson’s approach to functional interpretation of textual relationships emphasizes the packaging of information in texts and it brings to light three important aspects of the equivalence relation. First, she distinguishes configurations of information which are shared by the languages in contact from those which are not shared. The resulting correlation (or lack of correlation) highlights the ubiquity of skewing or compensation in translation operations. Second, she demonstrates that organizing information in a translation involves an awareness of differences between the interfacing languages in the information that needs to be made explicit. This principle is limited in its application to the process of exegesis: making explicit in the translation that which is implicit in the original. Finally, attention is paid to the distribution of features in the grammar and the effect such distributions have on the choices available to speakers in a communication. This highlights the meaningful nature of motivated choices to a communication: that ‘meaning is possible only when a speaker could choose to say something else instead’ (p. 31). The notion of

⁵³ Katherine Barnwell, *Introduction to Semantics and Translation*, 2nd edn (Horsleys Green: Summer Institute of Linguistics, 1980); and Mildred L. Larson, *Meaning-Based Translation: a Guide to Cross-Language Equivalence* (Larham: University of America, 1984).

focus of attention is mentioned, as is the need for the translator's awareness of prominence or markedness in the organization of text. Overall, the work is presented as a survey of themes in almost a checklist format—as a guide to practical translation. Its development into a coherent theory is limited by the receptor orientation of the Science of Translation approach.⁵⁴

A further variation on the approach is offered by Dillon's application of schema theory to translation. Once again, the work is deterministic and reductionist, suffering from the presumption of intention, conflating the roles of translator and exegete, and attempting to think for the recipient. These attitudes are most succinctly revealed in Dillon's claim that the goal of Bible translation is to make the product 'as easy to understand and comprehend as possible' (p. 5). Schema theory describes how people organize knowledge in their minds. It is adopted as a way of linking the comprehension of text to culturally determined knowledge. The organization of knowledge is seen as the key to understanding the cognitive processes of coherent communication and understanding. The implication is that the interpretation of new information is determined by pre-existing culturally determined knowledge.⁵⁵

Dillon is to be commended for her attempt to introduce the notion of prominence into a model of coherent interpretation, though this is not developed. She surveyed 37 translators to establish their interpretations of Biblical translation in the receiving culture. The general tone of the research is illustrated by the following procedure for avoiding 'the wrong message'. In this instance, informants interpreted John the Baptist to be from a higher class than Jesus:

Untying sandals was the job for a servant to do. What the *translator* wanted to communicate was that John the Baptist thought himself unworthy to do any menial task for such a great person as Jesus, just the opposite of what the people understood. The result was a distortion of the *intended* communication. This solution has two parts. First, the translator *omitted any reference to the sandals because John the Baptist was only using sandals to illustrate what he thought of himself in relation to Jesus*. Second, he *explained in detail that John the Baptist*

⁵⁴ Larson, pp. 6-9, 26-35, 38-42, 48, 58-62, 86-88, 168, 189, 257-260, 405-420, 438-459.

⁵⁵ Kathleen Lois Dillon, 'An Initial Examination of Schema Theory's Relationship to the Translation Process' (unpublished master's thesis, University of Texas at Arlington, 1988), abstract, pp. 7-27.

thought himself unworthy even to be Jesus' servant. This solution is content schema related and worked well—it gets across *the true meaning* instead of the people thinking that John the Baptist thought himself to be better than Jesus. (pp. 119-120 emphases added)

One can only wonder why this ‘true meaning’ wasn’t more prominent in the original *sacred* text. Judgements on the adequacy of a translation, according to the Science of Translation approach, are said to depend on whether it evokes the same response in a contemporary culture as in the original culture of the Scriptures. But ultimately, the criterion is untestable. In practice however, it appears that the notion of equivalence rests in whether the text evokes the same response in the receiving culture as in contemporary American evangelical Christian culture.

The cultural imperialism implicit in receptor orientation is nicely demonstrated in a critique of Tagore’s self-translated anthology *Gitanjali: Song Offering* for which he was awarded the Nobel Prize for literature in 1913—the first time for a non-European to be awarded the prize. Sengupta believes that Tagore’s popularity in the West was not based on an intellectual appreciation of his work but rather on an association with the enigmatic East. Comparing Tagore’s translation with more literal glosses from the original Bengali, she shows how the style, imagery, tone, register and diction are altered to suit the Edwardian English poetics of the receiving culture with the result that ‘none of the lyrical qualities of the originals are carried over in the English translations’ (p.57). More importantly, Sengupta claims that in the English translation we get a very different Tagore, a writer ‘tied to an ideology associated with colonialism and cultural domination, where his poems speak in terms of the master-servant relationship’ (p. 66). It is suggested Tagore translated his work in a manner that suited the psyche of the colonizer, feeding the existing superstructure of orientalism. Tagore was accepted as a mystic, for his ability to transmit wisdom and not for his artistic abilities—for following Christian missionaries in their task of ‘unshackling the natives from the bondage of tradition and history’ (p. 64). Sengupta supports her argument on the West’s reading of Tagore with various published commentaries, describing ‘an innocence, a simplicity that [...] makes the birds and leaves seem as near to him as they are to children’; revealing ‘the kernel of the wisdom and

insight of the great Hindu seer [...] the essence of his Eastern message to the Western world' (p. 63). Most telling perhaps, comes from the Nobel Committee on his selection:⁵⁶

The true inwardness of this work is most clearly and purely revealed in the efforts exerted in the Christian mission-field throughout the world. [...] Thanks to this movement the bubbling springs of living water have been tapped, from which poetry in particular may draw inspiration, even though these springs are perhaps mingled with alien streams, [...] the Christian religion has provided in many places the first definite impulse toward a revival and regeneration of the vernacular language, i.e., its liberation from the bondage of artificial tradition.⁵⁷

Sengupta illustrates how the poet and his poetry were 'lost in the politics of translation' (p. 65). The hegemony underlying contemporary receptor oriented missionary translation into languages of limited diffusion has reflexes in translation into European languages—the direction of translation and roles of translators are reversed, but the underlying process remains the same.

Nida's later work continued to address functional aspects of equivalence in an ad hoc way and established no fundamental theoretical developments.⁵⁸ However, he did introduce into the literature the notion of information redistribution by focusing on the decomposition of semantic structures. Componential analysis provides procedures for recovering implicit referential information. The receptor orientation presupposes an understanding of how semantic components fit into broader communication patterns in the receiving culture: 'how what is said fits into what is not said'.⁵⁹ This inevitably led to discussions on the significance of distributional relatedness—linking the choice of variants in sets of semantic features to contextual constraints on expectation.⁶⁰ In a more recent paper, Nida admits to the 'unlimited and intricate' combination of form and content. He

⁵⁶ Mahasweta Sengupta, 'Translation, Colonialism and Poetics: Rabindranath Tagore in Two Worlds', in *Translation, History and Culture*, ed. by Susan Bassnett and André Lefevere (London: Pinter, 1990), pp. 56-63 (pp. 56-58, 61-63).

⁵⁷ *Nobel Lectures on Literature*, ed. by Horst Frenz (London: Nobel Foundation, 1969), [n.p.] quoted in Sengupta, p. 64.

⁵⁸ Eugene A. Nida, 'Translating Means Translating Meaning', in *Translators and Their Position in Society: Proceedings of the xth World Congress of FIT, Vienna, 1984*, ed. by Hildegund Bühler (Vienna: Braumüller, 1984), pp. 119-125.

⁵⁹ Eugene A. Nida, *Exploring Semantic Structures* (Munich: Fink, 1975), p. 185.

⁶⁰ Nida, 'Science of Translation', p. 92; Nida, *Exploring...*, pp. 18, 28-29; and Eugene A. Nida, *Componential Analysis of Meaning: An Introduction to Semantic Structures* (The Hague: Mouton, 1975).

presents a classification of communication functions and rhetorical techniques in which he makes oblique references to prominence and shifts of expectancies.⁶¹

Despite its prescriptive receptor orientation, the Science of Translation approach has introduced some notions of value to the equivalence relation. By recognising extralinguistic factors affecting communication, the approach points out the interrelatedness of implicit information, expectancies and the language-specific arrangement of expression.⁶² Invariably, these themes are directed toward procedures for exegesis in the translation as illustrated in the following:⁶³

Certain of the more subtle problems of setting may be discussed in terms of the 'expectancies of the target audience'. In many cases, however, [...] there is often confusion as to precisely what communication event is involved and a failure to distinguish various types of settings. The problems of setting become especially difficult when languages differ radically as to the manner in which they may signal matters of setting or when such features are implicit in the source language but must be made explicit in the receptor language.⁶⁴

As a consequence of the receptor orientation and decomposition strategies, the impact of information load on the processing of translated text is noted. Translating is seen as a balance between obligatory and optional features constrained by expectations in the receiving culture.⁶⁵ Naturalness constraints on the language of translation affect analysis of the original text, in that the translator 'will anticipate what he knows he must confront in the restructuring'.⁶⁶ This characteristic of transfer is independently noted by Tsujii in relation to machine translation (Section 2.4). The inherent tendency to introduce information into a translation which is implicit in the original is referred to as the explicitation hypothesis, attributed to Blum-Kulka although traced originally to Vinay and Darbelnet. The correlation between explicitness and naturalness in translation is noted by Toury.⁶⁷

⁶¹ Eugene A. Nida, 'The Role of Rhetoric in Verbal Communications', *Babel*, 36 (1990), 143-154 (pp. 143, 148-149).

⁶² Nida, 'Framework for Analysis and Evaluation...', pp. 75-79.

⁶³ Nida, *Toward a Science...*, pp. 31-57; and Nida and Taber, pp. 91-98.

⁶⁴ Eugene A. Nida, 'The Setting of Communication: A Largely Overlooked Factor in Translation', *Babel*, 24 (1978), 114-117 (p. 114).

⁶⁵ Nida, *Toward a Science...*, pp. 129-142, 166-167.

⁶⁶ Nida and Taber, p. 104.

⁶⁷ Shoshanan Blum-Kulka, 'Shifts of Cohesion and Coherence in Translation', in *Interlingual and Intercultural Communication: Discourse and Cognition in Translation and Second Language Acquisition*

The distinction between formal and dynamic equivalence has been questioned by Tymoczko, who illustrates that even literal-seeming translations have a critical bias. A literal or formal-equivalence may gain its appeal for several reasons: being obvious, logically simple or direct, and more objective than dynamic equivalence translation. The translator's point of view is minimized in literal translation, resulting in less intervention between translation and original. But Tymoczko demonstrates that resolving the significance of an utterance for the purpose of translation requires an awareness of constraints beyond the meanings of expressions in the original text. She investigates a kind of syntactic mismatch called contradictory usage: where the usage of a structure in the language of the original is diametrically opposed to the usage in the language of translation. Contradictory usage may occur in any pair of interfacing languages, according to Nida, with primarily metaphorical significance. As with lexical false friends, one might expect that strictly formal translation of contradictory usage would lead to a sense of unmet expectation and disorientate recipients of the translation. Contradictory syntactic usage might therefore be translated with functionally equivalent syntactic patterns rather than word for word. Tymoczko's examples are drawn from the translation of Old Irish into English. In the former, a new substantive is introduced with the definite article, while usage in the latter is reversed.⁶⁸ A similar sort of mismatch involves the flouting of constraints on quality or truth in English ironic usage, in contrast to the flouting in Arabic of constraints on quantity or repetition for a similar effect (Section 3.0).

Tymoczko applies predicate logic analysis to determine corresponding formal equivalences in the language of translation. Her examples are similar in nature to the resolution of quantifier scope ambiguities of the type illustrated in fragment (1). The two

Studies (Tübingen: Gunter Narr, 1986) cited in Laviosa-Braithwaite; J. P. Vinay and J. Darbelnet, *Stylistique comparée du français et de l'anglais. Méthode de traduction* (Paris: Didier, 1958/1977), trans. by Juan Sager and M. J. Hamel as *Comparative Stylistics of French and English: A Methodology for Translation* (Amsterdam: John Benjamins, 1995) cited in Kinga Klaudy; Sara Laviosa-Braithwaite, 'Universals of Translation', in *Routledge Encyclopedia of Translation Studies*, pp. 288-291 (p. 289); Kinga Klaudy, 'Explication', in *Routledge Encyclopedia of Translation Studies*, pp. 80-84; and Gideon Toury, *Descriptive Translation Studies and Beyond* (Amsterdam: Benjamins, 1995), p. 227.

⁶⁸ Nida, *Toward a Science...*, p. 214; and Maria Tymoczko, 'How Distinct are Formal and Dynamic Equivalence', in *The Manipulation of Literature: Studies in Literary Translation*, ed. by Theo Hermans (London: Croom Helm, 1985), pp. 63-86 (pp. 63-66, 69-70, 76-77, 79).

readings (1a) and (1b) may receive divergent translations according to syntactic constraints on the language of translation:⁶⁹

- (1) All teachers in this room speak two languages.
- (1a) All teachers in this room speak *the same two* languages.
- (1b) All teachers in this room speak *various pairs of* languages.

Objections to equivalence based on logical form are twofold. First, as King demonstrates, among the difficulties inherent in inference-based interpretation of ambiguities is that truth-preserving paraphrase does not guarantee the production of meaning preserving translation. For example, language-independent conceptual dependency representations for *John sold a car to Bill* and *Bill bought a car from John* could generate identical translations.⁷⁰ More importantly though, the translator must decide how to resolve ambiguity. This is neither given nor obvious and depends on factors outside the sentence itself. At issue is the resolution of features that are obligatorily grammaticalized in the receiving language but lacking in the language of the original. In such cases, information needed to decide on the choice of expression in translation cannot be determined grammatically in the original and must be inferred according to context.⁷¹

Two independent constraints present themselves in the process of resolving ambiguity in an original from the perspective of the language of translation. The translator must interpret the significance of an expression with reference to the situation described in the utterance and with reference to information about the communication situation of the original utterance (Section 2.2). The translator must also interpret expressions in the original text in relation to constraints on expression in the language of translation (Section 2.4). Neither formal nor dynamic equivalence is objective in any fundamental sense. Both procedures involve the translator's subjective interpretation. The distinction between formal and dynamic equivalence becomes unsustainable since evidence for determining

⁶⁹ Adapted from W. John Hutchins and Harold L. Somers, *An Introduction to Machine Translation* (London: Academic, 1992), p. 28.

⁷⁰ Margaret King, 'Semantics and Artificial Intelligence in Machine Translation', *Sprache und Datenverarbeitung*, 1-2 (1981), 5-8 (p. 6).

⁷¹ B. Papegaaij and K. Schubert, *Text Coherence in Translation* (Dordrecht: Foris, 1988), p. 186.

readings is realized with respect to both the original communication and its reception in translation.

An alternative to the prescriptive receptor orientation characteristic of the Science of Translation emerged in the 1970's. The Translation Studies movement has its roots in Europe, its naming attributed to Lefevere. Primarily concerned with literary translation, the objects of study are the translated text itself and the mediating process of translating—how meaning travels. The phenomenon of translation is accepted a priori. The notion of an immutable message is rejected and meaning is desanctified. The translated text is viewed as both produced and producing. Nevertheless, the approach is criticized as self-referential for the tendency to reinforce its own literary values and to confront the problem of description with preconceived evaluative standards.⁷²

The precursors of the Translation Studies movement can be traced to Russian formalism and Czech structuralism, which examined the surface characteristics of actual texts—their structural and other specific features—in an effort to discover what makes them innovative and what determines literary merit. Though representing the beginnings of a descriptive methodology, the research has been criticized for divorcing the artistically valuable formal qualities of text from content and context. Equivalence was being viewed in terms of the internal organization of texts and their functions at the expense of referential content and removed from the constraints on communication to the actual readership. Translation Studies moved the focus of attention onto how abstract, thematic concepts are embedded in a culture and language—the relation of a text to its tradition. But determining the function of an original is presumed and given priority, without indication of how it is to be determined. While the Science of Translation attempts to deal with the limitations of real readers (idealized though they are) through fieldwork on text reception, Translation Studies focuses on the analysis of text function and neglects actual receptors. Gentzler suggests the movement is based on a 'non-existent receptor as well as a non-existent referent' (p. 177).⁷³

⁷² Gentzler, pp. 136-143, 190-193.

⁷³ Gentzler, pp. 145-163, 176-177, 184-86; and Susan Bassnett-McGuire, *Translation Studies* (London:

The Translation Studies approach allowed a broadening of the definition of translation. The dependent relationship between an original and its translation was maintained. But correspondence between expressions used in the original and in translation was seen as partial, and the role of the translated text in the receiving culture began to assume relevance:

Translation is the result of an activity which derives from a text in the source language to a text in the target language which *corresponds* with the text in the source language in certain relevant features and can be *substituted* for it under certain circumstances.⁷⁴

Various typologies hoping to account for translation methods have been suggested in the Translation Studies literature, such as those by Holmes and Lefevre.⁷⁵ Holmes distinguishes four orientations: to the form of the original text; to the meaning or content of the original; to the parallel function of the original and the translation in their respective cultures; and to deviations for specific purposes. Lefevre prescribes a seven-part model for translating poetry. Rather than claiming universally valid specific translation solutions, such typologies suggest a better descriptive understanding of the kinds of translation methodologies available. Nevertheless, their implicit prescriptiveness generates further sets of rules to which the competent translator is expected to conform, with its contradictory inherent commentator privilege.⁷⁶

In an attempt to define the parameters of the emerging Translation Studies movement, Holmes suggests a division between descriptive and theoretical translation studies. Theoretical translation studies uses the empirical data of descriptive translation studies to create models, principles and theories ‘to explain and predict what translating and translations are and will be’.⁷⁷ Descriptive translation studies describes translation

Methuen, 1980), pp. 23, 40-75, 81-101.

⁷⁴ A. Lefevre, ‘Translating Literature/Translated Literature: The State of the Art’, in *Languages of Theatre: Problems in the Translation and Transposition of Drama*, ed. by O. Zuber (Oxford: Pergamon, 1980), pp. 153-162 (p. 155).

⁷⁵ André Lefevre, *Translating Poetry: Seven Strategies and a Blueprint* (Amsterdam: Van Gorcum, 1975); and James S. Holmes, ‘Forms of Verse Translation and the Translation of Verse Form’, in *The Nature of Translation*, ed. by James S. Holmes, Frans de Han and Anton Popovic (The Hague: Mouton, 1970), pp. 91-105.

⁷⁶ Gentzler, pp. 166-170.

⁷⁷ James S. Holmes, ‘The Name and Nature of Translation Studies’, in *Translated!...*, pp. 66-80 (p. 73),

phenomenologically in the hope of establishing general principles by which these phenomena can be explained and predicted. Holmes proposes a three-way classification of descriptive translation studies: product-oriented description of individual existing texts in translation; function-oriented description of the way a translation operates in the context of the receiving culture (often of a historical nature); and process-oriented accounts of what takes place in the ‘black box’ of the translator’s mind during the act of translating.⁷⁸

Holmes’ process-oriented investigations bring to light the conditioned nature of choices inherent in the process of translating: that choices are not made without certain costs; and that deliberate changes must be made when translating, which cause departures from the original. Holmes observes that a translating decision ‘opens up certain possibilities for the translator who chooses it, and at the same time closes others’.⁷⁹ Different translations are always possible. Variety in translation depends on differing interpretations of the original and on the translator’s inclinations and initial choices. Variation also occurs in response to relative constraints on the languages in contact: where languages ‘interlock and begin to develop’.⁸⁰ We are made aware of the significance of both the subjective decisions of the translator and the way languages interface—their accidental correspondences or failures to correspond.⁸¹

The black box metaphor is taken up in a later paper modelling the process of translating.⁸² Holmes extends the notion of an abstracted mental conception of an original text. This reflects an appreciation of the interplay between strings of text and global information implicit in text structure and development. The translator’s mental conception acts as a kind of general criterion ‘against which to test each sentence during the formulation of the new, translated text’ (p. 83). The resulting abstract ‘maps’ are purported to be composed of three types of correspondences: related to the original, related to the

expanded version of a paper presented in the Translation Section of the Third International Congress of Applied Linguistics, held in Copenhagen, 21-26 August, 1972.

⁷⁸ Holmes, ‘Name and Nature’, pp. 71-76; Holmes, ‘Describing: Models and Methods’, pp. 81-87; and Gentzler, pp. 146, 164-179.

⁷⁹ Holmes, ‘Forms of Verse Translation...’, p. 93.

⁸⁰ Gentzler, p. 189.

⁸¹ Gentzler, pp. 167, 171-172.

⁸² Holmes, ‘Describing: Models and Methods’.

translation and matches between the two. A hierarchy of alternative correspondences subject to the translator's priorities is further suggested. Unfortunately, the model is limited to rule-based correspondences. Nevertheless, an interdependence among the correspondences is noted:

the choice of a specific kind of correspondence in connection with one feature of the source-text map determines the kind of correspondence available for another or others, indeed in some cases renders correspondence for certain further features infeasible or even unattainable. (p. 86)

The shift in focus in Translation Studies from a one-to-one to a one-to-many notion of equivalence reflects a change in understanding of the nature of meaning itself. The formalist concept of meaning as a property intrinsic to language was superseded by a view encompassing a network of relations between language and situation, at least in fairly vague terms.

However, Holmes also calls for a change in approach to reference. He argues that a translation does not refer to the same real world objects as the original text, but rather to a linguistic formulation. To him translation does not refer to the situation described in the original text. It is an act of 'critical interpretation'.⁸³ The language of translation is seen as a kind of metalanguage—a comment on a comment. Given a translation's position within its own language and tradition, its dual nature becomes apparent: translation is both referring and producing. From a literary perspective, translation is 'critical commentary on a source text, and yet yields critical interpretation as if it were a primary text'.⁸⁴ Holmes' claim that translation is not anchored in the situation described in the original text must be measured against his primary concern with the translation of poetry.

The descriptive methodology inherent in Translation Studies inevitably followed on from the rejection of claims that the equivalence relation is one of identity or difference. Popovic *expected* changes in translation, accepting the necessity of losses, gains and changes. Shifts in the values transferred in translation are seen as unavoidable due to

⁸³ Holmes, 'Forms of Verse Translation...', p. 93.

⁸⁴ Gentzler, p165.

differences in constraints on communication, and such shifts can be verified empirically. Popovic undertook comparative work locating the conformities and differences that occur in translation. Rather than attributing them to deliberate distortions, translator incompetence or linguistic incompatibility, these shifts were analysed in terms of differing cultural values and linguistic norms.⁸⁵ The relation of a translation to its original is seen as a question that ‘can never be solved without some residue’ (p. 81). The translator’s role is described as a process of maintaining the relative emphases in the original:⁸⁶

[The translator] strives to preserve the ‘norm’ of the original. He resorts to shifts precisely because he is endeavouring to convey the semantic substance of the original in spite of the differences separating the system of the original from that of the translation, in spite of the differences between the two languages and between the two methods of presenting the subject matter. (pp. 79-80)

Against a background of analysing the nuances or implicit features of text, Popovic concerned himself with differences in the conventions governing text production in the original and in translation. Shifts in the surface features displayed by texts in translation are motivated by language-specific (local) constraints on maintaining the meaningfulness or relative norms in communication.

Polysystems theory is widely viewed as a development toward a more comprehensive theory and has assumed the mantle of Translation Studies in recent years. No longer concerned with what Lefevere and Bassnett-McGuire call ‘painstaking comparisons between originals and translations’ (p. 4), attention has moved away from the translation process defined in its narrower sense (in terms of an equivalence relation which holds between a translation and its original). Translations as products are taken as the point of departure, and the functions of translations in receiving cultures are the focus of investigation. The new ‘target-oriented approach’ views translations as facts of the receiving culture, ‘determined first and foremost by considerations originating in the culture which hosts them’ according to Toury (p. 26). The underlying rationale is that in order to understand the non-observable processes whereby translations have come into

⁸⁵ Gentzler, pp. 158-161.

⁸⁶ Anton Popovic, ‘The Concept of “Shift of Expression” in Translation Analysis’, in *The Nature of Translation: Essays on the Theory and Practice of Literary Translation*, ed. by James Holmes (The Hague: Mouton, 1970), pp. 78-90 (pp. 78-81).

being, it is necessary to study the observables: translations themselves and the systems which yielded them. While the Science of Translation and early Translation Studies approaches share a common belief in the importance of some intended message with a fixed identity communicated in the original text, Polysystems emphasizes the socio-literary norms that pertain to the receiving culture and directly influence the process of translation. The notion of equivalence is expanded by historicizing the study of translation, with actual case studies showing the temporal nature of constraints on correspondence.⁸⁷

The term polysystems originally referred to the aggregate of literary systems operating in the receiving culture. The approach has developed methodologies for looking at actual translations in historical context, including multiple translations of the same original. It does not describe the transfer of single texts but rather the process of change within the entire literary system. The inaugural Summer Program in Translation Studies at Leuven stressed the fundamental role of literary life in the canonization of translation strategies and described as a focus of its seminars ‘the hidden function of translation strategies in the internationalization of communication’.⁸⁸ Translation is seen as inter-textual rather than inter-lingual. Lefevere draws attention to the lack of an obvious canonized generic equivalent to the Arabic *qasida* قصيدة in the West. Questions of equivalence or translatability relate to the familiarity of elements in the genre’s conventional organizing schema: ‘the absence of poetological equivalents rather than semantic or morphosyntactic equivalents’ (pp. 25-26). Under the rubric of Descriptive Translation Studies, Toury formulates generalizations of behaviour linking the repertoire of signs institutionalized in a receiving culture to specific functions acquired by the use of expressions in text.⁸⁹

⁸⁷ André Lefevere and Susan Bassnett, ‘Introduction: Proust’s Grandmother and the Thousand and One Nights. The ‘Cultural Turn’ in Translation Studies’, in *Translation, History and Culture*, pp. 1-13 (p. 4); György Radó, ‘Review of “Gideon Toury, *In Search of a Theory of Translation* (Tel Aviv: Tel Aviv University, 1980)”’, *Babel*, 27 (1981), 116; Maria Tymoczko, ‘Translation in Oral Tradition as a Touchstone for Translation Theory and Practice’, in *Translation, History and Culture*, pp. 46-55 (pp. 46, 53); Gideon Toury, *Descriptive Translation Studies and Beyond* (Amsterdam: Benjamins, 1995), pp. 21, 26, 29, 36-37; Gentzler, pp. 106-107, 198, 251; and Theo Hermans, ‘Introduction: Translation Studies and a New Paradigm’, in *The Manipulation of Literature*, pp. 7-15.

⁸⁸ ‘Program B: The CERA Chair for Translation, Communication and Cultures’, *Nouvelles de la Federation Internationale des Traducteurs - FIT Newsletter*, n.s. 8 (1989), 73-75.

⁸⁹ Gentzler, pp. 194, 200, 245, 268; Laviosa-Braithwaite, p. 290; André Lefevere, ‘Translation: Its Genealogy in the West’, in *Translation, History and Culture*, pp. 14-28 (pp. 22-26); and Toury, *Descriptive Translation Studies...*, pp. 259-279.

The shift in focus to constraints operating in the receiving culture is noted by Baker:

Rather than attempting to evaluate translation, the focus here is on investigating the evaluative yardstick that is used in making statements about translation in a given socio-cultural context.⁹⁰

The development of polysystems in Israel is hardly surprising given its emphasis on constructing a cultural framework in which to view translation strategies. In contrast to the Dutch origins of the early Translation Studies movement with its roots in Eastern European formalism, Gentzler notes:

The situation in Israel was more extreme than the Dutch, which had its own indigenous tradition, for Hebrew lacked a canon of literary works and was totally dependent upon foreign language texts to provide diversity and depth. More importantly, however, was the dependence of the culture as a whole upon translation for commercial and political purposes. (p. 196)

A very broad definition of translation is adopted under the new Translation Studies approach. Toury adopts the term ‘assumed translation’ to describe:

any target-culture text for which there are reasons to tentatively posit the existence of another text, in another culture and language, from which it was presumed derived by transfer operations and to which it is now tied by certain relationships, some of which may be regarded—within that culture—as necessary and/or sufficient. (p. 35)

This wider scope has the advantage of introducing a new set of cultural and historic factors constraining translation. These are the shared values held in the receiving culture which constitute what Toury calls translation norms. The notion of norms is rightly linked to meaningfulness: ‘[n]orms are the key concept and focal point in any attempt to account for the social relevance of activities’ (p. 55). But meaningfulness in Toury’s account is anchored in the translation’s function within the receiving culture, which is itself unhappily couched in a metaphor of cultural ‘slots’: ‘translations always come into being within a certain cultural environment and are designed to meet certain needs of, and/or occupy certain “slots” in it’ (p. 12). The methodology which places translated texts in their cultural context must be measured against the problem of how to translate text without concealing the things to which the text refers. As Gentzler warns:⁹¹

⁹⁰ Mona Baker, ‘Norms’, in *Routledge Encyclopedia of Translation Studies*, pp. 163-165 (p. 163).

⁹¹ Toury, *Descriptive Translation Studies...*, pp. 12, 31-35, 53-69; Gentzler, pp. 229, 244, 269.

Processes of dissemination, idiosyncrasy, subjective creativity, free play and unconscious random association are involved that extend beyond rational analysis, and certainly beyond the capabilities of academic reconstruction. (p. 269)

The period since 1980 has seen the appearance of a number of innovative theories of human translation. They have a general tendency to represent the wider process of translation or to focus on techniques of text analysis (often adopting a systemic linguistics approach). There has been little emphasis on the theoretical significance of the transfer component of the rationalist metaphor. Likewise, the relationship between abstract representations and surface text features has generally been ignored. Often, no clear distinction is made between typological analysis and actual interpretation.

The psychological or cognitive approach is expounded by Bell. Translation is understood to centre around the meanings of expressions, and various schematized models are provided which purport to detail the way meanings are processed and translated. A typical sample ‘contains nine steps which take us from encoding the message through its transmission and reception to the decoding the message by the receiver’ (p. 18). Scant reference is made to authentic translation data. The notion of transfer arises only in various ‘black box’ schematizations—as a fuzzy bubble labelled ‘semantic representation’ (pp. 21, 46, 49). The work does not explain the connection between contrastive analysis and the notion of equivalence in translation, nor does it attempt to reconcile abstract representation with surface expression.⁹²

Snell-Hornby provides what she describes as an integrated approach to Translation Studies. She hopes to bring together the linguistically oriented *Übersetzungswissenschaft* (represented by Wilss and Koller) and what she calls the culturally oriented approach (assumed by Vermeer). Limitations of the linguistically oriented approach include its adoption of the concept of *Äquivalenz* which in German entails a high degree of identity or sameness to the extent of reversibility. This is viewed as unsuitable for theorizing about translation at the global or textual level. The English term equivalence, is also rejected as

⁹² Roger T. Bell, *Translation and Translating: Theory and Practice* (London: Longman, 1991); and Roger T. Bell, ‘Psycholinguistic/Cognitive Approaches’, in *Routledge Encyclopedia of Translation Studies*, pp. 185–190.

‘vague to the point of complete insignificance’ (p. 21) and more suitably employed in contrastive linguistics. Limitations of the culturally oriented approach, according to Snell-Hornby, include its functional emphasis which is less applicable to the complexities of literary translation. Her solution draws on the holistic psychological principle of Gestalt in which ‘the whole is more than the mere sum of its parts, and an analysis of the parts cannot provide an understanding of the whole’ (p. 29). Snell-Hornby proposes a gestalt-like framework which claims to approach the analysis of text types in an integrated way. The work seems to offer little of interest concerning constraints on the relationship between a translation and its original.⁹³

Delisle provides a pedagogical work which focuses on discourse analysis. Translation is seen as the transmission of an intended message. Delisle notes that the main point of a message may not be explicitly stated and he distinguishes the meanings of expressions from the interpretations of utterances. The matching of words (transcoding) is thus distinguished from the communication of an intended message (translation). His model attempts to explain the cognitive processes involved in translation: how the translator ‘adapts the expressive potential of words to the rhetorical framework of the message’ (p. 68). Two monolingual journalistic articles are drawn on to support Delisle’s think-aloud protocol. He identifies three stages through which equivalence in translation is maintained. The first stage, correspondence, involves interpreting the original text according to situational parameters in order to understand the author’s intentions. The second stage, reformulation, is a process of analogical reasoning by which meanings are re-expressed in the language of translation. The third and final stage, verification, entails selecting functional equivalents in the language system of the translation. Seleskovitch reasserts the gist of Delisle’s argument by noting that texts convey more than the meanings of expressions. She observes that sense is found in texts and meanings in language. Translation establishes equivalence at the level of text rather than correspondences at the

⁹³ Mary Snell-Hornby, *Translation Studies: An Integrated Approach* (Amsterdam: Benjamins, 1988), pp. 13-21, 26-39, 69-81; Mary Snell-Hornby, ‘Linguistic Transcoding or Cultural Transfer? A Critique of Translation Theory in Germany’, in *Translation, History and Culture*, pp. 79-86; and Paul Kussmaul, ‘Semantic Models and Translating’, *Target*, 6 (1994), 1-13.

level of language. Neither Delisle nor Seleskovitch really clarifies the relationship between transferring the meanings of expressions and interpreting the senses of utterances in the process of translating.⁹⁴

In the face of a virtually limitless number of different texts that can exist in a language, Gutt rejects the proliferation of classificatory frameworks describing translation processes and text typologies. He proposes a cognitive account of the evaluation and decision-making which takes place in order for speakers to understand the complexities of communication. The work follows in the Science of Translation tradition and adopts the relevance theory of communication developed by Sperber and Wilson. Success in translation involves matching the contextual assumptions (cognitive environments) of receivers of the original with those of the translation. Intended meanings are interpreted in a model that seems to conflate utterance with thought: the implications conveyed by an utterance are said to be a faithful representation of the speaker's thoughts. A distinction is made between intended and unintended inferences implicit in communication, and brief reference is made to the notion of markedness in relation to the relative frequency of use of expressions as a measure of processing effort in communication. But neither of these points is elaborated.⁹⁵

Newman also works within the Science of Translation approach. He admits to a growing body of scriptural interpretation—multiple readings of a text. Like Lyons (Section 1.0), Newman relates meaningfulness to the intentions of text producers and to the significance of text to receivers. Equivalence becomes a matter of evaluating or balancing so-called objective intentions against subjective interpretations. Distinctions are drawn between explicitness and implicitness, and language-specific constraints on optional and

⁹⁴ Jean Delisle, *Translation: An Interpretive Approach*, trans. by Patricia Logan and Monica Creery (Ottawa: University of Ottawa, 1988), pp. 3, 5, 10, 30, 35, 42-68; and Danica Seleskovitch, 'Technical and Literary Translation: a Unifying View', in *Translators and Interpreters Mean Business: Proceedings of the Second Annual Conference of the Institute of Translation and Interpreting, London, 1988*, ed. by Catriona Picken (London: Aslib, 1988), pp. 83-88.

⁹⁵ Ernst-August Gutt, *Translation and Relevance* (Oxford: Blackwell, 1991), pp. 17-44, 85, 115-116; Dan Sperber and Deirdre Wilson, *Relevance: Communication and Cognition* (Oxford: Blackwell, 1986); Dan Sperber and Deirdre Wilson, 'Loose Talk', *Proceedings of the Aristotelian Society*, 86 (1985/1986), 153-171; and Peter G. Emery, 'An ATN-based Model of Human Translation and Its Application to an Arabic Literary Text', *Babel*, 42 (1996), 141-157 (p. 152 n. 2).

obligatory expression. Mention is also made of markedness, choice and norms. But none of these notions is developed into a coherent model of equivalence.⁹⁶

Hewson and Martin construct a two stage model of the translation process: first generating a set of paraphrases or virtual translations, then defining the validity conditions for selecting appropriate expression in the final translation. Translation is described as ‘the persistence of communication in the disparity of codes’ (p. 30). To Hewson and Martin, translation necessitates considering options rather than obligatory transfer operations. They reject the postulate of universal meaning converted in translation as commonly shared content. Equivalence is viewed as a continuum of possibilities that need to be selected and justified rather than enforced. The relationship between a translation and its original is described in terms of homology or likeness in difference: ‘configurations of resemblances that can be established in two radically distinct systems of reference’ (p. 30). The original is analysed in relation to constraints on text production in the receiving language, each element being assessed for its potential difference or tension created in the receiving culture. The metaphor of transfer as a gap which the translator must bridge is rejected as unscientific. Based on the incommensurability of language systems, transfer operations are seen as a relationship—an equation or complex of variable factors ‘which must all be defined and redefined for each new translation undertaken’ (p. 112). This relationship is never a limited and stable reality. Toury’s Descriptive Translation Studies approach is rejected for its ‘disproportionate and hypothetically introduced emphasis on the target system’ (p. 12).⁹⁷

The translator’s competence is assumed, and the translator’s role, according to Hewson and Martin, is to mediate relevance, value or meaningfulness:

[The translator] will mediate between two situations; that is to say, he will take it upon himself to define the norms and options that need to be established between two language cultures. (p. 27)

⁹⁶ Ayreh Newman, *Mapping Translation Equivalence* (Leuven: ACCO, 1980), pp. 21, 24, 61, 68, 85-91, 106-119.

⁹⁷ Lance Hewson and Jacky Martin, *Redefining Translation: The Variational Approach* (London: Routledge, 1991), pp. 7, 11-12, 20-33, 63, 101, 112, 137.

Meaningfulness is not recognized in terms of propositional content or reference. It is 'activated by the participants in the act of communication in order to serve their specific purposes' (p. 45). Hewson and Martin determine meaningfulness with the principle of variation: 'the set of all possible formulations that can be associated with any given identifiable situation' (p. 40). (This notion of variation parallels Abney's claim that statistical methods are linguistic and not computational issues—Sections 2.3 and 4.2. Abney argues that in order to process text, grammatical structures are assigned according to judgements about the speaker's intentions, and that such judgements are a matter of degree. Similarly, Grice presents a view of meaningfulness as a deeming relation—Sections 2.1 and 2.6.1.) According to Hewson and Martin, meaninglessness is not conceived as the absence of meaning, but rather, as infinite difference: 'where there is no possibility of constructing a meaningful difference between two terms' (p. 46). Homologies do not produce translations but variational ranges in the language of translation. The process of translating is not achieved through transfer or equivalence of meaning but by homologies between the paraphrastic set framing the original text and the paraphrastic set comprising the translation options. Selecting the appropriate expression for the final translation involves a process of referencing by the translator to normative constraints in the receiving culture. The implicit relationship between selected and excluded options assumes importance, as translation is conceptualized as the interplay of options within the variation range. Hewson and Martin admit to the open-endedness of their model.⁹⁸

The variational approach models the sentiment voiced by a number of researchers, such as As-Safi and Ash-Sharifi who note the 'subjective aesthetic selectivity' which the translator must constantly apply when deciding between tendencies in the search for equivalents. Emery proposes a model in which the reasons which lie behind translators' choices are made explicit. The synthesis phase of translation is depicted as selection between competing equivalents in the language of translation.⁹⁹

⁹⁸ Hewson and Martin, pp. 34-57; and Steven Abney, 'Statistical Methods and Linguistics', in *The Balancing Act*, ed. by Judith Klavans and Philip Resnik (Cambridge, Mass.: MIT, 1996), pp. 1-23.

⁹⁹ Abdul-Baki As-Safi and In'am Sahib Ash-Sharifi, 'Naturalness in Literary Translation', *Babel*, 43 (1997),

Like Hewson and Martin, Mason rejects the monolithic view that translation involves the deterministic transfer of meanings from an original to a translation. Mason concerns himself with the imposition which inevitably follows on from the translator's orientation toward the task at hand. Following Beaugrande and Dressler, Mason adopts the term mediation—with a specific sense linked to the translator's imposition of beliefs and goals, conscious or otherwise. Beaugrande and Dressler use mediation to mean 'the extent to which one feed one's current beliefs and goals into processing a text'. Placing the translator at the centre of the translation process, Hatim and Mason specify the term mediation in relation to the cultural distances involved in translating intertextual reference. The translator's role is to mediate between cultures; to interpret the value of signs in the culture of the original, and to identify and resolve disparities between these values and the values in the receiving culture. This process involves uniquely interpreting the original in relation to the communication resources available during generation of the translation. Hatim and Mason speak of degrees of mediation: 'reference might involve minimal mediation by those who share, say, a Western culture, but maximal mediation for readers from other cultural backgrounds' (p. 128). In a later work, they see mediation as an ideological issue. Minimal mediation is illustrated by a translation strategy which keeps features of the genre and discourse of the original text intact for receivers of the translation. Such a strategy may create unintended effects as the receiver makes inferences not implicated in the original. Maximal mediation, according to Hatim and Mason, entails radical departures from the original. In the process of reducing the heterogeneity of the original by rendering it more compatible with expectations in the receiving culture, a new world view may be introduced into the translation which was absent from the original. Hatim and Mason are clear to distinguish domestication (for the sake of acceptability to the receiver) from unacknowledged revision of an ideology. For a translator to promote an ideology at variance with that of the original is viewed as condemnable and 'far short of the accepted criteria for translating' (p. 163). This view of mediation appears slightly tempered in Hatim's recent work in which models of text development and text processing

are informed by translation theory and contrastive text linguistics. The term mediate refers to the more general notion of a translator's attunement to meaningfulness: 'what actually happens to a given text when someone attempts to mediate in communicating its "import" across both linguistic and cultural boundaries' (p. xiii).¹⁰⁰ In the Translation Saliency model, the term mediation is used without qualitative or subjective overtones. Mediation is not linked to a given translator orientation, and degrees of mediation are not suggested. The term is used to describe all aspects of the decision making process during the act of translating. In this neutral sense, the translator mediates by linking the communication event of the original with the communication event of the translation—communication resources employed in the original text are coordinated with communication resources available in the language of translation. Mediation is employed as a generic or cover term to describe the role played by the translator and to indicate the non-deterministic nature of the process of constructing translation.

Copious, naturally occurring translation data (in Arabic and other languages) support the work of Baker, and Hatim and Mason. Baker's course book views equivalence as a relative concept influenced by linguistic and cultural factors. She distinguishes referential and propositional aspects of communication from speaker attitudes and other elements of the utterance situation. Translation strategies are described for communicating implicit attitudes, as well as for dealing with culture-specific referents and language-specific constraints on lexicalization and grammaticalization. The value or significance of expressions is linked to the principle of markedness: the speaker's choice of expression from among sets of terms. Equivalence in translation is illustrated with a broad range of linguistic phenomena: at the level of lexis, collocation, syntax, theme and information structure, and cohesion and coherence. Baker also addresses very important issues in

¹⁰⁰ Ian Mason, 'Discourse, Ideology and Translation', in *Language, Discourse and Translation: In the West and Middle East*, ed. by Robert de Beaugrande, Abdulla Shunnaq and Mohamed Helmy Heliel (Amsterdam: Benjamins, 1992), pp. 23-34 (pp. 23-24, 33); R. de Beaugrande and W. Dressler, *Introduction to Textlinguistics* (London: Longman, 1981), p. 182, quoted in Mason, p. 33; B. Hatim and I. Mason, *Discourse and the Translator* (London: Longman, 1990), pp. 128, 223-236; Basil Hatim and Ian Mason, *The Translator as Communicator* (London: Routledge, 1997), pp. 143-163; Basil Hatim, *Communication Across Cultures* (Exeter: University of Exeter, 1997), p. xiii.

corpus linguistic methodology in separate papers. (Her analyses are dealt with in more detail in later sections.)¹⁰¹

Hatim and Mason have brought together a number of important notions. Observing that a communicative approach to translation questions is not new, Hatim and Mason emphasize the social nature of translation. They see text as evidence of a communication transaction: a wider process negotiated between interlocutors. They speak of expressions as having meaning potential and bring to light contextually determined variation in language use. Meaningfulness is explained with the notion of motivated choice, and the translator's task is described as a response to 'perceived meaning values' (p. vii). Values are sought in communicative aims or motivations behind text development. Translation is rightly viewed as an act of communication conditioned by a previous communication event (evidenced in the original text). It is seen as more than a matter of exchanging meanings of expressions. The translator may be oriented toward interpretations ascribed to the intended meanings of the original author, to the range of possibilities implicated in the original text, or to the impact or response at reception. Translation strategies result from the translator's orientation. Intentions, implications and impact are established through analysis of conventions constraining text production. In much of their work, Hatim and Mason aim to elucidate factors affecting text production and so establish parameters for text analysis—a metalanguage for translation. The term adequacy is favoured over equivalence and linked to the purpose of a particular translation task. Like Baker, a pedagogical purpose and general readership are indicated, but there is a tendency to supply partially sourced data in backtranslation and to address issues through monolingual text analysis within a systemic framework. While the metaphor of negotiated meaning is to be commended for its implication of non-determinism, translation is not generally an interactive process insofar as the author of the original may not necessarily be available to disambiguate the original for the translator. Consistent with the inherent non-determinism of translation, Hatim and Mason appeal to the notion of text as evidence of a prior communication event. This

¹⁰¹ Mona Baker, *In Other Words: A Coursebook on Translation* (London: Routledge, 1992), pp. 5-6, 12-15, 19-42.

licenses the translator to interpret information about aspects of the wider communication situation which are conveyed implicitly in the original text. Hatim and Mason correctly assert the priority of a translator's inferences over propositional content. However, they seem to be conflating referential and propositional content with the more fundamental notion of information about situations (including information about the situations described in a text and information about the situations of utterance—Section 2.2):¹⁰²

no intertextual reference can be transferred into another language on the strength of its informational purport alone. In fact, intentionality normally outranks information content as it is the basis of the general semiotic description of a given reference. (p. 137)

Hatim and Mason invoke context-sensitive models of communication and translation, aiming to isolate factors affecting text production. They are interested in the way meaning is inferred by language users. The use of communication resources involves a process of matching—establishing links between text and context. Attention is drawn to implicit aspects of communication, such as speaker attitudes and points of view. The relationship between text producer and text receiver is seen as fundamental to the underlying communication transaction. Culture-specific constraints on text type are linked to situational constraints on text production strategies. The degree of evaluativeness in an argumentative text reflects judgements about the state of mind of the receiver—as المنكر *denier*, المتردد *uncertain* or خالي الذهن *open-minded*, after al-Sakkaki (d. A.D. 1228/هـ ٦٢٦).¹⁰³ Hatim assumes an almost causal relationship between typological constraints and text development. His rationale for focusing on text type follows on from a belief that the majority of decisions taken in the processing and appropriate use of text are informed by the organizing principle of text type selection. Text development strategies regulate communicative interaction and the decision-making involved in the translation process, according to Hatim and Mason. The infinite variation inherent in text construction suggests to Hatim a process of hybridization by which deviations can be measured against

¹⁰² Hatim and Mason, *Discourse and the Translator*, pp. 1-20, 137; and Hatim and Mason, *Translator as Communicator*, pp. vii, 2-3.

¹⁰³ (١٩٨٤) محمد السكّاكي، "مفتاح العلوم"، تحقيق نعيم زرزور (بيروت: دار الكتب العالمية، ١٩٨٤) cited in Basil Hatim, 'The Pragmatics of Argumentation in Arabic: The Rise and Fall of a Text Type', *Text*, 11 (1991), 189-199 (p. 196); and Hatim and Mason, *Translator as Communicator*, pp. 48, 118.

postulated text type norms. Text processing is understood to involve attunement to norm-referenced expectations:

we seem to operate with a system of expectations constantly upheld or defied in a motivated manner. To be able to do this, we must be referring to some 'norms' against the background of which deviations are assessed as motivated departures. (p. 43)

House observes the value of Wilss' notion of *Gebrauchsnorm* in accounting for the speaker-hearer's metalinguistic adjustments, but warns against underestimating the immense difficulty of empirically establishing such norms. Hatim's functionalism sees negotiated communication (interpretation) as a process which combines the mapping of expressions (organized in text) with social relationships and interaction (which mould the institutional-communicative framework of discourse). But as Biber points out, a fully developed typology of texts (established with large-scale corpus linguistic methodology) is yet to be elucidated for English—let alone in the domain of cross-linguistic analysis.¹⁰⁴

Functionalism appeals for its power to explain the way linguistic phenomena serve certain universal types of demand. Interpretation is bound up simultaneously with the use of expressions and the situational factors which accompany communication. As a receiver of the original text, a translator has no direct access to the communicative intent of the original author. A translator cannot know with certainty what the producer of an original text knows or intends, but rather interprets the textual record on the basis of shared assumptions about situational factors and constraints on the use of communication resources. Mason notes that in spite of some predominant rhetorical purpose, all texts are ultimately multifunctional. However, Hatim would seem to qualify this, with the claim that 'no text can serve two equally predominant functions at one and the same time' (p. 43).¹⁰⁵

¹⁰⁴ Hatim and Mason, *Translator as Communicator*, pp. 2, 4, 7, 165; Hatim, *Communication Across Cultures*, pp. 11, 35, 41-43, 100; House, pp. 20-24; Basil Hatim, 'The Fuzzy Nature of Discourse in the Translation Process: Towards a Text-Based Pedagogy of Translation', in *Translation in Teaching and Teaching Translation*, III, pp. 105-124 (pp. 110, 115-116, 120); Biber, *Variation Across Speech and Writing*, pp. 206-207; Basil Hatim, 'Text Linguistics and Translation', in *Routledge Encyclopedia of Translation Studies*, pp. 262-265 (pp. 262, 264); and Basil Hatim, 'Discourse Analysis and Translation', in *Routledge Encyclopedia of Translation Studies*, pp. 67-71 (p. 68).

¹⁰⁵ M. A. K. Halliday, 'Linguistic Function and Literary Style: an Inquiry into the Language of William Golding's *The Inheritors*', in *Literary Style: a Symposium*, ed. by S. Chatman (New York: Oxford University, 1971), p. 331, cited in Hatim and Mason, *Discourse and the Translator*, p. 36; Ian Mason, 'Communicative/Functional Approaches', in *Routledge Encyclopedia of Translation Studies*, pp. 29-33; and

Meaningfulness is bound up with the notion of choice in the work of Hatim and Mason. They are clear to distinguish two kinds of linguistic analysis: that which leads to obligatory or automatic transfer procedures and that which does not. Automatic transfer procedures are not seen as translation problems in that they do not involve any choice. Similarly, statements about language systems are distinguished from those about the communicative factors surrounding the production and reception of actual texts. The way language systems force users to convey certain meanings in order to get at a required interpretation is summed up in Jakobson's assertion that 'languages differ essentially in what they *must* convey and not in what they *can* convey'. The intimate relationship between markedness and intention is simply illustrated with Hatim's reference to the choice of *immigrants and their offspring* by a politician in a political context. The clearly legalistic usage constitutes a marked use of expression as a discursal tool 'intended to dehumanize' (p. 69). The use of markedness in relation to meaningfulness and equivalence is not new as evidenced in say Toury and Tobin. But like Baker, Hatim and Mason have applied the notion in connection with a wide range of analytical tools.¹⁰⁶

Discrepancies between the markedness of some feature of an original text and the markedness of expression chosen by the translator are used by Hatim and Mason to illustrate the translator's mediatory presence and shifts in world view. Frequency and informativity are suggested as criteria for determining markedness as indicators of significance in an original text. Motivations behind the deployment of communication resources provide the essential link between the use of expressions and the context in which they are embedded. The fulfilment or defiance of expectations is a key notion in the model of text analysis presented by Hatim and Mason. Norm-conforming language use is

Hatim, *Communication Across Cultures*, p. 42.

¹⁰⁶ R. Jakobson, 'On Linguistic Aspects of Translation', in *On Translation*, ed. by R. A. Brower (Harvard: Harvard University, 1959), p. 236, cited in Hatim and Mason, *Discourse and the Translator*, p. 27; Hatim and Mason, *Discourse and the Translator*, pp. 23, 27; Hatim, 'Discourse Analysis and Translation', pp. 68-69; Gideon Toury, 'The Meaning of Translation-Specific Lexical Items and Its Representation in the Dictionary', in *Translation and Lexicography: Papers read at the EURALEX Colloquium held at Innsbruck 2-5 July 1987*, ed. by Mary Snell-Hornby and Esther Pöhl (Missouri: Northeast Missouri State University, 1989), pp. 45-53 (pp. 46-47); and Yishai Tobin, 'Invariant Meaning and Non-Equivalence in Language and Translation: The Two "Hows" in Modern Hebrew—a Case in Point', in *Translation and Lexicography:...*, pp. 31-43 (pp. 34-35).

described as ‘static’, and norm-flouting choices are described as ‘dynamic’ (p. 28).

Prominence is established in an original text by the marked use of expression which reflects some underlying motivation:

The need to be aware of variation and of the underlying motivation becomes even more urgent in domains such as literary analysis or literary translation, where some of the most elliptic or opaque forms of utterance (and hence the easiest to overlook) come to occupy a crucial position in the literary work, serving as important clues in the portrayal of a certain scene or persona. (p. 101)

The translator’s intervention involves coordinating the degree of dynamism displayed in the original text:

It is the task of the translator to identify and preserve the purposefulness behind the use of these seemingly individualistic mannerisms. (p. 103)

Translation competence involves attunement to norms and deviation from the norm.

Meaningfulness is linked to expectedness (traced to Nida) and to markedness (traced to classical Arabic rhetoricians—Section 2.6.1).¹⁰⁷

Rather than seeing markedness as a ubiquitous underlying principle, Hatim and Mason seem to closely link it to their model of text types. Their curriculum design is informed by the organizing principles of markedness and evaluativeness. Markedness is envisaged in terms of departures from text typological norms, and evaluativeness refers to the text producer’s relatively detached account of a state of affairs (situation monitoring) or involved point of view in which the text receiver is steered in a particular direction (situation managing).¹⁰⁸ Hatim suggests that markedness is a matter of degree (consistent with commentators reviewed in Section 2.6.1):

Markedness can thus range from minimal in texts which are least evaluative (detached exposition) to maximal in texts which are most evaluative (involved argumentation).¹⁰⁹

The view of text and terminologies as vehicles for ideology and cultural values inevitably led Hatim and Mason to adopt a semiotic perspective on translation

¹⁰⁷ Hatim and Mason, *Translator as Communicator*, pp. 12, 24-34, 54, 57-58, 97-103, 111-115, 156, 182-187, 194, 196, 230 n. 1.

¹⁰⁸ Hatim and Mason, *Translator as Communicator*, pp. 182-187, 196, 212.

¹⁰⁹ Hatim, *Communication Across Cultures*, p. 92.

equivalence.¹¹⁰ Semiotics refers to the way in which signs (from individual items to whole texts) interact within a socio-cultural environment. Translating is envisaged as:

the process which transforms one semiotic entity into another, under certain equivalence conditions to do with semiotic codes, pragmatic action and general communicative requirements. (p. 105)

Equivalence is constrained by the intentions conveyed in an original:

the limits on structure modification in translation are reached when the rhetorical purpose of the S[ource] T[ext] begins to be compromised. (p. 173)

The translator's task is described as facilitating the retrieval of intentions by receivers of the translation, in conformity with the norms implicated in the receiving culture. Since they are operating in different cognitive environments, what is inferable or evoked for the receiver of an original text may not be so for the receiver of a translation. Emphasis is shifted from the comparison of textual entities toward 'the systematic communicative factors shared by languages'.¹¹¹ Semiotic analysis is adopted for its hope of isolating universal mechanisms of signification which transcend culture-bound and language-specific aspects of communication. The translation of الطواف as the *sacrosanct ceremony of walking round the black Rock in Mecca* in fragment (2) is said to illustrate an awareness of the underlying values signified in culture-specific reference:

- (2) The Iranian pilgrims began their demonstration during sacrosanct ceremony of walking round the Black Rock in Mecca, preventing other pilgrims from leaving or entering the shrine.¹¹²

Hatim links semiotic analysis to speaker attitudes, which are rightly viewed as universals (as human states of mind). Controversially however, he attempts to associate the use of expressions with models of reality:

utterances become 'signs' or semiotic constructs which embody the assumptions, propositions and conventions that reflect the ways a given culture constructs and partitions reality. (p. 30)

¹¹⁰ Hatim and Mason, *Discourse and the Translator*, pp. 34-35, 92-93, 106, 115, 173, 188, 236-238; Hatim and Mason, *Translator as Communicator*, p. 11; Hatim, *Communication Across Cultures*, pp. 186-212; and Umberto Eco and Siri Nergaard, 'Semiotic Approaches', in *Routledge Encyclopedia of Translation Studies*, pp. 218-222 (pp. 218-219).

¹¹¹ R. de Beaugrande, *Factors in a Theory of Poetic Translating* (Assen: van Gorcum, 1978), p. 13 quoted in Hatim and Mason, *Discourse and the Translator*, p. 35.

¹¹² Hatim and Mason, *Discourse and the Translator*, p. 106.

While conceding that no comprehensive theory of semiotics exists, Eco and Nergaard describe equivalence in translation as a subspecies of interpretation of inference. Sense is acquired in a particular context or situation of production and reception, and translation entails the coordination of interpretations in distinct systems of communication:

Translation therefore does not simply involve substituting single terms with their alleged synonyms, nor does it involve comparing sign-systems *per se*. Instead, it involves confronting textual situations against a background of different (partial) encyclopedias, that is, of specific forms of socially and culturally shared knowledge set in different historical situations. (p. 219)

Three principles basic to the equivalence relation emerge from the common ground between early descriptive work of Translation Studies, the Science of Translation movement, and more recent research on discourse and culture. The values transmitted in translation can be linked to the interrelated notions of *implicit* information, language-specific or *local* conventional constraints on use, and the preservation of relative norms or *markedness*.

Section 2.1 elaborates the equivalence relation, by which an original communication event partially constrains construction of a translation. The need for a theoretical account of translation equivalence is underscored by Gentzler's assertion that '[t]ranslation theory needs to address the problem of not just the relationship of signs to the receiver, but also of the signs to the referent' (p. 185). The Translation Salience model construes uniformities in the translation process as information about situations described in a communication and information about the situation of utterance (including the states of mind of communicators). The following section examines issues relating to the translator's mediating presence.

1.2.2 Indeterminacy

Prevailing orientations accept that the translator mediates. They view text as evidence of a larger process of communication. Clearly, equivalence in translation extends well beyond the contrastive analysis of language systems. Eco and Nergaard note:

Translation does not involve comparing a language (or any other semiotic system) with another language or semiotic system; it involves passing from a text ‘a’, elaborated according to a semiotic system ‘A’, into a text ‘b’, elaborated according to a semiotic system ‘B’. (p. 212)

Cultural values and assumptions implicit in various translation theories suggest a tendency among researchers to subsume the translator’s mediating presence into some structural framework or theoretical agenda rather than being content to ‘identify and be governed by this mediatory aspect of translated texts and leaving it be’.¹¹³ Consistent with this mediatory view of translation, Dillon and Larson consider translation equivalence as the coordination of conceptual and discourse schemas. But such rationalist approaches were rejected as ultimately reductionist (Section 1.2.1). Underlying individual attempts to deal with the infinite variation which vexes the study of equivalence in translation is the notion of indeterminacy.

Philosophical interest in problems concerning equivalence in translation has roots in anthropology. The anthropologist’s contact with radically different cultures during the nineteenth and twentieth centuries inevitably led researchers to question their objectivity and the extent to which the researcher’s perceptions of their object of study reflect cultural conditioning, ‘making it all too easy for ethnographers to “impose” familiar, western grammatical and ontological categories upon subjects, rather than determining theirs’ according to Feleppa (pp. 2-3). This imposition, obvious in the dynamic equivalence strategy employed by the receptor oriented Science of Translation approach to translation (Section 1.2.1), stems from the problem of ‘reconciling the objective description of culture with the influence of inquirer interests and conceptions’.¹¹⁴

The thesis of indeterminacy brings about a rejection of the notion of meaning-preserving translation, or as Feleppa puts it, ‘rejection of the idea that translation is “about” natural synonymy, propositions, conceptual relations, and so on’ (p. 183). Peteri describes the theory as ‘Quine’s general campaign against our tendency to treat meaning and synonymy—and hence also translation equivalence—as matters of fact’ (p. 118).¹¹⁵

¹¹³ Gentzler, p. 10.

¹¹⁴ Robert C. Ulin, in Feleppa, back cover.

¹¹⁵ Jan Peteri, ‘What Might Analytical Philosophy Have to Offer to Translation Theory? (Reflections on

Hjort establishes a standard account of Quine's thought experiment of radical translation, which is understood to turn on two related theses. First, the underdeterminacy of theory states that available evidence may be accounted for equally well by mutually exclusive theories. (Quine indicates that indeterminacy of translation is an indeterminacy additional to the underdetermination of theory.) Second, the inscrutability of reference states that semantic synonymy cannot be inferred from stimulus synonymy. The inscrutability of reference thesis reasons that the anthropologist observing the utterance *givagai* in response to a referent or stimulus 'rabbit' has no way of knowing whether *givagai* refers to the whole rabbit, rabbitdom, or undetached rabbit parts and so on. The thesis is generally assumed to apply to 'radical' translation problems, but Hjort maintains that it is clear from Quine's work that the inscrutability of reference thesis is more general in scope and should not be limited to problems of radical translation alone. Malmkjær relates Quine's claim that the thesis is 'not the exception but the rule'. In *Word and Object*, Quine asserts that 'the meanings or ideas expressed in their identically sounded utterances could diverge radically [...] in a wide range of cases'.¹¹⁶

The thesis of indeterminacy of translation is argued by Wheeler to extend to non-referential information.¹¹⁷ Indeed, Quine states unequivocally in 'Indeterminacy of Translation Again' that his thesis of indeterminacy applies 'first and foremost to sentences [as opposed to terms]' (p. 9). The majority of utterances resist correlation with an observable, concurrent situation which the analyst can share with speakers in the quest for synonymy:

Usually the concurrent publicly observable situation does not enable us to predict what a speaker even of our own language will say, for utterances commonly bear little relevance to the circumstances outwardly observable at the time; there are ongoing projects and unshared past experiences. (p. 6)

Quine's Indeterminacy of Translation Thesis)', in *Translation, a Creative Profession...*, pp. 117-128 (pp. 117-118); and Feleppa, p. 183.

¹¹⁶ Anne Mette Hjort, 'Translation and the Consequences of Scepticism', in *Translation, History and Culture*, pp. 38-45 (pp. 38-39, 42, 44); W. V. Quine, 'Indeterminacy of Translation Again', *Journal of Philosophy*, 84 (1987), 5-10 (p. 10); Kirsten Malmkjær, 'Underpinning Translation Theory', *Target*, 5 (1993), 133-148 (p. 136); and Willard van Orman Quine, *Word and Object* (Cambridge, Mass.: MIT, 1960), p. 26.

¹¹⁷ S. C. Wheeler, 'Indeterminacy of Radical Interpretation and the Causal Theory of Reference', in *Meaning and Translation: Philosophical and Linguistic Approaches*, ed. by F. Guenther and M. Guenther-Reutter (London: Duckworth, 1978), pp. 83-94 (pp. 83, 93-94); and Quine, 'Indeterminacy Again', pp. 6-9.

Quine calls expressions of this type unconstrued, nonobservable sentences. He derides the analyst's process of projecting conjectural interpretations upon unconstrued, nonobservable utterances, based on no more than psychological empathy. Such interpretations or analytical hypotheses are construed from mistaken procedures which involve 'weighing incommensurable values':

Considerations of the sort we have been surveying are all that the radical translator has to go on. This is not because the meanings of sentences are elusive or inscrutable; it is because there is nothing to them, beyond what these fumbling procedures can come up with. Nor is there hope even of codifying these procedures and then *defining* what counts as translation by citing the procedures; for the procedures involve weighing incommensurable values. (p.8)

The inscrutability of reference and indeterminacy of meaning are argued by Quine in 'Ontological Relativity' to pervade our everyday encounters: 'we find it in the interests of communication to recognize that our neighbor's use of some word, such as "cool" or "square" or "hopefully" differs from ours, and so we translate that word of his into a different string of phonemes in our idiolect'. Quine's philosophical scepticism thus challenges the presumptions of meaning-based approaches to translation, stating that the practice of translation cannot guarantee synonymy of privately intended meanings.¹¹⁸

Rejecting Quine's sceptical argument involves accepting, for example, that we always know with complete certainty exactly what speakers mean when they utter words in a language that we speak and understand. This is an unlikely position, suggests Hjort: 'it is impossible to prove the existence of an exact identity relation between the conceptual schemata pertaining to speakers of the same language, let alone those speaking different tongues' (p. 42). But by conceding that the sceptic's assertion is unanswerable, Hjort offers a sceptical solution to the implications of indeterminacy for translation.

She offers two alternate interpretations: the flawed 'imprudent scepticism' and the compatible and pragmatic 'moderate fallibilism'. Imprudent scepticism, a philosophy of untranslatability, undermines the possibility of translation and is rejected out of hand. By conceding that a given translation may not mean exactly the same thing as its original text,

¹¹⁸ Feleppa, pp. 32-50; and W. Quine, 'Ontological Relativity', in *Ontological Relativity and Other Essays* (New York: Columbia University, 1969), pp. 26-68 (p. 46).

it does not follow that the translation definitely does not mean the same thing as the original. Moderate fallibilism, on the other hand, provides an observation on the rendering of meaning by decisions made by translators and their readers. Equivalence is associated with ‘equilibria’, established ‘at times’ (p. 44). Hjort speaks of the ‘enabling conditions of translation’ (p. 42), with the convergence of a complex process of reciprocal expectations and forms of coordination. She warns that there is no guarantee that equilibrium will always be achieved. ‘Correct translation’ or ‘pragmatic success’ is determined in accordance with social, political and linguistic conventions—though conventions are anything but binding, operating ‘without any transcendent anchor’ (p. 44). The pervasiveness of conventional non-binding reflexes in successful communication underlies a number of valuable accounts of meaningfulness, including Barwise and Perry (Section 2.1), and Hatim (Section 3.0). The Saliency model proposes that a translator’s attunement to the motivated choices made by a speaker informs much of the process of coordinating equilibria.

Motivated by the concern that Quine has not clearly established that translation is indeterminate, indeed conceding that the substance of indeterminacy remains unclear to him, Feleppa proposes an alternative thesis which takes up where Hjort’s account ends. He contrasts *law*-governed physical hypotheses of natural-scientific theorizing with *rule*-governed translational hypotheses entailing coordination equilibria established by the preferential application of rules and conventions. Successful communication involves the transmission of shared meaning—equivalence relations presumed to hold among expressions within and across languages. Interlinguistic translation thus becomes a matter of matching or coordinating the meanings of expressions in the interfacing languages, which amounts to establishing coordinating equilibria. Coordination equilibria, according to Lewis, are combinations of actions that yield optimal results, that is solutions which turn out best for all parties, in that ‘no one would have been better off had any one agent alone acted otherwise’.¹¹⁹

¹¹⁹ David Lewis, *Convention: A Philosophical Study* (Cambridge, Mass.: Harvard University, 1969), p. 14 quoted in Feleppa, p. 163; and Feleppa, pp. 1, 108, 131, 161-163, 170, 173, 185.

The main burden of translation is to coordinate behaviour, which is largely rule-determinate, according to Feleppa, and thus conventional. Feleppa's thesis turns on the role of rational preference in the constitution and change of rules and conventions. Rules, unlike laws, are contravenable and so may be violated and changed, and the variability and fixity of usage are relative to speakers' choices and preferences. In Quine's words: 'Translation is not the recapturing of some determinate entity, a meaning, but only a balance of various values'.¹²⁰

Consistent with these readings of the indeterminacy thesis, Malmkjær draws on Davidson's theory of linguistic interaction to describe the translator's mediating task as facilitating convergence. Reporting from Quine's viewpoint 'the fiction that the notion of translation can be removed to an ontology-independent metalanguage' (p. 137), she agrees that the problem of ontological relativity is the same for speakers of a single language: that we have no way of knowing what a speaker conceives independent of the access which the speaker's utterance affords us, aside from the circumstances of utterance. Such circumstances are subject to imposition or ways of seeing. Davidson's focus on speakers' cognitive states, rather than meanings, promotes the postulation of systematically attributed ostensive behaviour as a basis for rational communication. A shared human cognitive apparatus suggests a process of optimizing interpretation:

If we cannot find a way to interpret the utterances and other behavior of a creature as revealing a set of beliefs largely consistent and true by our own standards, we have no reason to count that creature as rational, as having beliefs, or as saying anything.¹²¹

Differences between individuals' states of mind are not so great as to make understanding impossible. Successful communication is said to result from the convergence of a hearer's and speaker's 'passing theories': what the speaker wants the hearer to understand by the use of a particular expression on a particular occasion of use, and how the hearer actually interprets the utterance on that occasion of use. The unique relationships which obtain

¹²⁰ W. Quine, 'On Empirically Equivalent Systems of the World', *Erkenntnis*, 9 (1975), 313-328 (p. 322), quoted in Feleppa, pp. 131, 185.

¹²¹ Donald Davidson, 'Radical Interpretation', *Dialectica*, 27 (1973), 313-328 (p. 324), quoted in Malmkjær, p. 138 (rep. in Donald Davidson, *Inquiries into Truth and Interpretation* (Oxford: Oxford University, 1984), pp. 125-139).

between expressions and the circumstances of utterance suggest that equivalence in translation involves a process of interpreting possible and actual equivalents. The translator's choice of one or another equivalent requires an ability to facilitate converge on passing theories with other speakers: for 'people who do not share what we normally think of as "the same language"'. Convergence in translation is, however, 'not guaranteed any more than it is in the case of direct [monolingual] interaction' (p. 14). The compatible notion of speaker connections is presented in a review of the Situation Semantics approach to meaning (Section 2.2).¹²²

If translation presupposes some notion of equivalence, just where do Quine's arguments for the indeterminacy of translation lead us? What Hjort sees at the core of the sceptical problem is the issue of justification. The sceptical argument is used not to prove that equivalence in translation cannot be satisfied, but to show that it cannot be given some undeniable foundation—'an ultimate justification or grounding' (p. 40). In a brief and final statement on indeterminacy in translation, Quine reiterates his critique of the 'uncritical notion of meanings' (p. 9) and challenges the 'ill-conceived notion within traditional semantics, namely, sameness of meaning' (p. 10). Quine rejects the idea of separate and distinct meanings, though conceding the value of translation (as observed in Hjort's moderate fallibilism). His thesis of indeterminacy undermines the prevailing rationalist approach to translation equivalence which informs the reductionist transfer metaphor (Section 1.1):¹²³

A sentence has meaning, people thought, and another sentence is its translation if it has the same meaning. This, we see, will not do. [...] Translation remains, and is indispensable. Indeterminacy means not that there is no acceptable translation, but that there are many. (p. 9)

Quine does not claim that we cannot or should not translate, indicating the existence of regulative maxims and analytical hypotheses—instantiated as dictionaries, translation

¹²² Malmkjær, 'Underpinning...', pp. 136-143, 146; Donald Davidson, 'On the Very Idea of a Conceptual Scheme', *Proceedings of the American Philosophical Association*, 47 (1974), 5-20 (rep. in Davidson, *Inquiries...*); and Donald Davidson, 'A Nice Derangement of Epitaphs', in *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson*, ed. by Ernest LePore (Oxford: Blackwell, 1986), pp. 433-446.

¹²³ Quine, 'Indeterminacy Again'.

manuals and grammars which help to establish the appropriateness of a translation and the unacceptability of others. As Hjort points out, regulative maxims exist as ‘bodies of explicitly articulated and publicly available theories’ (p. 42). Such instantiations are addressed here under the umbrella-term contrastive analysis (Section 2.5).

The incompatibility of the rationalist transfer metaphor of equivalence with the indeterminacy thesis rests on the notion of explicitness. The explicitness and norms entailed in the mediatory rules or regulative maxims of contrastive analysis obscures the translator’s process of interpreting coordination equilibria.

This interpretation process depends on the translator’s attunement to information *implicit* in the communication, to the linguistic conventions *shared* by participants in the communication, and to the *relative value* or meaningfulness of information conveyed. In the absence of an ultimate justification, the Translation Saliency model explains the relationship between the regulative maxims (by which transfer operations are determined) and the translator’s perception of meaningfulness in the translation problem at hand (saliency). The model formalizes the equivalence relationship as a continuum whose extremes are Transfer and Saliency. Saliency is determined with recourse to three oppositions: implicit versus explicit information; local (language-specific) versus non-local (shared) expression; and marked versus unmarked use (Sections 2.1, 2.2 and 2.6).

Having evaluated a selection of the literature on translation in English, an account of Arabic translation literature follows.

1.2.3 Arabic Literature on Translation

Translating into and out of Arabic has enjoyed an extensive tradition—whether from the centres of Baghdad, Damascus, Alexandria, Toledo or Cordova. Arabic translation was instrumental in the dissemination through the Islamic world of Greco-Roman classics and served to bridge the hiatus in development of European science during the so-called Dark

Ages. Arabic scholarship ensured the transmission of recorded scientific information in the primary fields of philosophy, mathematics, astronomy, geography, chemistry and medicine. Translations of the numerous treatises of the major Arabic schools of medical writers which flourished between the ninth and twelfth centuries constituted the core of science in the medieval university libraries in the Western world.¹²⁴

The rise of Islam saw Arabic become a written and spoken lingua franca to a vast collection of linguistic and ethnic groups. Arabic was declared the administrative language of the empire under Abd Al-Malik Ibn Marwan (reigned A.D. 685-705/هـ ٨٦-٦٥)

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¹²⁴ Henry Fischbach, 'Translation, the Great Pollinator of Science: As Illustrated by a Brief Flashback of Medical Translation', *Babel*, 38 (1992), 193-202 (p. 193-6, 198-9); and Remke Kruk, 'Early Arabic Translators, Their Methods and Problems', *Babel*, 22 (1976), 15-21.

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notes:¹²⁶

while Al-Rashid and Al-Ma'mun were delving into Greek and Persian philosophy their contemporaries in the West, Charlemagne and his lords, were reportedly dabbling in the art of writing their [own] names. (p. 315)

Hippocratic and Galenic writings were translated from Greek into Arabic under such physician-translators as Masawayh (b. 777/١٦٠ d. 857/٢٤٣) يوحنا بن ماسويه and Hunain

¹²⁵ Henry Fischbach, 'Translation, the Great Pollinator of Science: As Illustrated by a Brief Flashback of Medical Translation', *Babel*, 38 (1992), 193-202 (p. 193-6, 198-9); and Remke Kruk, 'Early Arabic Translators, Their Methods and Problems', *Babel*, 22 (1976), 15-21.

¹²⁶ Mona Baker, 'Arabic Tradition', in *Routledge Encyclopedia of Translation Studies*, pp. 317-325 (p. 317-321); Brian Stock, 'Science, Technology and Economic Progress in the Early Middle Ages', in *Science in the Middle Ages*, ed. by David C. Lindberg (Chicago: University of Chicago, 1978), pp. 1-51 (p. 13), cited in Baker, 'Arabic Tradition', p. 318; Mahmut Kaya, 'Some Findings on Translations Made in the 18th Century from Greek and Es'ad Efendi's Translation of the *Physica*', in *Transfer of Modern Science and Teaching to the Muslim World*, ed. by Ekmeddin Ihsanoglu (Istanbul: IRCICA 1992), pp. 385-392 (p. 391), cited in Baker, 'Arabic Tradition', p. 320; « كتاب الفهرست » cited in Baker, 'Arabic Tradition'; and Philip K. Hitti, *History of the Arabs: From the Early Times to the Present*, 10th edn (London: Macmillan, 1970), p. 315.

Ibn-Ishaq (Joannitius b. 808/١٩٢ d. 873/٢٦٠) حنين بن اسحاق العبادي. Both were bilingual in Arabic and Syriac (the language of higher Christian education and the liturgy) and both served as court physician. Hunain's *Risala* provides a detailed report of the available translations of Galen and also explains his method of collating as many Greek manuscripts as possible in order to establish a sound basis for his own translation. The literal strategies adopted by prior translators like Yahya Ibn Al-Batriq (d. ca 796-806/١٩٠-١٨٠) بن البطريق conventionalized the transliteration into Arabic of many Greek words. Such words include: *philosophy* فلسفة, *elixir* اكسير, and *astrolabe* اسطرلاب.¹²⁷

The works of Rhazes (d. ca 925/٢١٢) ابو بكر محمد ابن زكريا الرازي and Avicenna (b. 980/٣٧٠ d. 1037/٤٢٨) ابو علي الحسين ابن سينا were translated from Arabic into Latin by Gerard of Cremona (d. 1187/٥٧٧) جيرارد الكريموني and Faraj bin Salim فرج ابن سالم. This Gerard was based in Toledo, which flourished from about 1135 to 1284 (after the Christian conquest in 1085) as the main channel for transmitting Arabic works into Latin. The most prolific of the Toledan school, he translated seventy-one Arabic works, including commentaries and translations of Ptolemy, Aristotle, Euclid, Galen and Hippocrates. Rhazes' كتاب الاسرار quoted by Roger Bacon under the title *De spiritibus et corporibus*, was a chief source of chemical knowledge. Gerard also translated Rhazes' ten volume medical work كتاب الطب المنصوري (which was published in Milan in the 1480's as *Liber Almonisoris*) and Ibn Sina's encyclopaedic *Canon* القانون في الطب (which represents a final codification of Greco-Arabic medical thought and remained a medical textbook of authority used in the Latin West from the twelfth to the seventeenth century). Gerard translated the oldest Arabic work on algebra حساب الجبر والمقابلة (*De jebra et almucabola*) composed by Al-Khwarizmi (b. ca 800/١٨٤ d. ca 850/٢٣٥) محمد ابن موسى الخوارزمي. This work introduced algebra to Europe and served as the principal mathematical textbook in European universities until the sixteenth century. (The development of algebra can be traced back to Assyrian mathematical tables dating from the second millennium B.C., and it

¹²⁷ رسالة ... الى علي بن يحيى في ذكر ما ترجم من كتب جالينوس بعلمه وبعد ما لم يترجم
G. Strohmaier, 'Hunayn b. Ishak al'Ibadi', in *Encyclopaedia of Islam*, ed. by B. Lewis and others, 2nd edn (Leiden: Brill, 1971), III, 578-581 (pp. 578-579); J. C. Vadet, 'Ibn Masawayh', in *Encyclopaedia of Islam*, III, 872-873; and Hitti, p. 311.

has been shown that the Assyrians knew the six model equations used by Al-Khwarizmi.) The first Arabic exponent of numerals (including zero) in preference to letters, Al-Khwarizmi's work on arithmetic survives only in translation. It was translated as *Liber alghoarismi de practica arismetrice* by John of Seville and again as *De numero indico* by the British scientist Adelard of Bath who travelled Spain, Sicily and Syria in the first decades of the twelfth century. The work explains the operations of adding, subtracting, multiplying and dividing and shows how decimals and sexagesimal fractions should be used. (Quranic inheritance rules علم الفرائض made necessary the perfecting of arithmetical operations using so-called Egyptian fractions. Astronomical computations necessitate the use of sexagesimal fractions.) The oldest preserved version of Al-Khwarizmi's astronomical tables is that translated by Adelard of Bath. Such tables recall those of the cuneiform tablets. European mathematics saw the gradual replacement by Christian arithmeticians of Roman numerals and the abacus with Arabic numerals which can be traced to a work published in 1202 by Leonardo Fibonacci of Pisa.¹²⁸

Faraj bin Salim was a Sicilian Jewish physician who translated Rhazes' medical work الحاوي in 1279. From 1486 onwards, it was repeatedly printed under the title *Continens*, appearing in a fifth edition in Venice in 1542. The medical treatise تقويم الابدان في تدبير الإنسان written by Baghdad physician Ibn Jazla (b. 1074/٤٦٦ d. 1100/٤٩٣) ابن جزلة was translated into Latin by Faraj Bin Salim in 1280. Containing 44 tables consisting of 352 maladies and indicating appropriate diets as treatment, the manuscript was printed under the title *Tacuini aegritudinum* in Strasbourg in 1532. The transmission of Arabic works into Latin introduced calque translations like 'sine' in trigonometry (L. *sinus* as جيب *pocket* from Sanskrit *jiva*), as well as numerous transliterations, including the names of stars and technical terms such as السموت *azimuth*, نظير *nadir*, and السموت *zenith*.¹²⁹

¹²⁸ Hitti, pp. 366, 368, 379, 573-574, 579, 588; J. Vernet, 'Al-Khwarazmi', *Encyclopaedia of Islam*, IV, pp. 1070-1071.

¹²⁹ J. Vernet, 'Ibn Djazla', in *Encyclopaedia of Islam*, III, 754, and Hitti, pp. 366-369, 572-573, 579.

British scholars attracted to Toledo included Robert of Chester and Michael Scot. Robert made the first translation of Al-Khwarizmi's algebra in 1145 (as *Liber algebras et almucabola*) and completed the first Latin translation of the Quran with Hermann the Dalmatian in 1143. Michael Scot translated Ibn-Sina's version of Aristotle's zoology *Abbreviatio Avicenne de animalibus* after becoming court astrologer to Frederick II of Sicily. The first book printed in England, *The Dictes and Sayengis of the Philosophres* by William Caxton at Westminster in 1477, was based on the only surviving work of Ibn Fatik (d. ca 1053) ابو الوفاء المبشر ابن فاتك. His مختار الحكم ومحاسن الكلم gives biographical sketches and collections of sayings of ancient Greek sages. The first clinical account of smallpox (Rhazes' الجدري والحصبة) was translated into English as late as 1848.¹³⁰

Translation in medical science is said to present relatively fewer lexical problems with its referential universality (namely, the human body). This contrasts with the referential divergence entailed in the translation of works in other areas of the natural sciences (such as fauna and flora taxonoma), the conceptual and cultural divergence entailed in the translation of works across independent traditions in abstract sciences (such as metaphysics or jurisprudence), and the rhetorical divergence characteristic of attitudes expressed in political, ironic and even religious texts (Chapter Three).

A small number of contemporary Arabic language commentaries address theoretical and practical issues relating to translation. These works consider the historical context and cultural significance of translation into and out of Arabic and some practical aspects of translating between Arabic and English over a range of text types and styles.¹³¹

Khulusi presents a large sampling of parallel texts ranging from poetry to business reports, mostly of fairly non-contemporary usage and of a literary tone. He also offers some brief discussion on form, meaning, correspondence and ambiguity, with allusions to

¹³⁰ Hitti, pp. 588, 589 n. 3; F. Rosenthal, 'Al-Mubashshir b. Fatik', in *Encyclopaedia of Islam*, VII, pp. 282-283; and *A Treatise on the Small-Pox and Measles*, trans. by W. A. Greenhill (London: [n.pub.], 1848), ed. by Cornelius Van Dyck (London: [n.pub.], 1866; Beirut: [n.pub.], 1872), cited in Hitti, p. 366 n.5.

¹³¹

صفاء خلوصي، « فن الترجمة »، (القاهرة: الهيئة المصرية العامة للكتاب، ١٩٨٦)؛
عبدالعليم السيد منسى وعبدالله عبدالرازق ابراهيم، « الترجمة أصولها ومبادئها وتطبيقاتها »، (الرياض:
دار المريخ للنشر، ١٩٨٨)؛
ابراهيم زكي خورشيد، « الترجمة ومشكلاتها »، (القاهرة: الهيئة المصرية العامة للكتاب، ١٩٨٥).

information load, intertextuality and collocation. He includes sections on Arabic-English contrastive grammar on topics such as subcategorization, mood, number, gender and cohesion in English in chapters with titles such as: ‘What the translator should remember from among the peculiarities of English’, ‘Common linguistic mistakes’ and ‘Synthesis’ (pp. 181-218). He concludes with advice on paraphrasing and precis writing, description of metre in English poetry and a selection of literary translations (pp. 219-304).¹³²

Mansi and Ibrahim place a strong emphasis on contrastive grammar—or rather a descriptive grammar of English in Arabic—as a practical guide to translating from Arabic to English for Arabic speakers. They focus on the translator’s language proficiency as an essential basis for translation and view the translator as an innovator (back cover):

الإجادة اللغوية من الأساسيات الضرورية اللازمة للمترجم. والموهبة والثقافة والاطلاع ونوعية التعليم هي التي تصقل مهارات المترجم وتعمل على نضوجه وبلورة شخصيته كمبتكر ومبدع.¹³³

Khurshid details the translation movement in Egypt and the role of translation in contemporary Arab culture, after outlining doctrines of the early Arab schools of translation (pp. 5-42, 69-161). He also offers extensive personal advice on the task of translating, emphasizing the metaphorical nature of language and focusing on the ‘spirit and feeling of the writer’ روح المؤلف وشعوره (p. 11). Literary translation, according to Khurshid, is based on ‘tasting and absorbing the spirit of the foreign writer and subjugating the foreign text to the requirements of the Arabic style’ (p. 49):

الترجمة الأدبية [تقوم على] التذوق وتشرب المترجم لروح الكاتب الأجنبي وتطويع النص الأجنبي لمقتضيات الأسلوب العربي البليغ الرصين.

Together with the notions of spirit, feeling and style, attention is also drawn to the need by the translator for attunement to implicit information or ‘shades of meaning’ ظلال المعاني in a text (p. 5):

¹³²

<ما ينبغي للمترجم ان يتذكره من دقائق اللغة الانكليزية> (ص ١٨١-٨٠٢) ؛
<اخطاء لغوية شائعة> (ص ٢٠٩-٢١٤) ؛
<عملية دمج الجمل> (ص ٢١٥-٢١٨).

¹³³ (trans.) ‘Linguistic proficiency is among the essential requirements of the translator. Talent, education, knowledge and specialised education are what refine the translator’s skills and bring about the maturing and crystallisation of his personality as a creator and innovator.’

الترجمة فن عسير تقتضى [...] تذوقاً مرهفاً لأساليبها وظلال المعاني فيها.¹³⁴

A trade-off thus becomes apparent, in the process of translating, between naturalness constraints on maintaining literal content and constraints on maintaining other implicit information (p. 44):

ومن الأمور التي يجب أن ينتبه إليها المترجم ويتداركها:
١ - ألا يلتزم الترجمة الحرفية فيفسد بذلك الأسلوب العربي، وليس معنى ذلك أن يغفل أي معنى أو ظلاً لمعنى ورد في الأصل الأجنبي، وإنما يراعى سلامة اللغة العربية التي يكتب بها.¹³⁵

All three commentators warn against a literalist approach to translation. Khulusi favours the 'beauty' الجمال of 'the innovative literateurs' المجددون over the descriptive functionalism of 'the linguists' اللغويون (p. 5), arguing that the uses to which expressions are put precede the conventions that constrain them (pp. 7-8):

فكبار الادباء إذن هم الذين يرسمون الطريق للغويين دائماً ويبينون لهم التراكيب الجديدة التي ينبغي ان تحل محل التراكيب القديمة وما على اللغويين الا ان يضعوا قواعد جديدة للتراكيب الادبية المبتكرة التي يتفق عليها كبار الكتاب والادباء.¹³⁶

This position is traced back, by both Khulusi and Khurshid, to two opposing schools of thought: a literalist word-for-word approach adopted by Yahya Ibn Al-Batriq, Ibn Al-Na'imah Al-Hamsi ابن الناعمة الحمصي and others; and a global approach favouring readability and accessibility adopted by Hunain Ibn Ishaq, Al-Jawhari (d. ca 1006-1010/٤٠٠-٢٩٧) ابو نصر اسماعيل الجوهري and others. According to the global approach, the translator 'takes the whole sentence and deduces the meaning, expressing it in his own language with a similar sentence whether the words are identical or not'.¹³⁷

وهو ان يأتي الجملة فيحصل معناها في ذهنه ويعبر عنها من اللغة الاخرى بجملة تطابقها سواء ساوت الألفاظ أم خالفها.

¹³⁴ (trans.) 'Translation is a difficult field of science which requires [...] fine taste of styles and shadow of meaning.'

¹³⁵ (trans.) 'What the translator should pay attention to:

1) He should not adhere to literal translation so as to corrupt the Arabic style. That does not mean that he should ignore any meaning or shades of meaning that is mentioned in the foreign source text, rather he should pay attention to the soundness of the Arabic language in which he is writing.'

¹³⁶ (trans.) 'The great writers, then, are those who always forge the way for the linguists and show them new compositions that should replace the old ones, and all that should be done by the linguists is to create new rules for the literary innovations agreed upon by the leading writers and literary figures.'

¹³⁷ خلوصي، ص ١٢

(Al-Jawhari was a celebrated Arabic lexicographer of Turkish origin. He completed his education in Baghdad and is said to have been the last lexicographer of fame to travel among the Bedouin tribes for the purpose of linguistic investigation. Al-Jawhari did not live to complete the final draft of his dictionary *تاج اللغة والصباح* reaching only the middle of the letter *ضاد*. He is reported to have died:¹³⁸

either as the result of an accidental fall from the top of his house or of the old mosque, or else, in a fit of madness, while trying to fly with two wooden wings (or with the two wings of a door) fastened to his body.¹³⁹

The literalist approach is criticized by Khulusi as inconsistent for its failure to deal with ubiquitous metaphorical usage—bringing about some sort of deterioration at the text's surface by sacrificing the 'elegance', missing the 'force' of the original, and creating a translation with 'no elegance, no precision, no clarity, no harmony' (pp. 12-13):

يقع الخلل من جهة استعمال المجازات وهي كثيرة في جميع اللغات. [...] الطريقة الاولى [...] رديئة اذا اريد بها استجماع تحصيل المعاني وهي ايضاً تذهب بطلاوة التركيب فلا تبقى لها اثرًا [...] اختلطت المعاني على المطالع وغاب عنه فهم قوة العبارة [...] فلا طلاوة ولا إحكام ولا إعراب ولا انسجام.¹⁴⁰

A prescriptive attitude toward translator competence is generally emphasized.

'Defects' such as *defective repetition*, *tautology*, *repetition of the same meaning*, *pleonasm*, and *verbosity*, are viewed by Khulusi as *amr mustahjan* *unacceptable*. They are considered a function of the translator's competence resulting when the translator 'doesn't know the details of the language into which he is translating' (pp. 176-179). The notion of competence is extended somewhat by Mansi and Ibrahim to encompass attunement to the manner of expression: 'proficiency in the linguistic rules that determine the artistic channels through which the ideas are stated in the original' (p. 11):

¹³⁸ L. Kopf, 'Al-Djawhari, Abu Nasr Isma'il', in *Encyclopaedia of Islam*, II, 495-497 (pp. 495-496).

¹³⁹ Kopf, p. 496.

¹⁴⁰ (trans.) 'Inconsistencies would occur through the use of metaphor, which is abundant in any language. [...] The first [literal] method [...] is bad if we want to use it in a global way for meaning, and it also completely loses the elegance of composition [...] The meanings will be mixed up for the reader and he'll miss out on an understanding of the force of the phrase [...] So, [there will be] no elegance, no precision, no clarity, no harmony.'

إجادة القواعد اللغوية التي تحدد القنوات الفنية التي تنقل خلالها الأفكار الواردة في النص الأصلي.

Inconsistent with this call for determination of the ‘artistic channels’ through which ideas are stated, Mansi and Ibrahim require the translator to ‘pay attention to presenting the ideas in a style as similar as possible to the style in which the original is written’ (p. 11):

محاولة بناء الفكرة مشابهة إلى حد كبير للأسلوب الذي كتب فيه النص الأصلي

Likewise, Khulusi advocates ‘keeping to the original style as much as possible’

yet prefers a translation consistent with the taste of the Arabic reader, who reads a translation ‘as Arabic’ and ‘doesn’t read it as a foreign [book]’ (pp. 13-14):

نقل المعاني ورسمها رسماً صحيحاً ينطبق على لغة النقل ومشرب قرائها، فإذا قرأ المطالع فيها كتاباً معرباً فانما هو يقرأه عربياً ولا يقرأه أعجمياً.¹⁴¹

Khurshid also indicates a prescriptive attitude toward translation into Arabic, advocating that ‘the excellence in translation is that the reader should feel as if it were originally written in Arabic’ (p. 44):

ثم ان البراعة في الترجمة هي أن يشعر القارئ أنها قد كتبت أصلاً باللغة العربية.

The issue of indeterminacy is not adequately dealt with in these sources. This is indicated in Khulusi’s discussion titled ‘To what extent is the translator free to deviate from the original text?’ الى أي مدى يحسن بالمرجم التصرف بالنص الأصلي؟. The generally reductionist approach is clear from Khulusi’s views on the resolution of ambiguity or vagueness. He claims to adopt a middle path between ‘refining the original’ أن يصقل الأصل and ‘retaining even the mistakes and defects’ الاحتفاظ حتى باخطاء الأصل ونواقصه. Warning against imitating ambiguity in the original, he ignores the larger process of communication and prescribes an ultimately deterministic approach to interpretation (p. 15):

¹⁴¹ (trans.) ‘the transfer of meaning and portraying it correctly, consistent with the target language and the taste of its readers, so if the reader reads the book that is translated into Arabic, he reads it as Arabic and he doesn’t read it as a foreign [book].’

ويجب على المترجم ، حيثما يرى النص الأصلي غامضاً أو مشكوكاً في معناه أو محتلاً لمعنيين ، أن يختار المعنى الأنسب لسياق الكلام في القطعة بكاملها والأقرب إلى مزاج الكاتب الأصلي . اما محاولة تقليد غموض الأصل وإبهامه فأمر معيب قد يدل على عدم فهم المترجم للنص الأصلي على وجهه الصحيح.¹⁴²

Khulusi's definition of translation indicates a functional, receptor orientation.

Reminiscent of the dynamic equivalence espoused by the Science of Translation approach, he argues for equivalent effect (p. 14):

الترجمة فن جميل يعني بنقل الفاظ ومعانٍ وأساليب من لغة إلى أخرى بحيث إن المتكلم باللغة المترجم إليها يتبين النصوص بوضوح ويشعر بها بقوة كما يتبينها ويشعر بها المتكلم باللغة الأصلية.¹⁴³

This deterministic sentiment is echoed in Khurshid's reference to the contemporary translator Ahmad Hasan Al-Zayyat whom he quotes as 'feeling the emotional experience that the original writer or poet has been through' so as to be sure that 'if an author had written his novel or poem in Arabic, he wouldn't have written it in any other way' (p. 10):

استشعار التجربة العاطفية التي شعر بها الكاتب والشاعر [...] وأنا على يقين جازم بأن المؤلف لو كان كتب قصته أو قصيدته باللغة العربية لما كتبها على غير هذه الصورة.

Khurshid and Mansi and Ibrahim employ the notion of 'spirit' روح in various places to propose somewhat vague definitions of translation, such as the following:

الترجمة هي نقل صورة أمينة كل الأمانة للأصل مع سلامة اللغة العربية.¹⁴⁴

الترجمة تعنى نقل الأفكار والأقوال من لغة إلى أخرى مع المحافظة على روح النص المنقول.¹⁴⁵

¹⁴² (trans.) 'The translator, when he sees the original text ambiguous, vague, or with a double meaning, should choose a suitable meaning for the context of the whole passage, and the closest to the mood of the original. But attempting to imitate the ambiguity of the original and make it unclear is shameful, and could indicate the translator's complete misunderstanding of the original text!'

¹⁴³ (trans.) 'Translation is a beautiful art, concerned with the transmission of words, meanings and styles from one language into another in a manner that the speaker of the language that is translated into follows the texts as clearly and feels them as strongly as the speaker of the original language.'

¹⁴⁴ خورشيد ، ص ٤٣

(trans.) 'Translation is transferring an absolutely honest picture of the original with the correctness of the Arabic language.'

¹⁴⁵ منسى وإبراهيم ، ص ١١

(trans.) 'Translation means transferring the ideas and speech from one language to another preserving the spirit of the translated text.'

The fidelity or 'honest picture' أمانة صورة proposed by Khurshid is developed in Mansi and Ibrahim as 'honesty in translation' الأمانة في الترجمة and is determined as 'completely in harmony with the spirit of the writer' ينسجم مع روح الكاتب قلباً وقالباً. As with Khulusi's reductionist receptor orientation, the account of fidelity in translation offered by Mansi and Ibrahim is explicitly linked to 'the meaning which is intended by the author' (p.13):

فالأمانة تتطلب من المترجم أن ينقل لنا النص روحاً ومعنى وصدقاً وتعبيراً أي أن يكون النص المترجم المعادل الموضوعي للنص الأصلي بمعنى أن النص يجب أن ينسجم مع روح الكاتب قلباً وقالباً وأن يراعى المعنى الذي يقصده الكاتب والذي يكمن وراء كل كلمة وعبرة.¹⁴⁶

Attunement to the spirit of a text is what distinguishes the notion of translation equivalence presented by Mansi and Ibrahim from literal translation—with its 'adherence to the original text through the meanings of words and linguistic formulations, ignoring the differences of various linguistic styles from one language to another' (p. 13):

الإلتزام بالنص المنقول منه من ناحية معاني المفردات والتراكيب اللغوية متجاهلاً تباين الأساليب اللغوية المختلفة من لغة لأخرى.

The need to interpret implicit information expressed by a text is alluded to by Khulusi. He refers to intertextuality: '[a word's] literary history and its use by prominent writers and poets' (a central concern of the Polysystems approach). He also notes the effect of collocation or textual context on interpretation and use, 'the words that are close by' (pp. 145-146):

وليس في أية لغة، عربية كانت أو أجنبية كلمتان متشابهتان كل التشابه مهما كان معناهما متقارباً [...] ولل كلمات – كما للأشخاص – شخصيات مستقلة متميزة تتألف عناصرها من رسم الكلمة وجرسها ومعناها في الجملة، وتاريخها الأدبي واستعمالات أكابر الكتاب والشعراء لها ويختلف رواء كل كلمة وتأثيرها باختلاف الكلمات المجاورة لها.¹⁴⁷

¹⁴⁶ (trans.) 'Honesty requires the translator to transmit to us the text in the spirit and meaning and truth and expression. That is, the translated text should be equal to the original text and should as well be completely in harmony with the spirit of the writer. [The translator] should also pay extra care to the meaning which is intended by the author which lies behind every word and every sentence.'

¹⁴⁷ (trans.) 'In any language, whether Arabic or foreign, no two words are identical, however close their meanings [...] words, like people, have their own independent characteristics, which consist of the shape of the word, its sound, its meaning in the sentence, its literary history, its use by prominent writers and poets, and the effect and influence of every word differs according to the words that are close to it.'

Lexical combination التجمّع اللفظي is detailed in Arabic by Heliel, who concentrates on collocation التلازم اللفظي (p. 31).¹⁴⁸ (This important translation issue is addressed in Section 4.2.4.)

Referential content and contextually determined interpretation are viewed as equally fundamental by Khulusi (p. 170):

للكلمة الواحدة شخصيتان: شخصية مستقلة تلك التي نجدها عليها في معاجم اللغة وشخصية
تضيفها عليها العبارة التي تحل فيها.¹⁴⁹

Consistent with this understanding is Khulusi's view of naturalness as a balance between ideas and expressions. Among the basic principles of translation, he states that 'the translation gives a true picture of the ideas expressed in the original text' and 'the fluency of the translation shouldn't be less than that of any existing piece' (p. 14):

تعطى الترجمة صورة صحيحة للأفكار المتضمنة في النص الأصلي [...] ينبغي ألا تقل
سلاسة الترجمة عن سلاسة أي قطعة موضوعة.

Naturalness is understood in terms of the information load that a translation is forced to carry. In a chapter titled 'Elements that detract from a translation' (pp. 167-180)

Khulusi advises against an 'imbalance between ideas and expressions' العناصر التي تقلل من أهمية القطعة المترجمة. He suggests a naturalizing strategy (p. 167):

فكلما ازدادت الأفكار تركيزاً وجب تبسيط اللغة تبسيطاً يضطرد مع درجة التركيز.¹⁵⁰

Indeterminate correspondence between Arabic and English is addressed by Khulusi through referential incongruity—expressions 'having no equivalence' لا مقابل لها. Consequent 'addition' الزيادة and 'deletion' الحذف result from incongruent semantic mappings (p. 16):

¹⁴⁸

محمد حلمي هليل، المتلازمات اللفظية والترجمة (مائدة مستديرة - الترجمة المهنية العربية والتكنولوجيا الحديثة، طنجة: جامعة محمد الخامس مدرسة الملك فهد العليا للترجمة، ٢-١ يونيو ١٩٨٩)، ص ٣٠-٥٠

in *Nouvelles de la Federation Internationale des Traducteurs - FIT Newsletter*, n.s. 9.3 (1990), 30-50.

¹⁴⁹ (trans.) 'A single word has two characteristics: an independent characteristic which we find in dictionaries and a characteristic added to it by the way it falls in the sentence.'

¹⁵⁰ (trans.) 'Where the ideas are more heavily concentrated we should simplify the language in a manner agreeable to that concentration.'

الصعوبة الأساسية في هذا الفن متأتية من وجود ألفاظ معينة في كل لغة لا مقابل لها في اللغات الأخرى، ومن هذا القبيل معظم الألفاظ الدالة على الاخلاق والعواطف والمشاعر المنعكسة أو الذاتية.¹⁵¹

Translation theory literature in Arabic as with that in English, discusses a number of important areas such as meaning, use, ambiguity, repetition, intertextuality, collocation, information load and correspondence. Nevertheless, the translation theory literature in both languages, it would appear, is yet to present an adequate model of translation equivalence which focuses on the mediating role of the translator, bringing together text, information and situations.

1.2.4 Translating between Arabic and English

In addition to the contributions to translation theory made by Hatim and Baker (Section 1.2.1), a number of researchers have drawn on Arabic/English translation data. Shamaa provides the most comprehensive (manual) corpus analysis. Shamaa addresses problems of translating between Arabic and English for the purpose of drawing generalizations about the two language systems, as do El-Sheikh, Boushaba, As-Safi and Al-Najjar. Among these researchers, expression meaning is taken as the invariant by which translation equivalence is construed.¹⁵²

Shamaa examines some 3,000 pages of post-World War II Arabic fiction together with translations into English. El-Sheikh examines seven works of literature and criticism in English from the same period with their translations into Arabic. A further 100,000 words

¹⁵¹ (trans.) 'Basic difficulties in the art of translation stem from the existence of certain expressions in every language that don't correspond in the other languages, and as an example of that are most of the words indicating morals, passions, reflective or inner feelings.'

¹⁵² Najah Shamaa, 'A Linguistic Analysis of Some Problems of Arabic to English Translation' (unpublished doctoral thesis, Oxford University, 1978); Shawky Muhammad El-Sheikh, 'A Linguistic Analysis of Some Syntactic and Semantic Problems of English-Arabic Translation' (unpublished doctoral thesis, University of London, 1977); Majed F. Al-Najjar, 'Translation as a Correlative of Meaning: Cultural and Linguistic Transfer between Arabic and English' (unpublished doctoral dissertation, Indiana University, 1984); Safia Boushaba, 'An Analytical Study of Some Problems of Translation: A Study of Two Arabic Translations of K. Gibran's *The Prophet*' (unpublished doctoral thesis, University of Salford, 1988); and Abdul Baki Muhammad M. As-Safi, 'An Investigation of the Theory and Practice of Literary Translation Based on Arabic and English as Source and Target Languages and on Modern Arabic Prose Fiction Exemplified by Taha Husayn's *Shajarat al-Bu's* and *Du'a al-Karawan*' (unpublished doctoral thesis, University of Lancaster, 1979).

of Arabic text from various genres forms a point of reference for El-Sheikh's comments on Arabic stylistic preferences. Boushaba draws on two Arabic translations of Jibran's *The Prophet*. As-Safi provides his own English translation of two works by Taha Husayn. Al-Najjar offers a brief analysis of translations of a few verses from the Quran. Overall, error analysis is presented as a diagnostic tool for explaining difficulties of translation. Two further theses by Mouakket and Afifi provide little in the way of contextualized data or evaluative discussion.¹⁵³

Citing Steiner, Shamaa observes the importance of implicitness in the process of interpreting communication in general. She also draws attention to the way culture-specific values tend to constrain the significance attributed to descriptions of situations, though this is not developed in a theoretical way. Attitudes and other non-propositional aspects of communication are understood to be conveyed by the motivated choices in the use of linguistic devices. Language-specific stylistic norms (and markedness) are indicated with the aid of empirical measurement. Extract (3) illustrates naturalness constraints operating on the choice of lexis in Arabic and English. Shamaa notes a much higher frequency of metaphorical uses of القلب *heart* in Arabic originals which is avoided by a variety of translation strategies in English:

وتفهم ما في قلوبهم من حرارة الشوق والتبجيل
comprehended-he what in their heart from eagerness-of-longing and-of-veneration

- (3) They could understand how much these simple peasants had been looking forward to this visit.¹⁵⁴

The frequencies of lexical items such as قال *say* and يوم *day* are measured in Arabic originals and English translations (which are compared against standardized measurements in English non-translated text). Frequencies of certain expressions in English translation are made lower than in the Arabic originals, according to Shamaa, so as to bring them 'closer to [their] "natural" rate in English' (p. 169). In order to establish stylistic norms

¹⁵³ Ahmed Mouakket, 'Linguistics and Translation: Some Semantic Problems in Arabic-English Translation' (unpublished doctoral dissertation, Georgetown University, 1986); and Elhami Abdelzaker Afifi, 'Linguistic Perspectives of Interlingual Translation' (unpublished doctoral dissertation, University of Texas at Austin, 1986).

¹⁵⁴ Shamaa, p. 108; يحيى حقى، «قنديل أم هاشم»، "اقرأ" ١٨، الطبعة الثالثة، ص ٥
Y. Haqqi, *The Saint's Lamp*, trans. by M. M. Badawi (Leiden: [n.pub.], 1973), p. 1.

against which to measure deviations, quantitative statements are made about the use by various authors in Arabic of cohesive devices (و *and*; and ف *and so*). In addition, cross-linguistic comparisons are made between constraints on word order in Arabic and English. In spite of the limitations of manual analysis, Shamaa's research provides a glimpse at how language-specific tolerances and configurations of linguistic features can be elaborated by corpus methodology (Sections 2.3 and 4.2).¹⁵⁵

El-Sheikh also notes that meaningfulness is implicated in language-specific preferences and motivated choices linked to frequency of use. However, much of his data support comparative analysis of unsituated words and sentences.¹⁵⁶

Boushaba and Al-Najjar both focus on language-specific conceptualization. Although careful to distinguish communicative aspects of translation from context-free representation, Al-Najjar fails to realize that translation involves interpreting utterances. He correlates translation with determining the meanings of expressions. Data are generally monolingual and uncontextualized. Al-Najjar observes that translation is indeterminate. He questions the adequacy of analytical tools such as semantic decomposition but proceeds with a detailed model defining 'components of meaning which are relevant to translation' (p. 52). Like El-Sheikh, Al-Najjar illustrates processes by which new terms may enter Arabic.¹⁵⁷

Boushaba aims to reach 'an objective interpretation of the author's intention' by establishing relationships between 'the meaning of the SL [source language] message and the author's thought which conditions that meaning' (p. 170). Interpreting author intentions is understood to depend on the translator's knowledge about the life and beliefs of the author as well as analysis of the devices or stylistic effects displayed in the original text. Boushaba examines the notions of God and love, based on her understanding of how Jibran's life experiences and vision 'dictate the meaning of *The Prophet*' (p. 51). Boushaba

¹⁵⁵ Shamaa, pp. iii-iv, 24, 90-91, 107-108, 147-247; and George Steiner, *After Babel: Aspects of Language and Translation* (London: Oxford University, 1975), p. 414 quoted in Shamaa, p. 24.

¹⁵⁶ El-Sheikh, pp. 75-83.

¹⁵⁷ Al-Najjar, pp. 27-100, 192-208; and El-Sheikh, pp. 415-447.

takes issue with perceived distortion of Gibran's pantheism brought about by Islamic connotations introduced by the use of الله *God* in the two Arabic translations under consideration. She proposes substituting الرب *the Lord* since it 'does not have a muslim connotation, but rather refers to God in general' (p. 71):

By translating *God* by الله the translator gave a muslim connotation to *The Prophet* which has not been suggested by Gibran, and therefore did not render the concept of the universality of God which the author expresses in his work. (pp. 70-71)

Similarly, المحبة *love* is suggested as a better translation than الحب *love* (used by both translators), since الحب is sometimes used to refer to 'the affection between a man and a woman' (p. 77):

Love in The Prophet [...] expresses Gibran's concept of love not as being an affection between a man and a woman but a universal bond of love which unifies all men and all creatures of the universe. (p. 77)

Equivalence is described by Boushaba as 'relative correspondence', which she distinguishes from identical effect (p. 175). The translator's mediating presence involves an awareness of norms at play in the original communication and rendering 'the meaning of the original text' according to a different set of stylistic devices—those to which receivers of the translation are accustomed (p. 173). Boushaba illustrates the relativity of communication resources by highlighting two features which characterize the Arabic translations: the addition of rhythmical balance and added emotiveness. Rhythmical balance refers to the use of rhyming doublets in Arabic for single words in the English original. Extract (4) illustrates the strategy of translating into Arabic with the rhyming doublets بالألفاظ والتأملات (lit.) *in words and expressions*, and بالعبارات والأفكار (lit.) *in thoughts and meditations*. Such doublets are linked to unitary items in the original, viz. *in words*, and *in thought*. The device is said to provide balance. Shamaa also reports this repetition phenomenon which characterizes Arabic, explaining that repetition has an emphasizing function and satisfies stylistic expectations. Contrasting with the rhyming exhibited in (4), repetition in extract (5) creates a higher degree of intensity with the lexical set خان وعده *he broke his promise*, and نكث وعده *he broke his commitment*:

- (4) you would know in words that which you have always known in thought.¹⁵⁸

غير أنكم تودون لو تعرفون بالألفاظ والعبارات ما تعرفونه بالأفكار والتأملات
yet-you you-wish that you-know in-words and-expressions what you-know-it
in-thoughts and-meditations

علم منذ اللحظة أنه سيخون وعده وينكث عهده
knew-he at-once that-he break promise-his and-violate commitment-his

- (5) He knew at once that he would go back on his word.¹⁵⁹

Boushaba catalogues instances of rhythmical balance in Bashir's translation including:

بالحنين والتشوّقات *with longing*; الثرثار المهذار *talkative*; الوحدة والإنفراد *being alone*; and
قيد ولا تعويق *unencumbered*.¹⁶⁰ (Repetition in Arabic is detailed in Section 3.1.1.) A

second indication of the relative nature of communication resources follows Boushaba's assertion that Arabic exhibits a higher degree of explicit emotiveness:

the translators felt the necessity to add some stylistic devices that would put their translations of *The Prophet* on a higher scale of emotiveness appropriate to the Arabic language. (p. 117)

This propensity is supported by reference to the use of explicit markers such as emphatic morphemes *ولئن* and *ف...ن* in Quranic usage. The device is attested in Okasha's translation.¹⁶¹ Greater emotional intensity is also indicated in Bashir's translation, through the choice of lexis. Extract (6) renders *war* as حرباً عواناً *fierce war*. Extract (7) shows metaphorical extension of *regret* to قلبه *he feels pain in his heart* (rather than simply أسف *regret*). Extract (8) shows a heightening of the imagery which is made more concrete in translation, from *sorrow carving into one's being* to أحسادكم في أنيابه *a monster of sorrow getting his teeth inside your body*:

- (6) Your soul is oftentimes a battlefield, upon which your reason and your judgement wage war against your appetite.¹⁶²

¹⁵⁸ Boushaba, p. 114; from *The Prophet*, p. 65; and

خليل جبران، «النبي»، ترجمة أنطونيوس بشير (دار العرب للبستاني، ١٩٨٥)، ص ٦٩

¹⁵⁹ Shamaa, pp. 84, 116; from *Saint's Lamp*, trans. by Badawi, p. 25.

¹⁶⁰ Boushaba, pp. 115-117; from *The Prophet*, pp. 71, 74, 94; and بشير، ص ٧٥، ٧٨، ٩٨

¹⁶¹ Boushaba, pp. 132-134; from *The Prophet*, pp. 46, 49, 53, 61, 70, 98; and

خليل جبران، «النبي»، ترجمة ثروت عكاشة (مصر: دار المعارف، ١٩٦٦)، ص ١٠٠، ١٠١، ١٠٥، ١١٥، ١١٦، ١٢٢، ١٥٠

¹⁶² Boushaba, p. 135; from *The Prophet*, p. 59; and بشير، ص ٦٤

كثيرا ما تكون نفوسكم ميدانا تثير فيه عقولكم ومدارككم حربا عوانا على أهوائكم وشهواتكم

- (7) and who can depart from his pain and his aloneness without regret.¹⁶³

ومن ذا يستطيع أن ينفصل عن كآبته ووحده من غير أن يتألم في قلبه

- (8) The deeper that sorrow carves into your being, the more joy you can contain.¹⁶⁴

فكلما أعمل وحش الحزن أنيابه في أجسادكم، تضاعف الفرح في أعماق قلوبكم

Boushaba's work illustrates various translation strategies which seem aimed at maintaining prominence according to the translator's attunement to language-specific constraints on communication. An underlying factor not considered in Boushaba's account involves the role of stress and intonation in determining a given reading of the English original.¹⁶⁵

Like Boushaba, As-Safi sees translation equivalence as a matter of compromise: 'intuitive, subjective and largely relative' (p. 261). He rejects the idea that there can be any objective criteria for measuring the effect of an original work on its audience nor any scientific measurement of the translator's success at matching such effect in reception. Meaningfulness is linked to values or prominence associated with communication devices. Such prominence results from motivated choices measured against stylistic norms. As-Safi also believes it is imperative to investigate the original author's life and milieu. The research is supported by As-Safi's own translation of two works by Taha Husayn. The enormity of gratuitous annotation suggests exegesis rather than translation. Four hundred pages of translation contain lengthy footnotes detailing background knowledge including: descriptions of prayer rituals; an explanation of the sun and moon letters to guide pronunciation of Arabic names; a page detailing the etymology, history and cultural beliefs associated with the word *jinn*; a page of historical background on the appearance of the Prophet in dreams; two and a half pages explaining the form of a paragraph of text in the

¹⁶³ Boushaba, p. 135; from *The Prophet*, p. 1; and بشير، ص ١٢

¹⁶⁴ Boushaba, p. 135; from *The Prophet*, p. 39; and بشير، ص ٤٠

¹⁶⁵ Boushaba, pp. 20, 42, 46-77, 84-90, 126, 118-137, 173, 175.

Arabic originals; explanations on the use of rosary beads and the functions of various invocations; and so forth.¹⁶⁶

Afifi develops a hierarchical model of translation equivalence which establishes translation priorities, such as ‘content has precedence over form’ (p. 238), and ‘functional aspects have precedence over non-functional aspects’ (p. 241). Language tends to be understood as a code to which contextual dimensions of communication are augmented. The unsubstantiated and prescriptive model is represented in flow charts in which cognitive aspects of transfer are represented as a black box. Such schematic representation is also favoured by Al-Najjar and has been noted in the work of Bell (Section 1.2.1).¹⁶⁷

Some valuable findings emerge from the qualitative analyses presented in the literature on translating between Arabic and English. Contextualized interpretations of original text fragments and their translations provide insights into the motivations behind translation strategies. More importantly, the data point to three domains constraining translation equivalence: constraints linked to expression; constraints anchored in situations described in communication; and constraints associated with the situation of utterance (including the states of mind or attitudes of communicators).

Constraints linked to expression, at the most basic level, relate to the translator’s access to expressions used in the original. Fragments (9), (10) and (11) illustrate simple misinterpretation of the original due to incorrect vocalization by translators—with *العدو* *sprint* having been misread as *العدو* *enemy*; *عن تكفر* *atone for* read as *تكفر* *ungrateful for*; and *عظمت* *the greater she [the risks] became* read as *عظمت* *the greater I became*:

هذا العدو القاتل

- (9) *this mortal enemy¹⁶⁸
(9a) this deadly sprint

¹⁶⁶ As-Safi, pp. 55, 100-154, 260-261, vol. 2 n. 2, 3, 14, 50, 62, 104, 118, 128.

¹⁶⁷ Afifi, pp. vi-vii, 49, 101, 188-192, 236, 238, 241; and Al-Najjar, pp. 55-56, 91, 94-95, 99, 136, 181, 183, 215, 255.

¹⁶⁸ Shamaa, p. 26; from ص ٢٨٦ ، د. ت. أ. ، (القاهرة: مكتبة مصر، د. ت. أ. ، ص ٢٨٦ ، نجيب محفوظ ، « زقاق المدق » ، (القاهرة: مكتبة مصر، د. ت. أ. ، ص ٢٨٦ ، N. Mahfouz, *Midaq Alley*, trans. by Trevor Le Gassick (Beirut: [n.pub.], 1966), p. 295.

وصمت أن تكفر عنه

(10) *determined that she would be unfaithful to his memory¹⁶⁹

(10a) determined that she would atone for it

إن المخاطر تستهويني [...] وكلما عَظُمَت احسست رغبتي قد اشتدت في التغلب عليها

(11) *The risks overwhelmed me [...] and the greater I became, the more I wished to overcome them.¹⁷⁰

(11a) [...] the greater they became, the more I wished to overcome them.

A more interesting feature of the domain linked to expression concerns ambiguous readings. In (12), the more frequent reading is adopted in translation, with a first person imperfect interpretation: الله استغفر *God forbid; I hope not (lit.) I seek God's forgiveness*. An alternative, imperative reading الله استغفر *seek God's forgiveness* is also possible, as noted in (12a):

فأغْمَضَ عَيْنِيهِ لِيَحْجِبَ عَنْ بَصَرِهِ الدُّنْيَا الَّتِي تُثِيرُهُ فَقَالَ الشَّيْخُ:
- استغفر الله...

(12) He closed his eyes to obliterate from his sight the world that irritates him, and the Sheikh said:

'God forbid...'¹⁷¹

(12a) [...]

'Seek God's forgiveness...'

Extract (13) is criticized for misinterpreting the original as a statement of intention in standard Arabic. This reading misses the exclamatory tone of dismay implicated in a more likely colloquial reading (13a) with sharp rising then falling intonation, given that the situation describes a woman's response to the offer of an old man by a matchmaker:

أصوم وأفطر على بصلّة !

(13) *I am willing to go on a diet and have nothing but onions for breakfast.¹⁷²

(13a) Am I going to break my fast with nothing better than an onion?

¹⁶⁹ Shamaa, p. 28; from ٢٢ ص « زقاق المدق », *Midaq...*, trans. by Le Gassick, [n.pp.].

¹⁷⁰ Shamaa, p. 28; from ٢٦ ص « نداء المجهول », (القاهرة: مكتبة الآداب بالجاميز، ١٩٤٩)، ص ٢٦، M. Teymour, *The Call of the Unknown*, trans. by Hume Horan (Beirut: [n.pub.], 1964), [n.pp.].

¹⁷¹ Shamaa, p. 29; from ١٩١ ص « خمارة القط الأسود », (القاهرة: مكتبة مصر، ١٩٦٨)، ص ١٩١، N. Mahfouz, 'Dream', in *God's World*, trans. by A. Abadir and R. Allen (Minneapolis: [n.pub.], 1973), [n.pp.].

¹⁷² Shamaa, p. 31; from ٢٦ ص « زقاق المدق », *Midaq...*, trans. by Le Gassick, p. 25.

The conventional nature of expression implicates a process of attunement by translators to language-specific constraints on the naturalness of communication resources. While standard coordination and post-modification of nouns are illustrated in (14) and (15), the non-conventional coordination and pre-modification in (16) indicates a highly overloaded and unnatural Arabic translation, presumably due to the influence of conventions operating in the English original. El-Sheikh provides a more natural alternative in (16a):

- حدود البلد وأنهاره وجباله
borders the-country and-rivers-its and-mountains-its
- (14) the country's borders, rivers, and mountains¹⁷³

- التحول التاريخي البارز والمهيمن
the-change the-historical the-salient and-the-dominant
- (15) the historical, salient and dominant change¹⁷⁴

- (16) the beauty and nobility, the august mission and destiny, of human handwriting.¹⁷⁵

- جمال ونبيل وعظمة رسالة وقدر خط الإنسان
beauty and-nobility and-greatness [of] mission and-destiny writing [of] the-human
- (16a) جمال الخط الإنساني ونبيله وعظمة رسالته ومصيره
beauty [of] the-writing the-human and-nobility-its and-greatness [of] mission-its and-destiny-its

Relationships not overtly distinguished by expressions in the language system of the original may need disambiguating in the receiving language. Extracts (17) and (18) show the same particle *وقد* /wa-qad/ interpreted with two contrasting functions—synchronizing simultaneous actions with *yawning*; and expressing a causal relationship with *for the sun had already set*:

- وغرقتُ في مقعدي وقد عبث النوم بأجفاني
and-sank-I in seat-my and-(PART) impaired sleep eyelids-my
- (17) and sank, yawning, into my seat¹⁷⁶

¹⁷³ Al-Najjar, pp. 172-173.

¹⁷⁴ Al-Najjar, p. 171.

¹⁷⁵ El-Sheikh, pp. 61-62; from Bernard Shaw, *Pygmalion* (London: Penguin, 1973) p. 153;

¹⁷⁶ Shamaa, p. 38; from توفيق الحكيم، «يوميات نائب في الأرياف»، (القاهرة: مكتبة الآداب بالجاميز، د. تا. د. ص ٢٢٨ «بجماليون»، ترجمة جرجس الرشيدي (القاهرة: دار الكتب العربي، ١٩٦٧)، ص ٢٢٨
T. Hakim, *Maze of Justice*, trans. by A. S. Eban (London: [n.pub.], 1962), [n.pp.].

ونَهَضْنَا عَانِدِينَ ، وقد ارتفعت الشمس
got-up-we going-back and-(PART) rose sun

(18) We got up to go, for the sun had already risen.¹⁷⁷

Lexicalization pressures may result in a shift in semantic field. Arabic derivation morphology provides a regular process by which a verb such as جَرَعَ *he gulped* can be made causative, as جَرَعَهُ *he made him gulp*. Fragment (19) illustrates a shift in metaphor from *make him gulp* to *feed him* in order to maintain transitivity with a unitary lexical item:

يجرّعون خرافاتهم
they-make-gulp-him superstitions-their

(19) feed him their superstitions¹⁷⁸

Language-specific demands on cohesion may require explicit disambiguation of referents. Extract (20) points out a tolerance in Arabic for what could be considered unacceptably ambiguous pronominal reference in English. In fact, the pronominal object ه *him* in ليحسبه *he considers him* is specified in the translation as *Alwan*, though Shamaa maintains that *the broker* is being referred to in this context:

وقد جلس الى مكتبه مركزا انتباهه كله في كلام سمسار يهودي ، مستجمعا بقطته ، مستحضرا
حذره ، يعجب لرفقة محدثه ولطفه ، حتى ليحسبه الجاهل صديقا ودودا

(20) He [Alwan] could, for example, be seated at his desk giving his entire attention to a Jewish broker, [...] so that a stranger would have thought Alwan [(lit.) *him*] a close friend of the man.¹⁷⁹

Extract (21) presents five instances of Arabic pronominal reference specified with proper nouns in English translation—ها *Hamida watched* (lit.) *she watched her*; رأتها *Mrs. Hussainy went* (lit.) *she saw her*; فصعدت *Hamida climbed* (lit.) *so she climbed*; المرأة آثرت *Mrs Hussainy preferred* (lit.) *the woman preferred*; and عيناها *Hamida's eyes rested* (lit.) *her eyes rested*:

¹⁷⁷ Shamaa, p. 38; from Maze...، توفيق الحكيم ، « نائب... » ، ص د ، trans. by Eban, [n.pp.].

¹⁷⁸ Shamaa, p. 83; from Saint's Lamp، يحيى حقي ، « قنديل... » ، ص ٢٥ ، trans. by Badawi, p. 22.

¹⁷⁹ Shamaa, p. 41; from Midaq...، نجيب محفوظ ، « زقاق المدق » ، ص ٧٢ ، trans. by Le Gassick, [n.pp.].

فقد بلغها يوماً أنها وصفتها ببذاءة اللسان ، فتربصت بها حتى رأتها على سطح بيتها تنشر الغسيل فصعدت الى السطح وثباً [...] واقتربت من السور وجعلت تعرّض بالمرأة قائلة بتهكم وازدراء: " أسفي عليك يا حميدة [...] " ولكن المرأة آثرت السلامة وتعوّذت بالصمت. وقد ثبتت عيناها غير قليل على [...]

- (21) One day she learned the woman had described her as foul-mouthed. Hamida watched closely until a day when Mrs Hussainy went to the roof of her house to hang her washing. Like a flash, Hamida climbed to her own roof [...] and climbed to the intervening wall to confront her. She shouted in scornful sarcasm: 'Oh, what a pity, Hamida [...]'. Mrs Hussainy preferred to keep her peace and took refuge in silence.
Hamida's eyes rested long on [...] ¹⁸⁰

Conversely, specified referents may be omitted in translation according to stylistic constraints. Fragment (22) illustrates deletion in translation of the independent pronoun *وانا* and *I* which reduplicates the implicit subject pronoun in *ارتعش* *I tremble* (Section 3.2.0):

فخفضت رأسي وانا ارتعش
so-lowered-I head-my and-I I-tremble

- (22) I lowered my head and trembled. ¹⁸¹

Variant translations of two Quranic verses are presented in (23) and (24), by Pickthall, Bell, Ali, and Arberry respectively. The Arabic structures in (23) can be read as either simple past or present perfect, resulting in a number of translation combinations. Lexical indeterminacy is illustrated in (24), where *الصمد* encompasses the meanings 'eternal' as well as 'had recourse to in times of exigency' (in classical Arabic). These meanings are mutually excluded in (24b) and (24c): ¹⁸²

لم يلد ولم يولد (القرآن ١١٢: ٣)

- (23a) He begetteth not nor was begotten.
(23b) He brought not forth, nor hath He been brought forth.
(23c) He begets not, nor is He begotten.
(23d) Who has not begotten, and has not been begotten.

الله الصمد (القرآن ١١٢: ٢)

- (24a) Allah, the eternally Besought of all.
(24b) Allah, the Eternal.
(24c) Allah is He on Whom all depend.
(24d) God, the Everlasting Refuge.

¹⁸⁰ Shamaa, p. 43; from *Midaq...*, trans. by Le Gassick, [n.pp.].

¹⁸¹ Shamaa, pp. 38; from *Maze...*, trans. by Eban, [n.pp.].

¹⁸² Al-Najjar, pp. 291-296.

Cross-linguistic differences in the granularity of lexical fields is illustrated in extract (25).

The English generic *love* is forced into service as an equivalent for five distinct Arabic hyponyms, viz. *love* هوى, *love* عشق, *love* غرام, *passionate love* هيام, and *love* حب:

ولكنه الحب الذي كان مبعث نكبته، لقد هام الشاب بفتاة من أسرة عريقة، هام بها هياماً جنونياً، وبادلته الفتاة الغرام. فاحبته حب عبادة، وتناقل الناس أخبار حبهما العذرى الرائع كما يتناقلون الأفاقيص، وأصبح العاشقان بطلين من أبطال الهوى

- (25) But love was the cause of his downfall! He fell in love with girl of a noble family, loved her with a wild passion, and the girl in turn loved him adoringly. People spoke about their pure and splendid passion as if it were one of the classic love stories, and the two lovers became heroes of love.¹⁸³

Shamaa notes that the English translation is made dull through excessive repetition:

what is fairly vivid and powerful in the original can be reduced in the translation to sheer triteness. (p. 70)

A final example of constraints linked to expression shows how meaningfulness is related to the set of alternatives available for a given item. The choice of *streamed* in (26) has a marked effect in comparison with others in the set: *fell* نزل, *ran* جرى, *flowed* سال, and *poured* هطل. The intensifying force is maintained in translation with the metaphor *calling out for help and relief*:

سَحَّتْ عَيْنَاهُ دُمْعاً مَدْرَاراً
flowed-she[they] eyes-his tearfully welling-out

- (26) his tearfilled eyes calling out for help and relief.¹⁸⁴

Hatim and Mason also illustrate (with some partially sourced extracts in back translation) the purposeful repetition of words or lexical sets to achieve cohesion and various rhetorical ends in the writing of two Arabic authors. They demonstrate the translator's need to satisfy language-specific constraints on expression without neutralizing or compromising rhetorical function.¹⁸⁵

Constraints anchored in described situations link information (about things referred to during communication) with the world knowledge and linguistic knowledge (which

¹⁸³ Shamaa, p. 69; from ص ٥١ «نداء...»، *The Call...*, trans. by Horan, p. 31.

¹⁸⁴ Shamaa, pp. 83-84; from ص ١٩٠ «زقاق المدق»، *Midaq...*, trans. by Le Gassick, p. 199.

¹⁸⁵ Hatim and Mason, *Translator as Communicator*, pp. 30-35.

communicators draw on in order to effectively use expressions). Culturally determined associations may have contradictory indications, as in البوم *owl* which symbolizes wisdom in English but is an evil omen in Arabic. A functional strategy favoured over referential invariance would indicate عشرات من الرجال *dozens of men* in English, and عشرات من الرجال *tens of men* in Arabic (as dozens precludes selection of human substantives). Sentence (27) exemplifies how the expression قدح شاي *a glass of tea* does not refer to the same quantity in Arabic and English:

معظم العراقيين يشربون قدحين أو ثلاثة أقداح من الشاي بعد كل وجبة أكل

(27) Most Iraqis drink two to three glasses of tea after each meal.¹⁸⁶

Inappropriate reference may have unintended consequences, as in the use of المصطلى *hearth/fireplace*. An Arabic translation of (28), according to As-Safi and Ash-Sharifi, conveys ‘an image of horror’ due to its derivation from the verb صلى *he was burned by fire* and Quranic associations with the agony that awaits sinners in Hell.¹⁸⁷

(28) He shifted slightly on the hearth [...] Gudrun was aware of the beautiful panels of the fireplace.¹⁸⁸

Referents which are unknown in the receiving culture may require a translation strategy involving transliteration (29a), description (29b), or various functional equivalents (29c), (29d) and (29e):

¹⁸⁶ Al-Najjar, p 187.

¹⁸⁷ Abdul-Baki As-Safi and In'am Sahib Ash-Sharifi, 'Naturalness in Literary Translation', *Babel*, 43 (1997), 60-75 (p. 65).

¹⁸⁸ D. H. Lawrence, *Women in Love* (London: Penguin, 1960), p. 367;

« نساء عاشقات », ترجمة أ. حسين (بغداد: دار المأمّن، ١٩٩٠)، ص ٥٩٣

(29) Suzie [...] screamed like a banshee.¹⁸⁹

- (a) إن سوزي تصيح وكأنها "بنشي"
suzie she-screams and-as-if-she banshee
(b) واطلقت صرخة مشؤومة
let-loose-she a-scream sinister
(c) صرخت سوزي كالغول
screamed suzie like-ghoul
(d) راحت تصرخ كالمجنونة
began-she she-screams like-madwoman
(e) وراحت تولول كالنائحة
began-she she-wails like-mourner

Rather than actually refer to things in a described situation, certain culturally loaded symbolic referents are noted for their evocative impact. Shamaa points out the hypnotic effect of the familiar Quranic phrase *The Fig and the Olive*: '[t]heir sound does not evoke their referential meaning as much as it evokes feelings' (p. 254). Intertextual reference is illustrated in (30). With its referential treatment of the term الشورى *counsel*, Shamaa claims that the translation fails to capture the 'Quranic reverberations' of the Arabic original (p. 77). The expression is sourced to the Quranic verse cited in (30a):

وكانوا أهل شورى فأضلتهم الشورى

(30) They were a people who took counsel among themselves, yet their counsels led them astray.¹⁹⁰

وأمرهم شورى بينهم (القرآن ٤٢: ٢٨)

(30a) their affairs by mutual consultation.

Lack of familiarity with the religious and social customs referred to during communication may impact upon interpretation. Extract (31) presents a vivid image of the movement in Midaq Alley at dawn, which Shamaa describes as 'poor but permeated by a comforting spiritual atmosphere' (p. 183). The unfamiliar reader may find such a description opaque in translation:

¹⁸⁹ El-Sheikh, pp. 397-398; from Tennessee Williams, *Cat on a Hot Tin Roof* (London: Penguin, 1969), p.

« قطة فوقة سطح صفيح ساخن », ترجمة سمير عبد الحميد (القاهرة: الدار القومية، ١٩٦٥)، ص ٥٢؛ 115;

¹⁹⁰ Shamaa, p. 76; from محمد كامل حسين، « قرية ظالمة », (القاهرة: ١٩٥٨)، ص ١

M. K. Hussein, *City of Wrong*, trans. by K. Cragg (Amsterdam: [n.pub.], 1959), p. 3.

همسة هنا وهمسة هناك: يا رب يا معين، يا رزاق يا كريم. حسن الختام يا رب.
كل شيء بأمره.

- (31) A whisper here and a whisper there: 'Oh Master, Oh Helper.' 'Oh Provider, Oh Generous One.' 'Oh Master, may the ending be sweet.' 'All things are at his command.'¹⁹¹

With the reading of the Opening Prayer of the Quran, extract (32) implicates the marriage agreement between the girl's guardian and her suitor. This point which would appear lost in translation:

- (32) Abdul Hadi, rumour said, had made a point of visiting Wasifa's brother-in-law and of saying the Opening Prayer of the Koran in his company.¹⁹²

Extract (33) is charged with culture-specific connotations. It evokes many associations and portrays nuances of the customs, social behaviour and mental attitudes of the protagonists, leaving the reader of the translation 'at a loss to grasp the full meaning of what he reads' according to Shamaa (p. 213). The culturally-loaded passage is appraised as a masterpiece of wit and humour, describing a verbal clash between the wives of two civil servants stationed in an outlying Egyptian rural area. There are many associations with poorer, traditional, *baladi* Egypt—associations which do not seem to come across in the translation. In line (33:1), *طلعوا لبعض فوق الأسطح* *they appear to each other on the rooftops* creates an image of the women threatening each other from the safety of their own rooftops. Customary associations are made all the more amusing by the indication of threatening challenge in *طلعوا they appear* (M PL) which Shamaa suggests is normally restricted to cases of one male challenging another. The phrase *نزلوا في بعض ردح* which Shamaa glosses as *verbal duelling* describes almost institutionalized gestures, body movements and tone of voice, and creates a vivid image which enables the reader of the original text to 'visualize the scene with the women's aggressive postures and theatrical performances' (p. 217). In line (33:2), *المأمور* is transliterated as *ma'mur* which obscures an allusion to the importance associated with government employment—something to boast about. In line (33:3), *من غير مؤاخذه begging your pardon* is deleted in translation. It

¹⁹¹ Shamaa, p. 183; from « زقاق المدق », ص ٦ *Midaq...*, trans. by Le Gassick, p. 2.

¹⁹² Shamaa, p. 193; from « الأرض », الجزء الأول، « الكتاب الذهبي، ١٩٥٤ »، د ص عبد الرحمن الشرقاوي، A. Al-Sharkawi, *Egyptian Earth*, trans. by Desmond Stewart (London: [n.pub.], 1962), p. 13.

expresses the author's embarrassment and apology at mentioning the woman's attire which follows. Reference to the headdress typical of baladi women *head cloth with spangles* is also omitted. In line (33:6), *her dress* الفستان البمبي المسخسخ includes a marker of social status and the implication, according to Shamaa, that it is 'common or even vulgar' (p. 216). Other references to the described situation that do come across in the translation are: *with its crown and star* (33:2); *حاجب ربابيك* to describe the court's porter, translated as *the old usher in a cloth robe* (33:4); *with dyed hair* صابغ شعره (33:4); *the official red sash* الوسام الأحمر عهدة الحكومة (33:5); *giving us a salute* يضرب لنا سلام (33:4); *you silly old fool!* ولية سفيهة! (33:7). Such references contribute to some degree to the impact of this mocking and ironic scene:

آخر أخبار أنهم طلّعوا لبعض فوق الأسطح ونزلوا في بعض "ردح" من النوع "الضيف"
 ٢ امرأة المأمور إغاظة في صاحبته راحت لبست سترة زوجها الرسمية بالتاج "والضبورة"
 وغطت رأسها من غير مؤاخذه بالطرحة أم "ترتر" وقالت لها بالصوت العالي: "أنتم
 ٤ حواليكم إلا قلة القيمة لا يمشي وراكم إلا حاجب" ربابيك "نص عمر مكسر صابغ شعره.
 لكن المركز كله بالخفر والعسكر تحت أمرنا، يضرب لنا سلام". قامت امرأة القاضي نزلت
 ٦ ولبست لها الوسام الأحمر عهدة الحكومة فوق الفستان البمبي المسخسخ وطلعت تقول لها:
 "قطع لسانك ولية سفيهة! أنتم صحيح ما لكم إمارة إلا على غفيرين مغفلين، لكن من في البلد
 ٨ كلها يحبس ويشنق ويقول: حكمت المحكمة غيرنا؟".

- (33) The latest version is that they went up to the rooves of their houses and abused each other in the choicest terms. The ma'mur's wife wishing to enrage her rival, went and put on the jacket of her husband's uniform, with its crown and star—and actually covered her head with his cap—and said at the top of her voice:
 'You don't have any escort worth mentioning—just the old usher in a cloth robe, a broken down fellow with dyed hair. But the ma'mur has a post full of guards and soldiers under our command giving us a salute.'
 Whereupon the judge's wife went down, put on the official red sash over her dress and emerged saying:
 'May your tongue be cut off, you silly fool! You certainly have command of a couple of miserable guards. But who else is there in the whole town who can lock people up and hang them and say:
 "The court has decided...?"'¹⁹³

Language-specific or naturalness constraints may affect the way relationships between linguistic entities are expressed, and hence, the speaker's perspective on events in the

¹⁹³ Shamaa, p. 214; from « نائب... », د ص Maze..., trans. by Eban, p. 49.

described situation. Fragment (34) suggests a preference in Arabic is to view the event from the perspective of the cause, while in English the event is viewed from the perspective of the effect or result. As subjects of an active indicative verb, *القلق والحيرة* *anxiety and uncertainty* assume roles as agent in the predicate *افتترسه* *devoured him*. By contrast, *he* as subject in the English translation suggest *anxiety and uncertainty* as the result of some effect. Interestingly, this case inversion maintains the order of information—*he* remains thematic while *anxiety and uncertainty* remain in the position of end focus in both versions—which suggests a trade-off between case assignment and congruence in the systems of theme and focus (Section 4.2.1):

افتترسه نوع من القلق والحيرة
preyed-upon-it(SUBJ)-him kind of anxiety and-uncertainty

(34) He fell prey to anxiety and uncertainty.¹⁹⁴

Naturalness constraints also figure in the obligatory specification of information in English translations of Arabic non-verbal sentences and abstract nouns. The addition of verb phrases in translation forces explicit specification of grammatical arguments and places events within a temporal context in English. Fragment (35) illustrates an English predicate frame imposed in place of a non-verbal Arabic modal with *ولا بد من التضحية* (lit.) *and no doubt from the sacrificing* expressed as *I had to give up something*. The Arabic noun *التسليم* (lit.) *the surrender* is also further specified as *my surrender*:

ولا بد من التضحية وتحمل الوحدة، والصبر على مرارة التسليم والانسحاب.
and-no doubt about sacrifice and-endurance [of] solitude,
and forbearance toward bitterness [of] surrender and-resignation

(35) I had to give up something and put up with solitude and patiently accept the bitterness of my surrender.¹⁹⁵

In (36), *الاحساس* (lit.) *the feelings* becomes *his feelings*, and the Arabic non-verbal construction *لا...إلا* (lit.) *and not...except* is specified as *he had*:

¹⁹⁴ Shamaa, p. 50; from ص ٢٢ « قنديل... »، يحيى حقي، *Saint's Lamp*, trans. by Badawi, p. 20.

¹⁹⁵ Shamaa, p. 53; from ص ٧٩ « قنديل... »، يحيى حقي، *Saint's Lamp*, trans. by Badawi, p. 53.

وانحصر الاحساس في التحفز الأليم ، ولا فكرة تخطر إلا عن الانتقام ، لا حب ولا استقرار ولا ابقاء على ثروة.

focussed feelings in preparation painful, and-not idea occur except on vengeance,
not love and-not stability and-not saving wealth

- (36) His feelings were all focused on this painful process of preparation. Vengeance was the only idea he had; no love, no security, no desire to hang on to his money.¹⁹⁶

These examples show the unique ways in which expressions in the interfacing languages are anchored to a described situation or utterance situation. Information retrievable by the translator is drawn from situations according to language-specific constraints on expression. As Shamaa puts it:

[t]he translator [...] has chosen to clarify [reference to abstract nouns and verbless sentences] through narrowing down their meanings to verbal phrases in which the general abstract words are anchored to agents. (p. 53)

Final examples from the literature further illustrate the domain of constraints anchored in described situations. They show how the use of expressions is linked to information about the described situation and also to knowledge about the world which speakers bring to communication. These examples feature the stylistic values associated with variant usage. The classicizing effect in (37) is achieved by *sleeper of the forenoon* الضحى associated with poems and prose of the classical period. This can be contrasted with the neutral, contemporary style of *she sleeps [into] the forenoon* تنام الضحى in fragment (38):

وكانت نؤوم الضحى
was-she sleeper forenoon

- (37) She customarily slept well into the forenoon.¹⁹⁷

كانت الست روز تنام الضحى
was-she miss-rose she-sleeps forenoon

- (38) Miss Rose would sleep well into the morning.¹⁹⁸

¹⁹⁶ Shamaa, p. 54; from ص ٢٢ ، (١٩٦٨) ، (القاهرة: مكتبة مصر) ، « خمار القط الأسود » ، (N. Mahfouz, 'Wilderness', in *God's World*, trans. by A. Abadir and R. Allen (Minneapolis: [n.pub.], 1973), p. 226.

¹⁹⁷ Shamaa, p. 76; from ص ٩ ، « قرية ظالمة » ، (City of Wrong, trans. by Cragg, p. 10.

¹⁹⁸ Shamaa, p. 76; from ص ٩٢ ، (بيروت: ١٩٧٢) ، « طواحين بيروت » ، (T. 'Awad, *Death in Beirut*, trans. by Leslie McLoughlin (London: [n.pub.], 1976), [n.pp.].

Similarly, the choice in (39) of ألفى *he found* is marked by its highly literary associations in comparison to, say, وجد *he found* and لقي *he found* which are more neutral:

وألفيت مرة في الحديقة [...]

(39) One day in the garden, I found [...]¹⁹⁹

Constraints associated with utterance situations include information about the states of mind or the attitudes of communicators. A disparaging view can be implicated in the choice of expression, such as شفتين over شدين to refer to *lips*. In contrast to Shamaa's neutral paraphrase in sample (40b), the speaker's pejorative attitude toward the described situation is indicated by الشدين *lips* in (40a), and similarly by اشداقه *his lips* in (41). According to Shamaa, the word suggests 'big, flabby and unsightly lips' (p. 82):

(a) حمراء الشعر والشدين

(b) حمراء الشعر والشفيتين

(40) with red hair and lips²⁰⁰

وانفجرت اشداقه المترهلة

(41) His flabby lips parted.²⁰¹

A humorous effect is aimed for in (42) involving a telephone conversation between a legal officer and the police station. The legal officer makes his approach as if to a woman. The success of the personification in the original is facilitated by the female gender of نقطة *police box*, which makes the device more natural and convincing in Arabic. (Malone's notion of emblemism is elaborated in Section 2.2):

انا في عرضك يا نقطة، كلمة واحدة يا نقطة. أخص عليك يا نقطة، ردى عليّ يا...

(42) Hello, police post, I'm calling you! One word only, police post! Oh, damn you, police post! Hullo! answer me...²⁰²

Speaker attitude and the attitude of authors toward their characters (or toward other aspects of the described situation) may be indicated by the use of non-standard Arabic speech in a

¹⁹⁹ Shamaa, p. 77; from «نداء...»، ص ١٢ *The Call...*, trans. by Horan, p. 4.

²⁰⁰ Shamaa, p. 81; from «نائب...»، ص ١٠٦ *Maze...*, trans. by Eban, [n.pp.].

²⁰¹ Shamaa, p. 82; from «نداء...»، ص ٢٤ *The Call...*, trans. by Horan, p. 19.

²⁰² Shamaa, p. 85; from «نائب...»، ص ١١٧ *Maze...*, trans. by Eban, p. 83.

number of instances (Section 3.2.1). An element of character flattening results in the translation of Sudanese dialogue in (43), which may be compared to a standard Arabic paraphrase in (43a):

قالت حليلة بائعة اللبن لأمّنة [...]: سمعت الخبر الزين مو داير يعرس

- (43) 'Have you heard the news? Zein is getting married,' said Haleema, the seller of milk, to Amna.²⁰³

- (43a) هل سمعت الخبر؟ الزين سوف يتزوج

Fragment (44) typifies the juxtaposition of vernacular with formal, often inaccurate, standard Arabic in the dialogue of simple peasant characters. This creates a humorous effect which is not always carried over into the translation. In this case, the formal expletive *Pardon me!* من غير مؤاخذه *Pardon me!* is juxtaposed with vernacular من وراء *from behind*:

الباب من غير مؤاخذه من وراء.

- (44) I'm sorry—the entrance is on the other side.²⁰⁴

In (45), the humorous effect of the malapropism نقبه /naqab/ for لقبه /laqab/ *surname* is also glossed over in the translation:

- اسمه حسين ايه يا ولية؟ فيه ألف حسين في البلد. لقبه ايه؟
- ما اعرفش نقبه يا سيدي. البنت قالت اسمه "حسين" وانا مالي بقى اسأل عن أصله وفصله.

- (45) - His name is Husain 'what', madam? There're a thousand Husains in the country. What is his family name?
-I don't know his name, sir. The girl said his name was Husain, so why should I ask about his family and all the rest of it.²⁰⁵

The author's attitude toward the described situation is indicated by irony in a number of places in a short essay by Jibran. The irony indicated in the following Arabic fragment is implicated by the author's decision to flout the conversational maxim of quantity (Sections 2.1 and 3.0). The attitude is picked up in Emery's translation (46a) but glossed as *I paid him* in Ferris' published translation (46):

²⁰³ Mouakket, pp. 184-185; from الطيب الصالح، « عرس الزين »، (بيروت: ١٩٦٧)، ص ٥
T. Salih, *Wedding of Zein*, trans. by Denys Johnson-Davies (n.pub.: London, 1968), p. 31.

²⁰⁴ Shamaa, p. 79; from Maze..., توفيق الحكيم، « نائب...»، ص ٩٦،

²⁰⁵ Shamaa, p. 204; from Maze..., توفيق الحكيم، « نائب...»، ص ١١٩،

فصدقت كلامه وملأت حفنته بالدنانير وذهبت فرحا
so-believed-I word-his and-filled-I palm-his with-dinars and-left-I joyfully

(46) I believed him and paid him and departed from the place.²⁰⁶

(46a) I believed him and filled his palm with money and departed joyfully.

Extract (47) also conveys a sense of irony, indicated in translation by Emery's addition of the implication *by memorizing the words of long-dead grammarians*. The original makes culture-specific references to historical figures الأخفش *Al-Akhfash* and سيبويه *Sibawayh*, and it recalls Ibn Farid's verse سائق الأظعان يطوى البيد طي *the camel driver crosses the desert expertly*. It implies, according to Emery, backward looking and sterile attitudes to education: 'the slavish memorization of sayings of ancient grammarians and the idea prevalent in the early Islamic age that pure Arabic was to be found in the speech of the Arabs of the desert' (p. 151):

ومن شاء أن يرى أضراس سوريا المسوسة فليذهب الى المدرسة حيث يستظهر رجال الغد
ما قاله الأخفش نقلا عن سيبويه وسيبويه عن سائق الأظعان
and-from wish to he-sees teeth syria decayed then-he-goes to school where memorize men
tomorrow said-he-it al-akhfash taken from sibawayh and-sibawayh from driver camel

(47) If you wish to take a look at the decayed teeth of Syria, visit its schools where the sons and daughters of today are preparing to become the men and women of tomorrow [by memorizing the words of long-dead grammarians].²⁰⁷

The pretentiousness suggested by Jibran in (48) follows the use of three morphologically parallel synonyms النبهاء الفصحاء البلغاء *patrician literati eloquent*, implicated in translation as *those reformers who pose as the intelligentsia*. (Arabic communication resources utilizing various types of repetition for some rhetorical purpose are considered in Section 3.1.1):

²⁰⁶ Peter G. Emery, 'An ATN-based Model of Human Translation and Its Application to an Arabic Literary Text', *Babel*, 42 (1996), 141-157 (p. 149); from

خليل جبران، "الاضرار المسوسة"، في "العواصف"، (بيروت: ١٩٢٠)، د. ص
Khalil Jibran, *Thoughts and Meditations*, trans. by Anthony R. Ferris ([n.p.]: Heinemann, 1961), [n.pp.].

²⁰⁷ Emery, 'ATN Model...', pp. 150-151; from جبران، "الاضرار المسوسة"، د. ص
Thoughts and Meditations, trans. by Ferris, [n.pp.].

هم النبهاء الفصحاء البلغاء الذين يؤلفون الجمعيات ويعقدون المؤتمرات ويخطبون في النوادي والساحات

they patrician literati eloquent who they-organize societies and-they-hold conferences and-they-deliver-speeches to clubhouses and-arenas

- (48) those reformers who pose as the intelligentsia of the Syrian nation and organize societies, hold conferences, and deliver public speeches.²⁰⁸

A final illustration of the way information about an utterance situation may be brought out by the choice of expression is presented in (49). Hatim notes the rhetorical force of the change from first to second person reference in the Quranic verse: from

وما لي لا أعبد الذي فطرني *not be reasonable in me if I did not serve Him who created me* juxtaposed with وإليه ترجعون *and to whom you shall all be brought back*. The device of reference switching is contrasted with the possibility of first person reference throughout in (49a) which would be introspective and remote, and the alternative of second person reference throughout in (49b) which would be sermonizing, admonishing and alienating. Such paradigmatic variation implicates subtle distinctions in the situation of utterance, and the way participants in the communication are drawn into the speaker's rhetorical purposes (Sections 3.2.3 and 3.2.4):

وما لي لا أعبد الذي فطرني وإليه ترجعون (القرآن ٢٦: ٢٢)
and-what to-me not I-serve who created-he-me and-to-him you-return

- (49) It would not be reasonable in *me* if *I* did not serve Him who created *me*, and to whom *you* shall all be brought back.²⁰⁹
- (49a) *It would not be reasonable in *me* if *I* did not serve Him who created *me*, and to whom *I* shall be brought back.
- (49b) *It would not be reasonable in *you* if *you* did not serve Him who created *you*, and to whom *you* shall all be brought back.

In addition to sampling the constraining force of described situations and utterance situations on the use of expressions, the literature on translating between Arabic and English provides a range of translation strategies. Baker observes that global comprehension strategies apply equally in translation and in the broader context of general

²⁰⁸ Emery, 'ATN Model...', p. 151; from جبران، * الاضراس المسوسة "، د ص *Thoughts and Meditations*, trans. by Ferris, [n.pp].

²⁰⁹ Hatim and Mason, *Translator as Communicator*, pp. 116-122.

communication. Fragment (50) is easily interpreted in spite of the reference to *Clive of India*, the relevance and meaningfulness of which seem obscure in both the English original and in the Arabic translation:

- (50) Like Clive of India, Fayed must have stood amazed at his own restraint.²¹⁰

وما من شك ان فايد - شأنه في ذلك شأن كلايف أوف إنديا - قد وقف مذهولا أمام قدرته علي ضبط النفس.

In contrast, the translator's assessment of the Arabic reader's ability to interpret the implications of *the example of Truman*, in (51), called for a translation strategy which provides substantial additional background information, backtranslated in (51a):

- (51) [While fully conscious of his shortcomings I hoped that the responsibilities of office would strengthen the positive elements in his character and enable him to overcome the weak ones.] The example of Truman was always present in my mind. [I managed Sadat's campaign...]²¹¹

[...] وكان في ذهني باستمرار نموذج الرئيس الأمريكي "هاري ترومان" الذي خلف "فرانكلين روزفلت" في مقعد الرئاسة الأمريكية قرب نهاية الحرب العالمية الثانية. فقد بدأ "ترومان" في ذلك الوقت - وبعد "روزفلت" - شخصية باهتة ومجهولة لا تستطيع أن تقود الصراع الانساني الكبير في الحرب العالمية الثانية الى نهايته المطلوبة والمحقة، لكن "ترومان" - أمام تحدي التجربة السلبية - نما ونضج وأصبح من ابرز الرؤساء الأمريكيين في العصر الحديث. [...]

- (51a) [...the weak ones.] Was constantly on my mind the example of the American president Harry Truman, who succeeded Franklin Rosevelt in the seat of the American president towards the end of the Second World War. Truman began at that time, after Rosevelt, as an unknown, insignificant person who could not lead the huge human struggle of the war to its desired end. But Truman, in the face of the challenge of having no experience at all, flourished and matured and became one of the most prominent American presidents in modern times. [I managed...]

The strategy of replacing a hyponym with a generic is well attested. In (52), *جَبَّتَه* وقفطانه *his jubbah and caftan* is replaced by *his flowing robe*. In (53), *محمل* is translated as *camel*.

(Wehr defines *مَحْمَل* (colloq. *مَحْمَل*) as 'camel-borne litter; a richly decorated litter sent by

²¹⁰ Baker, p. 245; from *A Hero from Zero*, p. 27; Arabic text, p. 40.

²¹¹ Baker, p. 247; from Mohamed Heikel, *Autumn of Fury: the Assassination of Sadat* ([n.p.]: Random House, 1984) p. 3; Arabic text, p. 6.

Islamic rulers to Mecca as an emblem of their independence, at the time of the hadj'; Lane as 'of the pilgrims, an ornamented هَوْدَج [camel litter/sedan chair] which is borne by a camel, but without a rider, and is regarded as the royal banner of the caravan'²¹²):

يرفل في جبته وقفطانه
he-trails-off in jubbah-his and caftan-his

(52) He struts off in his flowing robe.²¹³

يتبختر كالمحمل

(53) swaying like a camel²¹⁴

Definition, paraphrase, substitution and omission of unfamiliar referents in translation are also documented. Shamaa suggests *the man who calls the people to prayer* for الموزن *the muezzin* (p. 88). In a section drawing on several language pairs and making no claims to exhaustiveness, Baker illustrates a number of translation strategies. These include:

explanation of *cap* as أي قبعة بلاستيكية تغطي الشعر (lit.) 'cap', *that is a plastic cap which covers the head* in (54); paraphrase of *creamy* as يشبه الكريما (lit.) *that resembles cream* in (55); and unrelated paraphrase of *totally integrated operation* as تقوم...بتنفيذ جميع خطوات الإنتاج بمصانعها (lit.) *carries out all steps of production in its factories* in (56). Examples follow:²¹⁵

(54) Cover the hair with a plastic cap or towel.²¹⁶

يُغطي الشعر بواسطة "كاب" أي قبعة بلاستيكية تغطي الشعر
is-covered hair by-means /kaab/ that-is hat plastic it-covers hair

(55) The rich and creamy KOLESTRAL-SUPER is easy to apply and has a pleasant fragrance.²¹⁷

كولسترال-سوبر غني ومكثف في تركيبته التي تمنح مستحضراً يشبه الكريما
kolestral-super rich and-concentrated in constitution-its which gives product it-resembles cream

²¹² A DICTIONARY OF MODERN WRITTEN ARABIC, ed. by Hans Wehr, 2nd edn (Wiesbaden: Harrassowitz, 1976), pp. 207, 1022; AN ARABIC-ENGLISH LEXICON, ed. by Edward William Lane (Beirut: Librairie Du Liban, 1968), p. 650.

²¹³ Shamaa, p. 68; from ص ٧ « زقاق المدق », Midaq..., trans. by Le Gassick, p. 3.

²¹⁴ Shamaa, p. 68; from ص ١٢ « زقاق المدق », Midaq..., trans. by Le Gassick, p. 11.

²¹⁵ Baker, *In Other Words*, pp. 26-42,

²¹⁶ Baker, pp. 35-36; from instructions accompanying hair conditioner.

²¹⁷ Baker, p. 37; from instructions accompanying hair conditioner.

- (56) They have a totally integrated operation from the preparation of the yarn through to the weaving process.²¹⁸

هذا وتقوم الشركة بتنفيذ جميع خطوات الانتاج بمصانعها ، من اعداد الخيوط الى نسجها
this carries-out company performance all steps production in-factories-its
from preparation yarn to weaving-its

Information implicated the original may be parenthetically introduced in translation where it is felt that explicit reference is called for. In (57), افريقيا *Africa* becomes *her husband's stay in Africa*. Extract (58) illustrates definition of الخمسين *as the vicious and unpredictable summer winds*, as well as parenthetic explanation of سَمَتَهَا *nicknamed her tempers (lit) she called her*:

متى تنتهي افريقيا؟
when end africa?

- (57) She wondered when her husband's stay in Africa would come to an end.²¹⁹

وكانت تقول في مرة أخرى إن جنونا لا شك فيه ينتاب ابنتها حين الغضب وسَمَتَهَا الخمسين
باسم الرياح المعروفة

and-was-she she-says in times other that madness no doubt in-it overcomes daughter-her when anger and-
called-she-her the-khamseen in-name [of] winds known

- (58) On other occasions she had said that a real madness overcame her daughter when she got angry and she nicknamed her tempers the *Khamseen*, after the vicious and unpredictable summer winds.²²⁰

Hatim and Mason also illustrate this kind of strategy in a backtranslated extract (59) which aims to avoid introducing attitudes not implicated in the original and at odds with the character's 'affable directness' (p. 177). In place of (lit.) *he asked me to show him what was in it*, the translator adds *he said it would be alright, but he wanted to check what was in it, so I had to show him*. The addition suggests the translator's desire to maintain some degree of invariance in the significance attached to events in the face of cultural divergence in the kinds of actions that can convey rudeness:

- (59) Three men were smoking *kif* around one of the card tables. I asked Mr Abdullah if I could leave my bag with him till the following day. He said it would be alright, but he wanted to check what was in it, so

²¹⁸ Baker, p. 39; from Brintons press release.

²¹⁹ Shamaa, p. 47; from « طواحين بيروت », ص ١٠، *Death in Beirut*, trans. by Leslie McLoughlin, p. 3.

²²⁰ Mouakket, pp. 174-175; from « زقاق المدق », ص ٢٨، *Midaq...*, trans. by Le Gassick, p. 22.

I had to show him: two largish framed pictures, a pair of trousers, two shirts and a pair of socks.²²¹

1.3 Summary

Equivalence is construed as a relation in which a translation is partially constrained by some original communication event. The translator's attunement to communication resources available at the nexus of translation is realized with respect to both the original communication and to its reception in translation. Translation follows on from the translator's attunement to uniformities and their reflexes in text. Uniformities are sought through information about situations described in a communication and through information about situations of utterance (including the states of mind of communicators). Interpreting the use of expressions draws on shared assumptions about constraints on communication resources. The incommensurability of language systems means that coordinating variable factors is never a limited and stable reality. Yet the persistence of communication remains. Equilibrium results from the convergence of complex reciprocal expectations.

Distinguishing the typological analysis of language systems from the communicative factors surrounding production and reception of actual texts focuses attention on interpreting the senses of utterances in the process of translating. Meaningfulness for the purpose of translation resides in the translator's contrasting awareness of the transfer of typological, backgrounded information *as well as* the unique interpretation of finer, salient distinctions which often convey the point of an utterance.

²²¹ Hatim and Mason, *Translator as Communicator*, pp. 176-177; from

محمد شكري، « زمن الأخطاء »، (الرباط: ١٩٩٥)، د ص
Muhammed Shukri, *Streetwise*, trans. by Ed Emery (London: Al-Saqi Books, 1996), [n.pp].

Chapter Two

Translation Salience

This chapter presents the Translation Salience model of equivalence. Section 2.1 looks at various ways of construing the relationship by which an original partially constrains translation. The translator's attunement to values (implicated in an original communication event and linked to situations) is taken as the point of departure for defining the equivalence relation. Uniformities are construed as described situations and the states of mind of communicators. Section 2.2 develops the hypothesis with reference to two complementary approaches to linguistic meaning: one which places meaning in the mind, and one which looks for meaning in situations. Sections 2.3–2.5 consider the notion of transfer (translation operations) from three perspectives: empiricist, rationalist and contrastive analysis. Section 2.6 formalizes the Translation Salience model, reviewing the defining notions of markedness, implicitness and localness.

2.1 Equivalence

Section 1.2 identified two general domains constraining translation: constraints on the meaningfulness of an original text, and those operating on the reception of a translation itself. The tendency is for meaningfulness to be elaborated by current theories of text analysis according to the analyst's persuasion, and for reception-oriented studies to make do without much reference to the conditioning influence of the original. Nowhere is the nature of the relationship between a translation and its original actually explained.

Existing models of translation equivalence are, by and large, founded on the transfer metaphor (Section 1.1). Researchers have focused on accounting for individual changes in the way information is expressed without coming to terms with the regularities or uniformities of the translation process—the kinds of information that the translator tries to maintain in translation. Many facets of the relationship (by which an original

communication event constrains text development in translation) remain unaccounted for. The Translation Saliency model addresses the balance. According to the prevailing transfer model, the content of an original is made explicit while the amount of information that is lost or added at the nexus of translation is minimized. The Saliency model argues to the contrary: that what the translator wants to be getting right is not necessarily maintaining invariance of the propositional content of an original text. It is mistaken to focus solely on the transfer of explicit analyses of an original. The translator can only get so far with literal meaning. The translator's mediating presence involves balancing or coordinating values—the need to add and reduce, to violate transfer to satisfy communication goals. The Saliency model aims to account for attitudes and implications that are very often the point of an utterance: stuff that isn't necessarily transformed by explicit analysis. Sections 2.1, 2.2 and 2.6 argue that the equivalence relationship is determined by the translator's attunement to communication resources in the interfacing languages. The Saliency model takes situations described by speakers and the communicators' states of mind as uniformities in the translation process. Equivalence is construed as a continuum with Saliency and Transfer as its polar extremes. Attunement to salient information conveyed in an original communication event is determined by the independent and observable principles of markedness, implicitness and localness. Saliency is defined by the simultaneous presence of these three primary notions. Transfer is defined by lack of saliency (the absence of one or more of the defining features of saliency).

Hermans sees translating as a modelling activity; that a translated text claims 'to repeat an anterior discourse'. Such modelling promotes a view of translation as a derived, second order product: 'the relation between the translation and its prototype is neither symmetrical nor reversible' (p. 156). Koller defines translation as a secondary text that stands in an equivalence relation to a primary text. He rejects Toury's very broad definition (which abandons the notion of equivalence and treats translation as an object in the receiving culture). Founded on the hypothesis 'that translations are facts of one [receiving] system only', Toury takes translation to be 'any target-language utterance which is presented or regarded as such within the target culture, *on whatever grounds*' (pp. 19-20). Koller

highlights the double linkage—the translation’s link to its original, and the translation’s link to communicative conditions on reception. Sager notes two senses in which translations are dependent texts: dependence upon an original (which may or may not have comparable form or serve similar functions); and dependence upon the purpose or function of the translation text in reception. He distinguishes obligatory modifications (culturally conditioned linguistic transfer) and deliberate modifications (necessitated by change in function of the translated text). This parallel development in the literature reflects Lyons’ general theoretical point that successful communication depends on both reception of the signal and recognition of the sender’s communicative intention.²²²

The translator’s orientation toward a particular purpose is linked variously to equivalence, adequacy, competence and translation strategies. Bell suggests the goal of translation is to retain as far as possible ‘the content of the message and the formal features and functional roles of the original text’ (p. 1). Degrees of equivalence are established according to communicative values and the ‘crucial variable’ purpose (p. 7). Hatim and Mason acknowledge the constraining power of function of the translated text, developed in the theory of Reiß and Vermeer. Assuming that translator’s choices are determined primarily by constraints such as the institutional factors surrounding the initiation of a translation, Mason promotes adequacy over equivalence as a standard for judging translations. To him, a functional perspective:

relates the circumstances of the production of the source text as a communicative event to the social circumstances of the act of translating and the goals which it aims to achieve. (p. 33)

Campbell notes the link between translation competence and the translator’s purpose. Lindquist is critical of the unquestioning acceptance of the notion of equivalence, concluding that the notion of purpose must take a prominent place in any definition of translation. He is at pains to distinguish translation as a speech event (always having a

²²² Hermans, ‘Models of Translation’, p. 156; Werner Koller, ‘The Concept of Equivalence and the Object of Translation Studies’, *Target*, 7 (1995), 191-222 (pp. 191, 195-197, 211-212); Gideon Toury, ‘A Rationale for Descriptive Translation Studies’, in *The Manipulation of Literature...*, pp. 16-41 (pp. 19-20), emphasis added, cited in Koller, ‘Concept of Equivalence...’, p. 195; J. C. Sager, ‘Quality and Standards—the Evaluation of Translations’, in *The Translator’s Handbook*, pp. 121-128 (pp. 121-122); and Lyons, *Semantics*, pp. 33-34.

purpose), from any ideal translation that can be taken out of context, declaring '[t]here are no general purpose utterances' (p. 46). Although acknowledging House's assertion of the translator's interpretive capacity in the interactive process of negotiating the meanings of expressions in original and translation, Lindquist questions taking for granted that a translator can construct a single functionally equivalent discourse.²²³

Given the complexity of texts and text purposes, and given the very large number of situational factors constraining text production (and hence equivalence), Gutt rejects the idea of functional equivalence and sees typologies and purpose-based evaluation as yet another intermediate step: that a set of purposes will 'only add another layer of theory to an already overwhelmingly complex framework' (p. 17). Gutt is suspicious of equivalence models which merely make statements about similarity and difference and he rejects the utility of the notion of equivalence as a measure of translation quality. Equivalence needs to be related to a theory of values, according to Gutt, as distinct from the task of evaluating translations themselves. Koller sees equivalence as an abstract relationship through which the translation is constrained by its original, a relationship that is actualized under certain conditions:

The concept of equivalence postulates a *relationship* between a source-language text [...] and a target-language text. The concept of equivalence does not say anything about the *nature of the relationship*: this must be defined in addition. The mere demand that a translation be equivalent to a certain original is void of content.

Pym points to the circularity of defining equivalence in terms of the relationship between a translation and its original, and defining translation in terms of equivalence. Unable to grapple with the essential nature of equivalence, Kenny notes, most theorists develop typologies which focus on uniformities at some level of analysis (word, sentence, text) or type of meaning (denotative, connotative, pragmatic, semiotic).²²⁴

²²³ Bell, *Translation and Translating...*, pp. 1, 6-7; Hatim and Mason, *Translator as Communicator*, pp. 11, 227 n. 1; Mason, 'Communicative/Functional Approaches', pp. 32-33; K. Reiß and H. J. Vermeer, *Grundlegung einer allgemeinen Translationstheorie* (Tübingen: Niemeyer, 1984); and Campbell, *Translation into the Second Language*, p. 6.

²²⁴ Gutt, pp. 10-17; W. Koller, *Einführung in die Übersetzungswissenschaft* (Heidelberg: Quelle and Meyer, 1983), p. 186, quoted and trans. by Gutt, p. 10; Dorothy Kenny, 'Equivalence', in *Routledge Encyclopedia of Translation Studies*, pp. 77-80; and Anthony Pym, *Translation and Text Transfer* (Frankfurt: Peter Lang, 1992), p. 37, cited in Kenny, p. 77.

Various aspects of the notion of equivalence are distinguished, such as by Koller and Toury.²²⁵ Koller describes formal similarity between language systems (*Korrespondenz*) as opposed to equivalence relations established between real texts/utterances in different languages (*Äquivalenz*). Toury proposes that empirical equivalence can be established only after the event of translation, while theoretical equivalence exists as an ‘abstract, ideal’ relationship between translations and their sources. By postulating equivalence, the underlying notion of invariance is replaced by a set of socially determined constraints or ‘circumstances’:

Rather than being a single relation, denoting a type of invariant, [equivalence] comes to refer to any relation which is found to have characterized translation under a specific set of circumstances.²²⁶

The (purportedly ideal) theoretical relationship which holds between two communication events (a translation and its original), is abandoned in favour of constraints on reception. But despite this shift in focus, there remains the essential notion of equivalence (and with it some underlying appeal to invariance) by which translation is distinguished from non-translation. Stecconi observes:

Equivalence is crucial to translation because it is the unique intertextual relation that only translations, among all conceivable text types, are expected to show.²²⁷

One may be tempted to construe invariance in translation with universals of grammar or with the meanings of expressions. Notable in these areas is the work of theorists such as Fillmore, Dik and Wierzbicka. Fillmore’s case grammar was an early attempt to make explicit the meaning relationships in a sentence on the basis of a possibly universal set of semantic relationships. Fillmore employed the notion of frame (used in cognitive psychology) to develop a theory of text interpretation. Categories that a speaker brings into play when describing situations independent of the speech situation are linked to the

²²⁵ Koller *Einführung...*, 4th edn (1979/1992), pp. 183-184, cited in Kenny, p. 78; and Gideon Toury, *In Search of a Theory of Translation* (Tel Aviv: Porter Institute, 1980), pp. 39, 113, cited in Kenny, p. 79.

²²⁶ Toury, *Descriptive Translation Studies...*, p. 61, quoted in Kenny, p. 80.

²²⁷ Ubaldo Stecconi, ‘Semiotics in Translation Teaching’ (paper presented at the conference *Problems and Trends in the Teaching of Interpreting and Translation*, Centro Internazionale di Studi sull’Interpretazione e la Traduzione, Misano Adriatico, September 28-30, 1994), quoted in Anthony Pym, ‘European Translation Studies, une science qui dérange, and Why Equivalence Needn’t be a Dirty Word’, *TTR: Traduction, Terminologie, Rédaction*, 8 (1995), 153-176 (p. 166), and also quoted in Kenny, p. 80.

framing or schematization of the actual communication situation. Rather than view language as a set of sentences to be interpreted autonomously at the level of syntax, Dik's functional grammar regards language as an instrument for social interaction. The formalism integrates the use of expressions with the cooperative activity of communicating; it seeks to explain the ultimate purposes which underlie the use of expressions. Functional grammar integrates semantic case roles in a wider model of description. States of affairs are designated by underlying predicate frames which are constructed on the basis of explicitly characterized functions. Predicate frames are said to embody interpretations of reality. Paraphrases are described as non-synonymous insofar as they may describe the same state of affairs from different perspectives. Metaphorical interpretations are indicated according to the markedness of the fit between a given term and the selection restrictions on arguments. The attraction of Dik's model is that with a small and universal inventory of predicate frames the language-specific structuring of states of affairs can be accounted for.²²⁸ Functional formalizations have been successfully adapted to cognitively plausible approaches to machine translation (Sections 2.3 and 2.4). But there are limitations on the expressiveness of models of translation equivalence founded on explicit representation.

Wierzbicka holds a compatible view of meaningfulness, in which interpretation is linked to attunement to communication resources:

The speaker's problem is not how to produce grammatical sentences, but how to say what they want to say; and how to understand what other people say.²²⁹

Based on a long line of Western scholarship, she proposes a universalist hypothesis by which innate, human conceptualizations of the world point to the assumption of an isomorphic set of semantic primitives: that 'in every language the set of such "translatable" words coincides with the set of this language's indefinables' (p. 15). A universal set of

²²⁸ Charles J. Fillmore, 'A Private History of the Concept "Frame"', in *Concepts of Case*, ed. by René Dirven and Günter Radden (Tübingen: Narr, 1987), pp. 28-36; Simon C. Dik, *Functional Grammar*, North-Holland Linguistic Series, 37 (Oxford: North-Holland, 1978), pp. 1-14, 71, 97-100; René Dirven, 'By Way of Introduction', in *Concepts of Case*, pp. 7-14 (pp. 7-9); and Simon C. Dik, 'Some Principles of Functional Grammar', in *Concepts of Case*, pp. 37-53 (pp. 37-46).

²²⁹ Anna Wierzbicka, *The Semantics of Grammar* (Amsterdam: John Benjamins, 1988), p. 561.

primitives facilitates interpretation of idiosyncratic semantic structures according to culture-specific configurations of the primitives.²³⁰ The defining power of a set of universal primitives capable of generating all other concepts is associated variously with: Aristotle (definition through terms that are prior and more intelligible); Leibniz (we have understood something only when we have broken it down into parts which can be understood in themselves); Descartes (there are certain things which we render more obscure by trying to define them, because, since they are very simple and clear, we cannot know and perceive them better than by themselves); Pascal (it is clear there are words which cannot be defined); and Arnauld (no attempt should be made to define all words; it is impossible to define all words; it is necessary to stop at some primitive words, which are not defined).²³¹ Innate links between human cognition and linguistic concepts are assumed. Human beings are described as having a readiness for meaning primitives to which we are innately attuned. Such primitives are assumed to be prior to language.²³² Wierzbicka aims to give a cross-cultural perspective to such views as Chomsky's that:

The speed and precision of vocabulary acquisition leaves no real alternative to the conclusion that the child somehow has the concepts available prior to experience with language.²³³

Wierzbicka rightly places rational human behaviour and intentions prior to linguistic conceptualization, noting Edelman's observation that individuals already think independently of language: 'a child makes sense of situations and human intentions and

²³⁰ Anna Wierzbicka, *Semantics: Primes and Universals* (Oxford: Oxford University, 1996), pp. 3-16.

²³¹ Aristotle, 'Topics', in *The Works of Aristotle*, ed. by W. D. Ross (Oxford: Clarendon, 1937), p. 141a; Gottfried Wilhelm Leibniz, *Opusculs et fragments inédits de Leibniz*, ed. by Louis Couturat (Paris: Universitaires de France, 1903), p. 430 (repr. Hildesheim: Georg Olms, 1961), trans. by Wierzbicka; René Descartes, 'The Search after Truth by the Light of Nature', in *The Philosophical Works of Descartes*, trans. by Elizabeth S. Haldane and G. R. T. Ross, 2 vols (Cambridge: Cambridge University, 1931), I, p. 324 (first publ. 1701); Blaise Pascal, 'De l'esprit géométrique et de l'art de persuader', in *Œuvres complètes*, ed. by J. Chevalier (Paris: Gallimard, 1954), p. 580 (first publ. 1667); and Antoine Arnauld, *The Art of Thinking*, trans. by James Dickoff and Patricia James (Indianapolis: Bobbs-Merill, 1964), I, pp. 86-87 (first publ. 1662); all quoted in Wierzbicka, *Semantics...*, pp. 10-12.

²³² Melissa Bowerman, 'Semantic Factors in the Acquisition of Rules for Word Use and Sentence Construction', in *Normal and Deficient Child Language*, ed. by Donald M. Morehead and Anne E. Morehead (Baltimore: University Park, 1976), pp. 99-179 (p. 102), cited in Wierzbicka, *Semantics...*, p. 17; and Jerome Bruner, *Acts of Meaning* (Cambridge, Mass.: Harvard, 1990), p. 72 cited in Wierzbicka, *Semantics...*, pp. 18, 22.

²³³ Noam Chomsky, 'Language in a Psychological Setting', in *Sophia Linguistica*, 22 (1987), 1-73 (p. 21), quoted in Wierzbicka, *Semantics...*, p. 250.

then of what is said'.²³⁴ The basic grounding of her research is compatible with a view which construes situations and states of mind as uniformities in the translation process. But an observation that cognition constrains language use leads Wierzbicka to claim that 'meaning underlies language' (p. 21), and that her metalanguage of primitives 'allows us to go beyond the vicissitudes of language use and to capture, and reveal, the semantic invariant of a word' (p. 25). Such meaning representation involves decomposition of complex, culture-specific conceptualizations in terms of a 'shared conceptual basis underlying all human language, cognition, and culture' (p. 207). Wierzbicka is concerned with the way meaning is conceptualized cross-culturally:

Meanings are not universal, because reality is, by and large, open to different conceptualizations, and different meanings embody those conceptualizations which have emerged within a particular speech community and are shared by its members. The reasons behind those different conceptualizations may be explainable in terms of history, culture, living-conditions, religion and so on. (p. 391)

The construction of linguistic definitions equates with Quine's analytical hypotheses (Sections 1.2.2 and 2.5). Concepts are not accessible to direct observation but can be tested against a word's use. Boas' commonsense assertion that '[t]he functions of the human mind are common to the whole of humanity', sets the scene for Wierzbicka's crucial claim that native speakers of different languages have the same basic concepts at their disposal. She is concerned with the representation of meanings rather than the interpretation of actual use. (Pustejovsky's attempt to formalize metaphorical sense is noted in Section 2.3.) Concepts, which 'can be shared', are seen as the link between the meanings of expressions and perceptions of the real world, which are 'private':

the foci of [...] different semantic categories may be relatively stable, across languages and cultures, not simply because our neural responses are the same but because we share our fundamental conceptual models, which we base on our common experience. (pp. 332-3).

²³⁴ Gerald M. Edelman, *Bright Air, Brilliant Fire: On the Matter of the Mind* (New York: Basic Books, 1992), p. 239 quoted in Wierzbicka, *Semantics...*, p. 21; and Margaret Donaldson, *Children's Minds* (New York: Norton, 1978), [n.p.] quoted in Edelman, p. 254, and in Wierzbicka, *Semantics...*, p. 21.

But cultural difference which besets the question of translational invariance is best understood as a process by which interpretations are anchored to information about situations. Cole, Gay, Glick and Sharp conclude:²³⁵

cultural differences in cognition reside more in the situations to which particular cognitive processes are applied than in the existence of a process in one cultural group and in absence in another.

Fillmore, Kay and O'Connor point out the limitations of the technique of decomposition for describing the endless metaphorical extension of linguistic forms. They promote the notion of idiomaticity over an idealized, atomistic view (by which complex linguistic objects are resolved into 'configurations containing only constituents of the designated types, arranged according to the standard rules, and yielding interpretations which follow from regular principles of compositional semantics', p. 513). Emphasis instead is placed on figuring out the implications of utterances. Interpretation involves simultaneous access to 'a repertory of clusters of information' (p. 534). While an idiomatic locution is assigned an interpretation by the speech community, someone who merely knows the grammar and the vocabulary of the language could not, by such knowledge alone, know how to say it, what it means, or whether it is a conventional thing to say.²³⁶ Schubert rejects the utility of semantic decomposition. He believes that a cross-linguistically valid set of semantic atoms is impossible to define since meaning is not inherently portioned or 'quantized'.²³⁷ While agreeing that meanings and comprehension are inextricably bound to beliefs, intentions, states of knowledge and cultural heritage and orientations toward the world, Smith questions the value of conceptual theories (which argue that lexical and sentential representations can be described). He cites arguments that

²³⁵ Wierzbicka, *Semantics...*, pp. 21-25, 184, 204-250, 270-272, 280, 332-333, 391-395; Franz Boas, *The Mind of Primitive Man*, rev. edn (New York: Macmillan, 1938), p. 135 quoted in Wierzbicka, *Semantics...*, p. 184; and Michael Cole, John Gay, Joseph A. Glick, and Donald W. Sharp, *The Cultural Context of Learning and Thinking* (New York: Basic Books, 1971), p. 215 quoted in Wierzbicka, *Semantics...*, p. 205.

²³⁶ Charles J. Fillmore, 'Verbs of Judging: An Exercise in Semantic Description', in *Studies in Linguistic Semantics*, ed. by C. J. Fillmore and D. Langendoen (New York: Hold, Rinehart & Winston, 1971), pp. 273-290 (p.273-277); and Charles J. Fillmore, Paul Kay and Mary Catherine O'Connor, 'Regularity and Idiomaticity in Grammatical Constructions: the Case of *Let Alone*', *Language*, 34 (1988), 501-538 (pp. 502-504, 534).

²³⁷ Klaus Schubert, *Metataxis: Contrastive Dependency Syntax for Machine Translation* (Dordrecht: Foris, 1987), p. 200.

no intermediate representation is needed to explain how language and meaning exist in the brain. The empirical evidence for the role of decomposition in cognition is controversial.²³⁸

Exhaustive description which follows on from the decomposition strategy has long-standing appeal in the translation literature. This is evidenced, say, in reporting on the Brazilian word *arruação*: ‘clearing the ground under coffee trees of rubbish and piling it in the middle of the row in order to aid in the recovery of beans dropped during harvesting’.²³⁹ Equally, the term *scrub up* might be used to describe ‘the act of health professionals cleaning their hands and forearms in certain prescribed ways in an institutional setting prior to performing surgical procedures’. Taken further, the expression may be modified—as *scrub up nicely* or *scrub up well*—to pick out ‘the jocular attitude of an observer commenting on a person’s unlikely transformation in appearance from unappealing to attractive’. The use of common, unspectacular words to refer to very specific or unusual situations follows on from the efficiency of language. Its ubiquity suggests linguistic expressions be viewed as resources for getting at a particular interpretation from the unique situations in which speakers find themselves during communication. A translation strategy which constructs comprehensive definitions of expressions with the analytical tool of decomposition may do so at the expense of interpreting actual use. Decomposition does not directly address the fact that individuals pick out specific features of the meaning potentials of expressions during communication. The uniformities by which translation equivalence is construed can not be anchored in the meanings of expressions.

Discourse processing theories suggest themselves as solutions to the invariance by which an original communication event constrains translation. Mann, Matthiessen and Thompson describe effective communication in terms of successful outcomes: the achievement of participants’ purposes. They aim to demonstrate how language use contributes to the outcomes of interaction by providing paths from situation to language,

²³⁸ George W. Smith, *Computers and Human Language* (New York: Oxford University, 1991), pp. 261-263, 279-286.

²³⁹ *ITI News*, 3 (1988), p. 57; quoted in Baker, *In Other Words*, p. 22.

and by explaining user choices and the effects of choices. The relations which hold between sequences of text are viewed as representations of intentions. Understanding involves interpreting the coherence of text (whether explicitly signalled or inferred). Interpretation is said to enable a text receiver to make judgements about the intentions of a speaker.²⁴⁰

In contrast, Reichman believes that grasping a speaker's intent cannot be a necessary precondition for understanding. Based on the realization that mutual understanding depends partly on some shared, external communication situation, Reichman's model attempts to integrate structural linguistic theory with world knowledge (implicated in speaker attitudes and intentions). Rather than identification of speaker intent governing discourse processing, it is the identification of communication resources (conversational moves adopted by a speaker) which is assumed to govern discourse processing. Communication resources connect a speaker's utterance with the preceding discourse, according to processing conventions derivable from the discourse context. The speaker's state of mind, rather than intent, is thus inferred in the interpretation process. In other words, the interpretation of utterances is placed prior to the hypothesizing of intention:

rather than speaker intent identification driving interpretation of the speaker's utterances, it is the interpretation of these utterances through conventionalized conversational move characterizations that enables us to hypothesize the speaker's underlying psychological state. (p. 192)

Attempting to explain how communicative goals are apprehended and how ongoing assumptions are updated (according to shared compatible views of the relevance of each discourse element to what has gone before), processing is said to involve a kind of attunement called focused processing (by which each utterance is interpreted in light of the current relevant discourse context to which it is related). Selective attention is established in connection with frames of reference. Only one of a few related items is highlighted at any given point in time, except in atypical (marked) or creative use of language. The basic discourse unit is called a context space, by which participants selectively bring constituents

²⁴⁰ William C. Mann, Christian M. I. M. Matthiessen and Sandra A. Thompson, 'Rhetorical Structure Theory and Text Analysis', in *Discourse Description: Diverse Linguistic Analyses of a Fund-Raising Text*, ed. by W. C. Mann and S. A. Thompson (Amsterdam: Benjamins, 1992), pp. 40- 71 (pp. 40, 45, 63-66).

into and out of focus or the foreground of attention. Context (a discourse reference frame) is said to direct text generation and govern subsequent interpretation. Understanding, according to frame of reference processing, involves evaluating one feature of the communication process in terms of another:

an ability to segment and differentiate between the unit serving as a frame of reference and the unit being analyzed in relation to the reference frame. (p. 158)

Mutual understanding involves a process whereby each discourse move is constrained by the continuing options of text development and by sets of expectations (based on shared knowledge). As with Wierzbicka's metalanguage, this mechanism (by which mutual knowledge facilitates interpretation) calls to mind Quine's translation manuals or analytical hypotheses (Section 1.2.2).²⁴¹

The coherence property of discourse is distinguished by Johnson-Laird from the theoretically entirely distinct notion of plausibility. Plausibility concerns how knowledge is associated with states of mind in the process of interpreting events. A sequence of events creates a particular state of mind in the observer and will be more or less plausible depending on how readily it can be construed within a temporal, causal or intentional framework:²⁴²

this state of mind then yields an intention; the intention issues in an action; and the action has an effect on the world. People are highly familiar with such sequences, and can use their knowledge to interpret events, whether they be real depicted, or described. (p. 377)

For Papegaaïj and Schubert, translationally-relevant elements are recognized in the original text. Meaningfulness (the values attributed to linguistic signs) is associated with the choices made by speakers in communication. Rhetorical patterning (by which text is shaped) is directly influenced by the producer's need to make a point. Deviations from an unmarked form are understood in the light of the argument they serve. Prominence or salience informs meaningfulness. Central to translating text coherence, according to Papegaaïj and Schubert, is finding the closest equally unmarked counterpart of a

²⁴¹ Rachel Reichman, *Getting Computers to Talk Like You and Me: Discourse Context, Focus and Semantics (An ATN Model)* (Cambridge Mass.: MIT, 1985), pp. xi-xii, 3-33, 100-107, 189-192.

²⁴² Johnson-Laird, pp. 376-377.

communication resource employed in the original communication. This is in spite of a recurrent tendency toward a form in translation which is closer to the original in meaning but more marked (due to constraints on expression in the receiving system). This explicitation (Section 1.2.1) is attributed to the skewing or shifting between the language-specific ways in which signs refer to reality: ‘the interplay between all kinds of devices, both implicit and explicit’ (p. 49). Explicitation results from strategies intended to convey information implied in the original text. Knowledge and attunement to the extralinguistic world are integral parts of the process of interpretation for the purpose of translation. A concept (type of item) is distinguished from an entity (an instance of such a type): an entity is taken to ‘have reality in the extralinguistic world’ (p. 76). Resolving interpretation is understood to involve an automatic recovery procedure by which ambiguities and vagueness are tolerated in the global understanding of text, since (as Sampson puts it) ‘we are good at not noticing ambiguities’.²⁴³ This highlights the importance of meaningfulness to the process of disambiguating an original text, which may draw upon a potentially infinite range of situational and contextual information. Recognition of meaningful, translationally relevant elements is derived from the analysis of an original text in the context of constraints on reception (language-specific differences in communication resources: obligatory and optional aspects of expression).

Levinson, among others, undermines the utility of discourse methodology (which is ultimately rationalist) in favour of conversation analysis (an inductive methodology which is rigorously empirical and emphasizes a markedness concept called preference organization: ‘the interactional and inferential consequences of choice between alternative utterances’ p. 287).²⁴⁴ We are forced to look elsewhere for uniformities in the translation process: in the external, observable domain of situations.

²⁴³ B. Papegaaïj and K. Schubert, *Text Coherence in Translation* (Dordrecht: Foris, 1988), pp. 28, 35, 42, 45-49, 51, 76, 159, 164, 166, 175, 184-191; and Geoffrey Sampson, ‘MT: A Nonconformist’s View of the State of the Art’, in *Machine Translation Today: The State of the Art*, ed. by Margaret King, Proceedings of the Third Lugano Tutorial Lugano, Switzerland, 2-7 April, 1984 (Edinburgh: Edinburgh University, 1987), pp. 91-108 (p. 97), quoted in Papegaaïj and Schubert, p. 51.

²⁴⁴ Stephen C. Levinson, *Pragmatics* (Cambridge: Cambridge University, 1983), pp. 286-294, 307, 368-369.

Among the early theorists to observe the intrinsic and undetachable link between situations and the use of expressions in linguistic communication was Firth. While recognizing the distinction between texts and the matrix of experience in which they are set, Firth realizes that situations and texts are ‘intimately wedded’.²⁴⁵ The duality of mind and body is rejected, and levels of linguistic inquiry are seen to indicate a ‘hierarchy of techniques’: analytical tools for achieving partial statements about meaning.²⁴⁶ Meaning is regarded as ‘a complex of contextual relations’.²⁴⁷ The interpretation of utterances is deeply embedded in ‘the processes of persons maintaining themselves in society’.²⁴⁸ Firth must also be credited for early use of the term polysystemic (popularized in Translation Studies), as a description of the multiple statements of meaning which can be made at a series of congruent levels.²⁴⁹ The systematic relationships between actual events and the use of expressions may be anchored either to innate thought or to external situations. It is, according to Firth, the human participants, their behaviour and the relevant objects and events of situations that are ‘the more manageable [...] and more easily related to problems of translation’.²⁵⁰ Since meaning is the property of ‘mutually relevant people, things, events in the situation’, invariants in rational human communication are to be construed as common human situations and experience. This ‘abstract inter-situation’ is taken to have common elements ‘in everything but language texts’.²⁵¹

With the notions of control and convergence, De Beaugrande explores how cognition and communication relate to the real world of experience. By postulating that the mind

²⁴⁵ J. R. Firth, ‘Linguistics and Translation’, in *Selected Papers of J. R. Firth 1952-1959*, ed. by F. R. Palmer (London: Longmans, 1968), pp. 84-95 (p. 91), read to an audience at Birkbeck College in the University of London, June 1956.

²⁴⁶ F. R. Palmer, ‘Introduction’, in *Selected Papers...*, pp. 1-11 (p. 5); and J. R. Firth, ‘Personality and Language in Society’, in *Papers in Linguistics 1934-1951* (London: Oxford University, 1957), p. 183 (first publ. in *Sociological Review*, 42 (1950), 37-52), cited in Palmer, p. 5.

²⁴⁷ J. R. Firth, ‘Techniques in Semantics’, in *Papers in Linguistics*, p. 19 (first publ. in *Transactions of the Philological Society*, (1935), 36-72), quoted in J. R. Firth, ‘Linguistics Analysis as a Study of Meaning’, in *Selected Papers...*, pp. 12-26 (p. 24), apparently prepared for publication in 1952 or 1953 but not previously published.

²⁴⁸ Firth, ‘Linguistics Analysis as a Study of Meaning’, p. 13.

²⁴⁹ J. R. Firth, ‘Linguistic Analysis and Translation’, in *Selected Papers...*, pp. 74-83 (p. 81), first publ. in *For Roman Jakobson* (The Hague: Mouton, 1956).

²⁵⁰ Firth, ‘Linguistics and Translation’, p. 91.

²⁵¹ Firth, ‘Linguistics Analysis as a Study of Meaning’, p. 14; and Firth, ‘Linguistic Analysis and Translation’, p. 82.

addresses models of reality (rather than reality itself), communication is said to involve convergence or divergence of different people's models of reality. Typological classifications of translation strategies (such as free versus literal) are rejected in favour of the notion of control, by which 'the skilled translator balances and reconciles in practice' (p. 15). Translation is defined in terms of control, in two or more languages, of the access to knowledge selected by the original text producer. The control framework includes: access to language-specific obligatory conventions (antecedent conditions); unmarked decision (routine ways of saying things in the absence of contradictory indications); and motivated choices (made at the most conscious level and applicable to any aspect of communication). The limiting view of language-specific representations of reality is superseded by a cognitive model which entails the translator's attunement to communication resources available in the interfacing languages:²⁵²

each language represents a selection of relevant aspects of reality and recommends them to the attention of speakers; but speakers are free, whether or not they realise it, to actively participate in the construction and negotiation of reality through their own voluntary control. (pp. 14-15)

The Translation Saliency model provides a non-rationalist account of attunement, linked to information about textual reflexes of interpretation and linked to information about situations.

The picture so far explains meaningfulness of an original text informed by a process of interpretation in which situations are linked to communication resources. Translational equivalence entails the translator's attunement: to situations described in communication; to situations of utterance (including the communicators' states of mind); and to communication resources available to members of the interfacing linguistic communities.

A central claim of the Saliency model is that the essential first step which determines the relationship between an evolving translation and its original is the translator's attunement to values in the original. A translator's attunement to the prominence or

²⁵² Robert de Beaugrande, 'Cognition, Communication, Translation, Instruction: the Geopolitics of Discourse', in *Language, Discourse and Translation: In the West and Middle East*, ed. by Robert de Beaugrande, Abdulla Shunnaq and Mohamed Helmy Heliel (Amsterdam: Benjamins, 1992), pp. 1-22 (pp. 3-9, 14-15).

salience of information conveyed through an original text interacts in very complex ways with the analytical tools and strategies which the translator brings with a particular orientation to the task at hand. By coordinating interpretations in two communication events, the translator is demonstrating attunement to communication resources in the interfacing languages. The translator associates information about the choice of expression in the original with information about the utterance situation and with information about the described situation (referred to by the use of expressions). Given that the choice of expressions as well as the external aspects of the situations of utterance vary across translation, the Saliency model construes uniformities as described situations and the states of mind of communicators.

Factors constraining interpretation in an original communication event differ in numerous ways from constraints on the inferencing process by which a translation is produced and understood. Baker illustrates the conditional nature of conventional constraints on communication, as well as the way speakers connect expressions in an utterance to information about the communication event. She details some of the ways in which aspects of the utterance situation impact upon translation equivalence under the rubric of pragmatic equivalence.²⁵³ The term pragmatics, attributed to Morris, refers to a branch of semiotics concerned with ‘the relation of signs to interpreters’. Understanding the ways in which situational parameters are systematically related to linguistic organization holds significant potential to the study of cross-linguistic variation in spite of the limited reference to analyses in languages other than English.²⁵⁴ Pragmatic analysis elaborates sense: the way an utterance uniquely refers to reality, or conversely, the way contingent attributes of the real world are brought into focus by the use of an expression. The inbuilt elasticity of natural language is evidenced in the pervasiveness of metaphorical use by which the sense of expressions can be extended infinitely according to context. The scope of context includes those cultural and linguistic features of the language user’s world

²⁵³ Baker, *In Other Words*, pp, 222-240.

²⁵⁴ C. W. Morris, ‘Foundations of the Theory of Signs’, in *International Encyclopedia of Unified Science*, ed. by O. Neurath, R. Carnap and C. Morris (Chicago: University of Chicago, 1938), p. 6, repr. in C. W. Morris, *Writings on the General Theory of Signs* (The Hague: Mouton, 1971), quoted in Levinson, p. 1; Levinson, pp. x, xi, 1.

which are relevant to the production and interpretation of utterances.²⁵⁵ An important aspect of the equivalence relationship concerns the language-specific ways in which expressions are anchored in context.

Pragmatics attempts to satisfy the fundamental need for a theory of communication which is not based on the notion of conventional meaning. Levinson observes that the communicative power of language can never be reduced to a set of conventions for language use, since with convention or expectation arises the possibility of non-conventional exploitation of conventions or expectations. Consistent with accounts presented in Section 1.2.2, conventional or rule-based models of language use can never be complete: ‘what can be communicated always exceeds the communicative power provided by the conventions of the language and its use’ (p. 112). The communicative power of language suggests an important inferential mechanism involved in interpreting utterances which is elaborated with Grice’s notion of conversational implicatures. Levinson describes the inferencing principle underlying implicature thus:

for every kind of mutually assumed constraint on language usage, there will be a corresponding set of potential inferences that come about either from the speaker observing or flouting the constraint. (p. 132)

Implicatures are not part of the conventional meaning of expressions. Rather than being built into the structure of expressions, implicatures are a kind of inferencing based on contextual assumptions concerning the cooperativeness of communicators. The partially published notion promises to bridge the gap between what is said in the use of expressions (which is relatively stable) and what is actually conveyed (which is context sensitive or unstable). Inferences are based on the content of what has been said as well as specific assumptions about the cooperative nature of linguistic communication. As such, implicatures present themselves as uniformities in the translation process which can be linked to situations described in communication and to situations of utterance. While Lyons appears to conflate conversational implicature with the pre-theoretical notion of what is implicated (‘what the addressee can reasonably infer, but is not necessarily

²⁵⁵ Basil Hatim, ‘Pragmatics and Translation’, in *Routledge Encyclopedia of Translation Studies*, pp. 179-183; and Levinson, pp. 22-23, 32, 34, 59, 77.

intended to infer' p. 606), Levinson is clear to define implicature as intended inference ('intended [by the utterer] to be recognized [by the receiver] as having been intended' p. 101). Grice's Cooperative Principle and maxims of conversation have been criticized variously as insufficiently constraining, imprecise or too vague.²⁵⁶

Grice views communication as rational human behaviour, which requires correspondences between psychological states and the world. Intelligibility requires that utterances are linked to reality by the states of mind of communicators through shared experience and shared knowledge of communication resources. Communication involves a process of rational preference: meaningful choices are made from the communicators' repertoire of communication resources. Linguistic communication is viewed as a complex kind of intention that is satisfied just by being recognized. In distinguishing speaker's meaning from expression meaning, Grice concedes to a variety of plausible analyses using the notion of intention. Meaningfulness, to Searle, is linked to recognition of 'intention to produce [a certain] effect'. Utterance interpretation, it is generally agreed, presupposes consideration of what one's interlocutor knows: a fund of shared mutual knowledge among the participants in a discourse. Understanding involves recovering propositions expressed by utterances as well as drawing certain inferences based on such premised propositions. The difficulty lies in explaining how comprehension is achieved: explaining the mechanism by which intended content and intended implications are recovered. Sperber and Wilson contest the suggestion that determining the contextual constraints on interpretation involves mutual knowledge of beliefs and suppositions of interlocutors. They argue that the principle of relevance simultaneously determines context, content and intended inferences, and that mutual knowledge is generally the result of comprehension rather than a precondition for it. Lyons points out that meaning and understanding are correlative and that both involve intention:

²⁵⁶ Levinson, pp. 97-104, 112-114, 117, 123, 132, 150, 156, 167; Lyons, *Semantics*, pp. 594, 606; and Dan Sperber and Deidre Wilson, 'Mutual Knowledge and Relevance in Theories of Comprehension', in *Mutual Knowledge*, ed. by N. V. Smith (London: Academic, 1982), pp. 61-85 (p. 71).

the meaning of an utterance necessarily involves the sender's communicative intention, and understanding an utterance necessarily involves the receiver's recognition of the sender's communicative intention. (p. 733)

It is clear, however, that the exact mechanisms by which interpretations are recovered remain controversial. For the purpose of translation equivalence, it is suggested, Lyons' distinction between (speaker's) intention and significance (to the listener) presents a false antithesis.²⁵⁷ The translator's mediating presence rests in the process of attunement to values.

Levinson suggests that Grice's essential insight rests on the realization that speaker meaning is not necessarily closely related to expression meaning: that 'what the speaker means by any utterance U is not exhausted by the meaning of the linguistic form uttered' (p. 18). Rather than construct an account of communication based on the notion of conventional meanings of signals, understanding language requires an awareness of implications—mechanisms which may cause a divergence between the meanings of expressions used in an utterance and what is actually communicated by the utterance in a particular context. Speaker meaning, according to Grice, is intrinsically linked to the notion of value. A rational creature is described as one which evaluates. The notion of value is seen as absolutely crucial to rationality: '[v]alue is there from the beginning, you can't get it out' (p. 238). Lyons traces a view of meaningfulness to Bazell and Ziff, by which meaning implies choice:

an element has meaning (is meaningful) in a given context only if it has been selected from a set of elements any one of which might have occurred in that context. (p. 298)

Regardless of the practical and perhaps theoretical impossibility of precisely quantifying the amount of information carried in an utterance, the meaningfulness of an element is described as a function of its probability of occurrence in particular context. Brown and Witkowski attempt to link implicational relationships with the principle of markedness.²⁵⁸

²⁵⁷ Paul Grice, 'Meaning Revisited', in *Mutual Knowledge*, pp. 223-257 (pp. 223-228); Levinson, p. 17; N. V. Smith, 'Introduction', in *Mutual Knowledge*, pp. xi-xvi (p. xi); J. R. Searle, *Speech Acts* (Cambridge: Cambridge University, 1969), pp. 60-61, quoted in Lyons, *Semantics*, p. 734; and Lyons, *Semantics*, pp. 3-5, 732-734.

²⁵⁸ Levinson, pp. 17-18; Grice, 'Meaning Revisited', pp. 237-138; John Lyons, 'Firth's Theory of "Meaning"', in *In Memory of J. R. Firth*, ed. by C. E. Bazell, J. C. Catford, M. A. K. Halliday and R. H. Robins (London: Longman, 1966), pp. 288-302 (pp. 297-299); C. E. Bazell, *Linguistic Form* (Istanbul:

The relative intractability of context-sensitive communicative values (in contrast to comprehending and translating context-free propositional content) has been noted by Bell. Citing Gumperz, he indicates that listeners may ‘differ on their interpretations of communicative intent’. Coulthard suggests the need for a theory of inferencing following Sadock’s observation on the problem of determining conversational implicature in a given context:²⁵⁹

an utterance ‘its cold in here’ can convey a request to close a door. But it can also convey a request to open a door or to bring a blanket or to pay a gas bill. In fact it is difficult to think of a request [or intention] that the utterance could NOT convey in the right context [including a desire to leave the room, a feeling of embarrassment or simply being lost for words].

Brown and Levinson illustrate shifts of sense with simultaneously positive and negative readings of words like *quite* and *just* to mean both ‘very’ and ‘not very’. Levinson also illustrates the indeterminacy of implicatures in certain cases, commenting that a single meaning can give rise to different implicatures on different occasions and even a set of implicatures on any one occasion. The utterance *John is a machine*:²⁶⁰

could convey that John is cold, or efficient, or never stops working, or puffs and blows, or has little in the way of grey matter, or indeed any and all of these.

Conversational implicature introduces a second sense in which translation is inherently indeterminate. Not only is translation established on the basis of coordinating equilibria (Section 1.2.2), but the translator’s mediating presence is itself founded on a reading of some original communication event which (like the incommensurability of coordinating values) may have no ultimate grounding. However, a failure to coordinate implicature

[n.pub.], 1953), p. 81; P. Ziff, *Semantic analysis* ([n.p.]: Ithaca, 1960), p. 42, cited in Lyons, ‘Firth’s Theory of “Meaning”’, p. 298; and Cecil H. Brown and Stanley R. Witkowski, ‘Language Universals’, in *Toward Explaining Human Culture: A Critical Review of the Findings of Worldwide Cross-Cultural Research*, ed. by David Levinson and Martin J. Malone (n.p.: HRAF, 1980), pp. 359-384 (p. 361).

²⁵⁹ Bell, *Translation and Translating*, pp. 162-163, 174-183; J. J. Gumperz, *Discourse Strategies* (Cambridge: Cambridge University, 1982), p. 94 quoted in Bell, p. 182; Malcolm Coulthard, *An Introduction to Discourse Analysis* (London: Longman, 1985), pp. x, 32; and J. M. Sadock ‘On Testing for Conversational Implicature’, in *Syntax and Semantics 9: Pragmatics* (New York: Academic, 1978), [n.p.] quoted in Coulthard (my additions), p. 32.

²⁶⁰ Penelope Brown and Stephen Levinson, ‘Universals in Language Usage: Politeness Phenomena’, in *Questions and Politeness: Strategies in Social Interaction*, ed. by Esther N. Goody, Cambridge Papers in Social Anthropology, 8 (Cambridge: Cambridge University, 1979), pp. 56-289 (pp. 271-272); and Levinson, *Pragmatics*, p. 118.

during translation may lead to a flattening or loss of potential interpretation or potentially introduce new interpretation.

Universal contextual categories are sought in various functional/semiotic analyses which aim to get at intention (rhetorical purposes).²⁶¹ Hatim and Mason envisage translating as a process of transforming semiotic entities under certain equivalence conditions: ‘to do with semiotic codes, pragmatic action and general communicative requirements’.²⁶² The semiotic process of signification (by which signs refer) is presented as a universal mechanism which ‘transcends verbal language’.²⁶³ Consistent with Morris, pragmatic relations are understood to obtain between signs and interlocutors. Relaying significance or values in translation involves preserving the intention or purposefulness of motivated choices. But while ‘almost universally recognized’ semiotic values are linked to human attitudes, pragmatic analysis is associated with language- and culture-specific divergence.²⁶⁴ (Hatim illustrates how the purportedly universal attitude of disparagement is linked to language-specific pragmatic constraints on expression—Section 3.0.) While it is apparent that rhetorical purposes are construed pragmatically in ways that are language-specific, the universality of rhetorical purposes themselves is controversial.

Baker also draws attention to the underlying centricity which appears to characterize pragmatic theory:

Grice’s maxims seem to reflect directly notions which are known to be valued in the English-speaking world, for instance sincerity, brevity, and relevance. These do not necessarily have the same value in their cultures, nor should they be expected to represent any ideal basis for communication. (p. 237)

Interpreting the implicatures conveyed in rational, cooperative communication is understood to mean exploiting ‘whatever maxims are in operation in that community’ (p. 238). She notes the intuitive nature of naturalness or norms and deviations from norms and

²⁶¹ Hatim and Mason, *Discourse and the Translator*, pp. 34-35, 105, 115-117, 173, 236-238; Hatim and Mason, *Translator as Communicator*, pp. 101-103; and Hatim, *Communication Across Cultures*, pp. 89, 186-212.

²⁶² Hatim and Mason, *Discourse and the Translator*, p. 105.

²⁶³ Hatim and Mason, *Discourse and the Translator*, p. 115.

²⁶⁴ Hatim, *Communication Across Cultures*, pp. 186, 197, 210.

suggests that divergence from the expectations constraining reception have a cumulative effect on translation.²⁶⁵

Levinson suggests that Grice's maxims of conversation ought to have universal application if they do in fact derive from general considerations of rationality which are grounded in cooperative activity, 'at least to the extent that other, culture-specific, constraints on interaction allow' (p. 103). Sweetser's cognitive account of polysemy and pragmatic ambiguity postulates a human cognitive apparatus independent of language in which pre-linguistic and extra-linguistic experience is shared:

it would be hard to deny that much of the basic cognitive apparatus of humans is not dependent on language, and that humans therefore share a great deal of prelinguistic and extralinguistic experience which is likely to shape language rather than to be shaped by it. (p. 7)

Metaphor is seen as a crucial source of links between the multiple senses of a single form, by allowing people to conceptualize one area of experience in terms of another without identifying the two as 'objectively the same' (p. 8). While some aspects of metaphor instantiation are fairly common cross-culturally if not universal and others may vary greatly between cultures, Sweetser proposes the existence of a 'coherent, regular structuring' within the metaphorical system of interconnections between semantic domains. Lyons assumes that certain 'more basic speech-acts' are universal, though 'integrated with, and governed by, felicity conditions of the same kind as those which govern other forms of behaviour and social interaction in that society' (pp. 737-738). Wierzbicka recognizes that acts such as 'promising', 'commanding', or 'requesting' are not language-independent, natural kinds. She proposes a framework for modelling speech acts with a metalanguage of universal semantic primitives. Schmidt and Richards investigate the fit between meaning and interpretation as it relates to foreign language acquisition. They cite Fraser's claim, following research into speech act performance in fourteen languages, that competence in a foreign language does not involve acquiring substantially new concepts (concerning the types of devices, their organization or social functions). Rather, foreign language competence involves acquiring new social attitudes

²⁶⁵ Baker, *In Other Words*, pp. 222-240.

(about which strategies may be used appropriately in a given context). Schmidt and Richards argue for the universality of speech acts ‘only if they are phrased in extremely general terms’ (p. 140). Wolfson, Marmor and Jones question the assumption that a given speech act actually refers to the same social act across cultures. Rather than look at the pragmatic means by which speakers carry out speech acts, they pay attention to cross-cultural differences in the situations which elicit apologies. They conclude that the notions which trigger speech acts (such as offence and obligation which call for remediation in the case of apologies) are themselves culture-specific. For this reason, speech acts across cultures are assumed to be differently organized. The communicative function of an expression boils down to how a function is itself defined by members of the community in question, according to Coulmas. Viewing ‘thanks’ and ‘apologies’ as invariable, abstract categories is considered premature.²⁶⁶

Like Baker, Keenan questions the centrality Grice’s maxims and the culture-specific values they assume. She describes striking cross-cultural differences in the expectations of interlocutors to meet informational needs, captured by Grice’s maxim ‘Be relevant’. Locally valid ways of speaking in Malagasy point to a system where, for example, speakers regularly avoid identifying an individual in their utterances. Keenan generalizes:

Members of this speech community do not regularly expect that interlocutors will withhold necessary information. Rather, it is simply that they do not have the contrary expectation that in general interlocutors will satisfy one another’s informational needs.’ (p. 76)

²⁶⁶ Levinson, pp. x-xi, 103, 120-121; Eve Sweetser, *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure* (Cambridge: Cambridge University, 1990), pp. 7, 8, 18, 45-48; Lyons, *Semantics*, 737-738; Anna Wierzbicka, *Cross-Cultural Pragmatics: the Semantics of Human Interaction*, Trends in Linguistics: Studies and Monographs, 53 (Berlin: Mouton De Gruyter, 1991), pp. 149-151, 161-165; Anna Wierzbicka, *English Speech Act Verbs: a Semantic Dictionary* (Sydney: Academic, 1987), pp. 10-12; Richard W. Schmidt and Jack C. Richards, ‘Speech Acts and Second Language Learning’, *Applied Linguistics*, 1 (1980), 129-157 (pp. 129, 136-140); B. Fraser, ‘Acquiring Social Competence in a Second Language’, *RELJ Journal*, 9 (1978), 1-26 cited in Schmidt and Richards, pp. 138-139; Nessa Wolfson, T. Marmor and S. Jones, ‘Problems in the Comparison of Speech Acts Across Cultures’, in *Cross-Cultural Pragmatics: Requests and Apologies*, ed. by S. Blum-Kulka, Juliane House and Gabriele Kasper, Advances in Discourse Processes Series, 31 (Norwood, NJ: Ablex, 1989), pp. 174-196 (pp. 174, 179-181); and Florian Coulmas, ‘Poison to Your Soul. Thanks and Apologies Contrastively Viewed’, in *Conversational Routine: Explorations in Standardized Communication Situations and Pre-Patterned Speech* (The Hague: Mouton, 1981), p. 70, quoted in Wolfson, Marmor and Jones, pp. 180-181.

She questions the universality of blanket statements about expectations and inferences that can be drawn in the process of interpreting utterances.²⁶⁷

In spite of these controversies surrounding the cross-cultural application of pragmatic theory, the underlying assumption of rationality among interlocutors remains. Brown and Levinson emphasize the mistaken tendency to think of pragmatic principles as rules: ‘to posit highly specific and diverse universal rules is to invent a problem to be explained, rather than to explain it’ (p. 91). Citing Lewis’ argument that conventions, rules and norms have rational origins, they believe in the need to push below such normative levels. Rational behaviour includes the ability to weigh up various means to an end and to choose the one that most satisfies the desired goals: ‘not to waste effort to no avail’ (p. 70). Aiming to demonstrate the role of mutually assumed rationality in the inferencing processes at play during communication, Brown and Levinson investigate a number of speech act strategies in English, Tamil and Tzeltal. They report ‘extraordinary parallelism in the linguistic minutiae of the utterances’ chosen cross-linguistically in the expression of politeness. Convergence relates to ‘the particular *divergences* from some highly rational maximally efficient mode of communication’ (p. 60). Brown and Levinson assume universal principles of face-to-face interaction based in the independent variables of distance, power and ranking relations between speakers, which are claimed to subsume all other variables. Face redress is proposed as one of the basic motives for departing from the maximally efficient talk defined by Grice’s maxims of conversation. Parallelism underlying the choice of communication resources is said to suggest ‘some underlying powerful universal pressures of an interactional sort lying behind the development of those strategies’ (p. 285). Communicative intentions are constrained by the intrinsic potential impact of the choice of a particular communication strategy and the way in which speakers wish to modify that impact. Inferencing during communication thus revolves around strategic analysis rather than rule analysis:²⁶⁸

²⁶⁷ Elinor Ochs Keenan, ‘Universality of Conversational Postulates’, *Language in Society*, 5 (1976), 67-80 (pp. 67-69, 72, 76).

²⁶⁸ Brown and Levinson, pp. 60-63, 70, 85, 91, 249, 261, 276, 284-287; and David Lewis, *Convention: a Philosophical Study* (Cambridge, Mass.: Harvard University, 1969).

rule analysis tends to accept the statement of rules as the terminal point of investigation. It thus inhibits investigation into the systematic source of patterns of message construction. A strategic analysis on the other hand, makes claims about the non-arbitrary nature of style. On this view the features that cooccur in a 'style' are determined by strategic choices, and the coherence of a style lies not necessarily on the formal level but on the strategic level that underlies the selection of forms. (p. 287)

What permits the interpretation of speakers' intentions is the underlying assumption that communication conforms to some level of rational, cooperative behaviour. Inferences arise to preserve the assumption of cooperation.²⁶⁹

Producing effects (like conveying attitudes) involves a process of exploiting communication resources available in a linguistic community. The equivalence relationship presumes a translator's attunement to the conditional nature of communication resources and an ability to exploit communication resources to achieve a desired interpretation. This section argues, for the purpose of translation equivalence, that a view of meaningfulness which distinguishes between intention (of speakers) and significance (of an utterance to receivers) presents a false antithesis. Meaningfulness follows on from the translator's evaluation of implicatures conveyed by an utterance. As a special kind of pragmatic inference, conversational implicature captures how the translator infers interpretation of an original communication event for the purpose of constructing translation. The translator's task is not to resolve the implications of utterances into unambiguous statements, but to coordinate relative meaningfulness. The interpretation of an original communication event rests on the translator's interlingual attunement to communication resources anchored in described situations and utterance situations. The evaluation of translationally-relevant entities is linked to an awareness of motivations behind the choice of implicit, language-specific features.

How is it possible to come to terms with the mediating presence that defines translation without succumbing to the rationalists' quest for innate cognitive processes which have no ultimate validation? An answer lies in the outwardly oriented notion of attunement. The following section investigates the nature of situation, information, meaning and

²⁶⁹ Levinson, pp. 102-103.

interpretation as they relate to translation equivalence. Whether meaning resides in the world or in people's minds, it is argued that things only have meaning when interpreted in a particular way: meaningfulness is established only in the process of interpretation. The context-embeddedness of meaning rests not only in text but also in what people bring to the text. Section 2.2 supports the Translation Salience model independently of translation theory research, with reference to complementary philosophical approaches to linguistic meaning. Some theories of meaning argue that information conveyed in communication—information about states of mind and described situations—precedes meaning and interpretation. This distinction points to the need to view translation as a process of reconstructing salient information about situations rather than anchoring invariance to the meanings of expressions. Uniformities in the translation process are construed as information about states of mind and information about described situations. In this way, the translator's mediatory role can be expressed through attunement to salient information determined by the independent and observable principles of markedness, implicitness and localness (Section 2.6).

2.2 Situation, Information, Meaning and Interpretation

The view of language as an environment or medium of communication is evidenced, for example, in Derrida's assertion that there is no content to language: 'What language *communicates* is its "communicability"'. The inadequacy of viewing translation as a semantic affair has been pointed out by Tymoczko, who rightly claims that translation equivalence must depend on additional non-linguistic theories of environment, culture, and speakers and their perspectives and beliefs. Tymoczko explores the relativity of meaning assignment, which provides different interpretations relative to speakers and environments, in the narrow context of pragmatic functions and the broader context of situations.²⁷⁰

²⁷⁰ Jacques Derrida, 'Des Tours de Babel', trans. by Joseph Graham, in *Difference in Translation*, ed. by Joseph Graham (London: Cornell University, 1985), pp. 165-207 (p. 180); and T. Tymoczko, 'Translation and Meaning', in *Meaning and Translation: Philosophical and Linguistic Approaches*, ed. by F. Guenther and M. Guenther-Reutter (London: Duckworth, 1978), pp. 29-43 (pp. 29-30, 39, 40).

Translation involves the contextualized interpretation of actual texts; and the use of expressions is anchored in situations. As Denison notes:

We need to get away from the linguistic organization and look at reality, precisely because that reality is encoded in situations and texts for the translator and not in languages.²⁷¹

In this section I investigate some aspects of language, cognition and reality as they relate to equivalence in translation. First, the extent to which language reflects reality, or at least ‘what human beings apprehend to be reality’ (p. 1), is introduced through the notion of emblemism, examined in a paper by Malone. Then, an overview of Johnson-Laird’s psychological approach to meaning and consciousness (Mental Models) is presented. This is followed by a review of the realist theory of Situation Semantics developed by Barwise and Perry, with reference to the theory’s application to machine translation demonstrated by Rupp. Comparisons are made with the philosophical question of determinacy introduced in Section 1.2.2—with remarkably convergent outcomes.²⁷²

Malone proposes a language-reality relation which he calls emblemism, to explain in part the fuzziness in the traditional distinction between naturalism and conventionalism. According to naturalism, distinctions in a language reflect reality. Conventionalism, on the other hand, describes how languages symbolize referents arbitrarily, reflecting conventional intra-linguistic systematization. English gender classification, for example, is generally speaking natural—with the three gender class distinctions (*he/she/it*) reflecting biological sex distinctions. Arabic gender classification, on the other hand, is a mixture of natural and conventional modes, where biological referents follow a sex-based gender system but non-biological referents seem to be arbitrarily attributed masculine or feminine gender morphology. However, Malone suggests that the English feminine reference for the

²⁷¹ Norman Denison, ‘Twelfth and Final Discussion’, in *Theory and Practice of Translation*, ed. by L. Grähs, G. Korlén and B. Malmberg (Berne: Lang, 1978), p343, quoted in Baker, *In Other Words*, p. 217.

²⁷² Joseph L. Malone, ‘Language, Emblemism, and Reality’ (unpublished ms., 1982); P. N. Johnson-Laird, *Mental Models: Towards a Cognitive Science of Language, Inference and Consciousness* (Cambridge: Cambridge University, 1983); Jon Barwise and John Perry, *Situations and Attitudes* (London: Bradford, 1983); and C. J. Rupp, ‘Situation Semantics and Machine Translation’, *Proceedings of the 4th Conference of the European Chapter of the Association for Computational Linguistics, Manchester*, ([n.p.: n.pub.], 1989), pp. 308-318.

noun *boat* (as *she*) is *not* clearly conventional but rather ‘falls between the cracks of the clearer, polar cases [natural versus conventional gender]’ (p. 3). The feminine reference in the case of boats brings with it an affective attitude on the part of the speaker. The boat is conceived of as if it were a female entity: not being biologically female, feminine reference to boats is not natural reference but nor is it wholly conventional because it lacks the arbitrariness of conventional gender due to the attitude of the speaker, since ‘for certain people within certain socioculturally determined limits, [boats] *are* female symbolically, *Emblematically*’ (p. 4).

Malone’s sample is extended to dynamic-neuter verb morphology in Classical Syriac and Classical Arabic. Dynamic verbs are marked in Classical Syriac by the stem vowel /a/ in the perfect and denote an action ‘consciously perpetrated by a willing and able subject’, while neuter verbs are marked by the perfect stem vowel /e/ and denote ‘an involuntary state or action, [...] beyond the control or consciousness of the subject’ (p. 4). Comparative historical evidence reveals a change in the Syriac verb ‘to prostrate oneself (in prayer)’ into the neuter form *segghedh* compared with the dynamic forms in Arabic *sajada* and Hebrew *saghadh*. To account for the fuzziness entailed in this apparent transition from conventionalism to naturalism, Malone proposes that the change from dynamic to neuter suggests an emblematically neuter interpretation: that ‘To cast oneself down in worship is effectively to forego one’s own independence, to subordinate one’s own will and control to those of the Eternal’ (p. 5). In Malone’s framework, the referents to which language signals refer comprise a coherent group of extra-linguistic items, such as members of a group defined by biological gender. In the case of the neuter verb form, an ‘involuntary state or action, [...] beyond the control of consciousness of the subject’ would therefore potentially indicate naturalism. But the reality of the extralinguistic item, as neuter in the case of *segghedh*, is only attested internally or imputed rather than external or physical and thus constitutes emblemism. Malone presents the notion of emblemism as a cognitive tool, confronting the problem of ‘objective reality as filtered through the “Black Box” of human cognition and perception’ (p. 7).

The metaphorical effect of emblemism is illustrated in fragment (1). Jibran's personification of *beauty* is emblematically feminine in English usage. By contrast, the Arabic *الجمال* is grammatically masculine and usually associated with grammatically masculine referents like *البدر* *full moon*, *القمر* *moon*, *الضياء* *brightness*, and *النور* *light*. Divergence in the effect of the metaphor on translation into Arabic can be observed in the contrasting chains of gender agreement which occur in both Arabic translations at the juncture *like/like a mother*:²⁷³ كما

- (1) The aggrieved and the injured say, 'beauty is kind and gentle. Like a mother half-shy of her own glory she walks among us.'²⁷⁴

يقول المطعون ويقول المكلوم:

²⁷⁵ الجمال رفيق رفيق كما تسير الأم الشابة بيننا على استحياء من عزتها.
beauty(M) kind(M) gentle(M) he-walks like she-walks mother(F) young(F) glory-her

²⁷⁶ فالحزين المتألم يقول، الجمال رقة ولطف، وهو يمشي بيننا كالأم الفتية الحية من جلالها.
beauty(M) kind(M) gentle(M) he-walks like-mother(F) young(F) shy(F) glory-her

A cognitive account of translation was presented in Dillon's receptor-oriented application of schema theory to Bible translation (Section 1.2.1). The account was criticized for its reductionist nature resulting from its attempt to resolve meaning and its emphasis on explicit messages. But attempts to situate meaning exclusively either in the mind or in the world remain controversial.

In spite of this, some common ground can be found between the two contrasting approaches under consideration: mental models (a cognitive, psychological approach which places meaning in the mind) and situation semantics (which locates meaning in situations). Both adopt a biological or ecological perspective on meaning and both emphasize the systematic links between the context in which a communication takes place and the reality which it refers to. These aspects of human language can be viewed as

²⁷³ Safia Boushaba, 'An Analytical Study of Some Problems of Translation: A Study of Two Arabic Translations of K. Gibran's *The Prophet*' (unpublished doctoral thesis, University of Salford, 1988), p. 158-161.

²⁷⁴ Kahlil Gibran, *The Prophet* (London: Heinemann, 1980), pp. 88-89.

²⁷⁵ خليل جبران، "النبي"، ترجمة ثروت عكاشة (مصر: دار معارف، ١٩٦٦)، ص. ١٢٩-١٤١.

²⁷⁶ خليل جبران، "النبي"، ترجمة أنطونيوس بشير (ادار العرب للبستاني، ١٩٨٥)، ص. ٩٠-٩٢.

uniformities in the translation process and thus suggest themselves as starting points in the search for a solution to the question of translation equivalence.

Mental models theory claims that the world is not experienced through direct perception, but that experience depends on an organism's model of the world. It is claimed that constructing a model (from information latent in the patterns of energy that reach the sense organs from entities in the external world) enables an organism to apprehend the entities that gave rise to the perception in the first place. In this context, the psychological core of understanding assumes a working model in the mind. This thesis is traced back to Craik's proposal on human processing of information, that thought is symbolic in nature and parallels or models reality:

If the organism carries a 'small-scale model' of external reality and of its own possible actions within its head, it is able to try out various alternatives, conclude which is the best of them, react to future situations before they arise, utilize the knowledge of past events in dealing with the present and future, and in every way to react in a much fuller, safer, and more competent manner to the emergencies which face it.²⁷⁷

Johnson-Laird highlights the importance of distinguishing reference from mere symbolic correspondence, and that the need to deal with reference has a biological answer. A bee symbolically transmits information about the location of a food source in relation to the sun by body movements on returning to the hive, whereas the communicative intention of natural (human) language involves an '*intentional* correspondence' between a symbolic expression and a state of affairs (p. 405). Devices that employ a formal language (such as a computer program) communicate on the principle of correspondence, like the bee, and cannot help themselves. The intentional correspondence involved in reference, on the other hand, is 'wrapped up in the notion of consciousness' (p. 406).²⁷⁸

The theory of mental models aims to show how language and the world are related to each other in the human mind. The existence of three types of mental representation is purported: propositions (strings of symbols corresponding to natural language); mental

²⁷⁷ K. Craik, *The Nature of Explanation* (Cambridge: Cambridge University, 1943), [n.pp.]; quoted in Johnson-Laird, p. 3.

²⁷⁸ Johnson-Laird, pp. 2-3, 399, 402-407.

models (structural analogues of the world); and images (perceptual correlates of models from a particular point of view). In contrast to other cognitive theories of meaning (such as lexical decomposition, semantic networks and meaning postulates), the psychological processing of semantic properties and relations is understood *not* to operate autonomously of the processes that mediate reference. In other words, the approach relates mental representations of sentences to representations of the world. It examines how language is related to the world: ‘what [expressions] pick out in the world’ (p. 231). It is also argued that a psychologically plausible theory of comprehension must show how a listener makes sense of an utterance by recovering the appropriate referent. As an example of the indirect reference that a waiter might use in order to pick out the person who ordered a ham sandwich, Johnson-Laird cites the statement:

(2) The ham sandwich is sitting at table number five and getting impatient.²⁷⁹

Ambiguity is thus resolvable only by making inferences from the context of utterance. In its role in the interpretation of utterances, context is not seen as an external inert object ‘that waits passively to be used in the interpretation of utterances’ (p. 173). A communication situation crucially involves at least two contexts: that of the speaker and that of the listener. Furthermore, a sentence defines its own context as it is uttered, and so there is no way for listeners to know what contextual information will be relevant to an interpretation until they hear the utterance. The overall picture is one of a non-deterministic process of interpretation, where ‘just about any item of information could be relevant to the interpretation of an utterance’ (p. 173).²⁸⁰

Reasoning and meaning are brought together to form the central claim that human beings employ recursive mental processes to construct mental models of the world. The significance of an utterance (its interpretation) is said to depend on the meaning of the sentence, on its context of utterance and on the implicit inferences triggered from background knowledge. Interpretation is recoverable from referents as well as ‘some

²⁷⁹ G. Nunberg, *The Pragmatics of Reference* (Bloomington: Indiana University Linguistics Club, 1978), [n.pp.]; cited in Johnson-Laird, p. 241.

²⁸⁰ Johnson-Laird, pp. 165, 173-174, 230-233, 241, 407-408.

minimal idea of the speaker's intention' (p. 407). At the heart of human, rational thinking is the process of inferencing. Johnson-Laird theorizes that inferences are based on mental models. Inferences are plausible conjectures that lead from one set of propositions to another and are valid 'if and only if there is no interpretation of the premises that falsifies the conclusion' (p. 132). Whether explicit ('at the forefront of awareness') or implicit ('outside conscious awareness'), inferences can be made without recourse to rules (p. 125-126). While conceding that fundamental cognitive operations cannot be inspected, Johnson-Laird proposes the possible design of a psychologically plausible parser. The algorithm is non-deterministic (in that more than one processing alternative is available) and recursively revises the mental model. It is consistent with Gricean conventions of rational, cooperative communication. Inferencing proceeds thus:

If a conclusion is true of a current model, attempts are made to modify the model recursively in a way that is both consistent with the premises and inconsistent with the conclusion. If the procedure fails, then of course the inference is valid. (p. 408)

Discourse (in the sense of coherent text, principally dependent on consistent coreference) is compatible with many different states of affairs. Yet the procedure of verifying assertions with respect to mental models means that discourse is readily related to the world, following the principle of economy in models: 'a description of a single state of affairs is represented by a single mental model even if the description is incomplete or indeterminate' (p. 408).²⁸¹

Johnson-Laird does not actually comment on language-specific effects on meaningfulness. However, he does indicate that mental models, though cognitive in nature, are not fixed to language-specific expressions. This is evidenced in the intrinsic functionalism of his aim of understanding the mind as a computational model, that 'the mind can be studied independently of the brain':

Once you know the way in which a computer program works, your understanding of it is in no way improved by learning about the particular machine on which it runs on this occasion or that. The same program may be translated into completely different codes for controlling different makes of computer that operate in different ways, and yet it is the same program that computes the same function however it is

²⁸¹ Johnson-Laird, pp. vi, x, xi, 1, 12, 23-24, 126-128, 132, 138, 264-266, 296, 396-397, 407-408, 446.

physically realized—whether the machine uses cogs, hydraulic valves, vacuum tubes, or silicon chips. (p. 9)

A successful account of meaning-preserving communication depends to some extent on the realm of sense experience, as Feleppa suggests: ‘[w]hat one makes of the world critically depends on the conceptual scheme that one brings to bear on it’ (p. 2). Shared meaning, in turn, depends on communicators having similar perceptions of the world. We have seen how the thesis of indeterminacy challenges the objectivity of translation and leads to a rejection of the notion of natural synonymy entailed in meaning-based approaches to translation (Section 1.2.2). The rejection of shared meaning or natural synonymy has its roots in the anthropological problem of imposition—that ethnographers may impose familiar ontological categories on a described culture rather than determine those of the described culture. In Quine’s view, ‘it makes no sense to speak of the objective existence of meanings or even of natural synonymy relations holding between source- and receptor-language expressions’.²⁸²

Quine sees linguistic meaning in situations, claiming that in linguistics the behaviourist approach is mandatory.²⁸³

Each of us learns his language by observing other people’s verbal behavior and having his own faltering verbal behavior observed and reinforced or corrected by others. We depend strictly on overt behavior in observable situations. As long as our command of our language fits all external checkpoints, where our utterance or our reaction to someone’s utterance can be appraised in the light of some shared situation, so long all is well. Our mental life between checkpoints is indifferent to our ratings as a master of the language.

There is nothing in linguistic meaning, then, beyond what is to be gleaned from overt behavior in observable circumstances. (p. 5)

Such a view suggests that identifying equivalence in translation rests, in its broadest sense, on the interpretation of information contained in situations. An independent yet compatible view is to be found in situation semantics, where linguistic meaning is expressed as a relation between speakers, expressions and situations.

²⁸² Quine, *Word and Object*; quoted in Feleppa, p. 3.

²⁸³ Quine, ‘Indeterminacy Again’.

Situation semantics is a context-sensitive formal semantics which offers a more intuitive characterization of the translation process than other semantic representations, with a greater balance between content and context. The philosophical basis of situation semantics was developed by Barwise and Perry, and its relevance to machine translation has been demonstrated by Rupp. It adopts an informational approach to language formalization, aiming to account for the way in which language fits into the general flow of information. It offers an ecological perspective on human language. Rejecting Frege's postulated realm of 'sense' which coordinates mind, word and object, Barwise and Perry see linguistic meaning as systematically linking expressions to kinds of events in the external world, on the one hand, and to states of mind, on the other. Their Ecological Realism locates meaning in the interaction of living things and their environment. Meaning arises out of recurring relations between situations. For a living creature to survive and make sense of the unique and ever changing situations in which it finds itself, it must have the capacity to anticipate new situations and to acquire information about one situation from another. Barwise and Perry picture a world 'teeming with meaning' (p. 16). In their view, meaning resides foremost in reality, arising out of 'the regular relations that hold among situations—bits of reality' (p. 16). For an organism to detect meaning it must be attuned to the regularities that are revealed to it, that is the uniformities between situations. Such 'natural meaning' (p. 17) constrains the way things happen in reality, or as Barwise and Perry put it, the way things 'fall out' (p. 18). Objective reality is seen as independent of an organism's individuating activity, and so reality will be ripped apart in different ways according to an organism's perceptual abilities and capacities for action. The structure of reality thus reflects properties of the organism itself.²⁸⁴

An important feature of the situation semantics approach is the notion of priority: that the reality of what happens (the way things 'fall out') and a sentient being's attunement to the uniformities of its reality ('natural meaning'), are prior to any attunement to the conventional environment of communication and the meanings and their interpretations entailed in language. Linguistic meaning in particular is seen as part of the general flow of

²⁸⁴ Barwise and Perry, pp. ix-x, 3-7, 10-12, 15-18; Rupp p. 308.

information but is determined by the conventions a linguistic community follows in the use of a language. Consistent with Feleppa's rule-governed account of translational indeterminacy (Section 1.2.2), Barwise and Perry note that linguistic conventions do not constrain the way things fall out in the way that natural meaning does, in that conventional meaning constrains the course of events only when convention is not violated. Meaning relations, nevertheless, are themselves uniformities, and linguistic meaning consists of an intricate relation 'between utterance events and other aspects of objective reality' (p. 17). This relationship is formalized in situation semantics as the relation theory of meaning, which states that language users are attuned to a type of constraint (an expression: ϕ) that relates the situation in which an utterance is made (an utterance situation: u) with the situation it is about (a described situation: s), formalized as: $u[\phi]s$. The relation theory of linguistic meaning formalizes the relationship between expressions (as paradigmatic carriers of meaning) and two parts of reality: facts about the utterance, and facts about the described situation. Situation semantics provides a classificatory scheme of abstract objects which describe the meaning of expressions and states of mind in terms of the information they carry about the external world. Linguistic meaning is viewed as a relation between situations. Interpretation is determined by facts about the utterance situation. Knowing a language entails exploiting linguistic resources available in a linguistic community to get at information about the world. Individual organisms within the species can be assumed to individuate uniformities in much the same way and so experience the same states corresponding to these uniformities. Translation equivalence is thus a matter of coordinating information from all aspects of the meaning relation to get at a required interpretation.²⁸⁵

The features which distinguish the relation theory of meaning from traditional formal semantics in the context of translation are its context-sensitivity and its application of the concept of partiality. Partial interpretations contain only a fixed amount of information. Barwise and Perry choose described situations as the reference of statements. Traditional formal semantic theories, however, choose truth value as the reference of statements,

²⁸⁵ Barwise and Perry, pp. 6-7, 15, 17, 21, 45, 119-121.

giving truth conditions priority over content, with the result that sets of logically equivalent sentences can receive the same interpretation and become indistinguishable. Such paraphrase demonstrates one of the weaknesses of abstracting away from the surface of text. This has been considered in Tymoczko's comparison of formal and dynamic equivalence, and with reference to King's demonstration that truth-preserving paraphrase does not guarantee the production of meaning-preserving translation (Section 1.2.1). Traditional formal semantic theories also assume static and total interpretation in assignment of denotation to lexical items. This complicates decisions on context-sensitive preferred reading or senses of words and implies an assumption that either the range of possible denotations is common to the languages in translation or that a universal set of primitives appropriate for the denotations for each language can be constructed. In contrast, the greater balance between context and content represented in the relation theory of meaning allows, according to Rupp, the possibility of formally representing aspects of the informational structure of texts. This directly affects syntactic representations of languages such as German, Japanese and Arabic. (Syntactic conflicts in translating pragmatic functions between Arabic and English are noted in Section 4.2.1.)²⁸⁶

Three concepts basic to the theory of situation semantics are attunement, constraints and partiality. At its core are the relation theory of meaning and its components: expression, described situation, utterance situation, discourse situation and speaker connections. Further relevant features are the distinctions the approach makes between real and abstract situations, and between information, meaning and interpretation.

Attunement describes an organism's ability to recognize similarities between situations. Each situation that an organism perceives and participates in is unique and limited, a small part of all that is going on. Situations also overlap in complicated ways. The way an organism differentiates its environment enables it to perceive uniformities or categorize situations. Uniformities are conceived of as invariants of real situations: individuals, properties, relations, locations and words. Attunement to uniformities (the

²⁸⁶ Rupp pp. 308-310; Barwise and Perry, p. 21.

similarities between situations) and attunement to the relationships that obtain between these uniformities are acts of a cognitive agent. Barwise and Perry describe attunement as the ability to ‘pick up information about one part of reality from factors present in another’ (p. 12). Meaning is thus seen as a relation between different types of situations, the relationship that ‘the first situation means the second’ (p.14).²⁸⁷

Constraints control the systematic relations between types of situations. They are what allows one situation to contain information about another. Attunement to constraints allows a cognitive agent to pick up information from one situation about another. Constraints make reality structured and they give rise to meaning, supporting ‘the flow of information in general and linguistic communication in particular’ (p. 97). Among the constraints that Barwise and Perry focus on are conventional constraints—those which hold within a community. Knowledge of language consists of knowledge about conventional constraints. Conventional constraints, like others in their classification, may be either unconditional (ubiquitous), or conditional, ‘holding only under certain special circumstances or conditions’ (p. 94). Most of the constraints we are attuned to are conditional constraints. Local usages and customs to which members of a particular linguistic community are attuned, are conditional. The constraints to which members are attuned can be exploited in order to get information about one situation from another. But the constraints may no longer hold if the setting is changed: ‘we may mistakenly rely on these constraints in situations where the requisite conditions are not met, [...] in situations where the constraints may no longer hold’ (p.99). Translation equivalence can be expressed in terms of a translator’s attunement to conditions under which conventional constraints hold. Such attunement suggests the need for a translator-oriented approach to translation equivalence, which the Salience model aims to address.²⁸⁸

Partiality is a third basic concept in situation semantics. Meaning is shown as a relation between different types of situations. But situation types are partial: ‘[t]hey don’t say everything there is to say about everyone, or even everything about the individuals

²⁸⁷ Barwise and Perry, pp. 10-14; Rupp, p. 308.

²⁸⁸ Barwise and Perry, pp. 94-118; Rupp, p. 308.

appearing in the situation type' (p. 9). Partiality is used to explain the notion of efficiency.²⁸⁹

The relation theory of meaning follows on from the combination of attunement and constraints as they apply to the problem of linguistic meaning. The meaning relation has thus far been described as a language user's attunement to a type of constraint (an expression: ϕ) that relates an utterance situation (u), with a described situation (s). Utterances have significance according to the way in which expression is employed. How an expression is used depends on facts about the utterance situation, not about the expression. The theory distinguishes between two types of information carried within the utterance situation: the discourse situation and speaker connections. The discourse situation is the part of the utterance situation concerned with external facts of the discourse, 'the public aspects of an utterance' (p. 127). It involves the spatial and temporal location of the communication and the identity of participants in the communication. The Arabic code switching strategy has reflexes in the discourse situation (Section 3.2.1). Speaker connections presuppose the linguistic attunement that must be shared by participants in effective communication. They link the utterance with the situation it describes by the speaker's language-specific attunement to structural constraints on utterances. Barwise and Perry, who were concerned primarily with determining reference, construe the speaker's connections in an utterance as a partial function from referring words to their referents. They point out that words such as pronouns refer indirectly to antecedents, while determiners and prepositions do not refer, but rather, tell us how to 'combine other things referred to in an utterance and [how to] to get at the described situation' (p. 125). This suggests that speakers are forced to adopt a particular strategy to get at the right interpretation from the particular perspective or unique situation in which they find themselves in a communication—which Barwise and Perry dub the perspectival relativity of language. Perspectival relativity in Arabic is illustrated by agreement variation and modes of address in relative clauses (Sections 3.2.2 and 3.2.3).²⁹⁰

²⁸⁹ Barwise and Perry, p. 9; Rupp, p. 308.

²⁹⁰ Barwise and Perry, pp. 39, 40, 45, 120-127; Rupp, p. 308-309.

The notion of speaker connections is extended by Rupp to fit the interfacing of languages in the translation process. He defines speaker connections with reference to attunement to conditional constraints: ‘the set of culturally specific constraints to which the users of a particular language are attuned in order to permit them to assign meaning to occurrences of its expressions’ (p. 309). Rupp claims that the only domain for essential translation operations (‘the nature and extent of the information that must be preserved, and the nature of the alteration that must be effected’) is speaker connections (p. 311). He suggests a strategy of partial representation—preserving the meaning of text while leaving the ambiguities of interpretation under specified. Much of what a written text has to say about the external facts of the communication (its context) remain constant under translation, and so the discourse situation is not affected. But culturally conditioned, linguistic attunements shared by the author and reader are drastically affected. Speaker connections associate linguistic forms with uniformities in the real world. The connections involved in reference into the described situation represents a vast area of potential variation across languages, affecting ‘not only the way that words may be used to refer to the uniformities that make up the content of the text, but also the range of uniformities that it is possible to refer to’ (p. 311). An account of speaker connections is presented in Chapter Three, with a review of attitudes in parallel Arabic and English texts.

Although there are many factors in an utterance that affect its interpretation, the three most important factors are thus isolated: the expression (ϕ), the discourse situation (d) and the speaker connections (c). The meaning relation can be reformalized: $d, c[\phi]s$. The meaning relation allows us to focus on the many coordinates from which information can be extracted: information about the described situation, about the participants and about their place in the world. Barwise and Perry construe the meaning relation as a multi-placed relation. They propose that information is available not just from an interpretation, but from any or all of the coordinates in the communication: ‘the idea that information in an utterance must come from its interpretation we call the fallacy of misplaced information’ (p. 38).

Arising out of the interaction of the meaning relation and the notion of partiality, is the notion of efficiency. Expressions are efficient in that they can be used for different purposes. Given that things besides expressions can be meaningful, expressions carry only a certain amount of information and so only partially determine the range of appropriate utterance and described situations. The underdetermination of interpretation by meaning is noted by Barwise and Perry with a simple observation on the efficiency of language:

[a]n expression can be used over and over again with the same meaning, a meaning learned once and for all by the members of the linguistic community. But its interpretation may be new each time, determined by the unchanging meaning and the varying circumstance of utterance. (p. 38)

Expressions make different claims about the world when used by different people in different situations. In this way, expressions can have different interpretations even though they retain the same meaning. The efficiency of human language thus leads to a clear distinction between meaning and interpretation. While a sentence carries only meaning, the interpretation of an utterance is arrived at through its meaning as well as other additional facts about the utterance by anchoring the utterance situation and described situation to actual situations. This anchoring of interpretations in actual situations suggests a link with Hjort's 'moderate fallibilism' solution to the implications of indeterminacy for translation (Section 1.2.2). It was argued that equivalence, expressed as coordination equilibria or the convergence of reciprocal expectations, is determined in accordance with conventions operating without any transcendent anchor. The translator's role of anchoring interpretation may be expressed in terms of multi-placed coordination.²⁹¹

Johnson-Laird's mental models theory of comprehension suggests a two-staged process of constructing interpretations: first, a propositional representation, which is close to the surface form of the sentence; and second, the construction of a mental model analogous to the state of affairs described by the discourse. A mental model is based partially on propositional representation and is also guided by contextual clues and implicit inferences based on knowledge. A mental model represents the context of utterance, while the significance of an utterance is established by relating its propositional representation to the

²⁹¹ Barwise and Perry, pp. 5-7; Rupp, p. 309; and Hjort, pp. 38-45.

mental model and to general knowledge. Johnson-Laird proposes that comprehension consists of mapping a sentence directly into a semantic representation using information concurrently from several sources. He claims that there is no need and no evidence for a mental representation of deep syntactic structure.²⁹²

In contrast, situation semantics takes the described situation as the interpretation of an utterance. The choice of the described situation as the reference or interpretation of statements (as opposed to the traditional choice of the truth value of expressions), correlates with Shamaa's focus on the described situation: the claim that translation is 'a way of making two languages talk about the same experience' (p. 48). The interpretation of utterances is considered of primary importance over the meanings of sentences since the meanings of sentences exist only as uniformities across utterances. The traditional emphasis on ambiguity of *sentences*, suggest Barwise and Perry, 'puts the cart before the horse' (p. 134). The coreferent *he* in the sentence *Jon thinks that John said that he is wrong* is open to three interpretations:

- (3a) Jon₁ thinks that John₂ said that he₀ is wrong.
- (3b) Jon₁ thinks that John₂ said that he₁ is wrong.
- (3c) Jon₁ thinks that John₂ said that he₂ is wrong.

In (3a), *he* acquires its referent independently of *Jon* and *John*, while in (3b) *he* refers to the antecedent *Jon* and in (3c) to *John*. Language is extremely flexible and there are no explicit techniques for disambiguating such ambiguous expression. There is an enormous number of contextual elements or features about language use that help with the interpretation of utterances. Pre-theoretical judgements are observed to rely on intuitions, and interpretation is constructed, in part, by implicit inferences which can be made without recourse to rules.²⁹³ This view that comprehension doesn't follow any fixed set of rules is supported independently in the mental models framework and in the philosophy of meaning literature (Section 1.2.2).

²⁹² Johnson-Laird, pp. 142, 144, 333, 337, 339.

²⁹³ Barwise and Perry, pp. 5-6, 19, 21, 41, 134-135.

Abstract situations are a tool of indirect classification in situation semantics. They are mathematical objects of set theory used to represent real situations. They allow one situation to contain information about another. Meaning is described as the attunement to structured reality—the constraints between different types of situations. The primary role of abstract situations is to be assigned to utterances as interpretations. Some abstract situations correspond to real, actual situations, others do not (as observed in the anchoring of interpretations to actual situations). Real situations are metaphysically and epistemologically prior to relations, individuals and locations (the primitives of situation semantics). Relations, individuals and locations are themselves metaphysically and epistemologically prior to abstract situations.²⁹⁴

Both the mental models approach and the situation semantics approach see our world view as causally dependent on the way the world is and on the way we are—that we have no way of knowing the structure of the world independent of the way in which we conceive it. The mental models approach focuses on the nature of the mind and its effect on the world we perceive. Human ability to construct models is focal, and so representations are distinguished from reality.²⁹⁵ Situation semantics accepts the priority of a larger reality of which rational organisms are a part, and goes one step further in positing a reciprocity in the systematic linking of expressions with external events and states of mind:

the ability of language to classify minds and events can be turned back on language itself; we can classify expressions by the way they classify us and the world.²⁹⁶

This suggests states of mind and described situations as uniformities in the translation process. These are inherently human artefacts, independent of the expressions used in communication.

In summary, the structure of reality according to situation semantics is provided by the invariants differentiated by an organism interacting with real situations—limited parts of

²⁹⁴ Barwise and Perry, pp. 8, 49, 58, 69, 225.

²⁹⁵ Johnson-Laird, pp. 402-403.

²⁹⁶ Barwise and Perry, p. 3.

its environment. Barwise and Perry aim to classify relations between situations that give rise to meaning and the flow of information. They formalize how expressions are used to classify situations and how mental states or attitudes (such as having information, knowledge or beliefs) classify situations. Information is *about* structured reality. It is relative to the conditional and unconditional constraints to which an organism is attuned. Situation semantics attempts to spell out the conventional constraints on utterances, ‘to spell out what it is a native speaker knows in knowing what utterances mean’ (p. 119).²⁹⁷

Having looked at the relevant features of two complementary approaches to linguistic meaning, it remains to be shown what the frameworks offer a general account of the regularities of translation (translation equivalence). Three notions are addressed for that purpose: the external significance of language, the perspectival relativity of language and the coordination of multi-placed relations.

The philosophical distinction between information and interpretation must be reconciled with the inherent indeterminacy of translation. The fallacy of equating information with interpretation is clearly established in situation semantics. Barwise and Perry describe the meaning of expressions and mental states in terms of the information they carry about the external world. The external significance of language is a principle based on the observations that things besides expressions have meaning and that the interpretation of an utterance depends on additional facts about the utterance. Linguistic meaning is construed as a multi-placed relation between described situations and utterances (including the speaker’s place in the world). Information is available not just from an interpretation but from any or all of the coordinates in the communication. The external significance of language places information contained in the real-world situations prior to meaning and interpretation. The reality of what happens and a sentient being’s attunement to the uniformities of its reality are prior to any attunement to the conventional environment of communication—the meanings and interpretations entailed in language. Just as the linguistic meaning of an utterance greatly underdetermines its particular

²⁹⁷ Barwise and Perry, pp. 69, 119.

interpretation, so too the interpretation of an utterance underdetermines the information conveyed. The information a statement conveys can therefore be viewed as independent of the language used to make the statement, and the translator must be attuned to coordinates including those contained outside an utterance. The indeterminacy thesis points out the fallacy of rationalist approaches to translation equivalence in which transfer is accomplished deterministically through deep structure syntactic representations. Dissatisfaction with the transfer metaphor has been voiced by a number of researchers, principally for its reductionist nature in abstracting away from surface textual features (Section 1.2.1). The external significance of language offers a principled explanation of the indeterminacy thesis. Furthermore, the flexibility of language and the enormity and unpredictability of contextual elements used in the interpretation of utterances highlight the role of inferencing without recourse to fixed rules. The overall picture is one in which the translator needs to maintain attunement to information which is *implicit* in the communication (Section 2.6.2).

In order to account for the kinds of information which must be maintained or altered in translation, it is necessary to take account of the translator's attunement to the culturally conditioned, linguistic constraints shared by author and reader in a particular language: the speaker connections. Both situation semantics and mental models highlight the fact that a speaker and listener do not share an identical context—that in spite of a shared communication, participants exist in unique and separate realities. As a sequenced event with discrete contexts operating independently on the original text and on its translation, the translation process is in principle no different from the wider process of communication. Communication resources shared within a linguistic community are available to speakers to get at states of mind and information about the world—to get at a required interpretation. A translator-oriented approach to equivalence entails articulating the translator's attunement to conditions under which conventional constraints hold. In situation semantics, the perspectival relativity of language describes how speakers from different situations with different communication resources to exploit can exploit aspects of one situation to get at elements of another:

while there are many ways of saying the same thing, not all of them are available to all of us all the time. Hence speakers are forced to adopt a strategy which gets at the right interpretation from the contextual milieu they find themselves in, from their “perspective”²⁹⁸.

The mental models approach independently adopts a parallel stance. Through the agency of the mind, reference is anchored in a mental model of discourse rather than in some external reality. Nevertheless, Johnson-Laird and Garnham adopt a relative perspective on communication resources:

If a speaker is to communicate felicitously, then he must consider whether an entity will be unique in his listener’s model. Utterances need seldom be more than clues about how to change a discourse model: they depend for their interpretation on what a listener knows, but that interpretation in turn modifies or extends the discourse model.²⁹⁹

The role of speaker connections in translation suggests a process of getting at a desired interpretation by attunement to the relative communication resources available in the interfacing languages. In this way, a model of equivalence in translation needs to consider the translator’s attunement to information which is shared between the languages involved in translation and that which is unshared or *local* (Section 2.6.3).

The coordination of multi-placed relations is a widely attested notion. Quine describes translation as the balancing of values: ‘Translation is not the recapturing of some determinate entity, a meaning, but only a balancing of various values’.³⁰⁰ Hjort associates the enabling conditions of equivalence in translation with equilibria coordination—the convergence of reciprocal expectations. Feleppa construes translation in terms of codifications of rules, which unlike laws, can be violated and changed, their contravenability dictated by rational preference. Like Quine, Feleppa sees the main burden of translation as coordinating behaviour ‘involving groups of rational individuals whose behavior [...] is largely rule-determinate’ (p. 162). Distinguishing conventional, ‘rulelike regularities that the linguist *codifies*’ from the ‘lawlike regularities that the physicist *describes*’ (p. 243), he characterizes the conventions of translation as complex

²⁹⁸ Barwise and Perry, p. 39.

²⁹⁹ P. N. Johnson-Laird and A. Garnham, ‘Descriptions and Discourse Models, *Linguistics and Philosophy*, 3 (1980), 371-393 (p. 377), quoted in Johnson-Laird, p. 385.

³⁰⁰ W. Quine, ‘On Empirically Equivalent Systems of the World’, *Erkenntnis*, 9 (1975), 313-328 (p. 322), quoted in Feleppa pp. 131, 185.

coordination equilibria. Davis describes coordination equilibria as optimal solutions resulting from combinations of actions: solutions which turn out best for all parties in that ‘no one would have been better off had any one agent alone acted otherwise’.³⁰¹ Mental models and situation semantics view comprehension in terms of non-deterministic selection of information simultaneously from a number of sources. But given that there are limits that expressions place on the range of uniformities that it may be possible to refer to in another language even in a backgrounded way, it is necessary to come to terms with the relative meaningfulness of information conveyed by an utterance. The need to identify the relevance of information to its communication suggests that an essential aspect of coordination for the purposes of translation involves distinguishing information which has a backgrounded function from information which is highlighted or marked. The principle that meaningfulness implies choice is captured by the notion of *markedness* (Section 2.6.1).

Two perspectives on meaningfulness have been noted by Lyons (Section 1.0): the intention of an utterance for the speaker, and the significance or informativeness of the utterance to the receiver. Lyons’ narrower sense of informativeness (as it relates to propositional content) is substantially extended in the notion of information (as it relates to the interpretation of utterances). Lyons distinguishes signal-information (the physical properties of linguistic signals by which communicators identify referents) from the information used to interpret utterances. He makes it clear that the manner in which signal-information content is quantified (as bits) is of no consequence to meaningfulness. The significance of information is a function of expectancy or probability of occurrence. Given the equiprobability of all signals in an unmeaningful system, the greater a signal’s probability of occurrence the less signal-information it contains. Information content is inversely proportionate to probability of occurrence (expectancy): the greater the surprise value of an item the more significant it is. Mason criticizes communication models built on the notion of informativity. Based on Nida’s account of information load (by which the translator compensates for the unpredictability of linguistically and culturally unfamiliar

³⁰¹ Hjort, p. 44; Feleppa, pp. 1, 162-163, 171-173, 243, 246; and Davis, p. 14, quoted in Feleppa, p. 163.

aspects of an original text in the process of translating), Mason claims informativity-based communication models overlook social circumstances of text production and reception and implicitly view meaning as quantifiable. While Lyons distinguishes quantification of information from its interpretation, the notion of information developed in situation semantics equates information (about situations) with interpretation.³⁰²

The anthropological approach to coordination and the rule-like character of translation argued by Feleppa in particular, is centred around Quine's notion of translation manuals, described variously as regulatory maxims, analytical hypotheses and instruments of coordination. But it is widely noted that just about any item of information could be relevant to the interpretation of an utterance. Interpretation is determined in accordance with conventions operating without any transcendent anchor. By expressing the translator's role of anchoring interpretation in terms of multi-placed coordination, a fundamental opposition is posited in the Translation Salience model. The model proposes that Transfer and Salience constitute bipolar extremes of a continuum and so offers a principled account of the translator's interlingual attunement to multi-placed coordination. Transfer involves typological, rule-like or codifiable aspects of equivalence in translation (Sections 2.4 and 2.5). In contrast with transfer are those non-conventional, non-codifiable or unique aspects of equivalence in which salient information is interpreted and coordinated (Chapter Three). Salient information for the purposes of translation can be accounted for with three primary notions: markedness, implicitness and localness. (A fuller account of these notions is presented in Section 2.6.)

Following is an overview of constraints on machine translation relevant to equivalence (Sections 2.3–2.4).

2.3 Computational Properties of Translation

³⁰² Lyons, *Semantics*, pp. 32-34, 41-46; Mason, 'Communicative/Functional Approaches', p. 30; and Nida, *Toward a Science...*, pp. 120 ff., cited in Mason.

Following a review of various theories of human translation (Chapter One), an explanatory proposal describes the equivalence relationship by which an original communication event partially constrains translation (Sections 2.1 and 2.2). Equivalence is described in terms of attunement to communication resources. Uniformities of the translation process are construed as information about described situations and information about utterance situations (including the attitudes and states of mind of communicators). The prevailing transfer metaphor (Section 1.1) is rejected for only partially defining the relationship between a translation and its original. The Translation Salience model is informed by the observable properties of situated expressions through the independent notions of markedness, implicitness and localness (Section 2.6).

Computational properties of translation must be distinguished from the wider domain of human translation most essentially in relation to the translating agent's states of mind and attunement to situations. As noted by Johnson-Laird, the human capacity for language is wrapped up in the notion of consciousness (Section 2.2). Intentional correspondence between symbolic expression and states of affairs differs from mere symbolic correspondences through which information is conveyed by non-human agents and by devices that employ formal (non-natural) language. At odds with this view is the representation hypothesis which claims that mental entities and processes can be made fully explicit. According to the representation hypothesis, understanding or thinking is viewed as the manipulation of symbolic representations. The role of consciousness or intentionality in such a paradigm remains uncertain. In addition to processing the propositional content of text, a theory of understanding must embrace things like the way utterances are associated with the real world to form coherent text, and the attitudes of speakers and hearers to propositions. Hutchins and Somers observe:

the most fundamental problems of computer-based translation are concerned not with technology but with language, meaning, understanding, and the social and cultural differences of human communication. (p. 9)

Hutchins makes a 'very fluid' distinction between knowledge of a linguistic system (common to all those competent users of a language) and the extra-linguistic knowledge

which is brought to bear in the interpretation of utterances. Arnold and others distinguish various kinds of knowledge actually deployed by human translators. Most obvious is knowledge of the languages in contact and various correspondences between them, including knowledge of the subject matter and common sense knowledge that allows translators to understand texts. In addition, the translator draws on knowledge of the culture, social conventions, customs and expectations of speakers of each of the languages in contact. Meaningfulness mediated in translation rests on this last domain of knowledge, according to Arnold, which ‘no one has the remotest idea how to represent or manipulate’ (pp. 37-38). Nirenburg, Raskin and Tucker admit that machines cannot produce interpretations sufficient for understanding. Nagao also concedes the limitations of current machine translation on text understanding:³⁰³

it is not yet possible to obtain an interpretation of a sentence in relation to world knowledge or the conditions under which the sentences were uttered—facts which a human translator would normally use for the selection of the most suitable expression in the target language. (p. 52)

While it may not be clear just exactly what is meant by language understanding, the need for total comprehension is not generally considered essential for effective translation. Citing the translation of front-line research on semiconductor switching theory or nuclear physics, Slocum questions whether a translator really fully comprehends the content of material being translated. Numerous commentators suggest that sophisticated inferencing mechanisms and the depth of understanding assumed by artificial intelligence researchers are not really necessary for translation.³⁰⁴ But a more fundamental issue concerns the

³⁰³ George W. Smith, *Computers and Human Language* (New York: Oxford University, 1991), pp. 4, 16-17; W. John Hutchins and Harold L. Somers, *An Introduction to Machine Translation* (London: Academic, 1992), pp. 9, 316; W. John Hutchins, ‘Recent Developments in Machine Translation’, in *New Directions in Machine Translation: Conference Proceedings, Budapest, 18-19 August 1988*, ed. by Dan Maxwell, Klaus Schubert and Toon Witkam (Dordrecht: Foris, 1988), pp. 7-64 (p. 12); D. Arnold and others, *Machine Translation: An Introductory Guide* (Oxford: Blackwell, 1994), pp. 37-38; Sergei Nirenburg, Victor Raskin and Allen Tucker, ‘On Knowledge-Based Machine Translation’, *Proceedings of the 12th International Conference on Computational Linguistics (COLING 86), Bonn, 25-29 August 1986*, (Morristown, NJ: Association for Computational Linguistics, 1986), pp. 627-632 (p. 627); and Makoto Nagao, *Machine Translation: How Far Can It Go?*, trans. by N Cook (Oxford: Oxford University, 1989), p. 52.

³⁰⁴ W. John Hutchins, ‘Prospects in Machine Translation’, in *Machine Translation Summit*, ed. by M. Nagao and others (Tokyo: Japan Electronic Industry Development Association, 1989), pp. 7-12 (p. 9); Makoto Nagao, ‘Introduction’, in *Machine Translation Summit*, pp. 1-3 (p. 2); Jonathan Slocum, ‘Machine Translation: Its History, Current Status and Future Prospects’, *Proceedings of the 10th International Conference on Computational Linguistics (COLING 84) and the 22nd Annual Meeting of the Association for*

validity of meaning-oriented systems and the distinction between translation and paraphrase.

Nirenburg, Raskin and Tucker consider degrees of similarity among paraphrases to be determined by external parameters, which human translators understand intuitively. According to knowledge-based approaches to machine translation which they promote, the invariance maintained during translation is equivalence in the meaning of expressions. Translation is viewed as a special kind of interlingual paraphrase. Translation accuracy is related to the depth of analysis of the original text and to the richness of the analytical tool. Meaning is said to be extracted from texts. It is stored in the form of unambiguous textual-meaning representations in an interlingua notation. In such linguistic rule-based systems, interpretation involves the application of world and language models. Processing attempts to draw on the knowledge and experience that participants bring to communication. Mental models are built synthesizing information in the discourse with knowledge of how things typically happen in the world. Information not explicitly mentioned may be inferred about typical event sequences in order to disambiguate texts for the purpose of translation.³⁰⁵

The interlingual strategy draws criticism from a number of quarters. Smith illustrates how paraphrasing results in different sentences expressing the same proposition. But translating sentences directly into propositions ignores the relative prominence that different sentences give to parts of a proposition. He argues that substitution relationships among words belong to the sense of expressions. Noting problems of disambiguating metaphorical usage, Weischedel states that constraints on paraphrase apply to what is described rather than to the expressions themselves. Hutchins points to the loss of information about the surface structure of texts which results from the abstract

Computational Linguistics, Stanford University, 2-6 July 1984, (Morristown, NJ: Association for Computational Linguistics, 1984), pp. 546-560 (p. 560), repr. in Jonathan Slocum, *Machine Translation Systems* (Cambridge: Cambridge University, 1988), pp. 1-47; Makoto Nagao, Jun-ichi Tsujii and Jun-ichi Nakamura, 'Machine Translation from Japanese into English', *Proceedings of the Institute of Electrical and Electronics Engineers Inc. (IEEE)*, 74 (1986), 993-1012 (p. 1007); and Hutchins and Somers, pp. 313-317.

³⁰⁵ Nirenburg, Raskin and Tucker, p. 627; Sergei Nirenburg and others, *Machine Translation: A Knowledge-Based Approach* (San Mateo, CA: Kaufmann, 1992), pp. 17-20, 27-30, 43-44, 50-51, 55-56, 61-63; Sergei Nirenburg, 'Knowledge and Choices in Machine Translation', in *Machine Translation: Theoretical and Methodological Issues*, ed. by Sergei Nirenburg (Cambridge: Cambridge University, 1987), pp. 1-21 (pp. 2, 6); and Smith, pp. 380-407.

representation of content, stating that ‘versions produced by AI [artificial intelligence] methods are not translations but rather paraphrases of source texts’. Aside from the complexity of abstracting away from language-specific surface realization, Warwick also notes the inherently reductionist nature of the approach: ‘language-specific attributes necessary for defining translation equivalents on the lexical and structural level [are] neutralized in the interlingual representation’. Raskin concedes the need for translation to encompass speaker attitudes, as well as the effects and inferences implicated in text. Tucker suggests the interlingua strategy develop a theory of salient features of text. Bell quotes the observation by Brown and Yule that the kinds of knowledge and experience modelled in the interlingua approach are metaphors for describing how world knowledge is organized and activated in the mind in the process of understanding discourse. Pustejovsky believes that the knowledge structures accessed in the process of inferencing and understanding are associated with propositions rather than linguistic or surface structure clues. Similarly, Arnold emphasizes the linguistic nature of translation, noting that:³⁰⁶

translation is taken to be fundamentally a relation between linguistic units which should preserve as far as possible the linguistic characteristics of the units (translation is thus a far more restrictive notion than paraphrase, where only ‘meaning’ is preserved).

In addition to criticisms levelled against their lack of constraining power, translation strategies which employ language formalisms are characterized by limitations on expressiveness. Hutchins observes that context-free grammars and formal syntax are intended only to define the set of well-formed sentences in a language. Smith discusses problems associated with the compositionality hypothesis. (Compositionality views phrase

³⁰⁶ Smith, pp. 266-267, 301; Ralph M. Weischedel, ‘Knowledge Representation and Natural Language Processing’, *Proceedings of the IEEE*, 74 (1986), 905-920 (pp. 908); Hutchins, ‘Prospects in Machine Translation’, p. 9; Hutchins and Somers, p. 317; S. Warwick, ‘An Overview of Post-ALPAC Developments’, in *Machine Translation Today...*, pp. 22-37 (p. 28), quoted in Nirenburg and others, *Machine Translation: A Knowledge-Based Approach*, p. 55; Victor Raskin, ‘Linguistics and Natural Language Processing’, in *Machine Translation: Theoretical and Methodological Issues*, pp. 42-58 (pp. 48, 56-57); Allen Tucker, ‘Current Strategies in Machine Translation Research and Development’, in *Machine Translation: Theoretical and Methodological Issues*, pp. 22-41 (p. 26); Gillian Brown and George Yule, *Discourse Analysis* (New York: Cambridge University, 1983), p. 238 quoted in Bell, *Translation and Translating...*, p. 249; James Pustejovsky, ‘An Integrated Theory of Discourse Analysis’, in *Machine Translation: Theoretical and Methodological Issues*, pp. 168-191 (pp. 173-174); and Doug Arnold, ‘Eurotra: A European Perspective on MT’, *Proceedings of the IEEE*, 74 (1986), 979-992 (pp. 980).

and sentence meanings as solely and systematically determined by the meanings of expressions that compose them, and by the relationships between such expressions. The principle explains how a finite number of expressions can be combined to form an infinite number of meaningful utterances.) The generally parsimonious nature of statements requires communicators to infer more information than actually contained in utterances by evoking relevant common knowledge. Using conceptual structures to represent events brings with it the problem of finding principled ways of determining what information should be part of a conceptualization, and also the problem of when to stop generating implications. In addition, Smith underscores the evaluative nature of understanding—how humans distinguish important relationships from incidental correlations during language processing. Rollinger believes that a theory of understanding must adequately describe and explain the fundamental human phenomenon of selective perception, by which relevant and interesting information is deliberately or unintentionally separated from that which is irrelevant. Selective perception enables people to process the huge amounts of information they involuntarily receive all the time. Somers outlines a model aimed at capturing language-specific senses, features and configurations without claiming language-independence. His interface structures are a kind of text representation rather than meaning representation. They purport to ‘abstract away from idiosyncratic surface features of a text, while capturing the relevant ones’ (p. 83). Schubert draws attention to what he calls the implicitness principle, arguing against explicitly stated, isomorphic, language-independent representation. His solution (the Distributed Language Translation project) views natural language as the best means of storing knowledge and the most expressive for representing text. Arguing that no artificial language can go beyond the capabilities of human language, the project adopts (the semi-natural language) Esperanto as an interlingua. The interactive, multi-lingual system is primarily a tool for monolingual users of the interlingual network. Translation from the intermediate language is facilitated by disambiguating answers provided by the user.³⁰⁷

³⁰⁷ Hutchins, *Machine Translation: Past, Present, Future*, p. 49; Smith, pp. 152, 306, 320-323, 382-384; Harold Somers, ‘Some Thoughts on Interface Structure(s)’, in *Maschinelle Übersetzung: Methoden und Werkzeuge*, ed. by Wolfram Wilss and Klaus-Dirk Schmitz, Sprache und Information, 16 (Tübingen: Niemeyer, 1987), pp. 81-99 (pp. 83, 87); Claus-Rainer Rollinger, ‘Attentiveness and

Problems of expressiveness associated with linguistic rule-driven approaches to natural language processing have also been addressed by Pustejovsky.³⁰⁸ He relates compositionality to the creative use of words in novel contexts, using a core set of word senses to generate a larger set of word senses. He aims to achieve a model which captures the ability of expressions to achieve an infinite number of senses in context while limiting the number of senses stored in the lexicon. The context dependence of predicates is traced to Aristotle, who speaks of the particular aspect of an individual to which is attributed a particular quality—as *goodness* in a *good lyre-player* or a *good sculptor* which speak to the function of *playing* and *sculpting* respectively.³⁰⁹ The ubiquity of metaphorical sense extension has been noted by Ibn Jinni (d. A. D. 1002/هـ ٢٩٢) ابن جَنِّي who observed *most language is metaphorical not factual*.³¹⁰ Pustejovsky rejects sense enumerative techniques (which distinguish word senses on the basis of finite feature distinctions). Two types of lexical ambiguity are distinguished: contrastive ambiguity (or hyponymy, entailing distinct and unrelated meanings which can be pragmatically disambiguated according to the domain of reference, viz. *John shot a few bucks* in the domains of ‘gambling’ or ‘hunting’); and complementary ambiguity (which refers to systematically related word senses of the same lexical item). Complementary polysemy in

Interestingness—Aspects of (Text)Understanding’, in *Probleme des (Text-) Verstehens: Ansätze der Künstlichen Intelligenz*, ed. by Claus-Rainer Rollinger, Sprache und Information, 10 (Tübingen: Niemeyer, 1984), pp. 265-271 (p. 267); Klaus Schubert, ‘The Theory and Practice of Metataxis’, in *Metataxis in Practice: Dependency Syntax for Multilingual Machine Translation*, ed. by Dan Maxwell and Klaus Schubert (Dordrecht: Foris, 1989), pp. 233-246 (pp. 242-243); Klaus Schubert, ‘Wann bedeuten zwei Wörter dasselbe? Über Tiefenkasus als tertium comparationis’, in *Linguistik in Deutschland* ed. by Werner Abraham and Ritva Arhammar (Tübingen: Niemeyer, 1987), pp. 109-117 (p. 116), cited in Schubert, ‘Theory and Practice of Metataxis’, p. 242; Klaus Schubert, ‘Implicitness as a Guiding Principle in Machine Translation’, in *Proceedings of the 14th [?] International Conference on Computational Linguistics*, ed. by Dénes Vargha (Budapest: John von Neumann Society of Computing Sciences, 1988), pp. 599-601, cited in Schubert, ‘Theory and Practice of Metataxis’, p. 242; Papegaaij and Schubert, *Text Coherence in Translation*, p. 196; Hutchins and Somers, pp. 297-299; Victor Sadler, *Working with Analogical Semantics: Disambiguation Techniques in DLT* (Dordrecht: Foris, 1989), pp. 34-41; Klaus Schubert, ‘The Architecture of DLT—Interlingual or Double Direct?’, in *New Directions in Machine Translation: Conference Proceedings, Budapest, 18-19 August 1988*, ed. by Dan Maxwell, Klaus Schubert and Toon Witkam (Dordrecht: Foris, 1988), pp. 131-144 (pp. 141-142); and Schubert, *Metataxis: Contrastive Dependency Syntax for Machine Translation*, pp. 200-204.

³⁰⁸ James Pustejovsky, *The Generative Lexicon* (Cambridge Mass.: MIT, 1995), pp. 1-2, 7, 29-43, 56-62, 72, 76, 85-88, 105, 234-236, 267; and Arnold and others, pp. 185-190.

³⁰⁹ *Categories* and *Nicomachean Ethics*, cited in Pustejovsky, *Generative Lexicon*, n. 1 pp. 243-244.

³¹⁰ quoted in Owens, p. 251, n. 149 p. 339;

ابو الفتح بن جَنِّي، « الخصائص »، تحقيق محمد علي النجار (القاهرة: ١٩٥٢-١٩٥٦ / بيروت: دار الكتاب العربي، د ت)، ج ٢، ص ٤٤٧

(4) illustrates that both senses of the noun *fig* seem relevant for contextual interpretation, but only one is focused for the purpose of a particular utterance, as ‘food’ in (4a) and ‘plant’ in (4b):

- (4a) Mary ate the fig for lunch.
- (4b) Mary watered the fig in the garden.

Pustejovsky argues that sense enumerative models are inadequate for the purposes of linguistic theory because they fail to adequately treat complementary polysemy. In statements (5a–5c), the senses in which the underspecified word *enjoyed* is used can be inferred from contextual information, as ‘watching’ ‘drinking’ and ‘reading’ respectively:

- (5a) Mary enjoyed the movie last night.
- (5b) John enjoyed his morning coffee.
- (5c) Bill enjoyed Steven King’s last book.

Word senses are not seen as atomic. Senses systematically overlap and make references to other senses, have multiple syntactic realizations, and assume new senses in novel contexts. Rather than view lexical semantics as decomposition into a specific number of primitives, Pustejovsky looks at generative or compositional aspects of the lexicon and provides a multi-dimensional system of representation. The model enables representation of the relative prominence of structural information which contributes to the focus of interpretation. The problem of controlling the inferences associated with the interpretation process is addressed by representing different contextual factors that account for the way that language users create and manipulate the context under constraints. For Barwise and Perry, compositionality holds for the meaning of an expression but not for its interpretation in a particular context. The creative use of language by humans, according to Zernik, will always make the ultimate lexicon ‘a moving target’.³¹¹

In contrast to the linguistic rule-based approaches looked at so far, empirical approaches to natural language processing make no particular claims to cognitive plausibility. Empiricist strategies do away with explicitly formulating linguistic knowledge in a deterministic way. Instead, they use statistical information about probabilities of

³¹¹ Barwise and Perry, pp. 31-32; and Uri Zernik, ‘Introduction’, in *Lexical Acquisition: Exploiting On-line Resources to Build a Lexicon*, ed. by Uri Zernik (Hillsdale, NJ: Lawrence Erlbaum, 1991), pp. 1-26 (p. 24).

cooccurrence implicit in large holdings of texts in machine-readable form.³¹² The use of corpora unmasks an essential confusion between theory and authentic data: invented examples have no independent authority but are really part of explanation. Phrases and sentences may be constructed to refine and clarify rationalist explanations, but as Sinclair points out: ‘usage cannot be invented, it can only be recorded’. Leech observes that rationalist views of scientific inquiry focus on mental and hence non-observable processes, while empiricist observation contributes to theory more than theory contributes to observation. Nevertheless, the way we categorize and interpret data is determined by the way we construct theory.³¹³

The limiting view of empiricism seems to be the rule rather than the exception. Sadler and Arnold believe that statistical techniques are unrevealing in relation to questions of translation theory because ‘addressing these questions presupposes explicit descriptions of the properties of, and relations between, linguistic expressions, which these techniques are designed to avoid’.³¹⁴ In a separate context, Shieber distinguishes linguistic tools from theories in that tools are independent of an understanding of linguistic analysis whereas theories are intimately tied to a comprehension of their linguistic analyses.³¹⁵ Other commentators generally describe corpus linguistics as a methodology rather than a domain of study.³¹⁶ However, Abney strongly argues that weighted (stochastic) grammars characterize linguistic issues rather than computational issues. Well-formedness and grammaticality are not identical to meaningfulness. Sounding natural and judging speaker

³¹² Arnold and others, pp. 201-204; McEnery and Wilson, pp. 118-119; Harold L. Somers, ‘Machine Translation’, in *Routledge Encyclopedia of Translation Studies*, pp. 136-148 (pp. 143, 148); Geoffrey Leech, ‘Corpora and Theories of Linguistic Performance’, in *Directions in Corpus Linguistics: Proceedings of Nobel Symposium 82, Stockholm, 4–8 August 1991*, ed. by Jan Svartvik (Berlin: Mouton de Gruyter, 1992), pp. 105-125 (p. 107); and Geoffrey Leech, ‘Corpora’, in *The Linguistic Encyclopedia*, ed. by Kirsten Malmkjaer (London: Routledge, 1991), pp. 73-80 (pp. 74-75, 80).

³¹³ COLLINS COBUILD ENGLISH LANGUAGE DICTIONARY, ed. by John M. Sinclair and others (London: Collins, 1987), p. xv, quoted in Michael Stubbs, ‘British Traditions in Text Analysis: From Firth to Sinclair’, in *Text and Technology: In Honour of John Sinclair*, ed. by Mona Baker, Gill Francis and Elena Tognini-Bonelli (Amsterdam: Benjamins, 1993), pp. 1-33 (p. 10); and Leech, ‘Corpora and Theories of Linguistic Performance’, p. 111.

³¹⁴ Louisa Sadler and Doug Arnold, ‘Unification and Machine Translation’, *Meta*, 37 (1992), 657-680 (pp. 659-660).

³¹⁵ S. M. Shieber, *An Introduction to Unification-Based Approaches to Grammar* (Stanford, CA: Centre for the Study of Language and Information, 1986), pp. 38.

³¹⁶ Leech, ‘Corpora and Theories of Linguistic Performance’, p. 105; and McEnery and Wilson, pp. 1-18.

intention are considered matters of degree. Algebraic (non-probabilistic) properties of idealized, homogeneous grammars are contrasted with stochastic (probabilistic) grammars which are concerned with statistical properties of language communities. In algebraic grammars, gradations of acceptability are not accommodated; a structure is either grammatical or it is not. Algebraic methods are seen as inadequate for understanding important properties of human language, like the appropriacy or ‘measure of goodness’ which permits identification of a correct parse in the face of considerable noise in communication (p. 21). Probabilistic (stochastic) models are not admitted as simple, stop-gap approximations of more complex deterministic models. A stochastic account provides insight into properties that are genuinely emergent:³¹⁷

Take stochastic queue theory, for example, by which one can give a probabilistic model of how many trucks will be arriving at a given depot in a transportation system. One could argue that if we could just model everything about the state of the trucks and the conditions of the roads, the location of every nail that might cause a flat and every drunk driver that might cause an accident, then we could in principle predict deterministically how many trucks will be arriving at any depot at any time, and there is no need of stochastic queue theory. Stochastic queue theory is only an approximation in lieu of information that it is impractical to collect. But this argument is flawed. If we have a complex deterministic system, and if we have access to the initial conditions in complete detail, so that we can compute the state of the system unerringly at every point in time, a simpler stochastic description may still be more insightful. To use a dirty word, some properties of the system are genuinely *emergent*, and a stochastic account is not just an approximation, it provides more insight than identifying every deterministic factor. Or to use a different dirty word, it is a *reductionist* error to reject a successful stochastic account and insist that only a more complex, lower-level, deterministic model advances scientific understanding. (p. 19)

Probabilistic grammars shed light on meaningful variation in natural language.

Halliday has argued that human grammar is inherently probabilistic.³¹⁸ Language potentials are realized in particular texts according to selections made by speakers. The social, conventional nature of language means that texts are shaped by prior texts, and every instance in a text perturbs the overall probabilities of the system. Citing both Firth and

³¹⁷ Steven Abney, ‘Statistical Methods and Linguistics’, in *The Balancing Act*, ed. by Judith Klavans and Philip Resnik (Cambridge Mass.: MIT, 1996), pp. 1-23 (pp. 4-5, 12-21).

³¹⁸ M. A. K. Halliday, ‘Corpus Studies and Probabilistic Grammar’, in *English Corpus Linguistics*, ed. by K. Aijmer and B. Altenberg (London: Longman, 1991), pp. 30-43; and M. A. K. Halliday, ‘Language as System and Language as Instance: The Corpus as a Theoretical Construct’, in *Directions in Corpus Linguistics...*, pp. 61-77.

Sinclair, Stubbs notes how interpretation takes place against a background of expectations. Texts are interpreted ‘as much for what they omit as for what they express’ (p. 12). For Sinclair, text results from a complicated selection process. It has meaning only as a sample of an enormously larger body of text: ‘each selection has meaning by virtue of all the other selections which might have been made, but have been rejected’.³¹⁹ Cognitive, intentionalist accounts capture individuating aspects of language behaviour. But intentional behaviour only has meaning against a background of social conventions. Corpus studies show endless variation in the authentic use of language. With statistical analysis, inferences can be drawn from complex numerical data, and significance or randomness can be attributed to variations in use. Style and meaningfulness become matters of coselection, or the cooccurrence of linguistic features. Lexis and syntax are shown to be completely interdependent.³²⁰

Perhaps the most substantial attack on rationalist approaches to natural language processing (and linguistic description in general) is mounted by Sinclair. He believes that the indeterminacy of the present state of our grammars should be emphasized and not camouflaged. Like Firth, Sinclair questions basic assumptions about levels of linguistic inquiry and prefers to relate meaningfulness to coordinated choice. There are no preconditions to parsing, according to Sinclair, and no such thing as a complete parse. Word class tagging does not contribute to the understanding of text. Rather, it functions to reduce the information in a text through the classification process. For this reason, the basic linguistic unit is taken as the word form rather than lemma (dictionary citation form under which various derivations may be grouped). Lemmatization is considered a matter of subjective judgement by the researcher, and the distribution of meanings among forms of a lemma is viewed as indeterminate. The large number of problematic examples in real text, and the scarcity of straightforward illustrations point to the fragility of any description: ‘the ever-present possibility that another way of organizing the evidence may lead to a superior

³¹⁹ John Sinclair, ‘When is a Poem like a Sunset?’, *A Review of English Literature*, 6 (1965), 76-91 (pp. 76-77), quoted in Stubbs, p. 12.

³²⁰ Stubbs, pp. 11-13, 16-19, 23, 25, 27; McEnery and Wilson, pp. 101-103, 123; and John M. Sinclair, ‘The Automatic Analysis of Corpora’, in *Directions in Corpus Linguistics...*, pp. 379-400 (pp. 383-385, 390).

description' (p. 84). Sinclair hopes to explain the regularity yet variability and adaptability of phrases. Combinatorial meaning flows on from the 'mystical' notion of coherence: 'decisions which are not recorded in the abstract [grammar] system, but which take precedence over those which are' (p. 102). Sinclair observes that the mass of instances in real text contain just a small element of typicality, and paradoxically, examples which are typical are rather uncommon. The main simplification introduced by conventional grammar follows the decoupling of lexis and syntax—which leads to the creation of 'a rubbish dump that is called "idiom", "phraseology", "collocation", and the like' (p. 104). At odds with traditional wisdom that lexical and grammatical patterns vary independently of each other, Sinclair theorizes that lexical and syntactic choices correlate. He widens the domain of syntax to include lexis and calls the broader domain *structure*, namely, 'any privileges of occurrence of [lexical or syntactic] morphemes' (p. 104). Sense and this broader notion of structure are seen as associated. The inquirer's task becomes the identification of regular and typical associations. Two principles of interpretation are hypothesized: the open-choice principle (by which a very large number of complex choices are available for text development at a given point); and the idiom principle (consistent with Fillmore's 'idiomaticity', by which randomness is constrained by a large number of semi-preconstructed phrases constituting single choices even though they may appear to be analyzable into segments—Section 2.1). A picture emerges of everyday words which have no independent meanings but are components of a repertoire of multi-word patterns that make up text. Sinclair speaks of uses rather than meanings, and suggests a reduction in the contributions made by individual words to the interpretation of text. The implicit switching which takes place between the two interpretation principles (open-choice and idiom) results in a level of indeterminacy which characterizes authentic text.³²¹

The most detailed quantification of stylistic variation is presented in Biber's factor analysis of 67 linguistic features in 481 texts from the Lancaster-Oslo-Bergen Corpus of British English and the London-Lund Corpus of Spoken English totalling some 1.5 million

³²¹ John Sinclair, 'Automatic Analysis of Corpora', pp. 383-385; and John Sinclair, *Corpus, Concordance, Collocation* (Oxford: Oxford University, 1990), pp. 3, 41, 49, 53, 60, 65, 71, 84, 102-113.

words. The approach enables empirically motivated, broad comparisons of language variation (rather than narrow, single-feature analyses). It provides more objective, language-internal perspectives on variation (rather than artificial, culturally-motivated notions about genre). An earlier, non-quantitative account of linguistic variation was attempted by Leech and Short. In the tradition of Firth, they link meaningfulness to the speaker's choice of expression from a repertoire of options. Style is understood to be ultimately demonstrable in quantitative terms, though invariably reduced to a handful of features. The association of style with the structure or arrangement of linguistic features is traced to Ormann and to Hockett, for whom the meaningfulness of stylistic variation is distinguished from substantive or propositional content. Attaching value to surface variation is attributed to Bloch, who defines style in terms of the distribution of linguistic features in relation to their frequency in the language as whole. Leech and Short discount such a 'fallacy of objectivity' on the basis of the technical problem of determining such norms (p. 46). Drawing on the psychological notion of prominence, which Halliday assumes can be expressed statistically, they bring together three aspects of the notion of saliency: foregrounding, prominence and deviance. These concepts are linked to expectancy but not convincingly distinguished.³²²

Concerned that empirical analysis does not always confirm our prior intuitive expectations, Biber uses quantitative methodology to establish sets of cooccurring linguistic features prior to their interpretation in functional terms. Consistent cooccurrence patterns among features are analyzed through multivariate statistical techniques to identify functional dimensions of linguistic variation (involved versus informational production; narrative versus non-narrative concerns; explicit versus situation-dependent reference; overt persuasion; and abstract versus non-abstract style). The relationship between features

³²² Geoffrey Leech and Michael H. Short, *Style in Fiction: A Linguistic Introduction to English Fictional Prose* (London: Longman, 1981), pp. 3, 12, 20, 24-25, 33, 38, 42-55; R. Ohmann, 'General Literary Style', *Word*, 20 (1964), 423-439 reprinted in *Linguistics and Literary Style*, ed. by D. C. Freeman (New York: Holt, Rinehart and Wilson, 1964), pp. 241-254 (p. 423); C. F. Hockett, *A Course in Modern Linguistics* (New York: Macmillan, 1958), p. 556; B. Bloch, 'Linguistic Structure and Linguistic Analysis', in *Report of the Fourth Annual Round Table Meeting on Linguistics and Language Study*, ed. by A. A. Hill (Washington DC: Georgetown University, 1953), pp. 40-44; and M. A. K. Halliday, 'Linguistic Function and Literary Style: An Inquiry into William Golding's *The Inheritors*', in *Literary Style: A Symposium* (Oxford: Oxford University: 1971), pp. 330-365 (pp. 340, 343).

and functions is complex: a single feature may have many functions, and each function is served by many features. Since each dimension comprises an independent group of cooccurring linguistic features, it becomes possible to quantitatively establish multi-dimensional comparisons between texts as well as establish language-specific norms. Systematic stylistic variation is thus multi-dimensional, scalar (a matter of degree), and open to empirical measurement. Factor scores measure the standard deviation (the spread of frequency values of a feature). They reflect the magnitude of a frequency with respect to the range of possible variation. By giving each linguistic feature a weight in terms of the range of its variation, factor scores effectively provides a measure of markedness of linguistic features against norms across genre, text-type or the language system at large.³²³ Meaningfulness, according to the substantial corpus-based research of both Sinclair and Biber, is associated with configurations of linguistic features. The infinite linguistic variation which results from the contextualization of utterances, is shown to be amenable to statistical analysis.

Other quantitative research into mono-lingual corpus analysis describes applications for the automatic acquisition of various types of sense-structure relations, including collocations, subcategorization frames and selectional restrictions.³²⁴ Smadja automatically extracts meaningful collocations as well as word class labels of the items involved. Statistical distributions of collocates of a given term are stored along with their position

³²³ Douglas Biber, 'Using Computer-Based Text Corpora to Analyze the Referential Strategies of Spoken and Written Texts', in *Directions in Corpus Linguistics...*, pp. 213-252 (pp. 213-215, 243, 248); Douglas Biber, *Variation Across Speech and Writing* (Cambridge: Cambridge University, 1988), pp. 9-24, 33, 49-56, 61-66, 70, 93-97, 104-108, 170, 180, 200, 207-207; McEnery and Wilson, pp. 66-84; and Kenneth Church and others, 'Using Statistics in Lexical Analysis', in *Lexical Acquisition...*, pp. 115-164.

³²⁴ Abney, pp. 17-18; Frank Smadja, 'Macrocoding the Lexicon with Co-occurrence Knowledge', in *Lexical Acquisition...*, pp. 165-189 (pp. 165, 172-174, 179, 181); Frank Smadja, 'Retrieving Collocations from Text: Xtract', *Computational Linguistics*, 19 (1993), pp. 143-177 (pp. 143-144, 162, 165, 174); Frank Smadja, 'How to Compile a Bilingual Collocational Lexicon Automatically', in *Proceedings of the AAAI Workshop on Statistically-Based NLP Techniques* (San Jose, CA: [n.p.], 1992), [n.pp], cited in Smadja, 'Retrieving Collocations...', p. 174; Christopher Manning, 'Automatic Acquisition of a Large Subcategorization Dictionary from Corpora', *Proceedings of the 31st Annual Meeting of the Association for Computational Linguistics, Ohio State University, 22-26 June 1993*, (Morristown, NJ: Association for Computational Linguistics, 1993), pp. 235-242 (pp. 235-238, 242); Michael R. Brent, 'Automatic Acquisition of Subcategorization Frames from Untagged Text', *Proceedings of the 29th Annual Meeting of the Association for Computational Linguistics, University of California, Berkeley, 18-21 June 1991*, (Morristown, NJ: Association for Computational Linguistics, 1991), pp. 209-214; and Philip Stuart Resnik, 'Selection and Information: A Class-Based Approach to Lexical Relationships' (unpublished doctoral dissertation, University of Pennsylvania, 1993), pp. iv, 1-4, 34-35, 48-54, 74-75.

relative to the term. Distribution peaks are selected, and the properties of a recurring syntactic structure into which the collocation relation repeatedly occurs is also retrieved. Smadja describes filtering methods applied to a 10 million word corpus of stock market news reports for the purpose of automatically extracting collocations. The program retrieved some 15,000 high frequency collocations, illustrated in italics in (6):

- (6) *Wall Street faced a major test with stock traders returning to action for the first time since last week's epic sell off and investors awaited signs of life from the 5-year-old bull market.*³²⁵

Noting that the purely statistical techniques can be applied to any language, Smadja also warns of the complexity of problems associated with a multi-lingual environment. He provides an algorithm for translating collocations. Manning and Brent report on filtering techniques for learning subcategorization frames (argument slots licensed by a given verb) from unrestricted text. Manning's strategy is to collect as much noisy information as possible from the corpus and then use statistical filtering to weed out false cues. The potential for determining subcategorization frames in languages other than English (which use any combination of word order, case marking and head agreement markers) is said to be straightforward. Resnik provides a probabilistic account of selectional constraints (limitations on the applicability of predicates to arguments, like *the number two is blue*). He operates under the premise that stochastic and cognitive views of language are not fundamentally incompatible. Rather than extracting a catalogue of selectional patterns from corpora, he redefines the notion of constraints in terms of preference—which suggests a probabilistic treatment. Lexical knowledge is represented inferentially in terms of plausible entailments (as opposed to the representation of definitional features). This notion of shared meaning applies when two words are mutually substitutable without changing the inferences licensed in a representative context. Inferences are not made explicit in the knowledge representation. Selectional behaviour is modelled on distributional effects to do with the strength of a predicate's selection for an argument and the amount of information it carries about that argument.

³²⁵ Smadja, 'Retrieving Collocations...', p. 162.

This brief overview of corpus linguistic approaches to meaningfulness in English (expressed in terms of sense-structure relations) hints at an enormous potential which stochastic methodology holds for applications in the context of translation. Leech notes that very large English corpora have only recently become available, while a number of researchers observe that corpus linguistics in languages other than English is truly nascent. Baker identifies three broad applications of corpora to translation: the parallel corpus, the multi-lingual corpus, and the comparable corpus. A parallel corpus consists of original texts together with their translations. Although the existence of parallel texts goes back to antiquity (viz. the Rosetta Stone), machine-readable parallel corpora necessitate alignment (explicit linking between elements which are mutual translations, at the level of words or sentences). The multi-lingual corpus refers to sets of original texts in different languages compiled on the basis of similar design criteria. Its purpose is to inform contrastive analysis along the lines described by Biber and other researchers (above). Such analysis provides information about the normative behaviour of expressions in different languages and would be a valuable indicator of language-specific constraints such as markedness. The comparable corpus, favoured by Baker, refers to a collection of original texts and translated texts in the same language. Its purpose is to reveal the kinds of patterning specific to translated texts in comparison to the wider domain of non-translated texts within a language. Such research assumes a polysystems orientation (Section 1.2.1) and reflects a focus on constraints on reception. It aims to make generalizations about universal features of translated texts (as opposed to non-translated texts), like changes in the degree of explicitness and information density. What claims to be the largest commercially available Arabic corpus consists of a CD containing one million words of *Al-Hayat* newspaper.³²⁶

³²⁶ McEnery and Wilson, pp. 57-60, 128; Leech, 'Corpora and Theories of Linguistic Performance', p. 111; Dorothy Kenny, 'Corpora in Translation Studies', in *Routledge Encyclopedia of Translation Studies*, pp. 50-53; Mona Baker, 'Corpora in Translation Studies: An Overview and Some Suggestions for Future Research', *Target*, 7 (1995), 223-243 (pp. 223-225, 228, 232-238); Mona Baker, 'Corpus Linguistics and Translation Studies: Implications and Applications', in *Text and Technology...*, pp. 233-250; and Imad Bachir, p.c. 22 July, 1997.

The notion of transfer, though not explicitly countenanced in empiricist literature, is brought out to some extent in research on parallel corpus alignment. The main applications of quantitative methodologies in machine translation are in the areas of preference-based parsing and the automatic acquisition of lexical knowledge (outlined above). Bilingual concordances, for example, render useful tools for the human translator which would curtail some of the pitfalls of incomplete collocational knowledge (as when, say, *magnetic fields* is translated as *magnetic meadows*). Various statistical methods achieve corpus alignment at the level of character, word or sentence. Gale and Church report statistical models which operate at the character level and have language-specific applications likely to be useful for most pairs of European languages. Kay and Röscheisen, and Chen exploit partial alignments of proper names and cognates at the word level to induce alignments at the sentence level. Lexical information is used to increase accuracy, at a cost to processing time. Kay and Röscheisen also propose approaches that would accommodate the nonconcatenative process of Semitic morphology. Brown and others approach the relation between expressions and grammar in a way that is consistent with Sinclair's sense-structure paradigm, insofar as the underlying meanings of expressions remain implicit in the processing of text:

When we look at a passage, we cannot see the concepts directly but only the words that they leave behind. To show that these words are related to a concept but are not quite the whole story, we say that they form a *cept*. Some of the words in a passage may participate in more than one cept, while others may participate in none, serving only as a sort of syntactic glue to bind the whole together. (pp. 266-268)

Using a training corpus of about 100 million words of the English text of Canadian Hansards together with the corresponding French text, Brown and others have described an algorithm which can reliably extract English and French sentences that are mutual translations. No use is made of the lexical details of the corpus. The sole linguistic input is a set of rules for determining sentence boundaries in the two languages. The probabilistic framework claims that word-by-word alignments are inherent in the corpus itself, provided only that the corpus be large enough. Cooccurrence data and distributional probabilities derived from the corpus specify the parameters of two probability models: a language model, and a translation model. The language model requires large amounts of

monolingual data. It suggests an order in which to place expressions and it involves computing the probability of a single word given all the words that precede it in a sentence (based on *n-gram* probabilities, or sequences of *n* words). The translation model requires a large bilingual aligned corpus. It suggests which words in the original text might correspond to the words observed in translation. The number of words in translation corresponding to a word in the original is called its fertility. The position of a word in translation relative to its position in the original is called its distortion. Word-for-word alignments are created using purely statistical techniques. A key criticism is that their work deals only with English and French. Given the dearth of large aligned corpora, questions about the viability of their application to structurally distant language pairs (such as Arabic and English) remain unanswered.³²⁷

Returning to this section's opening statement that the essential difference between human and machine translation lies in the consciousness of the translating agent, Sinclair offers an interesting slant on the future of empiricist approaches. The infinity of contextualizations and the recursive nature of phrase structure rules means that language is non-enumerable. This raises the issue of corpus representativeness, given that corpora are by their very nature finite and hence incomplete. As McEnery and Wilson note, a corpus 'could never be the sole explicandum of natural language' (p. 8). But Sinclair draws attention to the challenge of automatic retrieval software capable of extracting relevant linguistic evidence from a monitor corpus—a huge stream of language in motion; text of

³²⁷ McEnery and Wilson, pp. 127-139; Arnold and others, pp. 201-202; Somers, 'Machine Translation', p. 148; Kenneth W. Church and Robert L. Mercer, 'Introduction to the Special Issue on Computational Linguistics Using Large Corpora', *Computational Linguistics*, 19 (1993), pp. 1-24 (pp. 2, 16); William A. Gale and Kenneth W. Church, 'A Program for Aligning Sentences in Bilingual Corpora', *Computational Linguistics*, 19 (1993), pp. 75-102 (pp. 75, 77, 82, 85, 87); Kenneth Ward Church, 'Char_align: A Program for Aligning Parallel Texts at the Character Level', *Proceedings of the 31st Annual Meeting of the Association for Computational Linguistics...*, pp. 1-8 (pp. 1-4); Stanley Chen, 'Aligning Sentences in Bilingual Corpora Using Lexical Information', *Proceedings of the 31st Annual Meeting of the Association for Computational Linguistics...*, pp. 9-16 (pp. 9-11, 15); Martin Kay and Martin Röscheisen, 'Text-Translation Alignment', *Computational Linguistics*, 19 (1993), pp. 121-142 (pp. 121-123, 134, 140-141); Peter F. Brown, Jennifer C. Lai and Robert L. Mercer, 'Aligning Sentences in Parallel Corpora', *Proceedings of the 29th Annual Meeting of the Association for Computational Linguistics...*, pp. 169-176 (pp. 169-170); Peter F. Brown and others, 'A Statistical Approach to Machine Translation', *Computational Linguistics*, 16 (1990), 79-85; and Peter F. Brown, Stephen A. Della Pietra, Vincent J. Della Pietra and Robert L. Mercer, 'The Mathematics of Statistical Machine Translation: Parameter Estimation', *Computational Linguistics*, 19 (1993), 263-301 (pp. 263-268, 282, 186, 289).

no finite size which flows across a set of filters and is then discarded. Such capacity provides for the possibility of harnessing the powerful but little understood natural language feature of paraphrase. In a suggestion that calls to mind the variational approach described by Hewson and Martin (Section 1.2.1) and recent generative accounts of Pustejovsky and of Resnik (above), Sinclair describes a model of text understanding based on the glossing of lexical equivalences:³²⁸

if a person can routinely rephrase a given sentence in his or her own words and state the difference between the two sentences in a third sentence, that person will be seen as understanding the language. If a machine can perform in a similar way, the machine can reasonably be described as understanding the language. (p. 137)

Lamenting the technicalizing of human sciences and dehumanizing of meaning, Bruner voices concern over a shift in emphasis from the construction of meaning to the processing of information: the introduction of computation as the ruling metaphor, of computing as the model of the mind, and of computability as a necessary criterion of a good theoretical model.³²⁹ Interestingly though, the application of stochastic methods to translation problems has paralleled a shift in emphasis in theories of translation. Acceptance of the translator's mediating presence has brought with it a diminished concern for the meanings of expressions and with it a realization that central to the translation process is the interpretation of utterances.

2.4 Depth and Transfer

Issues pertaining to linguistic representation go to the heart of rationalist approaches to translation. In contrast to empiricist strategies (Section 2.3), rule-based approaches to machine translation presuppose some form of cognitively plausible language representation or interlingua. Noting that the postulation of a perfect, explicit representation language does not explain translation but rather presupposes it, Eco and Nergaard trace interlingua to western theologians, philosophers and scientists of the

³²⁸ Sinclair, 'Automatic Analysis of Corpora', p. 382 ; McEnery and Wilson, p. 8; Stubbs, p. 11; and Sinclair, *Corpus, Concordance, Collocation*, pp. 136-137.

³²⁹ Jerome Bruner, *Acts of Meaning* (Cambridge Mass.: Harvard University Press, 1990), pp. 1, 4, 6 quoted in Wierzbicka, *Semantics...*, pp. 6-7.

seventh century, and to theories of logic which began around the third century B.C. with the Stoics. In modern times, the transfer metaphor has prevailed in descriptions of the translation process since Weaver's metaphor for descending to 'the common base of human communication—the real but yet undiscovered universal language' (Section 1.2.1). Given that natural languages trade on a universal human capacity for communication, Weaver presumes that one-to-one correspondences exist between a translation and its original. The task of translating is envisaged as an unambiguous, mechanical process of decoding or substitution after retrieval of 'the information contained in the text' (p. 18). Such determinism is inherent in, say, Nagao's call for research into 'the rules for translating between two specific languages'. Tomita and Carbonell promote semantic invariance in translation 'above all else' (p. 72). An unambiguous meaning representation of an original text constitutes the starting point for translation in their model:

Knowledge-based machine translation is the process of applying syntactic knowledge of the source language and semantic knowledge pertinent to the source text in order to produce a canonical language-free meaning representation which may then be rendered in many different languages. (p. 633)

However, the validity of deterministic models is questioned by a number of researchers adopting rule-based approaches to translation. The Distributed Language Translation project observes the need for a translation system to make value judgements 'weighing the relative strengths of the various preferences one against another' (p. 45). This interactive translation tool provides interlingual paraphrases for the purpose of disambiguating input text or for translation problems. The fact of one-to-many correspondence is implicit in the notion of isoduity, by which the Eurotra project refers to representations which are equivalent alternatives at a given level of abstraction. The assumption of one-to-one correspondences is also rejected by Bresnan and Kaplan in lexical-functional grammar.³³⁰

³³⁰ Eco and Nergaard, 'Semiotic Approaches', pp. 220-221; Arnold and others, p. 13; Weaver, pp. 16-23; Donald Booth and William N. Locke, 'Historical Introduction', in *Machine Translation: Fourteen Essays*, ed. by William N. Locke and A Donald Booth (Cambridge Mass.: MIT, 1955), p. 1-14 (p. 1); Nagao, *Machine Translation: How Far Can It Go?*, p. 138; Masaru Tomita and J. G. Carbonell, 'CMU Project', in *Machine Translation Summit*, pp. 72-82 (p. 72); Masaru Tomita and Jamie G. Carbonell, 'Another Stride Towards Knowledge-Based Machine Translation', *Proceedings of the 12th International Conference on Computational Linguistics (COLING 86)*..., pp. 633-638 (p. 633); B. C. Papegaaïj, V. Sadler and A. P. M. Witkam, *Word Expert Semantics: An Interlingual Knowledge-Based Approach* (Dordrecht: Foris, 1986), pp. 16-23, 45; W. John Hutchins, 'Recent Developments in Machine Translation', in *New Directions in Machine Translation*..., pp. 7-64 (pp. 39-40); Doug Arnold, 'Eurotra: A European Perspective on MT', *Proceedings of*

One of the most detailed accounts of rule-based approaches to transfer is provided by Luckhardt (Appendix). He notes the distinction made by Wilss between two senses in which the term transfer is used: as a synonym for the general process of translation, and as a specific term for a partial phase in translation.³³¹ Two fundamentally varying positions are presented regarding this partial phase in which linguistic representations are subjected to transfer operations (Figure 2). While Koschmieder's model views transfer as the coordination of commonalities between interfacing languages, Weisgerber regards each language as a relatively closed system.

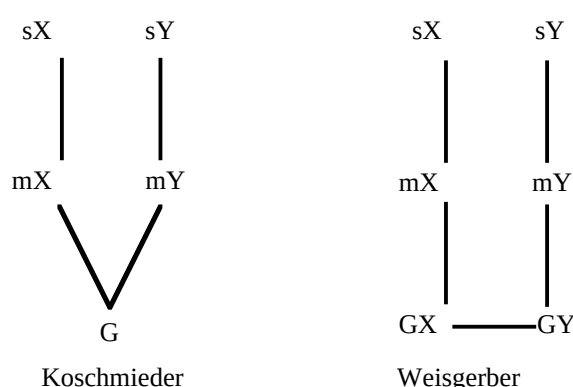


FIGURE 2 Two Transfer Models—after Koschmieder and Weisgerber (Luckhardt, p. 17)
 s = symbol; sign; expression (*Zeichen*)
 m = meaning (*Bedeutung*)
 G = universal; intended (*Gemeintes*)

Regardless of questions concerning the actual nature of universals, these two competing views (on the depth of representation and transfer) impact on the way analysis of an original text is defined. Weisgerber's model suggests analysis as an independent process of representation constrained by categories determined in accordance with the language of the original text. Koschmieder's model implies analysis involves independent categories, or is

the *IEEE*, 74 (1986), 979-992 (pp. 980-982); Steven Krauwer and Louis des Tombes, 'Transfer in a Multilingual MT System', *Proceedings of the 10th International Conference on Computational Linguistics (COLING 84)*..., pp. 464-467 (p. p. 465); Hutchins & Somers, p. 145; and Joan Bresnan and Ronald M. Kaplan, 'Introduction: Grammars as Mental Representations of Language', in *The Mental Representation of Grammatical Relations*, ed. by Joan Bresnan (London: MIT, 1982), pp. xvii-lii (pp. xxvi-xxx).

³³¹ Heinz-Dirk Luckhardt, *Der Transfer in der maschinellen Sprachübersetzung*, Sprache und Information, 18 (Tübingen: Niemeyer, 1987), pp. 17-19; Wolfram Wilss, *Übersetzungswissenschaft: Probleme und Methoden* (Stuttgart: Klett, 1977), cited in Luckhardt, p. 17; E. Koschmieder, *Beiträge zur allgemeinen Syntax* (Heidelberg: n.pub., 1965), p. 104, cited in Wilss, *Übersetzungswissenschaft*..., p. 49; and L. Weisgerber, *Vom Weltbild der deutschen Sprache* (Düsseldorf: n.pub., 1950), cited in Wilss, *Übersetzungswissenschaft*..., p. 50.

at least partially constrained by categories of the language in which the translation is generated.

Luckhardt distinguishes two processes by which transfer is accomplished (Figure 3).³³² Implicit transfer results from the total process of translation incorporating analysis and generation operations (sX to sY). Explicit transfer involves operations effective between interface structures (GX to GY).

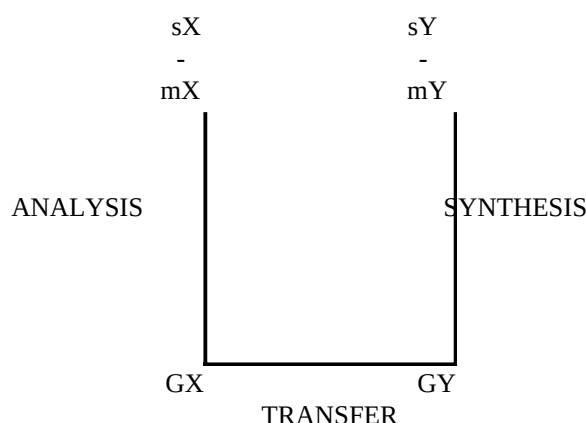


FIGURE 3 *Transfer Model (Luckhardt, p. 19)*
 s = symbol; sign; expression (*Zeichen*)
 m = meaning (*Bedeutung*)
 G = universal; intended (*Gemeintes*)

The interrelatedness of implicit and explicit transfer is modelled in Figure 4. Machine translation strategies adopted by rule-based approaches can be classified according to depth of linguistic representation. A direct strategy involves the mapping of expressions—transfer from *expression (Ta)* to *expression (Tz)*. Indirect translation systems involve transfer operations at some level of abstract representation which depends on the level of analysis attempted.

³³² Luckhardt, pp. 20, 41-44.

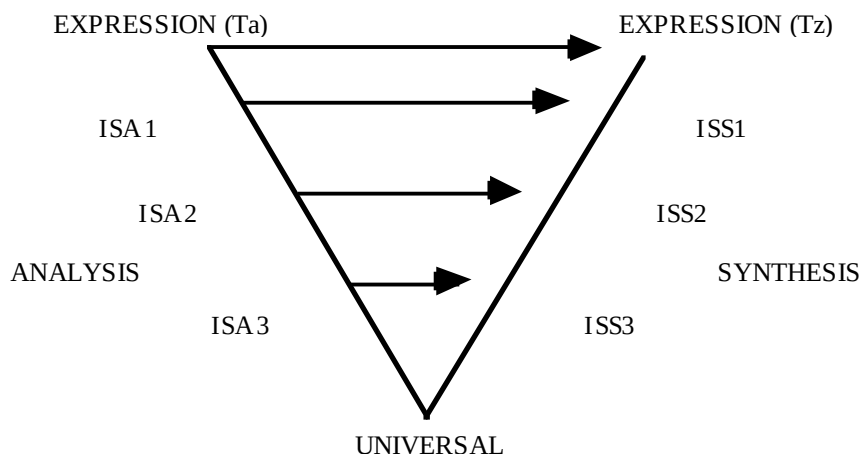


FIGURE 4 *Depth and Transfer* (Luckhardt, p. 44)—Attributed by Hutchins and Somers to Vauquois (1968)³³³

ISAn = interface structure after analysis

ISSn = interface structure before synthesis

T(a) = original text; T(z) = translation

Luckhardt makes two observations regarding the depth of abstraction.³³⁴ Figure 5 illustrates the assertion that expenditure on analysis is inversely proportional to the simplification of transfer. This means that from a certain point, further expenditure on analysis will not simplify transfer. Nagao notes that representation of higher level considerations (such as speaker attitudes) becomes particularly difficult, precisely to the degree that such implications are formalized. Nirenburg and others also concede the sheer enormity of formalizing the extralinguistic knowledge required to understand text for translation.³³⁵

³³³ Bernard Vauquois, 'A Survey of Formal Grammars and Algorithms for Recognition and Transformation in MT', IFIP Congress 1968 (Edinburgh); reprinted in *Bernard Vauquois and MT: Twenty-Five Years of MT Selected Writings*, ed. by C. Boitet (Grenoble: Association Champollion, 1988), pp. 201-213; cited in Hutchins and Somers, pp. 107, 129.

³³⁴ Luckhardt, pp. 46-49.

³³⁵ Nagao, *Machine Translation: How Far Can It Go?*, p. 108; and Nirenburg and others, *Machine Translation: A Knowledge-Based Approach*, pp. 3-5, 24-33.

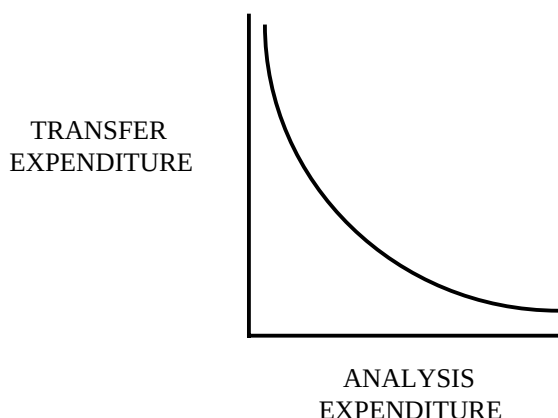


FIGURE 5 *Relationship Between Expenditure on Analysis and Transfer*
(Luckhardt, p. 46)

Figures 6 and 7 describe the economies of transfer expenditure according to typological differences between interfacing languages. Given the German and Dutch statements (7a) and (7b), the level of syntactic analysis required to represent the English statement (7c) would be redundant in translating from (7a) to (7b). Such redundancy is depicted at x in analysis and y in generation (of the German and Dutch representations in this instance).

- (7a) Peter schwimmt gerne.
- (7b) Peter zwemt graag.
- (7c) Peter likes to swim.



FIGURE 6 *Superfluous Analysis (x) and Synthesis (y) in a Multilingual System*
(Luckhardt, p. 48)

T(a) = original text; T(z) = translation

Optimal representation is visualized in Figure 7. It illustrates the assertion of an optimal outlay on analysis which relates to typological affinities discussed in connection with a multilingual system in Figure 6.

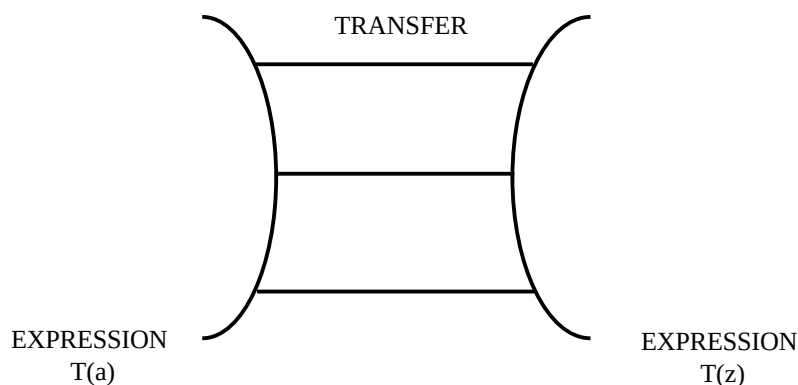


FIGURE 7 *Optimal Transfer* (Luckhardt, p. 49)
T(a) = original text; T(z) = translation

Identifying meaningfulness for the purpose of translation is brought out in Luckhardt's distinction between universal and transferable properties of text.³³⁶ Universal properties belong to a language-independent level of description. They are transferred implicitly and do not underlie differences which belong to a language pair. However, transferable properties are described as either obligatorily transferable properties or optionally transferable. Obligatorily transferable properties are transferred according to explicit rules of analysis, transfer or generation. Optionally transferable properties can be transferred explicitly or implicitly, according to the circumstances. Implicit transfer refers to indirect changes that take place during translation as a result of constraints on the receiving language, rather than on explicit contrastive analysis of the interfacing languages:

Darunter verstehen wir—im Gegensatz zu den expliziten Operationen [...]—solche Operationen, die nicht kontrastiv bedingt sind, sondern aufgrund der Grammatiken von *Einzelsprachen* ausgelöst werden, wodurch im Vergleich mit der quellsprachlichen Struktur die indirekte Änderung einer Struktur, eines Lexems oder einer Eigenschaft erreicht wird. (p. 143)³³⁷

This distinction parallels Tsujii's argument, below, that interpretation of an original text takes place according to constraints on text generation in the language of translation.

Translation strategies which adopt explicit language representation to achieve text understanding face the limiting presence of a linguistic fundamental: the distinction

³³⁶ Luckhardt, pp. 81-84, 162-171.

³³⁷ (*trans.*) 'In contrast to explicit operations, amongst these cases are those operations which are not conditioned by contrast, but are produced on the basis of the grammars of individual languages, through which the indirect change of a structure, a lexeme or a property is achieved, by comparison with the source language.'

between expression meaning and utterance interpretation (Section 1.0). The question of how much understanding of a text is required to translate it remains unresolved. The role of inferencing in understanding text, and the kinds of knowledge drawn on in the interpretation of utterances are discussed by Hutchins. He predicted a movement toward probabilistic models which would be more ‘like a human translator’ (p. 328). The translation competence of transfer-based systems rests on explicit analysis of structural differences between interfacing languages (contrastive analysis). Rule-based disambiguation tasks are of the kind illustrated in examples (8) and (9). Variant representations of sentence (8a) are possible since the phrase *with the telescope* can modify *saw* or alternatively *girl*. Such structural ambiguity is absent from (8b) due to constraints of real world knowledge.

- (8a) The man saw the girl with the telescope.
- (8b) The man saw the horse with the telescope.³³⁸

Grammatical constraints operate in example (9) to enable contrasting and unambiguous parses in which *yesterday* modifies *told* in (9a), and *tomorrow* modifies *will meet* in (9b).

- (9a) We will meet the man you told us about yesterday.
- (9b) We will meet the man you told us about tomorrow.³³⁹

Word category ambiguities are illustrated in utterances (10) and (11) from the British press. (*Foot* refers to a British politician.)

- (10) Foot heads arms body.
- (11) British left waffles on Falklands.³⁴⁰

The essential point is that linguistic representation seeks to make explicit the relationships which are implicit in text. However, there are certain deficiencies inherent in such an approach. Hutchins and Somers point out that when surface ambiguities are eliminated, synonymous sentences can have the same representation (as noted by King—Section 1.2.1). Such excessive power fails to distinguish meaning paraphrase from the more restricted notion of translation in which expressions are anchored to situations. Rationalist approaches focus on the set of well formed sentences in a language and their meaning

³³⁸ Hutchins and Somers, pp. 61, 93.

³³⁹ Hutchins and Somers, p. 93.

³⁴⁰ Hutchins and Somers, p. 86.

representations. Syntactic theory developed primarily as a description of sentence structure and does not account for the choice of specific sentence structures in context according to Hutchins. The transformation of syntactic representations describes structural relationships, not cognitive processes according to Smith. He argues that there is no convincing psychological evidence for processes that mediate between deep structure and variant surface structures. The underdetermination of expressions requires communicators to infer information about the way expressions are anchored to situations (Section 2.2), and to distinguish important relationships from incidental correlations in the process of generating implications (Section 2.1). Linguistic rule-driven approaches to translation must address problems of expressiveness and selective perception: not just how to produce grammatical sentences, but how communicators say what they want to say, and how interlocutors understand what other people say.³⁴¹

The equivalence relation (by which an original text partially constrains translation) amplifies the perspectival relativity of language. The interlingual strategy aims for a language independent representation which should be ‘entirely independent of knowledge of other languages’ according to Krauwer and des Tombe. But Sadler and Arnold warn against presuming that abstract representation of an original text and its translations will converge:

Notice also the presumption that representations will become more similar as they become more abstract, more distant from the linguistic surface. But this is by no means obviously correct. There can be no guarantee that the conceptualizations of different speakers will necessarily converge: and if they do not, then interlingual representations may make translation harder, rather than easier. (p. 679 n. 1)

Hutchins and Somers also point to the existence of unique perspectives on interpretation. They speak of transfer ambiguities to refer to the choices available during generation which are not resolvable by reference solely to the expressions used in an original.³⁴²

³⁴¹ Hutchins, *Machine Translation: Past, Present, Future*, pp. 188, 325-329; Somers, ‘Machine Translation’, p. 142; D. Arnold and others, *Machine Translation: An Introductory Guide* (Oxford: Blackwell, 1994), pp. 63-86; Hutchins and Somers, pp. 31-33, 61, 86-97; Smith, pp. 220-223, 228; and Johnson-Laird, pp. 329-331.

³⁴² Steven Krauwer and Louis des Tombe, ‘Transfer in a Multilingual MT System’, *Proceedings of the 10th International Conference on Computational Linguistics (COLING 84)*..., pp. 464-467 (p. 464); Louisa Sadler and Doug Arnold, ‘Unification and Machine Translation’, *Meta*, 37 (1992), 657-680 (p. 679 n.1); and Hutchins and Somers, pp. 99-129.

Transfer ambiguities (or translational ambiguities) arise when a single source language word can be translated by a number of different target language words or expressions, not because the source language word itself is ambiguous but because it is 'ambiguous' from the perspective of another language. (p. 99)

This parallels Tymoczko's demonstration that both formal and functional translation strategies involve subjective interpretation when disambiguating an original from the perspective of constraints on generating a translation (Section 1.2.1). Transfer ambiguity is consistent with the notion of perspectival relativity of language promoted by Barwise and Perry, according to which speakers are said to draw on communication resources from the unique situations in which they find themselves in order to pick out a desired interpretation (Section 2.2). Khurshid traces the notion of perspectival relativity in Arabic translation literature to Al-Jahiz (b. A.D. 776/هـ ١٦٠) الجاحظ who observed the interrelationship between constraints on both the language of a translation and that of its original.³⁴³

ومتي وجدناه أيضا قد تكلم [المترجمان] بلسانين ، علمنا أنه قد أدخل الضيم عليهما ، لأن كل واحدة من اللغتين تجذب الأخرى ، تتأخذ منها ، وتعترض عليها .

Khurshid describes literary translation into Arabic as 'tasting and absorbing the spirit of the foreign writer and subjugating the foreign text to the requirements of the Arabic style' (p. 49), much like the dynamic equivalence strategy promoted by the Science of Translation (Section 1.2.1).³⁴⁴

Tsujii argues that an original text is understood from the perspective of constraints on translation. Faced with significant divergence in linguistic constraints (in systems translating between Japanese and European languages), Tsujii realizes that the extra-linguistic knowledge and the extent of structural change required for translation is highly dependent on the language pair. The way events in the real world are captured by the use of expressions is language-specific. Nagao and Tsujii believe it is impossible to establish a set of lexical items or language-independent conceptual primitives because of the highly conventionalized way in which expressions combine. (This claim predates corpus-based approaches to lexical acquisition—Section 2.3.) Nagao and others illustrate the

³⁴³ (trans.) 'When we find [the translator] speaking in two languages, we know he introduces harm because each of the two languages draws out the other, takes from it and obstructs it.'

³⁴⁴ الترجمة الأدبية [...] تقوم على التذوق وتشريب المترجم لروح الكاتب الأجنبي وتطويع النص الأجنبي لمقتضيات الأسلوب العربي البليغ الرصين. (خورشيد ، ص ٤٩)

significance of specific language pairs by comparing selection restrictions in English and Japanese in (12) and (13). In contrast to the unitary expression *wear*, four Japanese verbs *kira*, *haku*, *kakeru* and *suru* coselect referents *suit*, *shoes*, *spectacles* and *wristwatch* respectively. Conversely, the Japanese expression *nomu* coselects referents requiring variant English expressions *smoke*, *take* and *drink*:

(12)	WEAR a suit	↔	Suutsu-wo KIRU
	WEAR shoes	↔	Kutsu-wo HAKU
	WEAR spectacles	↔	Megane-wo KAKERU
	WEAR a wristwatch	↔	Udedokei-wo SURU
(13)	Tabako-wo NOMU	↔	SMOKE a cigarette
	Kusuri-wo NOMU	↔	TAKE medicine
	Mizu-wo NOMU	↔	DRINK water

Tsujii describes as naive the view that abstract representations of an original and translation converge in an interlingua, simply because it is misleading to suggest that each level in the hierarchy of representations replaces a shallower level and contains all aspects of the information conveyed at the surface level of text (Figure 4). Understanding text for the purpose of translation is acknowledged as a notion that is only vaguely defined and understood. Meaning representation (as it has been modelled in conventional natural language understanding frameworks), informs understanding systems on the basis of specific tasks. Such processing involves information extraction rather than information preserving. Understanding takes place only from a certain point of view, and processing only preserves information relevant to specific processing tasks. According to rule-based models, understanding is taken to be a process of relating texts to cognitively plausible, pre-existing knowledge systems. However, aside from questions surrounding the validity of modelling how linguistic data is stored in the brain or linked to reality or matched cross-linguistically, it is argued by some that understanding communication involves inferencing processes linked to described situations and situations of utterance (Section 2.2). Since constraints on surface expression differ from one language to another, it is attunement to constraints on expression in the receiving language (rather than the description of input sentences) which seems—to some extent—to guide interpretation of an original text.³⁴⁵

³⁴⁵ Jun-ichi Tsujii, 'Future Directions of Machine Translation', *Proceedings of the 12th International Conference on Computational Linguistics (COLING 86)*..., pp. 655-668 (pp. 655-662); Makoto Nagao, Jun-ichi Tsujii and Jun-ichi Nakamura, 'The Japanese Government Project for Machine Translation',

The view that an original text is interpreted relative to constraints on translation suggests the translator's task involves attunement to the communication resources available in the interfacing languages. This contrasts with rule-based approaches which tend to view translation as the transfer of meanings. Hutchins and Somers have suggested that stylistic constraints on generating a translation are independent of the choices available during an original communication:

that whatever the criteria for making the choices [during generation] are, the corresponding choices in the German source text are more or less irrelevant. (p. 143)

However, the Translation Salience model argues that coordinating communication resources involves an awareness of meaningfulness in the original text, which is informed by the postulate of markedness, and that such coordination is constrained by the postulates of implicitness and localness (Section 2.6). Presuming human communication to be some form of universally rational behaviour which is anchored in situations, uniformities in the translation process are construed as information about psychological states and information about the world—that is the states of mind of speakers and the situations described during communication. As argued by Brown and Levinson, and Grice, such inferencing capacities can never be reduced to a set of conventions or rules (Section 2.1).

The significance of the concept transfer to translation (in particular to the equivalence relation which holds between an original and a translation), can be demonstrated etymologically. The verb *transfer* was adopted into 14th century English from French *transfère* or its Latin source *transferre* formed on TRANS- + *ferre* 'to bear, carry, bring [from one place, person etc. to another]' (p. 396). The verb *translate* is probably an adaptation of the past participle of *transferre*, namely *translat-us*. The past participle soon became *translat-ed*, and the verb stem *translate* (based on the suffix -ATE). This etymological link (to the past participle of *transferre*) suggests the chief current sense of

Computational Linguistics, 11 (1985), 91-110 (p. 96); Makoto Nagao and Jun-ichi Tsujii, 'The Transfer Phase of the Mu Machine Translation System', *Proceedings of the 12th International Conference on Computational Linguistics (COLING 86)*..., pp. 97-103 (pp. 97-100); Hutchins and Somers, pp. 99, 118, 120, 123; Rupp, p. 311; and W. Wilss, *The Science of Translation* (Tübingen: Narr, 1982), p. 218, cited in Emery, 'ATN-based Model of Human Translation...', p.152.

translate, ‘to turn from one language [...] into another language retaining the sense’ (p. 409), has its roots in the notion of that which has been transferred.³⁴⁶ (This is consistent with modern views of text as evidence of a communication transaction, and of translation equivalence as a relation between a translation and some prior, original communication event—Section 1.2.1). The following section addresses a third approach to transfer, by which the expressions used in translation are compared with those used in an original text.

2.5 Contrastive Analysis: Arabic and English

Contrastive analysis involves making explicit the differences between expression in two or more languages. James distinguishes texts situated in a communicative context from the abstract, formal system of language. A language system is viewed as a self-contained apparatus for producing well-formed sentences. But contrastive analysis involves more than the comparison of language-specific calculus. Citing Kaplan’s study of divergence in the rhetorical conventions of English and Arabic argumentation, James links the process of interpreting implications generated during communication to the existence of cultural assumptions shared by interlocutors. Inferences linked to situational parameters inform interpretation. Translation equivalence is construed as a relation between expressions. James rejects the views of theorists such as Kreszowski and Ivir who construe contrastive analysis as the correspondence of abstract representations. Seleskovitch also rejects the assumption that equivalents exist outside of any communication situation. She views equivalence as a relation established after the fact of translation. Sajavaara also highlights the importance of communication situation to the contrastive analysis framework.³⁴⁷

³⁴⁶ OXFORD ENGLISH DICTIONARY, prep. by J. A. Simpson and E. S. C. Weiner, 2nd edn (Oxford: Clarendon, 1989), XVIII, 396-397, 409.

³⁴⁷ Carl James, *Contrastive Analysis* (Harlow: Longman, 1980), pp. 35, 98-103, 109-129, 175-178; Tomasz P. Krzeszowski, ‘Equivalence, Congruence and Deep Structure’, in *Papers in Contrastive Linguistics*, ed. by Gerhard Nickel (Cambridge: Cambridge University, 1971), pp. 37-48; R. B. Kaplan, *The Anatomy of Rhetoric: Prolegomena to a Functional Theory of Rhetoric* (Philadelphia: Centre for Curriculum Development, 1972), cited in James, *Contrastive Analysis*, p. 121; Vladimir Ivir, ‘The Communicative Model of Translation in Relation to Contrastive Analysis’, in *Kontrastive Linguistik und Übersetzungswissenschaft: Papers from an International Colloquium, Trier/Saarbrücken, 25-30 September 1978*, ed. by Wolfgang Kühlwein, Gisela Thome and Wolfram Wilss (Munich: Fink, 1981), pp. 209-218; Danica Seleskovitch, ‘Foreword’, in Delisle, pp. vii-ix (p. viii); and Kari Sajavaara, ‘Expanding the Contrastive Analysis Framework’, in *Kontrastive Linguistik...*, pp. 53-63.

Earlier theorists Lado and Di Pietro drew attention to the perspectival relativity involved in interlingual communication. Lado assumed that individuals transfer linguistic and cultural constraints when engaged in second language communication. Di Pietro distinguished between generalized models (which tend to reinforce the investigator's assertion of some universal structure underlying languages), and autonomous models (which focus on specific information about particular languages). He describes transfer as 'the process of interpreting the grammar of one language in terms of another' (p. 6). Stylistic choices are determined by individual preferences and by language-specific constraints linked to communication situations: 'the set of choices each speaker makes in employing the rules made available to him by the language he is speaking' (pp. 47-48). In addition to the generative power of language-specific rules, Di Pietro argues that the process of interpreting expressions is responsive to the communicative needs of the speaker.³⁴⁸

Purporting some extralingual reality (like communicative function) as an invariant in inter-lingual communication brings with it the realization that equivalence is approximate rather than absolute—and hence the notion of compensation. Like Luckhardt (Section 2.4), Pinchuck distinguishes between the transfer of obligatory and optional features. Obligatory transfer operations are those which must be made in compliance with constraints on expression in the receiving language. Optional transfer presupposes choice in the receiving language, and is bound up in the communication situation. Attunement to situational constraints is brought out in the notion of anisomorphism. This refers to language-specific divergences in the way concepts and expressions are associated. Bennett and others illustrate with the expression *boyhood* which coincides with French *état de garçon* or *jeunesse*; the latter equivalent characterized by underspecified gender restriction.³⁴⁹

³⁴⁸ Robert J. Di Pietro, *Language Structures in Contrast*, rev. edn (Rowley, MA: Newbury House, 1978), pp. 2, 6, 17, 47-48, 112; and Robert Lado, *Linguistics Across Cultures: Applied Linguistics for Language Teachers* (Ann Arbor: University of Michigan, 1957), p. 2.

³⁴⁹ Günter Weise, 'Contrastive Studies and the Problem of Equivalence in Translation', *Papers and Studies in Contrastive Linguistics*, 22 (1988), 187-194; Isadore Pinchuck, *Scientific and Technical Translation* (London: Deutsch, 1977), pp. 190-192; and Paul Bennett and others, *Multilingual Aspects of Information Technology* (Hampshire: Aldershot, 1986), pp. 23-25.

In his work on translator competence, Campbell moves away from contrastive analysis as a tool for evaluating a translator's disposition and proficiency. He argues that judgements about the validity of a given transfer operation are subjective, particularly as the level of linguistic analysis increases in scope. In contrast to Seleskovitch's view that equivalence is established after the fact of translation, Toury rejects the explanatory power of 'retrospective studies', which compare a translation with its original (p. 182). Such comparisons are non-repeatable and impossible to validate according to Toury.³⁵⁰

Comparing the expressions used in translations with those used in original texts in order to elucidate the translation equivalence relation has led to a number of transfer typologies. James argues that contrastive analysis should be concerned with relationships or equations between language systems. He identifies two types of interlingual asymmetry: the one-to-many relationship, and the zero-to-something relationship. Pinchuck describes a range of translation procedures which involve adding, subtracting or adapting elements according to constraints on text production in the receiving language. Hatim and Mason also present various transfer typologies. Types of compensation and degrees of correspondence are linked to the translator's attunement to variation (markedness). The most detailed typology of equivalents established after the fact of translation is provided in Malone's trajectory model. While conceding that the business of translating cannot be reduced, his trajectories constitute an informal analytical tool whereby features of an original and translation text pair can be partially resolved into elementary translation patterns. The framework develops a variety of translation techniques and procedures, and also deals with a range of indeterminate translation situations. Trajectories are metaphors modelled on the physical sciences with labels such as equation and substitution, divergence and convergence, amplification and reduction, diffusion and condensation, and reordering. Configurations of features are compared across the nexus of translation with the purpose of determining patterned sets. Diffusion, for example, is illustrated with the translation of Arabic *ﻻ* (lit.) *belongs to him* into English as *he or she has* (ref. fragment (32) in Section

³⁵⁰ Stuart J. Campbell, 'Towards a Model of Translation Competence', *Meta*, 36 (1991), 329-343; Campbell, *Translation into the Second Language*, p. 15; and Toury, *Descriptive Translation Studies...*, pp. 182-185.

2.6.1 below). While Campbell seems to dismiss Malone's work for drawing on samples 'to illustrate a predetermined theoretical point' (p. 19), the framework parallels Biber's quantification of stylistic variation in which dimensions are determined across a spectrum of cooccurring linguistic features rather than by single feature analysis (Section 2.3). Malone suggests that multiple trajectory-level analysis of text may provide similarity profiles for specific language pairs, particularly in relation to the genetic-typological proximity of the interfacing languages.³⁵¹

Contrastive analysis results in what Quine and other theorists call regulative maxims or analytical hypotheses—bodies of explicitly articulated and publicly available theories instantiated as translation manuals, dictionaries, grammars and the like, which can help to establish the appropriateness or otherwise of a translation (Section 1.2.2). The literature on Arabic-English contrastive analysis provides analyses of texts situated in a communicative context as well as more simplistic comparisons of unsituated expressions.

In their unsituated comparison of Arabic and English greetings, El-Yasin and Salih observe a larger range of greetings in Arabic than English. Based on the non-secular implications of many Arabic greetings, they suggest functionally appropriate translation strategies at the expense of semantic content. Hamdallah and Tushyeh classify and compare the use of prepositions in Arabic and English. Prescriptive accounts of meanings typically associated with verb forms are provided by Kharma and Hassan without

³⁵¹ Carl James, 'Directionality in Contrastive Analysis', in *Kontrastive Linguistik...*, pp. 127-134 (pp. 130, 133); Reinhard R. K. Hartmann, 'Translation Equivalence: A Model of Lexical Approximation and Its Relevance to the Terminological Dictionary', in *Translators and Their Position in Society: Proceedings of the Xth World Congress of FIT, Vienna, 1984*, ed. by Hildegund Bühler (Vienna: Braumüller, 1984), pp. 286-290; Pinchuck, pp. 188-204; Hatim and Mason, *Translation and Translating*, p. 70; S. Hervey and I. Higgins, *Thinking Translation. A Course in Translation Method: French-English* (London: Routledge, 1992), cited in Hatim and Mason, *Translator as Communicator*, p. 115; K. Harvey, 'A Descriptive Framework for Compensation', *The Translator*, 1 (1995), 65-86, cited in Hatim and Mason, *Translator as Communicator*, p. 115; Campbell, *Translation into the Second Language*, p. 19; Joseph L. Malone, *The Science of Linguistics in the Art of Translation: Some Tools from Linguistics for the Analysis and Practice of Translation* (Albany: State University of New York, 1988), pp. 2, 9, 15-70, 74, 81-82 n. 2, 113, 119, 209; Joseph L. Malone, 'Trajectories' (unpublished ms., 1981); Joseph L. Malone, 'False Friendship in International Language Planning', in *Language Planning at the International Level: Report of the Third Annual Conference of the Center for Research and Documentation on World Language Problems, New York December 14, 1984*, ed. by Humphrey Tonkin and Karen Johnson-Weiner (New York: [n.pub.], 1985), pp. 17-26; Joseph L. Malone, 'Trajectory Analysis: Five Cases in Point', *Babel*, 32 (1986), 13-26; and Joseph L. Malone, 'Language Polysemy and Problems of Translation', *Babel*, 25 (1979), 207-209.

reference to naturally occurring data. Such studies identify obligatory, optional and unavailable categories in the languages under comparison. But they fail to appreciate the expressiveness of language. As communication resources, expressions can be utilized to implicate interpretations according to an infinite number of communication situations in which speakers may find themselves.³⁵²

Numerous studies use corpus methodology to contextualize and quantify the use of expressions. Aziz contrasts the use of referring expressions in Arabic and English. He categorizes reference on the basis of explicitness: greater explicitness is associated with unambiguous, open-class words (which refer directly to entities); and less explicit are PRO-forms such as pronouns (which refer indirectly via other expressions in text). Scales of explicitness for various types of referring expressions are presented (from proper nouns to pronominal ellipsis). The choice of a particular referring expression (from among equally grammatical variants) is said to be rhetorically motivated. Divergence in the degree of explicitness in Arabic-English translation pairs is understood to characterize language-specific constraints on text production. Comparison of distributional frequencies in a Mahfuz novel and English translation enables Aziz to make generalizations about tendencies in the use of various types of referring expression. He concludes, for example, that English reveals a marked tendency toward reference with proper nouns, which are said to be more explicit, compared to the use in Arabic of less explicit pronouns and superordinate nouns (such as الرجل *the man*, الشاب *the young man*, and المرأة *the woman*). The proper noun *Idris* in English translation takes the place of an implicit subject pronoun in fragment (14). Similarly, the proper noun *Shafey* is used in place of an Arabic kinship term (الاب *the father*) in fragment (15). Overall, the English text provides more instances of

³⁵² Mohammed K. El-Yasin and Mahmud Husein Salih, 'The Translatability of Arabic Greetings into English', *Babel*, 41 (1995), 140-148; Rami Hamdallah and Hanna Tushyeh, 'A Contrastive Analysis of Selected English and Arabic Prepositions with Pedagogical Implications', *Papers and Studies in Contrastive Linguistics*, 28 (1993), 181-190; Nayef N. Kharma, 'The Verb Phrase Translation Problems: English-Arabic', *Nouvelles de la Federation Internationale des Traducteurs - FIT Newsletter*, n.s. 10 (1991), 281-344; and Hassan M. Hassan, 'A Contrastive Study of Tense and Aspect in English and Arabic with Special Reference to Translation' (unpublished doctoral thesis, University of Bath, 1990).

explicit referring expressions, while the Arabic text shows a greater range of explicit referring patterns.³⁵³

وملاً جيبه بالخيار
and-filled-he pockets-his with-cucumbers

(14) Idris filled his pockets with cucumbers.³⁵⁴

وتسأل الاب
and-asked-he the-father(NOM)

(15) Shafey asked [...]³⁵⁵

A number of contrastive studies compare the use of passives in Arabic and English. El-Sheikh notes that Arabic generally favours the use of active over passive constructions in comparison to English. Common ground between the two languages is found in the use of passive constructions to promote agentless expression. In contrast, Arabic (unlike English) prohibits mention of an agent with passives, while English does not admit passivization of intransitives (unlike Arabic). This suggests the need for a paraphrasing strategy to maintain impersonal constructions in an English translation of intransitive passives. Active and passive intransitive structures are contrasted in (16), and a paraphrasing strategy is illustrated in (17):

خرج الرجل في المساء
exited-he the-man(NOM) in the-evening

(16a) The man went out in the evening.³⁵⁶

خُرِجَ في المساء
was-exited(PASS) in the-evening

(16b) *It was gone out in the evening.³⁵⁷

³⁵³ Yowell Y. Aziz, 'Explicit and Implicit Reference in Arabic-English Translation', *Babel*, 39 (1993), 129-150.

³⁵⁴ Aziz, p. 137 from ص ٥٨ ، «أولاد حارتنا» ، (بيروت: ١٩٨٦) ،
N. Mahfouz, *Children of Gebelawi*, trans. by Philip Stewart (London: Heinemann, 1981), p.36.

³⁵⁵ Aziz, p. 137 from ص ٢٢٧ ، «أولاد حارتنا» ،
Children of Gebelawi, trans. by Stewart, p. 146.

³⁵⁶ El-Sheikh, p. 161.

³⁵⁷ El-Sheikh, p. 161.

يُذهب الى المدرسة كل صباح
is-gone(PASS) to the-school every the-morning

(17) One goes to school every morning.³⁵⁸

El-Sheikh details a number of contrasting language-specific syntactic constraints on passivization, but the significance of this communication resource to the structuring of information during text development is not elaborated. El-Yasin brings out the constraining force of information structure on the use of passives in Arabic and English as well as the relative markedness of passivization in the two languages. Farghal and Shorafat surveyed translators to elicit a number of strategies for maintaining information structure during transfer. Based on a limited parallel corpus, Khafaji suggests conditioning factors which favour a given choice over possible alternatives in translating English passives into Arabic. Rosenhouse employs corpus methodology to relate passivization to text type. Mahmoud identifies certain indeterminacies or lack of correspondence in Arabic for English middle constructions such as *the car drives well*.³⁵⁹

Further studies focus on the contrastive analysis of more subtle communication resources involving choice of lexis. Salih and Athamneh look at the function of ellipsis in a novel by Tayeb Salih and its translation by Johnson-Davies. Among 95 instances, they identify a dozen or so contextual inconsistencies in translation. Such inconsistencies relate to mismatches in characterization, narrative technique, motivated ambiguity, suspense, mystery and other effects and attitudes implicated in their reading of the original. In a monolingual context, Shunnaq identifies skewed readings which reflect various perspectives on a reported event. His data are drawn from a number of Arabic radio news bulletins dealing with the Al-Amiriyyah Shelter bombing in Baghdad on 13 February

³⁵⁸ El-Sheikh, p. 163.

³⁵⁹ El-Sheikh, pp. 142-215; Mohammed K. El-Yasin, 'The Passive Voice: A Problem for the English-Arabic Translator', *Babel*, 42 (1996), 18-26; Abdelgawad T. Mahmoud, 'A Contrastive Study of Middle and Unaccusative Constructions in Arabic and English', in *Perspectives in Arabic Linguistics III: Papers from the Third Annual Symposium on Arabic Linguistics*, ed. by Bernard Comrie and Mushira Eid, Amsterdam Studies in the Theory and History of Linguistic Science Series IV: Current Issues in Linguistic Theory, 80 (Amsterdam: Benjamins, 1991), pp. 119-134; Rasoul Khafaji, 'Arabic Translation Alternatives for the Passive in English', *Papers and Studies in Contrastive Linguistics*, 31 (1996), 19-37; Judith Rosenhouse, 'Occurrence of the Passive in Different Types of Text in English, Hebrew and Arabic', *Babel*, 34 (1988), 90-103; and Mohammed Farghal and Mohammed O. Al-Shorafat, 'The Translation of English Passives into Arabic: An Empirical Perspective', *Target*, 8 (1996), 97-118.

1991. Variations in framing techniques (by which sources are reported directly or indirectly) are shown to reflect imposition of the mediator's viewpoint. Such mediation also hinges on highly marked collocations such as جريمة نكراء *abominable crime* and خطأ مأساوي *tragic mistake* to describe the same event. Four expressions refer to the same entity: الملجأ المدني *civilian shelter*, المبنى *building*, المنشآت العسكرية *one of the military installations*, and مركز للاتصال والضبط *centre for communication and control*. This range illustrates how choice of expression is anchored to the speakers' perspectives on the described situation. Interestingly, both abstraction (in المبنى *building*) and specifying (in المنشآت العسكرية *one of the military installations*, and مركز للاتصال والضبط *centre for communication and control*) have a mitigating effect. A similar range of attitudes is observed in the following set of expressions which all refer to the same event:

قتل مئات النساء والاطفال ... *killing hundreds of women and children*
 مقتل وجرح مئات الأشخاص ... *killing and wounding hundreds of people*
 الخسائر المدنية ... *civilian losses*
 مما أسفر عما يبدو عن خسائر فادحة في الأرواح ... *apparently resulted in heavy human losses*

Attunement to the meaningfulness of a chosen communication strategy also directs Abdulla's account of style shifts in two Arabic translations of a Hemingway novel. The imposition of classicisms and romantic and Quranic allusions is viewed as inconsistent with Hemingway's unadorned and direct, secular style. These researchers illustrate how translators may mediate cultural differences and in so doing affect ideological shifts.³⁶⁰

Contrastive analysis of lexical coselection recalls Sinclair's thesis on the association of sense and structure. He describes the 'privileges of occurrence' by which individual choices from among communication resources constrain multi-word patterns. The amenability of coselection to quantitative analysis was demonstrated in Biber's study of variation across speech and writing in English (Section 2.3). Baker and Kaplan note the context sensitivity of lexical choice in relation to contrastive analysis. They illustrate

³⁶⁰ Mahmud Husein Salih and Naser Y. Al-Hassan Athamneh, 'Silence in Arabic-English Translation: The Case of Salih's *Season of Migration to the North*', *Babel*, 41 (1995), 216-233; Abdulla Talal Shunnaq, "'Monitoring" and "Managing" in Radio News Reports', in *Language, Discourse and Translation...*, pp. 103-113; and Adnan K. Abdulla, 'The Translation of Style', in *Language, Discourse and Translation...*, pp. 65-72.

constraints on coselection with the sense of *fabulous*, viz. رائع with non-human reference in (18), and باهر with human reference in (19). Similarly, three Arabic expressions with the sense of *faded* are coselected with *light*, *applause* and *interest*, namely خبا (lit.) *it died out* (20), خفت (lit.) *it became inaudible* (21), and تضاءل (lit.) *it dwindled* (22):

(18) What a fabulous place this is!³⁶¹

يا له من مكان رائع

(19) a woman of fabulous beauty³⁶²

امرأة ذات جمال باهر

(20) The afternoon light was fading.³⁶³

أخذ ضوء الأصيل يخبو

(21) The applause faded.³⁶⁴

خفت التصفيق

(22) Interest in the story will fade.³⁶⁵

سيتضاءل الإهتمام بالقصة

Najjar observes how semantic relations obtaining amongst lexical derivations will generally remain opaque in translation. He illustrates with بكى *he wept* and derivations like بكى *he mourned* and استبكى *he moved someone to tears*. In a similar vein, Malone draws attention to the problem of translating motivated use of polysemous repetition (Section 3.1.1).³⁶⁶

Emery provides ample contrastive data on lexical coselection in Arabic and English. His parallel corpora include literary as well as journalistic and technical texts, though data are generally not individually sourced. His analyses illustrate contrasting constraints on

³⁶¹ Mona Baker and Robert Kaplan, 'Translated! A New Breed of Bilingual Dictionaries', *Babel*, 40 (1994), 1-11 (p. 7).

³⁶² Baker and Kaplan, p. 7.

³⁶³ Baker and Kaplan, p. 7.

³⁶⁴ Baker and Kaplan, p. 7.

³⁶⁵ Baker and Kaplan, p. 7.

³⁶⁶ Majed F. Al-Najjar, 'Translation as a Correlative of Meaning: Cultural and Linguistic Transfer between Arabic and English' (unpublished doctoral dissertation, Indiana University, 1984), p. 208.

word class, lexicalization, cohesion, and perspective on the described situation. Fragment (23) shows contrasting word class with ADJECTIVE + NOUN in *grave dangers* and NOUN + NOUN in أخطاء ومشاكل (lit.) *mistakes and problems*:

نظرا لما نجم عنها من أخطاء ومشاكل

(23) in view of the grave dangers it poses³⁶⁷

Fragments (24)–(27) illustrate a range of contrasting constraints on lexicalization. English multi-word verbs *kicked off* and *slapped down on* are lexicalized in Arabic as قذف (not رفس (lit.) *he kicked*) and رما على (not صفع (lit.) *he slapped*) in (24) and (25):

(24) He kicked off his boots.³⁶⁸

قذف بحدائه

(25) He slapped the revolver down on the table.³⁶⁹

رما بالمسدس على الطاولة

The English unitary item *buzzed* is paraphrased as يتقوم...بالتحليق فوق سطوح مباني (lit.) *have flown over the roofs of buildings* in (26). Similarly, *inaudible* and *incomparable* are paraphrased as لا يمكن أن يرقى إليها الشك (lit.) *not possible to ascend to it the doubt*, and لا...يظن أنه يمكن بأية قدرات الوصول إلى مثلها (lit.) *not think it possible to attain the likes of it by whatsoever capacities* in (27):

تقوم طائرة نفاثة بالتحليق فوق سطوح مباني العاصمة
doing aeroplane jet fly over roofs buildings capital

(26) jets have buzzed the capital³⁷⁰

معجزة لا يمكن أن يرقى إليها الشك [...] أو يظن أنه يمكن بأية قدرات الوصول إلى مثلها

(27) an indubitable and incomparable miracle³⁷¹

³⁶⁷ Peter G. Emery, 'Lexical Incongruence in Arabic-English Translation', *Babel*, 37 (1991), 129-137 (p. 133).

³⁶⁸ Peter G. Emery, 'Collocation—A Problem in Arabic/English Translation?', *Quinquere*, 11 (1988), 178-184 (p. 182).

³⁶⁹ Emery, 'Collocation—A Problem...', p. 182.

³⁷⁰ Peter G. Emery, 'Aspects of English-Arabic Translation: A Contrastive Study', *The Linguist*, 26 (1987), 62-64 (p. 63).

³⁷¹ Emery, 'Lexical Incongruence', p. 132.

English compound nouns may be explicitly linked in Arabic: *data tracks* appears as مسارات تحمل البيانات (lit.) *tracks which carry data*; and a *Pentagon spokesman* appears as ناطق باسم البنتاغون (lit.) *a spokesman in the name of the Pentagon*. Implied cohesive links in English may also be made explicit in Arabic. This is illustrated with the addition of حيث أن *since* in (28), and علماً بأن *it being known that* in (29):

[...] حيث أن [...]
 [...] since [...]

- (28) [The Americans may have to act urgently.] [Mullahs throughout Iran called yesterday for more acts of self-sacrifice]³⁷²

[...] علماً بأن [...]
 [...] it being known that [...]

- (29) [They will put a total of 220 war planes at the disposal of American military commanders.] [At present there are 80.]³⁷³

Fragments (30) and (31) exhibit contrasting perspective on the described situation through changes in agency. In (30), *has been told* implies an agent lacking in علمت (lit.) [*has learnt*]. In (31), the explicit agent in يستطيع الصاعد...أن ينظر إلى (lit.) *the climber can see*, is absent in the English *there is a...view*:

علمت السونداي تايمز
 learnt-she the-sunday times

- (30) The Sunday Times has been told³⁷⁴

يستطيع الصاعد للبرج أن ينظر إلى البحر
 he-can the-climber of-the-tower that he-sees to the-sea

- (31) from the top of the tower there is a good view of the sea.³⁷⁵

Contrastive analysis has been the mainstay of inquiries into the relationship by which an original constrains translation. Unlike rationalist approaches to translation which seek to elucidate unobservable cognitive processes, the contrastive analysis of naturally occurring data links the use of expressions to interpretations anchored in unique situations.

³⁷² Emery, 'Aspects...', p. 63, full Arabic text not supplied.

³⁷³ Emery, 'Aspects...', p. 63, full Arabic text not supplied.

³⁷⁴ Emery, 'Aspects...', p. 63.

³⁷⁵ Emery, 'Lexical Incongruence', p. 132.

Nevertheless, there exist no systematic quantitative analyses of significantly large parallel Arabic-English corpora approaching Biber's monolingual studies (Section 2.3).

The following section defines translation salience. The notion of salience is used to model the relative meaningfulness of information implicated in an original communication from the perspective of translation. Alexieva suggests:³⁷⁶

that a scene (situation) is not described with all its features and relations between them and that the selection of the latter for overt expression varies across languages. In other words, some of the features and relations between them seem to be, or to have been once, more *salient than others and this saliency is fixed in the way the respective language is used*. [...] Any deviation from what is considered as the normal description would imply additional meanings, mostly pragmatic, which a native speaker will recognize and adequately interpret. (p. 143)

Chapter Three examines a range of contrastive studies which focus on contextualized interpretations of particular utterances. Section 4.2 addresses much of the remaining literature on Arabic-English contrastive analysis, and suggests implications for further validating the Translation Salience model.

2.6 Translation Salience Model of Equivalence

The Salience model defines the relationship between an original text and its translation with the independent notions of markedness, implicitness and localness. Markedness is a criterion for determining meaningfulness within a language. Implicitness and localness are postulated as constraints on the transmission of meaningful information across the nexus of translation. These primary descriptors combine to explain the translator's relative perception of information in the process of interpreting situated text for the purpose of translating. The model offers a principled account of equivalence in translation.

2.6.1 Markedness

³⁷⁶ Bistra Alexieva, 'A Cognitive Approach to Translation Equivalence', in *Translation, a Creative Profession...*, pp. 141-146 (emphasis in original).

Markedness has particular utility to equivalence in translation. This section investigates markedness as an indicator of the meaningfulness entailed in contextualized sets of related entities. The medieval Arab grammarians' remarkably similar view of markedness is also reviewed.

In what he describes as a speculative and exploratory study, Greenberg develops a theory of markedness in the search for language universals: 'the possibility of generalizations which have as their scope all languages' (p. 61). He aims to demonstrate the existence of valid general principles or invariants underlying the diversities observable in human languages. The topic of language universals is approached through a single but 'rich and complex set of notions' pertaining to marked and unmarked categories (p. 62). The concept of markedness possesses a high degree of generality and is applicable to all levels of language. Through various tests, Greenberg sought the defining characteristics and common features of the concept, with its diverse manifestations. He traces the first occurrence of the terms marked and unmarked to Trubetzkoy in phonology, and to Jakobson for the term's application to grammatical categories. Papegaaij and Schubert trace the terms to Mathesius in the context of marked and unmarked word order.³⁷⁷

The intimate connection between markedness and the search for universals is brought out by Radford. He reviews the application of markedness in Chomsky's theory of Core Grammar, which seeks to establish the range of unmarked linguistic phenomena observed in all natural language: 'a common, universal "core" of linguistic principles' (p. 41). The core of unmarked rules and structures and the periphery of marked rules and structures are purported to form the grammar of any language. Unmarked phenomena are described by Radford as those which are regular, normal or usual, in contrast to those marked phenomena which are exceptional, irregular, abnormal, unusual or go against some tendency. He illustrates this opposition with the tendency in a language to place modifiers

³⁷⁷ Joseph H. Greenberg, 'Language Universals', in *Current Trends in Linguistics*, ed. by Thomas A. Sebeok and others (The Hague: Mouton, 1966), III: *Theoretical Foundations*, p. 62 n. 3; N. S. Trubetzkoy, *Grundzüge der Phonologie* (Prague, 1939); R. Jakobson, 'Zur Struktur des russischen Verbums', *Charistera Guilelmo Mathesio* (Prague, 1932), pp. 74-78; B. Papegaaij and K. Schubert, *Text Coherence in Translation* (Dordrecht: Foris, 1988), p. 177; and Vilém Mathesius, 'Zur Satzperspektive im modernen Englisch', *Archiv für das Studium der neueren Sprachen und Literaturen*, 84 (1929), pp. 202-210.

consistently either before or after the modified element. Since modification in English consistently precedes the head, a set of structural oppositions drawn from Quirk is used to contrast unmarked pre-nominal modification (in *good food*) with marked post-nominal modification (in *heir apparent*). The latter structure is described as stylistically marked, having ‘a “literary” and “archaic” flavour’ (p. 40). Such marked structures are characteristically non-productive set phrases. Core Grammar allows for ‘parametric variation’ across languages, based on the observation that languages seem to vary within fixed limits. The non-random nature of variation among languages suggests the possibility of defining ‘the set of possible *parameters of variation* across languages’ (p. 43).³⁷⁸

Markedness is a fundamental linguistic notion which describes, according to Richards, how certain elements of human languages labelled unmarked, are more ‘basic, natural and frequent’ than other elements described as marked. Crystal describes markedness as an analytical principle in which pairs of entities existing in oppositions exhibit features with neutral or negative unmarked values, and positive or marked values. He distinguishes a number of general senses through which the opposition is interpreted: formal marking, frequency of occurrence, semantic specificity, and distribution. Formal feature marking follows the intuition that a formally marked feature, for example the plural *dogs*, is derived from the unmarked form, in this case *dog*. Where the notion of marking by the presence or absence of a formal feature does not readily apply, the opposition (of unmarkedness and markedness) follows on from the related observations of the lower frequency of occurrence of marked entities, and the semantic analysis of marked entities as more specific. Semantic specificity is exemplified by the more specific *bitch* which is marked for gender. The more general and unmarked *dog* allows modification, as *male/female dog*, in contrast to the anomalousness of either modifier with the semantically marked *bitch*, viz. **male/female bitch*. The semantically more specific and marked *bitch* thus also has a more restricted distribution than the unmarked *dog*. Restricted distribution is further illustrated by the opposition of the unmarked *tall* in the comparative sentence *How tall is John?*, with the

³⁷⁸ Andrew Radford, *Transformational Grammar: A First Course* (Cambridge: Cambridge University, 1988), pp. 39-45; Randolph Quirk and others, *Comprehensive Grammar of the English Language* (London: Longman, 1985), p. 418.

marked *short* in the abnormal comparative sentence *How short is John?*. The principle of marking forms a basis for assigning universal and possibly innate values to entities. Crystal notes that a more general theory of markedness which has emerged in generative linguistics proposes that an unmarked property is ‘one which accords with the general tendencies found in all languages’, while a marked property is exceptional or ‘goes against these general tendencies’ (p. 212). An interesting correlation emerges between markedness and language-specificity or localness.³⁷⁹

An earlier account of markedness as it relates to the analysis of lexical structure and sense relations is provided by Lyons, who distinguishes three independent senses in which words may be described as marked: formally, semantically and distributionally. These senses are consistent with Crystal’s account. The restricted range of contexts in which the marked member occurs follows from the observation that formally marked terms tend to be excluded from contexts in which the opposition between marked and unmarked is neutralized or suspended. Thus, modification of the superordinate/generic in *male/female dog* is excluded from the marked hyponym **male/female bitch*. Incidentally, it is not always the term denoting the female which is distributionally and semantically marked (as *lioness, tigress* etc.). This is evidenced in the markedness of *bull, cock/rooster* and *ram* in relation to the unmarked *cow, chicken* and *sheep*. Lyons notes that distributional markedness does not invariably correlate with formal markedness. Formal, distributional and semantic markedness, though generally correlative, are independent principles or phenomena. This important observation is corroborated by Moravcsik’s account of consistency (outlined below). The opposition between *count* and *countess*, though formally marked, is not neutralized in certain contexts and therefore lacks correlative distributional and semantic markedness: the collocation *female count* being contradictory, and *male count* being tautological.³⁸⁰

³⁷⁹ Jack Richards, John Platt and Heidi Weber, *LONGMAN DICTIONARY OF APPLIED LINGUISTICS* (Harlow, U.K.: Longman, 1985), p. 171; and David Crystal, *A DICTIONARY OF LINGUISTICS AND PHONETICS*, 3rd edn (Oxford: Blackwell, 1991), pp. 211-212.

³⁸⁰ Lyons, *Semantics*, pp. 305-311.

The kind of sense relations evident in the lexical taxonomies discussed by Crystal and Lyons is described by Malone as conflative unmarkedness. This involves situations where both the generic and one of its hyponyms are identical and unmarked or conflated. Unmarkedness involves linguistic economy. According to Malone, ‘the inventory of *signals* stocked by a language falls short of a one-to-one relation with the number of corresponding *meanings*’ (p. 3). Conflative unmarkedness in particular, Malone points out, poses particular difficulties for the translator. The generic and hyponym are not random homonyms (distinct lexemes which just happen to have the same pronunciation), but rather the relationship entails a single lexeme which bears two or more semantic functions in a clear hierarchical relation such that the generic is implied by the hyponym. The innately heterogeneous semantic nature of conflation incurs the dangerous assumption that the conflated lexeme has only one sense: ‘the quest [in translating] after whose “true identity” often leads down fanciful metaphysical lanes’ (p. 11). Malone identifies three important properties of conflation with specific significance to translation: their non-isomorphism or incongruity across even closely related languages (the lack of coincident or one-to-one relations between conflative hierarchies in interfacing languages); their potential semantic ambiguity (in contexts where the generic or hyponymic sense of a conflative lexeme is unclear); and their semantic heterogeneity (since the generic-hyponymic relation is a different kind of semantic opposition to that holding between hyponyms). The non-random, mutually indicating generic-hyponym identity relation thus avails itself as an enhancement effect in skilled writing, and as such, constitutes a complicating factor in translation.³⁸¹

the very linguistic properties that the [skilled writer] most successfully manipulates in developing the source text may just have no counterpart in the target language [...] a skilled writer can be expected to exploit this identity when it suits his or her communicative–esthetic needs *regardless of any untoward consequences in the eventual case of translation into a target language of dissimilar structure.* (p. 17)

Malone illustrates several complicating aspects of the conflation phenomenon in translation between various languages. He relates conflation to incongruities in coherence,

³⁸¹ Joseph L. Malone, ‘Taxonomies, Unmarkedness, and a Few Other Items from the Linguist’s Grab-Bag for the Translator’ (unpublished ms., 1979), pp. 1-6, 9-14, 17, 19, 21-23, 25-26, 30.

register, structural features (such as parallelism), and even the referential fidelity of a translation to its original. One such instance, where semantic ambiguity induced by taxonomic conflation impacts on the fidelity of a translation, is illustrated in the strategy adopted for the Quranic fragment (32):

وإن كان رجل يورث كللة أو امرأة وله أخ أو اخت فلكل واحد منهما السدس (القرآن ٤: ١٢)
and-if was man bequeaths childless or woman and-has-he brother or sister so-to-each one of-them sixth

- (32) And if a man or a woman, having no children leaves property to be inherited and has a brother or sister, then for each of them is the sixth.³⁸²

The generic-hyponymic ambiguity of semantically unmarked *وله* *he/she/one has* (referring to *رجل...أو امرأة* *a man or a woman*), is neutralized in the translation by omission of the subject in *having no children...and has a brother or a sister*. This strategy avoids the sort of ambiguity carried over into the King James Bible in fragment (33), where the generic sense of *he die* (as ‘either servant or maid die’) is unclear:³⁸³

- (33) And if a man smite his servant, or his maid, with a rod, and he die under his hand; he shall surely be punished. (King James Bible: Exodus 21, 20)

An application of markedness in phonology is outlined by Hyman. Once again, the non-uniform usage of the concept of markedness is noted. A number of interpretations are presented, including the characterization of marked entities by the addition of something, and the characterization of unmarked entities by their higher frequency, their neutrality and their productivity or regularity. Hyman likewise sees markedness as a property of linguistically significant generality, deriving support from studies of universals in language change, language typology and language acquisition. Importantly, Hyman emphasizes that members of an opposition should be seen as marked or unmarked in a specific environment. Chomsky and Halle also adopt the position that the marked value of a given feature depends on its particular context. They point to the need in markedness theory to

³⁸² M. H. Ali, *Holy Quran*, 4th edn (Lahore: Ahmadiyyah Anjuman Ishaat Islam, 1955), 4:12.

³⁸³ Malone, *Science of Linguistics...*, pp. 112-113.

accommodate the effects of the intrinsic content of features, and to distinguish expected or natural rules and configurations from those which are unexpected and unnatural.³⁸⁴

The notion of markedness is employed by both Moravcsik and Croft in their typological analyses of agreement relations in natural language, following Greenberg's classic theory of markedness. Moravcsik notes the intuitive plausibility of markedness. She observes that correlations across the domains with respect to which markedness theory makes claims (like the formal, distributional and semantic domains illustrated by Lyons and Crystal), have reflexes in everyday life. She notes:³⁸⁵

it appears reasonable to expect that human artefacts that are simpler in structure are more popular—more widely used—and that more subtypes of them should be developed to suit the wider range of uses to which they are put [...] such as in food and clothing patterns; eg, everyday [...] foods are simpler to prepare and have more versions than festive or fancy food[s]. (p. 93)

Moravcsik and Wirth point out a correlation between familiarity, variability and complexity in the way things are perceived and constructed:³⁸⁶

Closer familiarity tends to be paired with simpler structure and greater variability; less frequent occurrence in human experience goes with increased structural complexity and diminished variability. (p. 2)

Moravcsik describes markedness as an asymmetrical relation—an opposition formed by pairs of structural entities in which 'the two are not on a par' (p. 90). She suggests three basic parameters to which Greenberg's tests of markedness pertain: complexity of structure, complexity of paradigm, and range of use. Structural complexity ('syntagmatic complexity'), roughly conflates Lyons' formal and semantic senses. This parameter combines 'complexity of meaning, and complexity of syntactic, morphological, or phonetic form' (p. 91). Paradigmatic complexity refers to the range of subvarieties, such as

³⁸⁴ Larry Hyman, *Phonology: Theory and Analysis* (New York: Holt, Rinehart and Wilson, 1975), pp. 138-147; and Noam Chomsky and Morris Halle, *The Sound Pattern of English* (London: Harper & Row, 1968), pp. 402, 404 n. 4.

³⁸⁵ William Croft, 'Agreement vs. Case Marking and Direct Objects', in *Agreement in Natural Language: Approaches, Theories, Descriptions*, ed. by Michael Barlow and Charles A. Ferguson (Stanford: Centre for the Study of Language and Information, 1988), pp. 159-179; Edith A. Moravcsik, 'Agreement and Markedness', in *Agreement in Natural Language...*, pp. 89-106; and Greenberg, pp. 59-112.

³⁸⁶ Edith Moravcsik and Jessica Wirth, 'Markedness—An Overview', in *Markedness*, ed. by Fred R. Eckman, Edith A. Moravcsik and Jessica R. Wirth, Proceedings of the Twelfth Annual Linguistics Symposium of the University of Wisconsin-Milwaukee, 11-12 March 1983 (New York: Plenum, 1986), pp. 1-12.

case distinctions in singular and plural. Range of use refers, as in Lyons' account, to the distribution of an item. Range of use tests include neutralization as an indicator of which of two structures is more frequent in texts. The two essential claims of markedness theory elaborated by Moravcsik are that there is consistency both within and across the general parameters. The results of logically independent tests show converging assignment of entities in marked-unmarked opposition. Consistency within a parameter obtains when a member of an opposition, such as the category plural, is shown to be semantically more complex than the unmarked singular category. Such consistency exists coextensively with other syntagmatic criteria such as morphological complexity. The same (marked) member will be selected as the more complex entity of the two. Consistency across parameters, on the other hand, enables predictions regarding the complexity of members of an opposition based on observations of a single parameter. This obtains from correlations that unmarked entities are observed to be syntactically less complex, paradigmatically more complex and more widely distributed, while marked entities are syntagmatically more complex, paradigmatically less differentiated and less widely used. Put simply:

things that are much used are simple in structure and rich in subvarieties and things that are used less are more complex in structure and less elaborated in terms of subtypes. The former are labelled *unmarked* and the latter, *marked*. (p. 92)

Though there are many cases where some of the correlations do not hold true, the intuitively plausible universal insight offered by the theory of markedness is the claim that relationships exist among things that would otherwise be anticipated as independent:³⁸⁷

things are related that otherwise would never appear to have any relationship with each other [...] and all markedness criteria are claimed to be mutually predictive of each other with respect to all oppositions in all human languages. (p. 92)

Croft likewise describes classic markedness theory in terms of the asymmetrical properties exhibited by paradigmatic members of the same grammatical category. His description is based on notions of complexity and distribution. Unmarked values are more frequent than marked ones and morphosyntactically less complex, 'usually "zero marked"'. Marked values are described as behaviourally defective in comparison to

³⁸⁷ Moravcsik, pp. 90-93.

unmarked ones, with more restricted syntactic distribution and/or inflecting for fewer grammatical categories.³⁸⁸ With the concept of natural correlation, Croft extends the notion of markedness beyond unitary grammatical categories. He further includes situations in which different categories are mixed, where an element of a grammatical category is unmarked relative to a member of another grammatical category. Hypothesized to be universal and explained in terms of properties external to the structure of language, natural correlation allows determination of externally motivated semantic and pragmatic aspects of the grammar.³⁸⁹ However, the correlation of markedness and unmarkedness should not be seen as an absolute opposition. Lyons' considers semantic marking as 'a matter of degree', and Croft's proposes a unified notion of 'relative markedness'.³⁹⁰

Conflicting notions of markedness may be observed. For example, the English third person singular present tense verb form *plays* is formally marked but appears distributionally unmarked.³⁹¹ However, Comrie's proposal that markedness in language is to be explained by markedness in the real world suggests that there is more at play here. He proposes that certain configurations of speaker, hearer and actor are pragmatically more natural. So rather than being less distributionally restricted and hence unmarked, *plays* would appear to be less salient from the speaker's point of view and hence marked. Based on well established crosslinguistic generalizations on the overt morphological marking of agents and patients in transitive constructions, Comrie proposes a correlation between markedness of situations and markedness in morphological structure: that 'morphological unmarkedness corresponds to greater unmarkedness of the situation, while overt morphological marking corresponds to a greater markedness of a (less expected) situation' (p. 97). He develops the hypothesis that the most natural situation is one in which the referent of the agent is relatively high in salience:

humans regard as more natural situations where entities closer to themselves are acting upon entities less close to themselves, rather than vice versa: closest are

³⁸⁸ Croft, p. 160.

³⁸⁹ Croft, pp. 165-167.

³⁹⁰ Lyons, *Semantics*, p. 309; Croft, p. 159, 173.

³⁹¹ Chris Manning, p.c. Dec., 1997.

other participants in the speech act (i.e. first and second person pronouns), then other humans, then other animals and finally inanimate objects. (p. 97)

Interestingly, the paper also illustrates how situational constraints on the interpretation of ambiguous sentences can require a less expected situation to force explicit reference.³⁹²

Independent research reports that the brain can be more receptive to outside sources which may be more urgent.³⁹³

The notion of markedness developed in contemporary western theory is remarkably compatible with medieval Arabic linguistic theory. The importance of markedness to Arabic linguistics is well documented. In Owens' view, Arabic linguistic theory is based on the notion of class: 'sets of items occurring at positions in structure, realizing certain functions' (p. 2). The discipline is pervaded by a system that assigns marked or unmarked values to positions in the structure and items realizing a position. Owens concludes that 'the Arabic grammarians predicated a major component of their theory on the notion of markedness' (p. 306 n. 269). He sees markedness as a pre-theoretical notion resting on the premise of basicness: that 'among a set of items, one or more of them is in some sense more basic than the other' (p. 199). Like other commentators, Owens mentions the applicability of markedness to all levels of linguistic inquiry, pointing out the intuitiveness of the concept. But he also warns that there is no general, comprehensive theory of markedness that covers all aspects of grammar.³⁹⁴

A formulation schematized by Abu Barakat Anbari (d. A.D. 1187/٥٧٧ هـ)

أصل states that among a set of items, one is basic or unmarked *trunk/root/origin* while another is marked فرع *branch/secondary* because of some علة *reason*. The insistence on stating a conditioning reason for the existence of some characteristic in the marked category is the main distinction between the Arabic and

³⁹² Bernard Comrie, 'Markedness, Grammar, People and the World', in *Markedness*, pp. 85-106 (pp. 85, 90, 94, 96-97, 101-104).

³⁹³ New York Times, 'Have You Ever Wondered Why You Can't Tickle Yourself?', *Bangkok Post*, 14 Dec. 1998, p. 7 ('Outlook' Section), sourced to the Department of Cognitive Neurology at University College, London.

³⁹⁴ Jonathan Owens, *The Foundations of Grammar: an Introduction to Medieval Arabic Grammatical Theory*, Amsterdam Studies in the Theory and History of Linguistic Science Series III: Studies in the History of the Language Sciences, 45 (Amsterdam: Benjamins, 1988), pp. 2, 199, 218, 226, 306 n. 269.

western approaches to the notion of markedness. Owens examines a range of medieval Arab grammar terminology. The notion is reported to derive originally from Sibawaih (d. 793/١٧٧) سيبويه. Later usage of al-Zajjaj (d. 923/٣١١) ابن إسحاق الزجاج, Ibn Jinni (d. 1002/٣٩٢) أبو الفتح بن جني, al-Saymari (d. early 11th/5th) أبو محمد الصيمري and al-Mubarrad (d. 898/٢٨٥) ابن يزيد المبرّد correspond ‘consistently and [...] without exception’, according to Owens, to the two categories unmarked and marked. Variant terminologies are tabulated below:³⁹⁵

TABLE 1 *Medieval Arab Grammar Terminology—Unmarked and Marked Categories* (Owens, p. 202)

<u>Basic/unmarked</u>	<u>Marked</u>
أصل <i>root/origin</i>	فَرْع <i>branch/secondary</i>
أخف <i>lighter</i>	أثقل <i>heavier</i>
أقوى <i>stronger</i>	أضعف <i>weaker</i>
أول / قبل <i>first/before</i>	بعد <i>after</i>

Opposing unmarked and marked lexical categories such as singular versus plural, masculine versus feminine, and Arabic versus non-Arabic were established. This led to the formulation of general principles based on the notion of markedness. Al-Zajjaj’s explanation of the inflectional forms of nouns and verbs is based on the following principle of *فروع marked categories*:

إذا اجتمع منها شيان في الاسم منعاً الصرف.³⁹⁶

In this way, the partial inflection of إبراهيم *Ibrahim* (having the same form in both genitive and accusative) is explained as being doubly marked by virtue of its definiteness and foreign origin. This particular formulation considerably oversimplifies matters, as Owens indicates. But applying four of Greenberg’s tests to a number of the marked categories identified in the medieval literature, Owens verifies that the Arabic grammarians were, in

³⁹⁵ Owens, pp. 200, 202-213, 306 n. 269; Ramzi Baalbaki, ‘Some Aspects of Harmony and Hierarchy in Sibawayhi’s Grammatical Analysis’, *Zeitschrift der deutschen morgenländischen Gesellschaft*, 2 (1979), pp. 7-22; Georges Bohas, ‘Quelques Aspects de l’Argumentation et d’Explication chez les Grammairiens Arabes’, *Arabica*, 28 (1981), pp. 204-221; and Cornelis Versteegh, ‘The Arabic Terminology of Syntactic Position’, *Arabica*, 25 (1978), pp. 261-280.

³⁹⁶ Owens, pp. 209, 337 n. 121; from

ابن إسحاق الزجاج، «ما ينصرف وما لا ينصرف»، (القاهرة: لجنة إحياء التراث الإسلامي، ١٩٧٠)، ص ٥ (Owens’ trans.) ‘[I]f an item has two marked characteristics it is only partially inflected.’

terms of independent modern evaluation, ‘about 100% “correct” in their choices [of unmarked and marked categories]’ (p. 212).³⁹⁷

The significance of markedness to the notion of equivalence in translation, specifically between Arabic and English, is brought out by Baker and Sa‘adeddin. Baker’s account calls for an awareness of meaningful choices in theme and focus (Section 4.2.1). She also notes that meaningfulness is associated with the choice of an item from a lexical set. She illustrates how the associations implicated in an English advertizing text are not matched in Arabic translation, because Arabic does not offer the same range of choices instanced in *factory/plant, choose/select, qualities/kinds* and *matching/complementary*. Subtle enhancement of the product image is said to be lost in translation.³⁹⁸ Cross-language incongruence in the meaningfulness associated with lexical sets is also illustrated by Shamaa (ref. fragments (25) and (37)–(41) in Section 1.2.4).

Sa‘adeddin emphasizes ‘suppositions’ which are said to underlie the ability of a receiving audience to understand and appreciate the experience of the original text. Following the assertion by de Beaugrande and Dressler that translation equivalence is ‘equivalence in the experience of the participants’, Sa‘adeddin draws attention to the communicative context of translation. Equivalence is determined by linguistic, situational and experiential constraints on the surface representation of text. The notion of selective attention to expressions is also alluded to: the ‘unit [of text] on which attention is focussed’ (p. 157 n. 10). Sa‘adeddin’s insights suggest the translator’s mediating presence involves attunement to salient information about uniformities beyond expressions. The Saliency model explains Sa‘adeddin’s experiential matching as the multi-placed coordination of information about described situations and utterance situations. Relative meaningfulness is maintained by attunement to markedness constraints on surface expression.³⁹⁹

³⁹⁷ Owens, pp. 206, 209-212.

³⁹⁸ Baker, *In Other Words...*, pp. 110-170, 207-210, 282-283.

³⁹⁹ Mohammed Akram A. M. Sa‘adeddin, ‘Target-World Experiential Matching: The Case of Arabic/English Translating’, *Quinquereme*, 10 (1987), 137-164; and R. de Beaugrande and W. Dressler, *Introduction to Text Linguistics* (London: Longman, 1981), p. 216.

Sa'adeddin's reference to relative markedness rests on the claim that equivalence can only be achieved by 'neutralizing the elements of contrast between the source "textual world" [...] and the expectations of the TA [target audience], unless those contrasts are intended by the author of the SLT [source language text]' (p. 140). Translation is seen as the reproduction of a communication event which fits the experiential knowledge of the receiving audience. Concepts such as 'equivalence of experience' and 'experiential value of text', and concern for the devices used to effect such experiences, are put forward by Sa'adeddin in his call for an awareness of 'contrastive experiential language use' (p. 141). He offers a detailed analysis of strategies for translating an Arabic journal editorial into English based on typological considerations (Section 4.2.2). However, Sa'adeddin's emphasis on intention suggests a receptor orientation, founded on the intentional fallacy. Judgements about intention fail to offer principled yet non-prescriptive guides to equivalence and were shown to be ultimately impressionistic (Section 1.2.1). Nevertheless, Sa'adeddin does link the translator's retrieval of the relations activated by textual devices to experiential and conceptual knowledge of the receiving culture: that 'intimate knowledge of how texture fits in the conceptual memory of the TA [target audience] has to be second nature in the translator' (p. 146). More importantly, he pre-empts the role of attunement to constraints on interpretation and the interrelated notions of naturalness, expectancy and markedness.⁴⁰⁰

Distinguishing the communicative intentions of a speaker from the significance of an utterance to a receiver (Section 1.0), Lyons identifies non-communicative (yet informative) aspects of linguistic interaction:

All utterances will contain a certain amount of information which, though put there by the speaker, has not been intentionally selected for transmission by him; and the listener will commonly react, in one way or another, to information of this kind. (p. 34)

The mutual intentions upon which successful communication depends is generally said to rest on the receiver's recognition of the speakers communicative intentions. But Grice somewhat provocatively explores the idea that what is really required in a full account of

⁴⁰⁰ Sa'adeddin, 'Target-World Matching', pp. 137, 140-141, 146.

speaker meaning is the *absence* of a certain kind of intention. Successful communication is viewed as a psycho-linguistic correspondence. The psychological states of rational communicators hook up communication devices (utterances) with reality. Successful communication involves certain desirable sequences: a speaker's psychological state linked to an utterance, followed by a further psychological state in the receiver. The evaluativeness entailed in rationality suggests that an expression's meaning is fixed by the optimal uses to which the expression is put: 'what it is in general optimal for speakers of that language to do with that word, or what use they are to make of it' (p. 239). Speaker meaning is *deemed* from an optimal yet logically impossible or unrealizable state. This view of mutual intentions calls for a broader account of markedness—one in which deeming from the receiver's perspective plays a greater role. For the moment, markedness is narrowly construed as the motivated use of expressions in an original text. However, claims (Sections 1.2.1 and 2.4) that an original is interpreted in the context of constraints on translation suggest ramifications for the principle of markedness (Section 4.1).⁴⁰¹

Markedness is a widely attested and powerful tool for determining relative meaningfulness both within and across languages. The notion provides an independent and observable perspective from which the translator's mediating presence can be gauged without recourse to innate cognitive processes. The productivity of language requires an explanation of equivalence to take account of the larger process of interpretation rather than limiting attention to typologically determined contrastive analysis of the meanings of expressions. The way expressions are used relates what is said to what is not said. The relative significance of information can be determined by contextualizing motivated choices made by communicators. In contrast to the lexical oppositions referred to so far, higher level markedness constraints on speaker perspectives and attitudes are illustrated in Chapter Three. The relativity of constraints on markedness is addressed in Section 4.1, and the important issue of measurability is addressed in Section 4.2.

⁴⁰¹ Lyons, *Semantics*, pp. 33-34; Paul Grice, 'Meaning Revisited', pp. 223-257.

2.6.2 Implicitness

Connotations are retrieved by interlocutors through inferences about the use of expressions in actual situations. Inferences are drawn according to systematic relationships between the use of expressions, the situations utterances describe, and the situations in which they are uttered. Retrieving important information involves picking out information which may not be overtly expressed. Information may be entailed in expressions themselves; or it may be presupposed by or implicated in the relationships between utterances and situations. Though an independent notion, implicitness appears allied to the concept of markedness in that relationships are entailed in sets of entities or properties linked by expectations to situations. While markedness provides a tool for identifying meaningfulness, the notion of implicitness relates meaningful information across the nexus of translation.

Underlying the translation of explicit and implicit information are the inter-related notions of obligatoriness and optionality. The interplay of obligatory and optional configurations of information determines a text's naturalness. The naturalness of an utterance is guided by conventions or language-specific rules which determine the kinds of information which are obligatorily expressed and those which are optional. Maintaining a desired level of naturalness in translation thus involves coordinating obligatory and optional information through the choices of explicit or implicit expression. A view has been presented which claims that expressions carry only a certain amount of information and so only partially determine interpretation. Interpretation is thus arrived at by anchoring expressions to actual situations. It has been further argued that equivalence in translation involves the convergence of reciprocal expectations. Multi-placed coordination equilibria are determined in accordance with speaker connections: the translator's attunement to the language-specific conventions or communication resources operating at any given moment in a communication (Sections 2.1 and 2.2).

The significance to translation of the speaker's manipulation of optional and obligatory information, is pointed out by Candlin when he draws attention to the need to investigate

‘the social and individual motivation of particular choices’.⁴⁰² Such motivated choices (determined by both the speaker’s preferences and the constraints of a given communication situation), have reflexes which extend to the level of discourse. These higher level or pervasive choices are attributed by Di Pietro to style: ‘the set of choices each speaker makes in employing the rules made available to him by the language he is speaking’.⁴⁰³ Maintaining equilibria in an evolving translation requires attunement to information conveyed implicitly in the original communication. The postulate of implicitness explains how choices available to a translator are affected by language-specific constraints on naturalness.

The inevitability of changes in the information conveyed by text during translation is noted by Baker. The shift in translation between information that is obligatorily expressed and that which is optional follows on from the operation of language-specific grammar rules which determine the kinds of information which regularly have to be made explicit in utterances. This tension between naturalness and meaningfulness is expressed in the interplay of obligatory and optional information. Baker notes the conditioning force of the receiving language:⁴⁰⁴

grammar has the effect of a straitjacket, forcing the translator along a certain course which may or may not follow that of the source text as closely as the translator would like it to. (p. 85)

Changes in the information content of a text during translation often result from differences between the interfacing languages in grammatical constraints. Obligatory information is expressed paradigmatically in a language and entailed in grammatical properties and features. Optionally expressed information in a text, on the other hand, entails choices which are often lexicalized. Dilemmas can arise for the translator from information which is obligatorily grammaticalized in an original text and which must be explicitly specified in translation if uninferable from the context. Where the receiving language lacks such a grammatical category, information may be omitted, or alternatively,

⁴⁰² Chris Candlin, ‘General Editor’s Preface’, in Hatim and Mason, *Discourse and the Translator*, p. ix.

⁴⁰³ Di Pietro, pp. 47-48.

⁴⁰⁴ Baker, *In Other Words*, pp. 82-118.

lexicalized. Fragment (34) exemplifies differences in grammaticalization. Information that is obligatorily grammaticalized in the original Arabic dual المحكمان المعينان *arbitrators*(DUAL) *appointed*(DUAL) may be explicitly expressed by optional lexicalization in the translation as *the two arbitrators thus appointed*:

عندما يراد تعيين ثلاثة محكمين، يختار كل طرف محكماً واحداً، ويختار المحكمان المعينان على هذا النحو المحكم الثالث وهو الذي يتولى رئاسة هيئة التحكيم.

- (34) When the appointment of three arbitrators is required, each party selects one arbitrator, and the two arbitrators thus appointed select the third arbitrator who then heads the Arbitration Committee.⁴⁰⁵

In this instance, information on number was felt to be important enough to be encoded lexically; the absence of a dual category in English predisposes the translator to optional lexicalization. By contrast, fragment (35) illustrates a decision not to lexicalize the obligatorily grammaticalized dual الطرفين المتعاقدين *parties*(DUAL) *contracting*(DUAL), viz. *the contracting parties*, no doubt mitigated by the partitive *either*:

ويجوز في خلال مدة الاختبار انهاء هذا العقد من احد الطرفين المتعاقدين

- (35) During the period of probation, the contract may be terminated by either of the contracting parties.⁴⁰⁶

The trade-off between information load and implicitness will, in certain circumstances, affect the naturalness of a translation and cause information to assume greater significance. Baker warns the translator against overspecifying information normally left unspecified in the translation unless the context specifically demands it:⁴⁰⁷

The frequency of occurrence of [...] optional information tends to be low, and a translation which repeatedly indicates information that is normally left unspecified in the target language is bound to sound unnatural [...] it is [also] likely to assume more importance in the target text than it does in the source text. The fact that lexical choices are optional gives them more weight than grammatical choices. (p. 87)

To coordinate the relative significance of information, distinctions between backgrounded and foregrounded information must be maintained. Prominence in the original is

⁴⁰⁵ Baker, *In Other Words*, p. 89; from an unpublished document about arbitration procedures in Cairo.

⁴⁰⁶ Peter G. Emery, 'Legal Arabic Texts: Implications for Translation', *Babel*, 35 (1989), 1-11 (p. 8); from Libyan Government Services Contract, p. 3.

⁴⁰⁷ Baker, *In Other Words*, pp. 86-90.

maintained relative to linguistic constraints on the translation. This argues that naturalness constraints on text production in the receiving culture actually necessitate certain changes in meaning.

The translator has to make conscious decisions about the nature of, and relationships between, all sorts of information inferable from text. Fragment (36) illustrates a translation strategy which avoids the obligatory marking of gender distinctions in the Arabic imperative. Such information is not obligatory in the gender-unspecified English original:

- (36) *Kolestral Super*
 Instructions for use:
Shampoo the hair with a mild WELLA-SHAMPOO and lightly towel
dry.
Apply KOLESTRAL-SUPER directly onto the hair and massage gently.
 [...] Rinse off thoroughly before styling [...] Style the hair as usual.⁴⁰⁸

يُغسل الشعر بشامبو من "ويللا" على ان [...]
 ثم يُجفف الشعر [...]
 يُوضع كولسترال-سوبر مباشرة على الشعر ويُدلك بنعومة وبرقة.
 [...]
 يجب ان يُشطف (يُفَوَّح) الشعر جيداً [...]
 يُسَرَّح الشعر ويُمشط كالعادة [...]
 is-washed hair with-shampoo of wella...
 then is-dried hair...
 is-applied kolestral-super directly onto hair and-is-massaged gently
 [...]
 necessary that is-rinsed hair well
 is-combed hair and is-styled as usual

The English imperatives, unspecified for gender, are translated with agentless passives in Arabic: يُغسل *is washed*; يُجفف *is dried*; يُوضع *is applied*; يُدلك *is massaged*; يجب ان يُشطف *should be rinsed*; يُسَرَّح *is combed*; and يُمشط *is styled*. According to Baker, this strategy avoids connotations associated with the motivated use of explicit, optional information about gender. In this situation, the use of the agentless passive constitutes a superordinate or more general type of expression than the gender specified imperative in Arabic. The unmarked masculine form of the imperative would normally be used to translate English imperatives into Arabic, unless the speaker wished to highlight

⁴⁰⁸ Baker, *In Other Words*, pp. 92-93; from instructions accompanying hair conditioner.

some specific gender distinction. But as Baker points out, in this instance both the masculine and feminine forms would exhibit inappropriate markedness:⁴⁰⁹

the *Kolestral Super* text is a leaflet which accompanies a hair conditioner, the sort of product which is predominantly used by women rather than men. In the Arab context, it is likely to be used exclusively by women. This situation would make the use of the masculine form in this instance highly marked. The translator could have used the feminine form of the verb, but s/he possibly felt that it would also have been marked or that it might have unnecessarily excluded potential male users. The gender distinction is avoided by using a totally different structure throughout the whole set of instructions. The use of the *passive voice* [...] instead of the imperative form of the verb allows the translator to avoid specifying the subject of the verb altogether. (p. 94)

But closer consideration of the example suggests that there might be more at play here.⁴¹⁰

Regardless of the gender issue, consideration must be given to generic and pragmatic constraints on expression. Judgements must be made about the relative frequency of bare imperatives in the genre of instructional texts, and about strictures on the use of imperatives in general (except, say, with children and animals). Such judgements are to be made in the light of empirical measurements on usage, or as the result of intuitive judgements (attunement). Baker's insights as a native speaker of Arabic may be taken at face value. The example demonstrates the recoverability of information. The translator is attuned to implicit information in the original communication, and in order to maintain the relative significance of information, surface level features are changed. Such changes are determined by naturalness constraints on the translation.

Equilibria are established in translation by maintaining the relative significance of information. Due to language-specific constraints, point-by-point correspondences of explicit information are limited. In the process of coordinating or balancing values, the translator draws on a wide range of information potentials from the original communication event. Decisions about naturalness and acceptability in the evolving translation may implicate factors like language-specific tolerances for information load. But translation strategies must at some stage be measured up against the relevance of

⁴⁰⁹ Baker, *In Other Words*, pp. 90-94, 117 n. 7.

⁴¹⁰ Chris Manning, p.c. Nov., 1997.

information in the original. The rearrangement of elements brings with it a potential for changes in content and perspective.

The complementary approaches to meaning examined in Section 2.2 view our conception of the world as causally dependent on the way the world is. The general picture that emerged was one in which information about real world situations is prior to meaning and interpretation. The Translation Saliency model takes states of mind and described situations as uniformities in the translation process (rather than assuming static and total interpretation in assignment of denotation to expressions). The translator's attunement to implicit information conveyed by an original communication results from the realization that expressions carry only a certain amount of information and so only partially determine interpretation. The translator's mediatory presence depends on additional facts about utterances. The flexibility of language and the enormity and unpredictability of contextual elements suggest a process of inferencing without recourse to any ultimate set of fixed rules. Changes in the explicit and implicit information that must be affected in the translation process are determined by the translator's attunement to the relative significance of information conveyed in the original in relation to conventional constraints on communication in the receiving culture. Implicitness, as a criterion for determining saliency in translation, brings out this fundamental principle.

2.6.3 Localness

Localness describes those properties, features or configurations of linguistic expression which are unique or specific to one of the language pairs in translation—elements which are *unshared* by the interfacing languages. Localness provides a principle for distinguishing regularities of interlingual communication from other, translationally salient features.

By contrast, non-localness mortises surface text features with explicit representation. Since non-local or shared entities exhibit isomorphic abstract representation, they are subsumed under the notion of explicit transfer. Traditional approaches to translation have

focused on maintaining regularities in transfer through the contrastive analysis of expressions. In rule-based approaches, equivalence is generally equated with explicit transfer operations (Section 2.4). In this context, Quine notes the ubiquity of translation manuals, regulative maxims or analytical hypotheses (Section 1.2.2).

Localness points to the translator's task of coordinating partially-specifying expressions. Almost a century ago, Boas pointed out that expressions partially specify interpretation according to language-specific (conditional) constraints:

in each language only a part of the complete concept that we have in mind is expressed, and [...] each language has a peculiar tendency to select this or that aspect of the mental image which is conveyed by the expression of thought.⁴¹¹

Taking the mental image (states of mind and described situations) as that which is mediated, the translator's ultimate task is to coordinate the selection of this or that feature according to the tendencies in the interfacing languages. The fact that speakers are forced to adopt a particular strategy to get at the right interpretation (from the particular perspective or unique situation in which they find themselves in a communication), is described by Barwise and Perry as the perspectival relativity of language (Section 2.2). The notion of localness picks out the translator's attunement to differences in the shared communication resources available in the interfacing languages. The translator associates linguistic form with uniformities in the real world according to an awareness of the conditions under which such conventional constraints hold. A range of local communication resources is examined in Chapter Three. Following is an instance of the communication resource of agreement variation in Arabic which is unshared with English.

In his theory of agreement as a discourse linking relation, Barlow observes that constraints on the consistency of discourse referents (a naturalness consideration), are not connected with the properties of described objects:

while the fit between discourse structure and the structure of actual situations is in general a good one, discourse structure is not an intermediate form of interpretation[. ...T]he well-formedness of discourse is not dependent on real

⁴¹¹ Franz Boas, *Handbook of American Indian Languages* (Washington D.C.: Government Printing Office, 1911), p 43; quoted in Michael Barlow, 'A Situated Theory of Agreement' (unpublished doctoral dissertation, Stanford University, 1988), p. 46.

situations, and the semantic content of utterances is not dependent on the form of discourse referents. (p. 187)

Barlow summarizes an important distinction between discourse theory and semantic theory as it relates to the interpretation of utterances. He notes that while described objects are used in determining the interpretation of an utterance, the conventionalized (language-specific) aspects of meaning entailed in discourse referents are not:

In Situation Semantics, the described object associated with an expression is picked out by virtue of speaker connections. [...] Described objects are used in determining the interpretation of an utterance. [...] Discourse referents are not suitable as input to a semantic interpretation because they only reflect the conventionalized aspects of meaning, they cannot be used in the interpretation of particular utterances.⁴¹²

Since certain properties contained in conventionalized, language-specific expression are not part of the described object but originate entirely with the speaker, the violation of conventions often communicates the speaker's attitude or perspective on the described object.⁴¹³ Without pre-empting the discussion in Section 3.2.2, sample (37) shows a set of variant agreement options available in Arabic:

- (a) جائتني مكاتيب
reached-she-me letters
(b) جاءني مكاتيب
reached-he-me letters
(c) جاؤوني مكاتيب
reached-they-me letters

(37) I got some letters.

The feminine singular agreement in sample (37a) is the most common option and is generally associated with inanimate plurals. Sample (37b) has a classicizing effect reminiscent of Classical Arabic verb initial masculine agreement with an immediately following indefinite subject. Sample (37c) suggests an emphasis on plurality, or personification of the letters as deliberately coming, or syntactic association with a series of plural human subjects nearby in the text.

⁴¹² Barlow, pp. 187-188.

⁴¹³ Barlow, pp. 188-189.

While markedness is postulated to bring out meaningfulness in an original communication event, the notions of implicitness and localness model the way meaningful information is constrained in the process of generating translation.

2.6.4 Saliency

The term saliency stems from the adjective salient (from *salientem*, past participle of the Latin verb *salire*, ‘to leap’), which gained currency by the mid-17th century and was used to describe the movement of animals and water: ‘leaping, jumping; jetting forth; leaping upwards’. By the late 18th century, salient had come to describe material things and the spatial configuration of static objects. By the mid 19th century, adjectival and nominal forms referred to non-material things or qualities ‘standing above or projecting beyond the general surface or outline; jutting out; prominent among a number of objects; standing out from the rest; conspicuous’. By the 20th century, usage in the social sciences, particularly psychology, began to include the component of prominence or significance in an individual’s consciousness or awareness: ‘standing out or prominent in consciousness; the quality or fact of being more prominent in a person’s awareness’. The first cited use in the discipline of psychology relates to a universal principle (‘objective meaning’) and to the relative perception of meaningfulness in a situation (‘something that at the moment has special significance’).⁴¹⁴

The most important of all facts about consciousness is that it is graded; sometimes it stands out, as it were, against the diffuse background of personal life. It is *salient* [...] The more salient an experience, the greater its objective meaning. [...] At other times [...] consciousness is embedded [...] more deeply; there is less clearness, less salience. Saliency represents an act of pointing, a directedness of the person toward something that at the moment has special significance for him.⁴¹⁵

A later citation focuses on the importance of backgroundedness or norms to the awareness of prominence:

⁴¹⁴ OXFORD ENGLISH DICTIONARY, prep. by J. A. Simpson and E. S. C. Weiner, 2nd edn (Oxford: Clarendon, 1989), XIV, 392-393.

⁴¹⁵ OED, XIV, 392-393; from G. W. Allport, *Personality* ([n.p.: n.pub.], 1938) p. 553.

We shall refer to the degree to which [...] a specific group is present and prominent in a person's 'awareness' as the *salience* of that group. [...] A communication will produce more immediate change when the opposing group norms are at a low level of salience than when they are highly salient.⁴¹⁶

Use of the term in relation to information and consciousness is illustrated in a later citation:

We shall use the term 'salient' to describe stored information that has been prompted to the forefront of the individual's conscious thought.⁴¹⁷

In linguistics, salience focuses on the relative perception of information in language learning, speech perception and information processing: describing 'the ease with which a linguistic item can be perceived'.⁴¹⁸ Based on, say, relative position or the emphasis placed by stress, an item is said to have a greater or lesser degree of salience: 'characteristics that seem to make an item more visually or auditorily prominent than another'.⁴¹⁹ Although there is no direct relationship between the degree of salience of items and the order in which those items are learned, salience (tempered by other factors) is claimed by Dulay, Burt and Krashen to have an indirect effect on language acquisition. They cite earlier work on child second language acquisition in which an acquisition hierarchy is presented for a number of English grammatical structures.⁴²⁰

According to Barlow's discourse linking theory of agreement, salience is strongly associated with discourse rather than with syntactic or semantic structures. The notion is associated with the marking of important participants and it permits formulations incorporating cross-linguistic description.⁴²¹ Croft likewise uses salience to define person-based agreement—the cross-referencing or indexing of important arguments in discourse. A pragmatic concept, salience describes connections between the speaker and a referent in the described situation: that is 'the speaker's attitude or point of view towards the referent [...] rather than a relation between two entities in the described situation itself' (pp. 167-

⁴¹⁶ OED, XIV, 392-393; from C. I. Hovland, *Communication and Persuasion* ([n.p.: n.pub.], 1953) pp. 155, 161.

⁴¹⁷ OED, XIV, 393; from T. M. Newcomb, *Social Psychology* ([n.p.: n.pub.], 1965) p. 37.

⁴¹⁸ LONGMAN DICTIONARY OF APPLIED LINGUISTICS, p. 249.

⁴¹⁹ Heidi Dulay, Marina Burt and Stephen Krashen, *Language Two* (Oxford: Oxford University, 1982), p. 33.

⁴²⁰ Dulay, Burt and Krashen, pp. 32-34; and Heidi Dulay and Marina Burt, 'A New Approach to Discovering Universal Strategies of Child Second Language Acquisition', in *Georgetown University Round Table on Languages and Linguistics 1975*, ed. by Daniel Dato (Washington D.C.: Georgetown University, 1975), pp. 209-233.

⁴²¹ Barlow, pp. 169, 235.

168). The most salient entities are thus the most readily identifiable by the speaker and most closely involved in the described event. A similar notion—obviousness—is used to denote a relationship between a semantic relation and the speaker or hearer, which ‘depends on the knowledge and presuppositions of the speaker and the hearer rather than on some property of the described situation’ (p. 169).⁴²² Lyons associates salience with the capacity for speakers to infer reference from the universe-of-discourse. A situationally salient referent is pragmatically given and exists among the set of referents being talked about (non-linguistic entities) rather than the expressions mentioned (linguistic entities). Referents which are situationally salient need not be present in the utterance situation but are inferable from in the universe-of-discourse. Lyons illustrates with sentence (38):

(38) John wants to catch a fish and eat it for supper.

While *a fish* does not refer to any specific individual, the expression *it* is used with singular definite reference. A hypothetical entity is being treated as if it were an actual entity.⁴²³ This capacity for speakers to systematically infer reference from the universe-of-discourse underlies the structural ambiguity that characterizes the process of translating from one language system to another. The Salience model captures this capacity in a principled way.

Translation equivalence is a relative notion and very complex. Though crucial to any theory of translation, in Tabakowska’s view it is ‘still far from being adequately defined’ (p. 74). Recognizing the need to attempt pragmatic equivalence in addition to semantic and syntactic equivalence, Tabakowska searches for counterparts that trigger the attitudes, ambiguities and multiple readings in an original: what she calls ‘the polyphonic interpretation’ (p. 74). Polyphony frequently reflects the speaker’s choice of an indirect communication strategy, creating humorous, ironic, or some other rhetorical effect or style which need not be explicitly marked. To underscore the contrast between translation restricted to the syntactic and semantic levels on the one hand and the domain of pragmatic equivalence on the other, Tabakowska draws attention to the distinction between a text’s

⁴²² William Croft, ‘Agreement vs. Case Marking and Direct Objects’, in *Agreement in Natural Language...*, pp. 159-179 (pp. 167-169).

⁴²³ Lyons, *Semantics*, pp. 667-677; and Levinson, p. 80 n. 12.

propositional content and the interpretation of attitudes. Propositions are the decontextualized meanings or states of affairs entailed in statements, while attitudes flow on from the context-sensitive human factors of communication: belonging to ‘a definite speaker, acting within a definite situation, which is described in terms of a number of context-defining parameters’ (p. 73). The expressions contained in text are all that remains of unique communication events. The suggestion that texts are the tangible, durable evidence of a larger, fleeting process of communication underlies the view held by Hatim and Mason that translation involves a process of negotiation (Section 1.2.1).⁴²⁴

Texts are also the result of motivated choices reflecting speakers’ communicative aims. Expressions are the shared property of communicators. Individual voices or points of view reflect the choice of particular structures by speakers to get at a particular interpretation from a unique communication perspective. The subtle ways in which the speaker can represent an attitude to a described event or situation is referred to by Kuno and Kaburaki as empathy in syntax. They use the metaphor of camera angles to distinguish different interpretations or views of a situation through various syntactic structures with identical logical content. Concerned with empathy as it relates to theme, focus and discourse perspective in English and Japanese (though not in terms of cross-language equivalences), they observe sets of sentences of which all are grammatical, but some are unacceptable in a given reading ‘due to violation of various constraints on empathy foci’ (p. 627 n. 1).⁴²⁵

The use of expressions is constrained by language-specific (conditional) conventions. The conditional nature of constraints on communication suggests that translators are attuned to cross-linguistic variations in the use of expressions as communication resources. Like Tabakowska, Hickey sees the need for translators to distinguish the meanings of expressions used in a text from the effects created as part of the overall experience of a communication—the attendant impressions, feelings, attitudes and emotions. He draws

⁴²⁴ Brian Harris, p.c. 11 May, 1992; Elzbieta Tabakowska, ‘Linguistic Polyphony as a Problem in Translation’, in *Translation, History and Culture*, pp. 71-78 (pp. 71-74); and Hatim and Mason, *Discourse and the Translator*, pp. 3-4.

⁴²⁵ Susumu Kuno and Etsuko Kaburaki, ‘Empathy and Syntax’, *Linguistic Inquiry*, 8 (1977), 627-672 (pp. 627, 656-663, 670).

attention to the relationship between pragmatic and stylistic considerations in a text with the term *pragmastylistics*, which refers to the convergence of pragmatic aspects (of given and new information in the original text) with elements of style in the translation. The arrangement of information in linear text (as given or new) is intimately linked to conventional constraints on communication (ways of referring to things in the described situation and utterance situation). The translator's capacity to affect pragmatic convergence is consistent with the human communicative capacity for systematically inferring reference from the universe of discourse noted by Lyons (above).⁴²⁶

Stylistic effects (such as humour, intertextuality and metonymy) and the normality or strangeness of text are anchored in the surface form of expression. This is suggested in Hockett's observation that 'two utterances in the same language which convey approximately the same information, but which are different in their linguistic structure, can be said to differ in style'.⁴²⁷ Following changes in the pragmatic arrangement of given and new information in a translation, Hickey indicates that a change of style during the process of translation involves a change of effect:

Since given information is encoded or treated differently [...] from new information, and since given information [...] in one culture may not be given in another, how can the same or similar style be used in a target text to convey an item of new information as was used in the source text to convey an item of given information? [...] If the style has to be substantially changed, where does that leave any hopes for stylistic equivalence? (p. 78)

Hickey focuses on referring to entities in the described situation. Noting the conditional nature of constraints on referring, he investigates the implications of shared knowledge on the arrangement of given and new information in texts. He suggests the technique of *presupposition* in order to convey information that is given in the culture of the original text (in the sense of shared knowledge, information, beliefs, values and attitudes), but not given in the receiving culture. *Presupposition* in translation involves adding to the

⁴²⁶ Leo Hickey and others, 'A Pragmastylistic Aspect of Literary Translation', *Babel*, 39 (1993), 75-87 (pp. 77-78).

⁴²⁷ C. F. Hockett, *A Course in Modern Linguistics* (New York: Macmillan, 1958), p. 556; quoted in Hickey, pp. 78-79.

translation information which is implicit or presupposed in the original text. Such additions are made with minimal disruption to the style of the original.⁴²⁸

Presuppositions are context sensitive aspects of pragmatic inference. Unlike conversational implicature (by which inferences are based on assumptions concerning the cooperativeness of participants in communication), presuppositions are tied to actual words or aspects of surface structure. The partially understood notion of presupposition is intended to capture pre-theoretical intuitions about what is presumed when we speak. Perception of the main point of what we say is relative to perception of the background assumptions against which the main point is set. Presupposition generalizes sensitivity to backgroundedness. Although presuppositions are part of the conventional meaning of expressions, Levinson demonstrates that they are unstable, context-dependent aspects of meaning. He also notes the parallel way in which presupposition-triggers give rise to presuppositions in unrelated languages.⁴²⁹

The balance between what is stated explicitly and what is treated as known will vary from one language to another (Section 2.6.2). Hickey suggests that unless skilfully treated, ‘pragmatic distinctions between given and new in the source text will [...] produce radical differences in style between the source and target text’ (p. 80). Unlike the choice of substituting the nearest functional or cultural equivalent opted for by the dynamic equivalence strategy, presupposition involves the addition to the translation of the presupposed information by means of a number of presupposition triggers. Presuppositions are those aspects of meaning implicitly asserted by a speaker for an utterance to be meaningful. They reflect the way things are treated as true in a given context. They help interlocutors to get at the interpretation of an utterance by satisfying the conditions that must be met for an utterance to make sense. A discrepancy in the presuppositions of a statement, for example, can have an ironic effect on the style of a text. Hickey illustrates this with the unexpected and contradictory presuppositions entailed in (39):

⁴²⁸ Hickey and others, pp. 77-79, 86.

⁴²⁹ Levinson, pp. 167-168, 174, 178-181, 186-187, 204, 206, 212, 216-217, 219, 225; and Ralph Fasold, *The Sociolinguistics of Language* (Oxford: Blackwell, 1990), pp. 166-167, 170, 176-178.

- (39) It was true that he had been educated at a public school, but he managed to disguise this handicap well.⁴³⁰

The humorous effect and social comment in the original is created by juxtaposing *public school* with *but...managed to disguise this handicap*. The implications are lost in the hypothetical backtranslation in (39a), in which presuppositions are made explicit:

- (39a) It was true that he had been educated at a public school. This is an expensive, fee-paying school, usually with high standards of excellence. Despite this fact, which is generally considered a privilege for the rich or the elite rather than a handicap, he managed to act as a normal human being, as far as one could see. (p. 79)

Drawing on a parallel corpus of English novels translated into Spanish, Hickey presents a range of constructions that trigger presuppositions without interfering with the style or information load of the evolving translation. Though not claimed to be exhaustive, the list includes: non-restrictive adjectivals (parenthetical, qualifying information that assumes something to be true rather than declaring it); factive verbs (such as *know*, *realize* and *be glad that* which presuppose the factuality of the following clause); change of state phrases (such as *stopped doing s.th.*); cleft and pseudo-cleft sentences (*It is the...that should be...*, which presuppose the existence of some other contrasting entity); and judgmental verbs (such as *accuse s.o. of doing s.th.*, which presuppose the wrongness of the thing being done). Presupposing information is intended to minimally disrupt the effectiveness of communication—its style—determined by the translator's subjective estimations and decisions about the balance between given and new information in the interfacing languages.⁴³¹

A slightly different strategy for dealing with divergence in shared referential knowledge is found in Baker's discussion of implicature as it relates to pragmatic equivalence. Fragment (40), from a Haitian newspaper article, is compared to English and Arabic versions (40a) and (40b):

⁴³⁰ David Lodge, *Nice Work* (London: Penguin, 1989), p. 44; quoted in Hickey and others, p. 79.

⁴³¹ Hickey and others, pp. 79-83.

(40) En vérité, il ferait palir Arsène Lupin.

(40a) Indeed, he would frighten even Arsène Lupin. (A French version of Boris Karloff.)⁴³²

(40b) فالحق انه شخصية كفيلة بأن تخيف أرسين لوبين نفسه.

Although unclear whether the Arabic text was translated from the French original or its English translation, variation in the information content of the three versions indicates a divergence in the constraints on presupposition (implicit reference to things in the real world). The presupposition linking *frighten* and *Arsène Lupin* in both French and Arabic have been anchored to *Boris Karloff* in English. Although outside the sentence itself and literally parenthetical—as a kind of a translator’s aside—the string *A French version of Boris Karloff* serves a similar function to Hickey’s non-restrictive adjectivals. Information presupposed in the French original is added but limited in its pragmatylistic encroachment by not being elevated to the level of predicate. In contrast to English, the Arabic translation converges with the French text reflecting a decision by the translator regarding the Arab readership. Most of Arsène Lupin’s stories, explains Baker:

are translated into Arabic and his name will probably suggest the familiar image of a resourceful and cunning thief. The Arabic translation therefore does not provide an elaboration of the reference. By contrast, Arsène Lupin is virtually unknown to the average English reader. The English translator attempts to bridge the gap between the textual world and the world of the target reader by explaining the unfamiliar (Arsène Lupin) in terms of the familiar (Boris Karloff). (pp. 231-232)

The strategy of presupposing information in the translation represents a middle ground between implicit and explicit expression—between silently assuming information to be known and asserting it declaratively.⁴³³ Stylistic effect draws on implicatures which allow participants in a communication to identify and interpret the significance of reference. As Baker puts it, identifying reference crucially involves ‘knowing enough about the referent to interpret the particular association it is meant to trigger in our minds in a given context’ (p. 232). She notes Thomson’s advice that in deciding what part of the original shared context is to be built into the text of a translation, information should be included if it is

⁴³² Baker, *In Other Words*, p. 231; from *Le Matin*, Haiti [n.d.], p. 51; in *A Hero from Zero* ([n.p.]: Lonhro, [n.d.]), p. 57; Arabic trans. [no details], p. 67.

⁴³³ Hickey and others, p. 83.

essential to the success of conversational implicatures.⁴³⁴ The translator's need to constantly choose between alternatives is necessitated by the impossibility of simultaneously conveying information at all linguistic levels. In this context, Pérez reiterates Bell's realization that 'texts in different languages can be equivalent in different degrees' (p. 6).⁴³⁵

In contrast to Hickey's strategies for translating information bound to surface expression, two papers investigate the systematic relationships in language between meaning and surface expression from a typological standpoint. As part of a reference manual of linguistic phenomena for field workers recording grammars of the world's languages Foley and Van Valin examine information dynamics at the clause level, and Talmy examines information lexicalized in the category of verb.⁴³⁶

Foley and Van Valin investigate information packaging: how the prominence associated with different syntactic constructions relates with perspective on the described event or situation. In particular, they illustrate how interpretation is linked to the promotion and demotion of information in text. Interpretation of the way information is packaged—its prominence—is described with the notions of foregrounding and backgrounding:

the spatial metaphor of looking at a sentence as being somehow analogous to a landscape or photograph, such that elements in the foreground are more salient and important than those in the background. (p 332)

Information status is shown to be determined by both the discourse context and the inherent properties of the system of reference (suggested in an inherent salience hierarchy of person reference). Variations in the packaging of utterances thus afford speakers options about how information is expressed.⁴³⁷

⁴³⁴ G. Thomson, 'An Introduction to Implicature in Translation', *Notes on Translation*, Special Edition (1982), p. 30 cited in Baker, *In Other Words*, p. 248.

⁴³⁵ María Calzada Pérez, 'Trusting the Translator', *Babel*, 39 (1993), 158-174 (p. 161); from Bell, p. 6.

⁴³⁶ William A. Foley and Robert D. Van Valin, 'Information Packaging in the Clause', in *Language Typology and Syntactic Description*, ed. by Timothy Shopen, 3 vols (Cambridge: Cambridge University Press, 1985), I: *Clause Structure*, pp. 282-364; and Leonard Talmy, 'Lexicalization Patterns: Semantic Structure in Lexical Forms', in *Language Typology and Syntactic Description*, III: *Grammatical Categories and the Lexicon*, pp. 57-149.

⁴³⁷ Foley and Van Valin, pp. 282-283, 287-291, 332-335.

Talmy assumes that elements can be isolated within the domains of meaning and surface expression. He is concerned with comparing the patterns occurring across languages—examining which semantic entities are expressed by which surface entities. He observes that meaning-surface relations are largely not one-to-one. Rather, a combination of semantic entities can be expressed by a single surface entity, a single semantic entity can be expressed by a combination of surface entities, and semantic entities of different types can be expressed by the same type of surface entity. Talmy demonstrates that semantic entities and surface entities relate to each other in specific patterns, both typological (exhibiting a comparatively small number of patterns across languages) and universal (exhibiting a single pattern). He aims to describe the typological and universal principles that are embodied in the ‘meaning-in-form language patterns’ (p. 58). His study is not limited to treating the properties of whole word forms as atomic givens, but rather, involves the semantic components that comprise them. Rather than treating a single component at a time in such crosslinguistic semantic decomposition, Talmy investigates the surface arrangements of concurrent sets of syntagmatically related components: the ‘whole-system properties of semantic-surface relations’ (p. 121).⁴³⁸

Such componential crosslinguistic comparison permits observations on the distribution of information across languages on the basis of the significance of information to the communication. Talmy proposes that the relative meaningfulness of communicated information is encompassed in the notion of salience, a pragmatic concept which, importantly, relates interlocutors and the described situation. Talmy defines the ‘universal principle’ of salience as:

the degree to which a component of meaning, due to its type of linguistic representation, emerges into the foreground of attention or, on the contrary, forms part of the semantic background where it attracts little direct attention. (p. 122)

Equivalence in translation involves a trade-off between informational equivalence and backgroundedness due to differing constraints on obligatory and optional information embodied in the surface forms of two interfacing languages. Talmy concludes:

⁴³⁸ Talmy, pp. 57-9, 121.

Languages can be quite comparable in the informational content that they convey. However, a way that languages genuinely differ is in the amount and the types of information that can be expressed in a backgrounded way. (p. 122)

Equivalence in backgrounding is only gained by the forfeiture of information. Information may need to be either omitted altogether and left for possible inference, or established elsewhere in the discourse. However for reasons of style or naturalness in translation, the interplay between significance and information suggests the translator coordinates a more restricted domain than backgroundedness. Talmy points out that pragmatic constraints on the relative significance of information to the communication may force decisions on the translation of even salient information—just ‘how much can be expressed at all in a single sentence, even in the foreground, without being unacceptably awkward’ (p. 123). For this reason, the Translation Salience model distinguishes the identification of salient information for the purpose of translation from the transfer of non-salient information.

The extent to which equivalence phenomena should be explained and predicted by the Salience model is suggested in Moravcsik’s insight that explaining something provides an ‘independently motivated principle from which the facts to be explained naturally follow’ (p. 90). Hawking states that a good theory ‘must accurately describe a large class of observations on the basis of a model that contains only a few arbitrary elements, and it must make definite predictions about the results of future observations’ (p. 10). Hermans describes theoretical models as ‘hypothetical constructs which are derived from an established field of knowledge and then tentatively projected onto a new, wholly or partly unknown domain’ (p. 155). Gutt distinguishes a theory from a model, which realizes theory. Theory is described as an internal representation or idea which explains the cohesive character of a phenomenon by the perception of system and order in the thing observed. A model exists as an external realization of theory. It stands for the idea embodied in theory by revealing the most essential, significant characteristics and specifying the components involved and relationships between the components. Gutt suggests that ‘[t]he explanation of the system is the theory of the scientist which, when passed on to others, is realized as a model’ (p. 23).⁴³⁹

⁴³⁹ Stephen Hawking, *A Brief History of Time*, (London: Bantam, 1989), cited in Anna Wierzbicka, *The*

The Translation Saliency model makes generalizations about the notion of equivalence in translation. Very complex processes are subsumed under the cover term equivalence. The model formalizes these processes as a continuum determined by the simultaneous presence of all three determining criteria: markedness, localness and implicitness.

Definition of Translation Saliency

The Translation Saliency Model is construed with the following three postulates:

1. Equivalence in translation refers to a continuum whose polar extremes are *Saliency* and *Transfer*;
2. *Saliency* describes, for the purposes of translation, information which is:
 - a) marked,
 - b) implicit, and
 - c) local;
3. *Transfer* describes, for the purposes of translation, information which lacks one or more of the defining elements of saliency (viz. markedness, implicitness and/or localness).

Translation Saliency isolates meaningful information from the translator's perspective. It determines the relative meaningfulness of information about uniformities in the translation process: described situations and the states of mind of communicators. Transfer is defined by lack of saliency.

The model explains the relationship between a translation and its original in terms of attunement to constraints on communication. Translation Saliency models how the translator coordinates expressions across interfacing communication events in two different languages systems. Coordination is achieved according to the translator's cross-language attunement to communication resources. The Saliency model does not describe equivalence as a direct relationship between expressions in an original and a derived text. The model does not follow on from a rationalist theory because it does not seek to explain cognitive processes of interpretation. Points of reference are external: the behaviour of expressions, and situations in the real world (or describable abstract worlds). The postulates of Translation Saliency (markedness, implicitness and localness) are observable and comparable—as the behaviour of expressions in texts. They are, nevertheless, subject

to limitations on measurability (Chapter Four). Described situations and the states of mind implicated by communicators in their choice of expression are likewise observable.

A number of theorists have drawn attention to the constraining force of the receiving language and culture (Sections 1.2.1, 1.2.3 and 2.4). In this account of Translation Salience, a narrow scope is adopted in modelling the equivalence relation. For the sake of expedience, meaningfulness in an original communication event is taken as a point of departure, and the defining postulate of markedness is construed relative to an original communication (Section 4.1). Equivalence is construed as a partial relation.

The notion of salience captures, at the highest level of generality, information about described situations and about the states of mind of interlocutors. While language-specific constraints on expression tend to reflect cultural attitudes, it does not follow that structural distinctions imposed by the use of individual languages must be correlated with the patterns of thought of language users. Acculturation does not obscure the species-specific human capacity to acquire and use languages. Lyons describes the human perceptual predisposition for differentiating reality (biological salience) as distinct from the acquisition of language and the meanings of expressions:⁴⁴⁰

any child, whatever his parentage might be, is capable of learning any language at all, provided that he is brought up in an environment in which the language is used for all the multifarious activities of everyday life. By virtue of his perceptual and conceptual predispositions the child will notice certain aspects of his environment rather than others. These may be described as biologically salient. (p. 247)

This calls to mind Grice's view of communication as rational human behaviour in which utterances are linked to reality by the states of mind of communicators through shared experience and shared access to communication resources. Meaningful choices are made from the communicators' repertoire of communication resources according to rational preferences (Section 2.1). Both Situation Semantics and Mental Models approaches view interpretation as a process of modelling information about a prior causal reality (Section 2.2). These theories of meaning point to a model of equivalence which pays attention to the translator's attunement to communication resources and the infinity of contexts in which

⁴⁴⁰ Lyons, *Semantics*, pp. 245-250

utterances may be interpreted. The flexibility of language, and the enormity and unpredictability of situational elements means that the inferencing process which underlies a translator's attunement takes place without recourse to any ultimate set of fixed rules. The equivalence relation (by which an original communication event partially constrains text development in translation) is not modelled according to the functions or meanings of expressions. Rather, equivalence is modelled on the way a translator picks out relevant information in described situations and utterance situations. Such attunement has reflexes in the use of expressions.

Chapter Three presents a range of qualitative data illustrating salience in translation between Arabic and English. Qualitative methodology enables the contrastive analysis of contextualized interpretations. Section 4.2 addresses quantitative approaches to salience in relation to emerging multi-lingual applications of statistical techniques.