PRAGMATICS
&
COGNITION

Offprint

Using non-sentences:
An application of Relevance Theory

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For every affirmation, it seems, is either true or false;
but of things said without any combination none is either true or false
(e.g., 'man', 'white', 'runs', 'wins'). (Aristotle, *Categories* IV, 10a)

Michael Dummett has nicely expressed a rather widespread doctrine about the primacy of sentences. He writes: "you cannot DO anything with a word — cannot effect any conventional (linguistic) act by uttering it — save by uttering some sentence containing that word ...". In this paper we argue that this doctrine is mistaken: it is not only sentences, but also ordinary words and phrases which can be used in isolation. The argument involves two steps. First: we show — using Sperber and Wilson's relevance theory — that an utterance of "John's father" could COMMUNICATE a proposition. Second: we point out that, in this context, this proposition would be asserted rather than merely implicated. Because there is nothing importantly idiosyncratic about the phrase "John's father", we infer that words and phrases generally can be used in isolation to make assertions.

1. The Thesis

The central claim of this paper is given in (1). Lacking a better name for it, we label it the Thesis.

(1)   *The Thesis*: Ordinary words and phrases can be used in isolation to make assertions.

The Thesis is to be contrasted with the following Counter Thesis, a view which is rather widely assumed among philosophers of language.

(2)   *The Counter Thesis*: Only sentences can be used in isolation to make assertions.

As Michael Dummett puts the point,

> A sentence is, as we have said, the smallest unit of language with which a linguistic act can be accomplished, with which 'a move can be made in the language game': so you cannot *do* anything with a word — cannot effect any conventional (linguistic) act by uttering it — save by uttering some sentence containing that word ... (Dummett 1973: 194).[1]

At first glance, one might think that Dummett is obviously mistaken about this. After all, one can simply *observe* that speakers utter ordinary words and phrases in isolation. And such speakers thereby make assertions. That is, it might appear that the Counter Thesis is obviously false. The Counter Thesis is easily rescued, however, by taking "sentences" to include both (a) syntactically elliptical sentences (e.g., "At home" as an answer to "Where is John?") and (b) so-called "one-word" or "one-phrase" sentences; i.e., expressions which are *syntactically* lexical or phrasal, but which are capable of expressing propositions (e.g., "Fire!", "Gavagai.").

For the sake of argument, let us grant that there are elliptical sentences and "one-phrase" sentences. Then the Counter Thesis could still be true if every apparent assertoric utterance of a word or phrase was actually an utterance of an elliptical sentence, or an utterance of a "one-phrase" sentence. Given this notion of "sentence", we can spell out the Thesis as follows:

(3)   *The Thesis*: A speaker can assert by tokening an expression whose syntactic structure is lexical or phrasal, and whose meaning is non-propositional.[2]

We know of at least two arguments for the Thesis, and against the Counter Thesis.

Argument One: Speakers actually do assertorically utter ordinary words and phrases in isolation. Therefore, ordinary words and phrases *can be* used in isolation to make assertions.

Argument Two: Regardless of whether speakers actually do assertorically utter ordinary words and phrases in isolation, they are able to do so. Therefore, ordinary words and phrases *can be* used in isolation to make assertions.

We have elsewhere considered the merits of Argument One (see especially Stainton 1993). The present paper is devoted to showing that, whatever the actual behavior of speakers, they are able to assertorically utter ordinary words and phrases in isolation. Hence the Thesis is true, and the Counter Thesis is false.

We will begin by arguing for the following Possibility Premise.

(4) *The Possibility Premise*: A typical speaker is able to use the ordinary phrase "John's father" in isolation to assert that the man near the door is the man who fathered John Adams.

Given that the Possibility Premise is true, at least one ordinary phrase can be used in isolation to make an assertion. This in itself refutes the Counter Thesis. What's more, the very same arguments which establish the Possibility Premise with respect to (5) apply, mutatis mutandis, to a multitude of ordinary words and phrases.

(5) John's father

For instance, the arguments could be applied to any of the words or phrases in (6).

(6) (a) An emergency generator shutdown
  (b) Seven scoops of ice cream
  (c) At the house of the seven gables
  (d) To my dearest wife of many years. From your loving husband
  (e) Coffee. Black. With seven lumps of sugar
  (f) Of all the stupid things to say (Quirk et al. 1985: 850)

In so far as there is nothing special or peculiar about "John's father", we may safely generalize from this case and conclude that speakers are able to use words and phrases in isolation to make assertions.

Let us stress: the truth of the Possibility Premise is not dependent upon whether any speaker ever has or ever will use the ordinary phrase "John's father" in isolation to make an assertion. The Possibility Premise concerns the actions speakers *are able to* perform by uttering the ordinary phrase "John's father"; not the actions (if any) speakers actually have or will perform by uttering this phrase. Indeed, the Possibility Premise could be true even if no actual speaker *has ever* made a non-sentential assertion; it could happen that a typical speaker has *the ability* to make assertions using words and phrases, but that all actual speakers choose not to exercise this ability.

Our demonstration of the Possibility Premise will take place in two steps. In the first step we use relevance theory to show that, given the right circumstances, a typical speaker is able to *communicate* the proposition in (7) — hereafter referred to as JF — by uttering the ordinary phrase "John's father" in isolation.

(7)   *JF*: The man near the door is the father of John Adams.

In the second step, we introduce a slightly modified version of Sperber and Wilson's (1986) definition of assertion. Applying this definition to our example, we show that a typical speaker can assert — not merely communicate, but *assert* — JF by uttering "John's father" in isolation.

2. Step one: Communication

According to Sperber and Wilson (1986), an interpretation of an utterance is communicated if it is consistent with the presumption of optimal relevance. Simplifying somewhat, an utterance of "John's father" communicates JF if:

(a)   JF is relevant enough to make it worth the addressee's while to process the utterance of "John's father"; and

(b)   The utterance of "John's father" is the most relevant one the communicator could have used to communicate JF.

In what follows we will argue that, in at least one possible context C, conditions (a) and (b) are jointly satisfied. If it is possible for these two conditions to be jointly met, then it is possible for JF to be communicated by an utterance of "John's father". And if it is possible for *an utterance* of "John's father" to communicate JF, then it is possible for *a typical speaker* to communicate JF by uttering "John's father". This is the conclusion of step one.

2.1 *Relevance*

What is it for an assumption to be "relevant enough"? Sperber and Wilson call the set of assumptions which an individual holds to be true or probably true at a given time that person's CONTEXT. Contexts change over time: new assumptions are added, old ones removed. CONTEXTUAL EFFECTS are changes to a context which improve it. Contextual effects arise is three different ways:

(i)   New information may interact with old information, and introduce new assumptions into the context;

(ii)   New information may provide evidence for an assumption already present in the context;

(iii)   New information may provide evidence against an assumption, and may result in its removal from the context.

Armed with the notions of context and contextual effect, we can introduce RELEVANCE.

(8)   RELEVANCE:

> *Extent Condition 1*: An assumption is RELEVANT in a context to the extent that its contextual effects in that context are large.
> *Extent Condition 2*: An assumption is RELEVANT in a context to the extent that the effort required to process it in this context is small (Sperber and Wilson 1986: 125).

Thus, for an assumption to be relevant in a context, it must have some contextual effect in that context. And, ceteris paribus, the more contextual effects an assumption has in a context, the more relevant it is in that context. Furthermore, the less processing required in achieving the contextual effect in question, the more relevant the assumption.

There are contexts in which interpreting an utterance of "John's father" as communicating JF would require comparatively little processing effort: the interpreter would only need to (a) assign the Logical Form [$_{NP}$ John's father] to the utterance; (b) complete[3] this Logical Form; and (c) access one very manifest Logical Form.[4] We shall shortly explain why this is so.

We begin by noting some important facts about the context C within which the utterance is to be imagined: Two people are talking at a party. Mary points to a man near the door and says "John's father". Let it be further stipulated that someone was recently talking about John Adams. Given this, the completion of the Logical Form of the utterance (i.e., [$_{NP}$ John's father]) in C is sure to be (9).

(9)   [$_{NP}$ The man who fathered John Adams]

That is: reference would be assigned such that the speaker is referring to John Adams, who was just mentioned, and not John Baker — who no one has thought about for ten years. Also, in the described situation, the genitive case marker would be enriched such that "John's father" refers not to the father who John brought along to new members night at the Association of Fathers, nor to the father who John "purchased" for the evening at a charity auction. Rather, [$_{NP}$ John's father] would be enriched so that it refers to the man who actually

fathered John. [$_{NP}$ John's father] would be enriched in this way because, in these circumstances, this reading is more accessible[5] than any other.

So: the completed Logical Form of the utterance, in these circumstances, would be [$_{NP}$ The man who fathered John Adams]. So far, relatively little processing effort has been expended.

Of course this is not yet what we are after: we want to show that, in these circumstances, the utterance of "John's father" is relevant enough. And the Logical Form (9), even completed, cannot be *relevant enough* because it cannot be *relevant*. Only assumptions can be relevant, and [$_{NP}$ The man who fathered John Adams] is not an assumption.

Recall, however, Sperber and Wilson's definition of manifestness: a Logical Form is manifest to an individual if it is inferable, retrievable from memory or perceivable in the physical environment (See Sperber and Wilson 1986: 81ff for discussion). According to this definition, Logical Forms of all the following semantic types can be manifest — because they can be perceived or retrieved from memory.

(10) *Logical Forms of semantic type one*: Logical Forms that express individual concepts

(11) *Logical Forms of semantic type two*: Logical Forms that express properties

(12) *Logical Forms of semantic type three*: Logical Forms that express generalized quantifiers, where a generalized quantifier is a function from properties to propositions

(13) *Assumptions*: Logical Forms that express propositions

Returning to our example, the following assumption schema — which is a Logical Form of semantic type two — would be very manifest to the hearer H in C, because the speaker is pointing at the man near the door.

(14) [The man near the door is x]

And JF results from conjoining this formative with the completed Logical Form of the utterance. So: H, the hearer, can arrive at JF by merely completing the Logical Form of the utterance, and accessing the very manifest Logical Form in (14). This is indeed comparatively little processing effort.

It is safe to assume that, in some context C, JF would have sufficient contextual effects to make this small amount of processing effort worthwhile. That is: there is surely some context or other such that JF could be usefully added to that context, or such that JF would provide further evidence for some assumptions already in that context, or such that JF would remove some assumption from that context. Hence condition (a) of the presumption of optimal relevance is met in at least one context C:

(a)   JF is relevant enough to make it worth the addressee's while to process the utterance of "John's father".

But is condition (b) met in C as well?

(b)   The utterance of "John's father" is the most relevant one the communicator could have used to communicate JF.

2.2 *Optimal relevance*

The most relevant utterance which communicates an assumption A is the one which manages to communicate A while requiring the least processing effort on the part of the hearer. But is there not another utterance which would communicate that the man near the door is John's father, and which would require less effort on the hearer's part than an utterance of (5), namely an utterance of (15)?

(15)   The man near the door is John's father.

There are two questions worth raising here. On the one hand: would utterances of (15) and (5) really have the same contextual effects in the same context? On the other hand: would an utterance of (15) really require less processing effort than an utterance of (5)? As Sperber and Wilson (1986: 202) write:

> It might seem that two utterances with the same linguistically determined truth conditions must have identical contextual effects. [We believe that], on the contrary, they may differ both in their contextual effects and in the processing effort they require, and that this is the key to an explanatory theory of style.

2.2.1 *Contextual effects*

The style which a speaker adopts inevitably carries information about her relationship to the hearer, what she takes the hearer to know or believe, her personality (e.g., does the speaker lean to formal and dignified, or casual and unceremonious communication?), and so on. As Sperber and Wilson (1986: 217-218) explain,

> From the style of a communication it is possible to infer such things as what the speaker takes to be the hearer's cognitive capacities and level of attention, how much help or guidance she is prepared to give him in processing her utterance, the degree of complicity between them, their emotional closeness or distance. In other words, a speaker not only aims to enlarge the mutual cognitive environment she shares with the hearer; she also assumes a certain degree of mutuality, which is indicated, and sometimes communicated, by her style.

Applied to our example, we see that an utterance of "John's father" has different contextual effects than an utterance of "The man near the door is John's father". Given the right circumstances, uttering the former might indicate that the style is informal, that the speaker and hearer can take a familiar tone with one another, that the speaker is relying on the hearer to do some extra inferential work, and so on.

In general, uttering a word or phrase has different stylistic effects than uttering a sentence. The differences may be communicated. Or they may merely be registered by the hearer, i.e., the hearer may receive extra contextual effects, without it being manifest that the speaker intended to make it manifest, etc. Hence it simply is not true that utterances of (5) and (15) will inevitably have the same contextual effects in the same circumstances.

2.2.2 *Processing effort*

How much processing effort an utterance requires is an empirical question about which we can only speculate. Nevertheless, we hope to show that there is no reason to expect that interpreting (5) requires more processing effort than interpreting (15), given the same circumstances. On the contrary, there are some reasons for thinking that, in the circumstances described, (5) requires the least processing effort of the two.

As Sperber and Wilson (1986: 218) claim,

> A speaker aiming at optimal relevance will leave implicit everything her hearer can be trusted to supply with less effort than would be needed to process an explicit prompt.

Let us look closely at our example. Sentence (15) contains more words than (5); words which need to be disambiguated, enriched and assigned reference. Is "man" to be taken as human being — as in "earth man" — or as male human being? In saying "the man", which man is the speaker referring to? Is "near" to be taken as near for two planets, near for two cities, near for a missed target, or near for two medium sized physical objects? And so on.

Discovering the propositional form of an utterance of the more explicit (15) may, therefore, require more processing effort than discovering the completed Logical Form of an utterance of (5) and conjoining it with some formative; e.g., the very manifest Logical Form [The man near the door is x]. It may happen, given the right circumstances, that a speaker aiming at optimal relevance should leave the Logical Form [the man near the door is x] implicit, because the hearer can be trusted to discover [The man near the door is x] and connect it to [John's father] with less effort than would be needed to process the explicit prompt "The man near the door is John's father".

2.2.3 *Optimal relevance and syntactic ellipsis*

Nevertheless, it may be objected, an utterance of the ordinary phrase "John's father" might not be the most relevant prompt — because an utterance of the elliptical sentence (16) would appear to be no less relevant.[6]

(16)
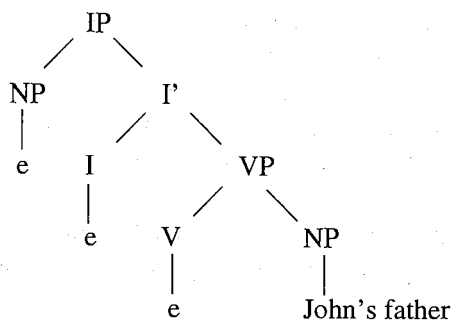
On the one hand, interpreting an utterance of the elliptical sentence (16) would not seem to require more processing effort than interpreting an utterance of "John's father", because sentence (16) contains no more words than (5). Hence an utterance of it contains no *extra* words in need of disambiguation, enrichment and reference assignment. On the other hand, there is no apparent

difference in stylistic effects. It is at least plausible, therefore, that an utterance of (16) would be no less relevant than an utterance of the ordinary phrase "John's father".

How to respond? We believe the objection can be side-stepped altogether, on the grounds that the elliptical sentence (16) could not be used in the context described. If there is one thing known about elliptical sentences, it is this: elliptical sentences require some kind of linguistic antecedent.[7] Hence they cannot acceptably occur in discourse initial position.[7] It follows that (16), being an elliptical sentence, cannot be used in discourse initial position. And, in C, there is no prior discourse. Hence, in the context described, the elliptical sentence (16) simply is not an alternative to (5).

2.3 Summary

According to Sperber and Wilson, an utterance of "John's father" communicates JF if:

(a)   JF is relevant enough to make it worth the addressee's while to process the utterance of "John's father"; and

(b)   The utterance of "John's father" is the most relevant one the communicator could have used to communicate JF.

It is reasonable to suppose that there is at least one context in which both of these conditions obtain. Therefore, we may safely conclude, an utterance of "John's father" can communicate JF. Of course if an utterance of "John's father" can communicate JF, then a typical speaker could use the ordinary phrase "John's father" in isolation to communicate JF. This is the conclusion of step one.

What remains, in order to establish the Possibility Premise, is to show that a typical speaker can actually *assert* JF by uttering "John's father" in isolation.

3. Step two: Assertion

3.1 *Assertion defined*

When is a proposition asserted, and not merely communicated? According to Sperber and Wilson (1986: 181), an utterance is an assertion if the proposition it communicates is the propositional form of the utterance.[8]

An utterance U has a propositional form P just in case P is a completion of U's Logical Form L — i.e., P results from assigning reference to all indexicals in L, disambiguating L and enriching L.

Consider an example. Mary utters (17).

(17) He is at the bank.

The propositional form [John is at the river bank] is a possible propositional form of Mary's utterance, because it could result simply from assigning John as the reference of the pronoun "he" and disambiguating the word "bank" as meaning river bank. Another possible propositional form of this utterance is [Steve is at the money lending institution]. Again: this propositional form could result simply by assigning Steve as the reference of "he" and money lending institution as the appropriate reading of "bank".

Most utterances have many possible propositional forms, because there are usually many different ways that the Logical Form of the utterance can be filled in. In contrast, there are infinitely many propositional forms which any given utterance *could not* have. These are the propositional forms which *cannot* result merely from filling in the utterance's Logical Form.

The propositional form [The king is dead], for example, is not a possible propositional form of Mary's utterance, because there is no way to complete the Logical Form [He is at the bank] to arrive at this propositional form. This is true despite that fact that, given the right circumstances, someone might *communicate* that the king is dead by saying "He is at the bank".[9]

Given this notion of the propositional form of an utterance, we can spell out Sperber and Wilson's definition of assertion.

(18) *Definition of Assertion*: An utterance U is an assertion that P if and only if:
  (a) P is the propositional form of U (i.e., P results merely by completing the Logical Form of U — by disambiguating it, enriching it and assigning it reference); and
  (b) P is consistent with the presumption of optimal relevance (i.e., U actually communicates P).

3.2 *Revising the definition*

This definition, as it stands, leaves out assertions made with words and phrases in isolation. According to Sperber and Wilson's definition, an utterance U is an assertion if and only if the assumption communicated by U is identical to the propositional form of U. But the assumption communicated by an utterance of an ordinary word or phrase *cannot* be identical to the propositional form of that utterance since the latter cannot be propositional, while the former must be propositional.

The "propositional form" — or, more accurately, the COMPLETED LOGICAL FORM (LF-C(U)) — of a lexical or phrasal utterance is typically of semantic type one, two, or three; that is, the Logical Form of an ordinary word or phrase, even when completed, expresses either an individual concept, a property or a generalized quantifier. Such a Logical Form can, of course, never be identical to the assumption communicated. Therefore, no utterance of an ordinary word or phrase can be an assertion — according to Sperber and Wilson's definition.

To include utterances of ordinary words and phrases as assertions, we must amend Sperber and Wilson's definition as follows:

(19) *Definition of Assertion (Revised)*: An utterance U is an assertion that P if and only if:
  (a) *Either* P is the propositional form of U (i.e., P results merely by completing the Logical Form of U — i.e., by disambiguating it, enriching it and assigning it reference) *or* P could result merely by completing the Logical Form of U and conjoining it with another manifest Logical Form of the appropriate semantic type; and
  (b) P is consistent with the presumption of optimal relevance (i.e., U actually communicates P).

Hence:

(a) *Where the Completed Logical Form expresses an Individual Concept*: If LF-C(U) expresses an individual concept and there is a manifest Logical Form LF' that expresses a property, and LF-C(U) conjoins with LF' to yield the proposition that is communicated, then U is an assertion.

(b) *Where the Completed Logical Form expresses a Property*: If LF-C(U) expresses a property and there is either a manifest Logical Form LF' that expresses an individual concept, or a manifest Logical Form LF'' that expresses a second order property, or a manifest Logical Form LF''' that expresses a generalized quantifier, and LF-C(U) conjoins with LF', LF'' or LF''' to yield the proposition communicated, then U is an assertion.

(c) *Where the Completed Logical Form expresses a Generalized Quantifier*: If LF-C(U) expresses a generalized quantifier and there is a manifest Logical Form LF' that expresses a property, and LF-C(U) conjoins with LF' to yield the proposition communicated, then U is an assertion.

What can be said in favor of this definition, as compared to Sperber and Wilson's original? Well, pretheoretically anyway, a man who says "rabbit" while pointing at an animal has not merely *implicated* that the indicated object is a rabbit. (Certainly the man could fairly be said to have lied if, intending to deceive, he said "rabbit" while pointing at a suitably disguised guinea pig.) However, whatever is communicated, but not merely implicated, is asserted. Therefore, in saying "rabbit", the speaker asserts. The revised definition, unlike the original, allows this.

3.3 *Applying the definition*

Let us now apply this definition to our example of "John's father". We saw that:

(a) The proposition that the man near the door is the man who fathered John results merely by completing the Logical Form of the utterance of "John's father" and conjoining it with another manifest Logical Form of the appropriate semantic type; namely, the Logical Form [The man near the door is x]; and

(b) The proposition that the man near the door is the man who fathered John is, by hypothesis, consistent with the presumption of optimal relevance. That is, the utterance of "John's father" actually communicates this proposition.

Therefore, according to our revised definition of assertion, a speaker who uttered "John's father" in the circumstances described would *assert* that the man near the door is John's father. So the Possibility Premise is true.

The Possibility Premise on its own refutes the Counter Thesis. But notice: there is nothing odd or special about the phrase "John's father". The arguments would work equally well for any of the words or phrases mentioned in (6), and many more — mutatis mutandis, of course.

We conclude, therefore, that speakers are able to assertorically utter a multitude of ordinary words and phrases — regardless of whether they actually do so. Hence the Thesis is correct. And the Counter Thesis is false.[10]

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Notes

1. Further along in the same work, Dummett *identifies* assertion with the act of uttering sentences in the appropriate circumstances: "assertion *consists in* the (deliberate) utterance of *a sentence* which, by its form and context, is recognized as being used according to a certain general convention" (Dummett 1973: 311; our emphasis). For related discussion, see Davidson (1967), Dummett (1981: 360), and Evans (1982: 67), as well as the voluminous literature on Frege's (1978) so-called "context principle".

2. Examples of non-propositional meanings include: individual concepts, properties, and generalized quantifiers. For discussion, see Lewis (1970), Dowty, Wall, and Peters (1981), and Bach (1989) among many others.

3. Where an utterance is assigned more than one Logical Form (e.g., an utterance of "Flying planes can be dangerous"), the hearer will need to disambiguate; where the Logical Form of the utterance contains indexical elements (e.g., an utterance of "He bought that in Chicago"), she will need to discover the reference of these indexicals; and where the Logical Form of the utterance contains some vague element (e.g., an utterance of "That is big"), she will need to ENRICH the vague element (i.e., she will need to choose between, say, big for an insect, big for a building, big for a star, etc.). Sperber and Wilson call these tasks collectively COMPLETING or FILLING IN a Logical Form.

4. An assumption A is MANIFEST to an individual I if (a) I actually holds A true or probably true or (b) I could reasonably hold A true or probably true, at the time and place in question. There are several ways that an assumption may be manifest to an individual. It

may be perceptible in the physical environment; it may be inferable from assumptions which are already manifest; or, it may be retrievable from memory. It is important to stress the modality at work in this definition: to be manifest, an assumption need not have been already perceived, remembered or inferred. Rather, what is required for manifestness is the mere possibility that the assumption be perceived, inferred or remembered.

5. It is not wholly clear what ACCESSIBILITY comes to. But the intuitive idea can be brought out as follows. Some assumptions are more easily brought to consciousness than others; furthermore, some assumptions can be retrieved from long term memory with ease, while others require significant effort. Similarly, some assumptions can easily be introduced into an individual's context; while other assumptions could become part of the individual's context only with a good deal of effort. Those assumptions which require less effort to become part of an individual's context at a given time are more accessible for that individual at that time.

6. We owe this point to Dan Sperber.

7. See Barton 1990, Hankamer and Sag (1976), and Stainton (1993) for the evidence.

8. Evans (1982) espouses roughly the same idea, though he puts it differently. Evans says that a proposition is asserted if it is expressed, in the circumstances of use, by the words used.

9. Imagine that the propositional form of Mary's utterance is actually [John is at the river bank]. Suppose further that it is manifest to both Mary and her interlocutor that John would not go near the river bank unless the king were dead. In these circumstances, Mary might well communicate that the king is dead by saying "He is at the bank".

10. Many thanks to Sylvain Bromberger, Lenny Clapp, James Higginbotham, Robert Stalnaker, and Daniel Stoljar for their innumerable contributions to this paper. Thanks also to my wife Hamila Cuna-Stainton, without whom not. This paper is lovingly dedicated to her memory. This work was supported by grants from the Andrew W. Mellon Foundation and the Social Sciences and Humanities Research Council of Canada.

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