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# On the Nature of Welsh VSO Clauses ${ }^{1}$ 

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## 1. Introduction

Like the other Celtic languages, Welsh is VSO language with a verb before the subject in finite clauses. The following illustrate:

> (1)a. Welodd Emrys ddafad.
> saw Emrys sheep
> 'Emrys saw a sheep.'
> b. Aeth Megan i Aberystwyth.
> went Megan to Aberystwyth
> 'Megan went to Aberystwyth.'

A central question in generative discussion is whether such clauses have a basic SVO structure. Roberts (forthcoming, chapter 1) remarks that 'the general consensus of work on Welsh' is 'that VSO clauses involve an operation which moves the verb out of VP to the left over the subject'. It seems to me that this is correct. It has been assumed in almost all transformational work on Welsh that VSO order is the result of verbmovement. This includes in chronological order Jones and Thomas (1977), Harlow (1981), Sproat (1985), Sadler (1988), Rouveret (1994), Willis (1998), and Roberts (forthcoming). A basic SVO structure has also been
assumed within Generalized Phrase Structure Grammar in Borsley (1988) and within Lexical Functional Grammar (LFG) in Bresnan (2001: chapter 7, section 1.1). In contrast, only a few works have assumed analyses in which there is no basic SVO structure. The earliest work on Welsh syntax within generative grammar, Awbery (1976), assumed a basic VSO structure, and Tallerman (1991) argued against an SVO analysis. There is also no SVO structure in the Head-driven Phrase Structure Grammar (HPSG) analyses of Borsley (1989a, 1995). Other things being equal, an SVO analysis is more complex than a non-SVO analysis. Thus, the burden of proof is on advocates of an SVO analysis. In this paper I want to consider whether this burden has been met. I will argue that it has not been.

The SVO analysis of VSO sentences is a fairly typical transformational analysis. It is generally accepted within transformational work that the superficial word order of clauses may be the result of movement processes. In a major challenge to what they call 'mainstream generative grammar', Culicover and Jackendoff (forthcoming) argue at length on the basis of English data that such analyses are unnecessary. The argument developed here can be seen as providing some support for their position.

The paper is organized as follows. In section 2, I sketch a number of analyses which have been or might be proposed for Welsh VSO clauses. Then in section 3, I consider a variety of arguments that have been advanced or might be advanced for an SVO analysis of VSO clauses. In section 4, I consider some data which might pose problems for an SVO analysis. Finally, in section 5, I summarize the paper.

## 2. Analyses of Welsh VSO clauses

As is indicated by the Roberts quote above, most transformational analyses assume that VSO order results from movement of the verb out of VP to the left over the subject. Some analyses assume that the subject remains within VP. Others assume that it too is extracted from the VP. For example, Rouveret (1994) develops an analysis within Principles and Parameters theory ( $\mathrm{P} \& \mathrm{P}$ ) involving structures like the following:
(2)


Here we have two functional heads, $\operatorname{Agr}($ eement ) and T (ense), outside the VP, within which both the verb and the subject originate. The verb moves to T and then the combination of the verb and T moves to Agr. The subject moves to the specifier position of T. ${ }^{2}$

Within LFG, there is no movement and no traces, but it is possible for V to appear outside the associated VP, and Bresnan (2001: 127-131) proposes that this is the situation in Welsh VSO clauses. ${ }^{3}$ Within this approach, (1) would have the following structure:
(3)


It is also possible to adopt an SVO analysis within HPSG. Some work in HPSG has assumed an analogue of verb-movement. See e.g. Borsley (1989b). Obviously, this allows an SVO analysis. An SVO analysis is also possible in the version of HPSG developed in Kathol (2000). Kathol proposes that constituents have an order domain, to which ordering constraints apply. The domain elements of a constituent may be 'compacted' to form a single element in the order domain of the mother or they may just become elements in the mother's order domain. In the latter case, the mother has more domain elements than daughters. Within this framework, (1) might have the following schematic analysis:
$\left[\begin{array}{l}\text { PHON welodd Emrys ddafad } \\ \text { SYNSEM S } \\ \text { DTRS }<\left[\begin{array}{l}\text { PHON Emrys } \\ \text { SYNSEM NP }\end{array}\right],\left[\begin{array}{l}\text { PHON welodd ddafad } \\ \text { SYNSEM VP }\end{array}\right]> \\ \text { DOM }<\left[\begin{array}{l}\text { PHON welodd } \\ \text { SYNSEM V }\end{array}\right],\left[\begin{array}{l}\text { PHON Emrys } \\ \text { SYNSEM NP }\end{array}\right],\left[\begin{array}{l}\text { PHON ddafad } \\ \text { SYNSEM NP }\end{array}\right]>\end{array}\right]$

Here we have two daughters but three domain elements. An analysis like this is in fact assumed for German verb-initial clauses in Kathol (2000).

It seems, then, that an SVO analysis is available in a variety of frameworks. Is it required in some? An SVO analysis is more or less
required within a framework such as $\mathrm{P} \& \mathrm{P}$ or Minimalism, which limits itself to binary branching. In such a framework, unless one assumes that the verb and subject form a constituent, one must assume that the subject and the complement or complements form one. ${ }^{4}$

It seems that the main example of a non-SVO analysis of Welsh VSO clauses is that developed within HPSG in Borsley (1989a, 1995). In a version of HPSG which does not have an analogue of verb-movement or order domains, a VSO clause cannot contain a VP and the obvious assumption is that we have a flat structure in which subject and object are both sisters of the verb. There are two analyses that one might propose here. In one, the subject is a realization of the SUBJ feature and the object a realization of the COMPS feature as in (5), where I use the familiar tree format to represent constituent structure.


On the other, the subject is a realization of an extra member of the COMPS list and the verb has an empty SUBJ list. This gives the following structure:
(6)


Borsley (1989a, 1995) argues that the latter is appropriate for Welsh, but Borsley (1995) argues that the former approach is appropriate for Syrian Arabic. ${ }^{5}$ The main motivation for this approach is that it automatically accounts for the fact that the subject of a finite clause follows the verb. Borsley proposes that subjects of non-finite verbs are a realization of the SUBJ feature. Thus, this approach involves a major contrast between the finite and non-finite verbs.

Both these approaches distinguish subjects and objects. On the first approach, the subject is a realization of the SUBJ feature and the object a realization of the COMPS feature. On the second, the subject is a realization of the first element on the COMPS list and the object a realization of the second element. In both approaches, both constituents are immediately dominated by the sentence node. Hence, neither approach distinguishes them in terms of dominance. It often seems to be assumed that subject and object can only be distinguished in terms of dominance. Thus, Carnie and Guilfoyle (2000: 4) suggest that a flat structure 'predicts that subject and object NPs, since they are both postverbal, should not be distinguishable in contexts where only one NP argument appears'. This would only be true if
subjects and objects could only be distinguished in terms of dominance, but as we have just seen, there are other ways. ${ }^{6}$

Interestingly, there is one respect in which subjects and objects could be said to be indistinguishable in Welsh. It involves agreement. When a non-finite verb is followed by a pronominal object, it shows agreement in the form of a proclitic. Thus, while there is no proclitic in (7a), a proclitic appears in (7b).
(7)a. Naeth Emrys weldy bachgen. did-3SG Emrys see the boy 'Emrys saw the boy.'
b. Naeth Emrys ei weld o. did-3SG Emrys 3SGM see he 'Emrys saw him.'

Welsh has one situation in which what looks like a non-finite verb is followed by a subject. This is in certain subordinate clauses introduced by bod 'be'. When the subject of such a clause is pronoun, the verb is preceded by a proclitic. Thus, we have examples like the following (where bod appears as fod because of soft mutation, a morphophonological process affecting initial consonants):

> (8)a. Dywedodd Gwyn fod Emrys yn ddiog.
> said Gwyn be Emrys PRED lazy
> 'Gwyn said Emrys was lazy.'
> b. Dywedodd Gwyn ei fod (o) yn ddiog. said Gwyn 3SGM be he PRED lazy 'Gwyn said he was lazy.'

Thus, as noted in Borsley (1983), we have an agreement process here which ignores the difference between subjects and objects. It seems in fact that Welsh agreement does not refer to grammatical functions. I argue in Borsley (2003) that it involves certain heads and an immediately following pronoun. We will return to agreement facts below.

## 3. Arguments for an SVO analysis

We turn now to arguments that have been proposed or might be proposed for an SVO analysis. There has been considerable discussion here, but there is little in the way of carefully formulated arguments. Therefore, to a considerable extent it is necessary to look for the arguments that are implicit in various discussions.

### 3.1. VP-like constituents

One strand of argument for an SVO analysis of VSO clauses has highlighted the existence of VP-like constituents. Thus, Carnie and Guilfoyle (2000: 5) highlight the fact that '[a] great body of empirical evidence has surfaced showing that many VSO languages have VP-like constituents which consist of a non-finite verb and object but exclude the subject'. Welsh is no exception here. In Welsh, a VP-like constituent appears in non-finite clauses, sentences containing the auxiliary gwneud 'do', and certain aspectual sentences. The following illustrate:
(9) Mae Siôn yn disgwyl [i Emrys [ddarllen llyfr]]
is Siôn PROG expect to Emrys read book 'Siôn expects Emrys to read a book.'
(10) Naeth Siôn [ddarllen llyfr]
did Siôn read book 'Siôn read a book.'
(11) Mae Siôn [yn darllen llyfr]
is Siôn PROG read book 'Siôn is reading a book.'

In (9), we have a clause which resembles an English for-to clause. It is introduced by what looks like the preposition $i$ 'to', 'for'. This is followed by the subject and a VP-like constituent appears as the predicate. I will call such clauses $i$-clauses. In the most detailed discussion of these clauses, Tallerman (1998) proposes that they have essentially the same structure as VSO clauses but with the prepositional element $i$ in the position which is occupied by the verb in VSO clauses. In (10) a VP-like constituent appears as the complement of the auxiliary gwneud 'do'. Sentences like these are assumed by Harlow (1981: 223) and Sproat (1985: 202) to have the same structure as simple VSO clauses but with gwneud-insertion instead of verbmovement, and an analogous position is assumed within LFG in Bresnan (2000: 127-131). Essentially, the idea here is that these sentences reveal the basic structure of VSO clauses. Interestingly, however, both Rouveret (1994) and Roberts (forthcoming) assume that gwneud clauses have more complex structures than simple VSO clauses. In (11), we have a slightly more complex constituent, in which the non-finite verb is preceded by the progressive particle yn. We might assume that this is not a VP but an Aspect Phrase or a Progressive Phrase. Complements in raising sentences such as (12) and control sentences such as (13) are also potentially relevant given the arguments in Borsley (1984) that they are VPs.
(12) Dechreuodd Megan ddarllen y llyfr.
began Megan read the book
'Megan began to read the book.'
(13) Ceisiodd Megan ddarllen y llyfr.
tried Megan read the book
'Megan tried to read the book.'

Of course, such complements are standardly analyzed as clauses of some kind in transformational work, so some would think that they are not relevant here. I will concentrate on examples like (9) and (10) in the following paragraphs.

How exactly are VP-like constituents relevant here? Such constituents might support an SVO analysis of VSO clauses if some principle required all forms of a word to be associated with the same kind of structure. This would entail that if some verb forms are associated with a VP all verb forms must be associated with a VP. In other words, we might have the following argument:

## (14) Argument from uniform structures

All forms of a word must be associated with the same kind of syntactic structure.
Non-finite verbs are associated with a VP.
Therefore, finite verbs must be associated with a VP.
Within a transformational framework we can interpret 'associated with’ as 'originate in’. Within LFG it will have a slightly different interpretation.

The problem with this argument is the first premise. There is evidence in Welsh that different finite forms of the same verb may be associated with different structures. Consider first the following data:

$$
\begin{aligned}
& \text { (15)a. Mae Gwyn (*ddim) yn hwyr. } \\
& \text { is Gwyn NEG PRED late } \\
& \text { 'Gwyn is (not) late.' } \\
& \text { b. Dydy Gwyn *(ddim) yn hwyr. } \\
& \text { NEG-is Gwyn NEG PRED late } \\
& \text { 'Gwyn is (not) late.' }
\end{aligned}
$$

Here we see that present tense forms of the copula include mae, which may not combine with ddim to form a negative sentence and dydy, which must combine with ddim to form a negative sentence. ${ }^{7}$ Consider now the following:

> (16)a. Mae/*ydy Gwyn yn athro.
> is is Gwyn PRED teacher 'Gwyn is a teacher.'
> b. Athro ydy/*mae Gwyn. teacher is is Gwyn 'Gwyn is a teacher.'
(16a) is a simple VSO clause containing a predicate nominal, and we have mae and not $y d y$. (The latter is possible in an interrogative.) In (16b) the predicate nominal is in initial position (without the particle $y n$ ), and we can only have $y d y$ and not mae. Finally, consider the following:

$$
\begin{aligned}
& \text { (17)a. Mae/*sydd Gwyn yn canu. } \\
& \text { is is Gwyn PROG sing } \\
& \text { 'Gwyn is singing.' } \\
& \text { b. Gwyn sydd/*mae yn canu. } \\
& \text { Gwyn is is PROG sing } \\
& \text { 'It is Gwyn that is singing.' }
\end{aligned}
$$

(17a) is a simple VSO clause and we have mae and not sydd. (17b) has a 'fronted' subject and we can only have sydd and not mae. There is also evidence that different forms of the same adjective may be associated with different structures. Consider the following:

$$
\begin{array}{r}
\text { (18)a. da } \quad(* \hat{a} / * \text { na } G w y n) \\
\text { good } \\
\text { as than Gwyn } \\
\text { b. cystal } \\
\text { (â/*na Gwyn) } \\
\text { as-good as than Gwyn } \\
\text { c. well (*â/ na Gwyn) } \\
\text { better as than Gwyn }
\end{array}
$$

Welsh adjectives typically have distinct equative and comparative forms, which combine with distinctive constituents expressing the standard of comparison. Neither can combine with the type of constituent with which the other combines and the basic form of an adjective cannot combine with either type of constituent. It seems, then, that the first premise is untenable and hence that the Argument from uniform structures is fundamentally flawed.

An SVO analysis of VSO clauses might also be plausible if $i$-clauses and gwneud clauses were like simple VSO clauses in all respects except word order. The similarities would call for an explanation and the assumption that all clauses have a basic SVO structure might provide one. ${ }^{8}$ In other words, we might have the following argument:

## (19) Argument from similar properties

If a number of clause types have the same properties apart from word order they must have the same syntactic structure at some level. VSO clauses have the same properties apart from word order as $i$-clauses and gwneud clauses.

Therefore, VSO clauses must have the same syntactic structure at some level as $i$-clauses and gwneud clauses.

Notice that VSO clauses would have the same structure at some level as $i$ clauses and gwneud clauses if the latter involved a VSO structure in some way. ${ }^{9}$ Thus, this argument would not by itself provide motivation for an SVO analysis of VSO clauses. However, the argument is untenable because the second premise is false. I-clauses and gwneud clauses differ from simple VSO clauses in the realization of agreement and negation.

A Welsh finite verb agrees with a subject if it is pronominal, as the following illustrates:
(20) Mi est ti i Aberystwyth. PRT went-2SG you(SG) to Aberystwyth 'You went to Aberystwyth.'

As noted earlier, non-finite verbs show agreement in the form of a proclitic, but they agree with a following object (if it is pronominal). We see this in the following $i$-clause:
(21) Dw i’n disgwyli Mair dy weld di.
am I PROG expect to Mair 2 SG see you
'I expect Mair to see you.'

The verb in an $i$-clause does not agree with the subject. Hence (22) is ungrammatical with the proclitic.
(22) Dw i’n disgwyli ti (*dy) fyndi Aberystwyth. am I PROG expect to you(SG) 2SG go to Aberystwyth 'I expect you to go to Aberystwyth.'

We have the same situation in gwneud clauses, as (7b), repeated here as (23), and (24) show:
(23) Naeth Emrys ei weld o. did-3SG Emrys 3SGM see he 'Emrys saw him.'
(24) Naeth Emrys (*ei) fynd i Aberystwyth.
did Emrys 3SGM go to Aberystwyth ‘He went to Aberystwyth.'

As noted earlier, we have what looks like agreement between a non-finite verb and a subject in examples like the following:
(25) Mae Aled yn credu [ei bod hi yn darllen y llyfr] is Aled PROG believe 3SGF be she PROG read the book 'Aled believes that she is/was reading the book.'

This, however, is a rather different type of clause with verb-subject order. Essentially bod appears here instead of present and imperfect forms of the copula, which cannot appear in affirmative complement clauses, and Tallerman (1998) argues that such clauses are finite despite appearances. Such examples do not alter the fact that agreement behaves quite differently in clear examples of non-finite clauses and finite clauses.

A further aspect of agreement that we should note is the fact that the prepositional element $i$ agrees with the following subject in much the same way as a finite verb agrees with the following subject. The following illustrates:
(26) Mae Siôn yn disgwyl iddo fo ddarllen llyfr. is Siôn PROG expect to-3SGM he read book 'Siôn expects him to read a book.'

This suggests that the relation between a finite verb and the following subject is like the relation between $i$ and the following subject. However, if VSO clauses involve structures like (27) and i-clauses involve structure like (28), as proposed in Borsley (1999), then the relation between a finite verb and the following subject is like the relation between $i$ and the following subject.

(28)


Moreover, as noted above, I have argued in Borsley (2003) that constraints on agreement just refer to linear order. If this is right, the data we are concerned with here cannot tell us anything about the structural relation between the agreeing elements.

Turning to negation we again find a major difference between simple VSO clauses and i-clauses and gwneud clauses. A VSO clause is generally negated by the post-subject negative adverb ddim, as indicated earlier.
(29) Est ti ddim i Aberystwyth. went-2SG you(SG) NEG to Aberystwyth 'You did not go to Aberystwyth.'

An i-clause is negated not with ddim but with peidio, a defective verb with only a non-finite and imperative forms in the colloquial language, whose
only content is negation. Thus, the negative counterpart of (30a) is not (30b) but (30c) (where peidio appears as beidio as a result of soft mutation).

> (30)a. Dw i ’n disgwyl i Mair fynd i Aberystwyth. am I PROG expect to Mair go to Aberystwyth 'I expect Mair to go to Aberystwyth.'
> b. *Dw i 'n disgwyl i Mair ddim mynd i Aberystwyth. am I PROG expect to Mair NEG go to Aberystwyth 'I expect Mair not to go to Aberystwyth.'
> c. Dw i ’n disgwyl i Mair beidio (â) mynd i Aberystwyth. am I PROG expect to Mair NEG with go to Aberystwyth 'I expect Mair not to go to Aberystwyth.'

The situation is more complex in gwneud clauses. Borsley and Jones (2000, 2001, in press) argue that Welsh has a negative adverb ddim and a negative quantifier dim (or ddim if mutated). A gwneud clause with a transitive verb can be negated by the adverb ddim, but a VSO sentence with a transitive verb cannot be. ${ }^{10}$ Thus, we have the following contrast:
(31) Naeth Siôn ddim gweld y defaid.
did Siôn NEG see the sheep
'Siôn did not see the sheep.'
(32) *Welodd Siôn ddim y defaid.
saw Siôn NEG the sheep
'Siôn did not see the sheep.'

In contrast, a VSO sentence with a transitive verb can be negated by a negative object, including an object containing the quantifier dim. A gwneud clause cannot be. Thus, we have a contrast between (33) and (34). ${ }^{\mathbf{1 1}}$
(33)a. Welodd Siôn neb.
saw Siôn no one
'Siôn did not see anyone.'
b. Welodd Siôn ddim o 'r defaid.
saw Siôn NEG of the sheep
'Siôn did not see the sheep.'
(34)a. *Naeth Siôn weld neb.
did Siôn see no one
'Siôn did not see anyone.'
b. *Naeth Siôn weld dim o 'r defaid. did Siôn see NEG of the sheep 'Siôn did not see the sheep.'
(33b) is the grammatical counterpart of (32).
Thus we have two important differences between VSO clauses on the one hand and $i$-clauses and gwneud clauses on the other. They do not differ just in word order but also in agreement and negation. Hence, as stated, the argument from identical properties is untenable. The most one might be able to argue is that there are important similarities between VSO clauses and certain other types of clause, which can be most easily accommodated if VSO clauses have an SVO structure. We will consider a number of arguments of this kind in the following pages.

### 3.2. Anaphora

Another type of argument for an SVO analysis involves contrasts between subjects and objects. Carnie and Guilfoyle (2000: 6) suggest that a flat structure predicts that 'there will be no structure dependent subject/object asymmetries in VSO languages'. It appears that they are thinking of contrasts with respect to anaphora. Welsh displays such contrasts.

In Welsh, the subject of a VSO clause can be the antecedent of an anaphor in object position but the object of a VSO clause cannot be the antecedent of an anaphor in subject position.
(35)a. Welodd Gwyn ei hun.
saw Gwyn 3SGM self
'Gwyn saw himself.'
b. *Welodd ei hun Megan.
saw 3SGM self Megan

This is like the situation in i-clauses and gwneud clauses.
(36)a. Disgwyliodd Megan i Gwyn weld ei hun.
expected Megan to Gwyn see 3SGM self
'Megan expected Gwyn to see himself.'
b. *Disgwyliodd Megan i ei hun weld Gwyn.
expected Megan to 3SGM self see Gwyn
(37)a. Naeth Gwyn weld ei hun.
did Gwyn see 3SGM self
'Gwyn saw himself.'
b. *Naeth ei hun weld Gwyn. did 3SGM self see Gwyn

If binding theory refers to constituent structure and in particular if it requires an anaphor to be c-commanded by its antecedent, such data shows that the subject of a VSO clause must c-command the object and not vice versa, and hence supports the idea that the object is inside a VP constituent. Thus, we have the following argument (which is implicit in Borsley 1988).

## (38) Argument from anaphora

An anaphor must be asymmetrically c-commanded by its antecedent.
A anaphor can appear in object position in a VSO clause with its antecedent in subject position, but not vice versa.

Therefore, object position in a VSO clause must be asymmetrically c-commanded by subject position, but not vice versa.

The problem with this argument is the first premise. There is evidence in Welsh as in English that an anaphor is not always c-commanded by its antecedent. Consider the following:
(39) Nes i sôn [wrth Gwyn] [am ei hunan] did-2SG I talk to Gwyn about 3SG self 'I talked to Gwyn about himself.'

Here, in the Welsh example as in the English translation, the antecedent is inside one PP complement and the reflexive inside another. There is no obvious reason to think that such examples fall outside the scope of the main conditions on anaphora. Thus, such examples suggest rather strongly that an anaphor is not necessarily c-commanded by its antecedent. Pollard and Sag $(1992,1994)$ argue in part on the basis of examples like the English translation that constraints on anaphora refer to argument structures and not to constituent structures, and a similar conclusion is reached on the basis of rather different data by Culicover and Jackendoff $(1992,1995)$ and Jackendoff (1997). It is also assumed within LFG that constraints on anaphora refer to f -structures (Bresnan 2000, chapter 10). In fact, the idea that constraints on anaphora refer to constituent structures seems to be confined to P\&P. Clearly, if constraints on anaphora do not refer to
constituent structure, anaphora cannot show anything about constituent structure.

### 3.3. Coordination

In a detailed discussion of Irish VSO clauses, McCloskey (1991) argues that coordination provides evidence that both the material following the verb and the material following the subject is a constituent. One might try to use coordination to argue for the same conclusions in Welsh.

Rather like one type of Irish example cited by McCloskey is the bracketed subordinate clause in the following:
(40) Dw i 'n gwbod [na fydd Mair yna neu Gwyn yma] am I PROG know NEG will-be Mair there nor Gwyn here 'I know Mair will not be there nor Gwyn here.'

This clause contains two conjuncts consisting of a subject and a complement. Rather like a second type of Irish example cited by McCloskey is (43).
(41) Rhoddodd yr un dyn lyfr i Mair a darlun i Megan. gave the one man book to Mair and picture to Megan ‘The same man gave a book to Mair and a picture to Megan.'

Here we have two conjuncts consisting of a pair of complements. These examples have implications for constituent sructure if we assume that conjuncts must be constituents. We have the following argument:

## (42) First argument from coordination

A conjunct must be a constituent.
Both the material following the verb and the material following the subject
in a VSO clause can be a conjunct.
Therefore, both the material following the verb and the material following the subject in a VSO clause must be a constituent.

We obviously need to ask here whether the first premise is sound. There are reasons for scepticism about it.

It is quite widely assumed that English examples like the following involve conjuncts that are not constituents:
(43) I gave 5 pounds to Kim and 10 pounds to Lee.

Here, the conjuncts consist of a pair of complements. It has generally been assumed in P\&P since Larson (1988) that such sequences are constituents, but this assumption is rejected in most other frameworks. See, for examples, Sag et al. (1985) and Maxwell and Manning (1996). ${ }^{12}$ Welsh has similar examples, e.g. the following:
(44) Mae Gwyn wedi rhoi lyfr i Mair a darlun i Megan.
is Gwyn PERF give book to Mair and picture to Megan
‘Gwyn has given a book to Mair and a picture to Megan.’

If examples like (43) and (44) involve coordination of non-constituents, then the first premise in (42) is untenable.

Some evidence that this premise is indeed untenable comes from the following examples:
(45)a. Mae Gwyn wedi gweld Sioned ym Mangor a Megan yng Nghaernarfon
'Gwyn has seen Sioned in Bangor and Megan in Caernarfon.'
b. Mae Gwyn wedi prynu dafad a gwerthu gafr yng Nghaernarfon.
is Gwyn PERF buy sheep and sold goat in Caernarfon
'Gwyn has sold a sheep and bought a goat in Caernarfon.'

In (45a), the conjuncts consist of a complement and an adjunct. In (45b), they consist of a verb and a complement. Unless we assume two different structures for the sequence verb + complement + adjunct, one or other of these examples must involve conjuncts which are not constituents.

Other sorts of example cast doubt on the first premise of (42). Consider the following:
(46)a. Darllenodd Gwyn a sgrifennodd Megan lyfr read Gwyn and wrote Megan book am ieithyddiaeth. about linguistics 'Gwyn read and Megan wrote a book about linguistics.'
b. Rhoddodd Gwyn a gwerthodd Emrys lyfr i Mair. gave Gwyn and sold Emrys book to Mair ‘Gwyn gave and Emrys sold a book to Mair.’

Here the conjuncts consist of a finite verb and a subject. If ordinary VSO clauses have a single structure, then finite verb and the subject cannot be a constituent if the subject and the complement(s) are a constituent. Examples like these are standardly said to involve right node raising. This might suggest that they are a special sort of example, which shows nothing about 'ordinary’
coordination. However, right node raising is hardly a well understood process, and it is not obvious that there is a clear cut distinction between 'ordinary' coordination and right node raising. This assumption is in fact rejected within Combinatory Categorial Grammar (Steedman 2000). Within this framework, an unambiguous sentence can have a variety of different structures and hence all the examples we have just considered can be instances of constituentcoordination. However, if we assume that an unambiguous sentence normally has a single structure, we must apparently conclude that coordination is not a good guide to constituent structure. Given this conclusion, examples like (40) and (41) do not show that post-verbal and post-subject material in a VSO clause must be constituents.

### 3.4. More on coordination

A second argument involving coordination might be advanced on the basis of what Rouveret (1994: 302) calls the serial construction. The following illustrates:
(47) Daeth Megan i mewn ac eistedd i lawr came Megan to in and sit to down 'Megan came in and sat down.'

Here we appear to have have a coordinate structure in which the second conjunct is a (non-finite) VP. If one assumes that conjuncts must be members of the same category, then the first conjunct must be a VP. As Rouveret notes, this is apparently possible if one assumes an SVO analysis of VSO clauses. One might propose something like the following analysis: ${ }^{13}$
(48) $\left[\right.$ Daeth $_{\mathrm{i}}$ [Megan [[t $\mathrm{t}_{\mathrm{i}} \mathrm{i}$ mewn] ac [eistedd i lawr]]]]]

Here we have conjoined VPs and the verb has been extracted from the first of them giving rise to verb-subject order. The argument here takes the following form:

## (49) Second argument from coordination

Conjuncts must be members of the same category. The second conjunct in the serial construction is a VP.

Therefore, the first conjunct in the serial construction must be a VP.

This argument faces a number of problems. First, it is not completely clear that the serial construction is an example of a coordinate structure. Abeillé (2003) suggests that it in fact involves a head and one or more adjuncts. She draws attention here to examples like the following from Sadler (2003).
(50) I 'r ty yr aethant ac eistedda bwyta. to the house PRT went.3PL and sit-VN and eat-VN 'It's to the house that they went and sat and ate.'

This example involves a fronted constituent and Abeillé suggests that it would involve a violation of the Coordinate Structure Constraint, which bans extraction from one conjunct of a coordinate structure, if it were an example of a coordinate structure. However, a proponent of a coordination analysis might argue that the fronted constituent is within the first conjunct.

Even if the serial construction is an example of a coordinate structure, the argument in (49) is problematic. This is because the first premise seems untenable. There is fairly clear evidence in Welsh as in

English that conjuncts need not be members of the same category. The following illustrate one type of relevant example:
(51)a. Mae Gwyn yn ddiog ac yn cysgu.
is Gwyn PRED lazy and PROG sleep
'Gwyn is lazy and sleeping.'
b. Mae Gwyn yn ieithydd ac yn astudio Cymraeg. is Gwyn PRED linguist and PROG study Welsh 'Gwyn is a linguist and studying Welsh.'

These examples show that Welsh like English allows a coordinate structure with different categories as its conjuncts as the complement of the copula. Moreover, within the minimalist framework, we would probably have different categories in (48). Within this framework, finite verbs are introduced into the derivation with tense features and do not acquire them through movement. It seems to follow that the first VP in (48) will have tense features unlike the second VP. It seems, then, that this argument is not at all persuasive.

Moreover, there is an obvious objection to the analysis in (48). It clearly involves a violation of the Coordinate Structure Constraint. The following examples, where the gaps are marked by '___, show that this is operative in Welsh.
(52)a. *Pwy mae Gwyn [[wedi ei weld ___] ac [wedi clywed
who is Gwyn PERF 3SGM see and PERF hear
Megan]]
Megan
*'Who has Gwyn seen and heard Megan?’
b. *Pwy [[mae Gwyn wedi ei weld__] ac [mae Emrys
who is Gwyn PERF 3SGM see and is Emrys
wedi clywed Megan]]
PERF hear Megan
*'Who has Gwyn seen and has Emrys heard Megan?’

Thus, not only is there no real reason to adopt the analysis in (48), there is a good reason for rejecting it. ${ }^{14}$

### 3.5. Ellipsis

A further area in which one might look for arguments for an SVO analysis is ellipsis. Examples like the following from Jones (1999) are of interest here:

$$
\begin{aligned}
& \text { (53)a. Mi newidith Sion 'i feddwl } \\
& \text { AFF change.FUT.3SG Sion 3SGM mind } \\
& \text { 'Sion will change his mind.' } \\
& \text { b. Neith o ddim (newid 'i feddwl). } \\
& \text { do.FUT.3SG he NEG change } \\
& \text { 3SGM mind } \\
& \text { 'He won’t (change his mind).' }
\end{aligned}
$$

The second sentence is a gwneud clause, and as the bracketing indicates, the VP complement may be omitted. If it is omitted, the antecedent is apparently the finite verb and the object in the first sentence. Such data might lead one to argue as follows:

## (54) Argument from antecedents for ellipsis

The antecedent for ellipsis must be a syntactic constituent at some level.
A finite verb and its complement can be the antecedent for ellipsis

Therefore, a finite verb and its complement must be a syntactic constituent at some level.

We can argue, however, that the first premise of this argument is untenable.

Culicover and Jackendoff (in preparation, chapter 5) argue at length against the idea that antecedents for ellipsis must be a syntactic constituent at some level. They pay particular attention to bare argument ellipsis, where a phrase of some kind is interpretated as a clause. Welsh seems to have essentially the same construction. Consider, for example, the following:
(55) Welodd Gwyn Emrys, ond dim Sioned.
saw Gwyn Emrys but not Sioned
'Gwyn saw Emrys, but not Sioned.'

Like its English translation, this is ambiguous. It can mean that Gwyn did not see Sioned or that Sioned did not see Emrys. On the second interpretation, the antecedent for ellipsis is the verb and the object, which is a constituent on an SVO analysis. However, on the first interpretation, the antecedent for ellipsis is the subject and the verb, which obviously do not form a constituent. Another relevant example is the following:
(56) Rhoddodd Gwyn lyfr i Megan, ond dim papur newydd gave Gwyn book to Megan but not paper new ‘Gwyn gave a book to Megan but not a newspaper.'

This means that Gwyn did not give a newspaper to Megan. Thus the antecedent for ellipsis is the subject, the verb and the second complement. Clearly this is not a constituent.

Although the argument in (54) must be rejected, one might still try to use ellipsis to argue for an SVO analysis. It seems that post-subject material in a Welsh VSO sentence can generally undergo ellipsis. Thus, we have examples like the following: ${ }^{15}$

$$
\begin{aligned}
& \text { (57)a. Mi eith Sioned yn ôl heno } \\
& \text { AFF go.FUT.1SG Sioned back tonight } \\
& \text { 'Sioned will go back tonight.' } \\
& \text { b. Eith hi ddim (yn ôl heno). } \\
& \text { go.FUT.2SG she NEG back tomight } \\
& \text { 'She won’t (go back tonight).' } \\
& \text { (58)a. Mi gan nhw fwy o bres } \\
& \text { AFF will-get.3PL they more of money } \\
& \text { 'They will get more money' } \\
& \text { b. Chan nhw ddim (mwy o bres). } \\
& \text { will-get-3PL they NEG more of money } \\
& \text { 'They won’t get more money' }
\end{aligned}
$$

We might say that Welsh has post-subject ellipsis. However, someone might suggest that what is omitted is a VP. One might perhaps argue as follows:

## (59) Argument from VP-ellipsis properties

If an ellipsis process has the properties of VP-ellipsis, it must be VP-ellipsis
Post-subject ellipsis has the properties of VP-ellipsis
Therefore, post-subject ellipsis must be VP-ellipsis
This is essentially the argument that McCloskey (1991) advances in connection with rather similar data in Irish. Is it a good argument?

Whatever may be the case in Irish, there seems to be at least one important difference between post-subject subject ellipsis in Welsh and VPellipsis. The difference arises in connection with examples like (53). At least superficially the antecedent for ellipsis is discontinuous. Given the differences between English and Welsh, one would not expect VP ellipsis with a superficially discontinuous antecedent to be common in English. However, one would expect it to occur. Consider first (60).
(60)a. Is Kim here?
b. No, but he will *(be here).

Here, it is not possible to omit the VP be here in the second sentence although there is a form of be and here in the first sentence. Consider now (61).
(61)a. Has Kim gone?
b. No, but he will (*have gone) by noon.

Here, it is not possible to omit the VP have gone although there is a form of have and gone in the first clause. It seems, then, that English VP ellipsis does not allow a superficially discontinuous antecedent.

No doubt, there are some similarities between Welsh post-subject ellipsis and English VP-ellipsis. After all they are both examples of ellipsis. However, the contrast just highlighted suggests that there is no reason to think that they are the same process.

## 4. Possible evidence against an SVO structure

As noted at the outset, an analysis that involves an SVO structure is more complex ceteris paribus than one that does not. Hence, as long as there are no compelling arguments for such a structure, an analysis without one should be preferred. However it is important to consider whether there is any evidence against such a structure. We will consider three areas of grammar here and argue that there may well be problems for some SVO analyses.

### 4.1. Agreement

We noted in 3.1 that contrasts between agreement in VSO clauses on the one hand and in i-clauses and gwneud clauses undermine one type of argument that might be advanced for an SVO analysis of VSO clauses. Do these contrasts pose any problems for an SVO analysis?

There is probably no problem within P\&P. Within Rouveret's analysis, illustrated in (2), agreement in finite clauses involves Agr and the following subject and is realized on the verb as a result of the movement of the verb through T to Agr. If $i$-clauses involve the same structure, agreement could only be realized on the verb if Welsh had some Agr lowering mechanism in i-clauses. ${ }^{16}$ If Welsh has no such mechanism, the verb will not agree with the subject in such clauses. As we noted earlier, Tallerman (1998) proposes that pre-subject $i$ is a realization of Agr in an $i$-clause, and this seems a fairly plausible idea within P\&P assumptions. It looks, then, as if there are probably no problems here.

What about LFG? As far as I can see, it is probably possible to adopt a similar position here, i.e. to assume that agreement involves I and the following subject and is realized on the verb in a finite clause because the verb is in I.

What finally of the HPSG analysis in (4)? As noted earlier, I argue in Borsley (2003) that constraints on agreement refer to linear order, in other words that they are constraints on order domains. Within this approach the fact that there is no agreement between a non-finite verb and the preceding subject is no problem. However, as noted in Borsley (2003), one would expect agreement between the verb in a VSO clause and a following
proniminal object given that the verb is immediately followed by the object within the order domain of the VP (not given in (4)). It looks, then, as if agreement provides an objection to the analysis in (4).

Thus, agreement probably poses no problems for an SVO analysis within P\&P and LFG, but probably provides evidence against an HPSG SVO analysis.

### 4.2. Negation

We looked in 3.1 at contrasts between simple VSO clauses on the one hand and $i$-clauses and gwneud clauses on the other with respect to negation. This is a complex area, but it seems that there may be real problems for some SVO analyses here.

We noted in 3.1 that an $i$-clause is negated not by ddim but by the defective verb peidio. As discussed in Borsley and Jones (in press), ddim only appears immediately after the subject of a finite clause or as a premodifier of certain predicative expressions. The latter use is illustrated by (62).
(62) Mae Sioned wedi bod [ddim yn dda]
be.PRES.3SG Sioned PERF be NEG PRED good 'Sioned has been not well.'

Ddim cannot appear before a VP unless it follows the subject of finite clause. Thus, it cannot appear in an i-clause or in examples like the following:
(63)a. *Mae Gwyn yn debyg o ddim mynd i Aberystwyth.
is Gwyn PRED likely of NEG go to Aberystwyth
'Gwyn is likely not to go to Aberystwyth.'

> b. *Mae Gwyn yn awyddus i ddim mynd i Aberystwyth. is Gwyn PRED eager to NEG go to Aberystwyth 'Gwyn is eager not to go to Aberystwyth.'

Rouveret (1994) assumes that the ddim is adjoined to VP. However, it looks as if it can only combine with the VP in a finite clause. Is this a problem? Within Minimalism, the answer is probably no. We noted earlier that the VP in which a finite verb originates will probably have tense features on minimalist assumptions. Hence, it should be possible to ensure that ddim only combines with a the VP in a finite clause. Whether there might be a problem within LFG is not clear to me.

We also noted earlier that a gwneud clause with a transitive verb can be negated with the adverb ddim, but a VSO sentence with a transitive verb cannot be. In fact a VSO sentence with a transitive verb can be negated with ddim as long as it is not immediately followed by the object NP. Thus, while (64a) is ungrammatical, (64b) is fine.
(64)a. *Fytodd hi ddim y siocled hyd yn oed. ate-3SG she NEG the chocolate even 'She didn't eat the chocolate even.'
b. Fytodd hi ddim hyd yn oed y siocled.
ate-3SG she NEG even the chocolate 'She didn’t eat the chocolate even.'

It looks, then, as if we need a constraint banning two adjacent elements. Such a constraint does not fit very readily with minimalist assumptions. Moreover, on minimalist assumptions they will not in fact be adjacent. This is because movement leaves a copy within Minimalism. This means that (32) will have the following structure assuming Rouveret's view
of clause structure:
(65) [AgrP welodd [Tp Siôn [vp ddim [vp Siôn welodd y defaid]]]]

Ddim and the object NP would be a little closer if the subject originated outside VP, but they would be still be separated by the copy of the verb, which must originate within VP.

What about LFG? As noted above, LFG has no traces or copies. Hence ddim will be adjacent to the NP in the ungrammatical examples. Perhaps, then, there is no problem here. There is certainly no problem either for the HPSG analysis in (4), since the facts can be attributed to a constraint on order domains (as is done in Borsley and Jones in press).

We also noted in 3.1 that a VSO sentence with a transitive verb can be negated by a negative object but that a gwneud clause cannot be. Borsley and Jones (2000, 2001, in press) argue that the finite verb in a negative sentence requires a negative dependent, which may be a negative subject, post-subject adverb or complement. The following illustrate the three possibilities:
(66) Does neb yny cae.

NEG-is no one in the field
'There is no one in the field.'
(67) Dydy Gwyn ddim yn cysgu

NEG-is Gwyn NEG PROG sleep
'Gwyn is not sleeping.'
(68) Weles i neb.
saw-1SG I no one
‘I didn’t see anyone.’

A negative dependent that is part of a complement is not sufficient. Thus, the following, where the complements are bracketed, are ungrammatical:

$$
\begin{aligned}
& \text { (69) } \text { *Na’th Emrys [weld neb] } \\
& \text { did Emrys see no one } \\
& \text { 'Emrys didn't see anybody.' } \\
& \text { (70) } \text { *Na'th Emrys [gweithio erioed] } \\
& \text { did Emrys work never } \\
& \text { 'He never worked' }
\end{aligned}
$$

Borsley and Jones argue within HPSG that both post-verbal subjects and post-subject verbs are complements and propose a constraint requiring the main verb of a negative sentence to have a negative complement. It may be that a related constraint could be proposed within LFG. Within Minimalism, the natural assumption is that the negative dependent and some negative head undergo operation AGREE, and that this is blocked in (69) and (70) because they are separated by a Phase boundary. However, it is not really clear what sort of phase boundary there might be between the head and the dependent. Rouveret (1994) in fact proposes that non-finite VPs are embedded in a DP, and it has been suggested that DPs may be phases. However, a number of objections to this analysis are presented in Borsley (1997). Roberts (forthcoming) proposes that non-finite VPs are embedded in a Part(iciple) Phrase, and one might suggest that this is a phase. If there is evidence for a phase boundary between the negative head and the negative dependent, there may be no problem here. Of course, as noted earlier, if such sentences do have a more complex structure than VSO clauses, then they cannot be seen as revealing the basic structure of VSO clauses.

A further type of example that is relevant here is exemplified by the following, where '\%' indicates that speakers vary in their judgements:
(71) \%Soniodd Sioned am neb
talked Sioned about no one ‘Sioned talked about no one.'

Borsley and Jones (in press) propose that prepositions have the same value for the feature NEG as their complements for some speakers but not others. Thus, the PP is a negative complement for some speakers but not others. Within a minimalist analysis, there is no problem with speakers who accept such examples. There is a problem, however, with speakers who reject them. PPs are not normally considered to be phases. Hence one would not expect AGREE to be blocked by a PP boundary. On the face if it, then, the fact that some speakers reject such examples is problematic for minimalist assumptions.

### 4.3. Mutation

We can turn now to relevant another area of Welsh grammar, the area of mutation. We will see that some instances of mutation appear to pose a problem for an SVO analysis.

The term mutation refers to systems of word-initial consonant alternations. Three types of mutation are traditionally identified in Welsh, soft mutation, aspirate mutation and nasal mutation. By far the most common is soft mutation, which involves the following changes:
(72) Soft mutation

| $\mathrm{p}>\mathrm{b}$ | $\mathrm{b}>f([\mathrm{v}])$ | $m>f([\mathrm{v}])$ |
| :--- | :--- | :--- |
| $\mathrm{t}>\mathrm{d}$ | $\mathrm{d}>\mathrm{dd}([\mathrm{\delta}])$ | $\mathrm{ll}[\mathrm{l}>\mathrm{l}$ |
| $\mathrm{c}([\mathrm{k}])>\mathrm{g}$ | $\mathrm{g}>\varnothing$ | $\mathrm{rh}\left[\mathrm{r}^{\mathrm{h}}\right]>\mathrm{r}$ |

Soft mutation is triggered by a variety of lexical items. The following illustrate:
(73) dau fachgen (bachgen)
two boy
'two boys'
(74) Aeth Megan i Fangor. (Bangor)
went Megan to Bangor
'Megan went to Bangor.'
(75) Mae Gwyn yn feddyg. (meddyg)
is Gwyn PRED doctor
‘Gwyn is a doctor.’

In (73), the mutation is triggered by the numeral dau. In (74), it is triggered by the preposition $i$ 'to'. Finally, in (75), the trigger is the predicative particle $y n$. Most instances of soft mutation can be seen as triggered by a specific lexical item or class of lexical items, but there are a variety of cases where such an analysis seems impossible. A number of researchers have argued that soft mutation is triggered by an immediately preceding NP (Harlow 1989, Borsley and Tallerman 1996 and Borsley 1999, Tallerman 2003). ${ }^{17}$ This accounts inter alia for the mutation of post-subject constituents such as the non-finite VP in (76).

> (76) Dw i 'n disgwyl i Mair fynd i Aberystwyth. (mynd) am I PROG expect to Mair go to Aberystwyth 'I expect Mair to go to Aberystwyth.'

It should also account for the mutation of the object in (77).
(77) Welodd Emrys ddraig. (draig)
saw Emrys dragon
'Emrys saw a dragon.'

However, as Tallerman (1990) points out, on a transformational SVO analysis, the subject in (77) is immediately followed not by the object but by a verbal trace or a verbal copy in more recent work. On the latter view, (80) will have the following superficial structure:
(78) [AgrP welodd [тр Emrys [vp Emrys gwelodd ddafad]]]

Mutation must apply after deletion of the lower instances of Emrys and gwelodd. However, it seems that a copy left by wh-movement must be deleted after mutation. We have examples like the following:

> (79) Pwy welodd ddraig? (draig)
> who saw dragon
> 'Who saw a dragon?'

Here, the object is mutated just as it is in (77). It seems, then, that a copy of pwy must remain in post-verbal position when mutation applies. It looks, then, as if deletion of some copies must precede mutation and deletion of others follow. There is an obvious alternative: to assume that the first set of copies do not exist. But given current transformational assumptions, this means abandoning the assumption that verbs originate in a post-subject
position. Thus, mutation seems to pose a problem for a transformational SVO analysis. There is no problem for an LFG VSO analysis given that it has no traces or copies. There is also no problem either for the HPSG analysis in (4), since the mutation rule can refer to order domains, as in Borsley (1999, 2003).

## 5. Concluding remarks

The preceding discussion suggests that at least some SVO analyses of Welsh VSO clauses may face some problems. In particular, minimalist SVO analyses seem to face problems because of the assumption that movement leaves a copy. However, this is not really too important. As we noted at the outset, other things being equal, an SVO analysis is more complex than a non-SVO analysis. Thus, the burden of proof is on advocates of an SVO analysis. In section 3 I looked at the arguments that have been advanced or might be advanced for an SVO analysis. I argued that none of them is very compelling. If this is right, it is reasonable to assume a non-SVO analysis and to reject 'the general consensus of work on Welsh'. As noted at the outset, Culicover and Jackendoff (forthcoming) argue at length against analyses in which the superficial word order of clauses is the result of movement. The argument developed here provides some support for their position. Thus, it is not just relevant to Welsh.

## NOTES

${ }^{1}$ Earlier versions of this paper were presented at at the $10^{\text {th }}$ Welsh Syntax Seminar at Gregynog, Wales in July 2002, at the Linguistics Society of Korea workshop on inversion in Seoul, Korea in August 2002, at the Autumn Meeting of the Linguistics Association of Great Britain at the

UMIST in September 2002, and at a seminar in Université Paris 7 in February 2003. I am grateful to members of the audiences for various helpful comments. Any bad bits are my responsibility.
${ }^{2}$ Roberts (forthcoming) proposes a slightly more complex analysis with separate Pers(on) and Num(ber) heads instead of Rouveret's Agr head.
${ }^{3}$ However, Bresnan (personal communication) informs me that such an analysis is not necessary within LFG assumptions.
${ }^{4}$ For some critical discussion of the arguments for a restriction to binary branching see Culicover and Jackendoff (in preparation, chapter 3).
${ }^{5}$ The analysis in (6) has been applied in English auxiliary-initial clauses in Sag and Wasow (1999) and Warner (2000).
${ }^{6}$ Interestingly, Carnie (2001) proposes an LFG analysis of Irish VSO clauses in which they have a flat structure. Presumably, then, he no longer agrees with his suggestion.
${ }^{7}$ Various analyses have been proposed for ddim. For Rouveret (1991) it occupies Spec NegP. For Rouveret (1994) it is adjoined to VP. Borsley and Jones (2000, 2001, in press) argue that it is an extra complement of the preceding finite verb.
${ }^{8}$ It would not, however, be the only possible explanation. An alternative would be that the verbs have almost identical categories in the various sentence types.
${ }^{9}$ The idea that SVO clauses involve a VSO structure was developed in connection with English in McCawley (1970).
${ }^{10}$ The situation is actually more complex than this, as we will see in 4.2.
${ }^{11}$ The examples in (34) can be turned into grammatical sentences by the insertion of ddim after the subject to give the following:
(i)a. Naeth Siôn ddim gweld neb.
did Siôn NEG see no one 'Siôn did not see anyone.'
b. Naeth Siôn ddim gweld dim o 'r defaid. did Siôn NEG see NEG of the sheep 'Siôn did not see the sheep.'
${ }^{12}$ It is also rejected in some work within P\&P, notably Williams (1994: 182-184).
${ }^{13}$ Rouveret in fact assumes that the construction involves a coordination not of VPs but of TPs. As far as I can see, this does not have any advantages.
${ }^{14}$ For a detailed LFG analysis of the construction, embodying the assumption that it involve coordination of a clause and a VP, see Sadler (2003).
${ }^{15}$ In examples like these where the verb in elliptical is something other than gwneud, the same verb must appear in the first clause. Thus, the following is ungrammatical:
(i) *Brynodd Emrys geffyl a gwerthodd Megan. bought Emrys horse and sold Megan 'Emrys bought a horse and Megan sold one.'
This is not surprising on a transformational SVO analysis since it is assumed that movement leaves behind a copy. On this assumption that two VPs in (i) will not be identical and consequently ellipsis will be precluded. We will see, below, however, that the assumption that movement of a verb leaves behind a copy causes serious problems.
${ }^{16}$ Within P\&P, an English example like Kim admires Lee, in which a lexical verb shows agreement, must involve Agr-lowering or something similar given that there is no evidence that the verb is outside VP.
${ }^{17}$ Roberts (forthcoming) argues that this mutation is in fact a realization of accusative case. Tallerman (2003) argues at length against this proposal.

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# Exploring the Relationships between Theories of Second Language Acquisition and Relevance Theory 

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This article explores a number of points at which Relevance Theory makes a useful contribution to second language theoretical models, specifically those of Bialystok and Schmidt and their respective notions of 'analysis', 'control' and 'noticing'. It is suggested that the inferential mechanisms of Relevance Theory can account for the contingencies of communicative interaction without which pragmatic negotiations do not make sense, and thus can complement such information-processing accounts through the notions of 'manifestness’ and the balance between 'effort’ and 'effect'. Further research is called for into the integration of information-processing concepts and Relevance Theoretical insights as part of a complex theoretical architecture capable of capturing the rich diversity of pragmatic development in second language acquisition.

## 1. Introduction

If Relevance Theory is an appropriate theoretical perspective for understanding the pragmatics of second language learning, there are two requirements which it should strive to meet. The first, and weaker, is that it should be able to account for the robust facts of interlanguage pragmatics (ILP), such as contextual variation, nature of development and relationship with input. The second, stronger requirement is that it should be able to provide insightful explanations for data which have not adequately been accounted for before, and=or better explanations for data which already have an account elsewhere (Foster-Cohen, 2000). Given that ILP studies have moved in recent years from a rather descriptive to a more explanatory level of development, it is time to engage with a range of theories as constitutive elements of ILP studies. This article contributes to the discussion of the usefulness of Relevance Theory for second language research by comparing Relevance Theory with other cognitive approaches to second language, specifically information processing models.

## 2. Cognitive Theories of Pragmatic Development in a Second Language

Examining the explanatory power of RT requires careful selection of the approaches with which it is to be compared. Descriptive accounts of second language pragmatics that do not attempt explanation are not appropriate candidates. We mean by this that accounts which place their focus on the pragmatic performance of learners, establishing comparisons between languages and cultures (e.g., studies in cross-cultural pragmatics) do not have the same goals as Relevance Theory, namely to offer an integrated
perspective on bold communication and cognition. Thus, it would be unfair to assume that their frameworks are translatable into each other. In this way, accounts which, while attempting explanation, pay no heed to cognitive dimensions of language use and language learning would also not be appropriate. However, theories which attempt to explain the inner workings of the learner mind are indeed appropriate interlocutors.

Both Bialystok's (1993) two-dimensional model of second language proficiency development and Schmidt's noticing hypothesis (1993) are appropriate interlocutors in this sense. The discussion below assumes basic familiarity with all three theories, and only addresses points of contact between them. (For a more detailed discussion of the connections across the three theories, see de Paiva, 2003.)

Bialystok's account of pragmatic development rests on distinctions between conceptual, formal and symbolic mental representations. Conceptual representations are organized around meanings, formal representations are coded in terms of the structure of the language and refer to metalinguistic knowledge, and, finally, symbolic representations express the way in which language refers, coding between form and a referent. In Bialystok’s view, pragmatic competence depends to a greater extent on symbolic representations and to a lesser extent on formal representations. However, she argues that the mapping is not between form and meaning, but rather between form and social context (Bialystok, 1993).

### 2.1 Context

The notion of context is key to any dynamic account of pragmatics, including Relevance Theory. However, where Bialystok has a very general notion of context which (like the context of the sociocultural approaches to pragmatics), seems to be external to the learner (see Foster-Cohen, this issue), under Relevance Theory context is explicitly defined as internal to the learner (because it is cognitive context) and is explicitly defined as the set of assumptions the hearer brings to the interpretation of any ostensive communication. Thus, whereas Bialystok steps out of her cognitive account in order to account for pragmatics, Relevance Theory maintains the cognitive stance, incorporating external notions of context such as place, situation, etc., but, crucially, through an internal context, that is the eyes of =via the mind of the speaker= hearer. The fact that Relevance Theory in this way makes stronger cognitive claims for pragmatics means a shift from a view where social and cultural aspects of interactions represent central constraints to a more agent-based perspective with a clear emphasis on the individual's internal context.

It is worth noting at this point that while, as we are arguing, Relevance Theory can do the job of accounting for the notion of context used by sociocultural theories, it must be acknowledged that Relevance Theory has traditionally not taken on board the need to address explicit cultural knowledge of how to behave and how to interpret utterances in a culturally bound way (but see Foster-Cohen, this issue). In the specific case of ILP, it seems that Relevance Theory may profit from incorporating notions made explicit by Bialystok in order to account for what happens for
learners of a second language when they are confronted with contexts in which their utterances are displaced from their original context. Here, Bialystok provides a way of describing how declarative or propositional assumptions about cultural context can be formed and brought to bear in displaced contexts. She suggests learners construct their pragmatic knowledge by building a symbolic representation level, relating form to (external) context, from an already existing level of formal representations. And in order to learn culturally conventionalized forms and rules for pragmatic language use, learners need to analyse existing knowledge by creating new explicit categories and learning new forms. Bialystok's notion of 'analysis' (contrasted with 'control' in her model) offers a way of understanding how (Relevance Theoretic) assumptions become incorporated into the mind of the speaker=hearer.

However, neither theory adequately addresses how analysis of pragmatic (as opposed to grammatical) input works exactly, nor how the 'control' mechanisms for the new representations develop. How is it, in Relevance Theoretical terms, that some assumptions for interpretation come instantly to the fore, and are instantly and fully 'manifest' and others are more reticent or harder to bring to bear on a particular act of interpretation=comprehension?

An appropriate contribution can perhaps be made here by Schmidt's noticing hypothesis. The concept of 'noticing' refers to the allocation of attention to some stimulus as a prerequisite for learning. 'Attention' is a necessary condition for noticing, but not attention to input in general, rather to linguistic forms, functional meanings and relevant contextual features
(Schmidt, 1993). The issue of how learners decide to attend to form, rather than to communicative intention, in understanding has been addressed by Carroll (2001) who, like us, argues that it will be relevance (in the Relevance Theory sense) that will determine what exactly is attended to, and therefore what is noticed. The extension needs only to be made from vagueness in grammatical input to vagueness in pragmatic input.

Schmidt argues that aspects of pragmatic knowledge which appear to be unconscious or implicitly learned might be better accounted for by connectionist models since, according to his account, principles of pragmatics and discourse are better represented in terms of associative networks, rather than by propositional rules. While learners do not need consciously to count the frequency of occurrence of contextual and pragmatic features, they might have to notice specific relevant pragmalinguistic or contextual features in order for the encoding to be triggered. Again, the selection of features seems to play an important role.

Nevertheless, Schmidt does not explain the criteria according to which a specific feature is considered relevant. If the acquisition of pragmatic competence is a question of selecting information amidst an input of grammatical, textual, discoursal and social factors, then a notion such as 'manifestness’ in Relevance Theory has a clear contribution to make.
'Manifestness’ seems to relate in a less prescriptive way to the notion of 'representation' than the concept of 'analysis' in Bialystok's model discussed above, since what is 'manifest' to the learner is what he or she is capable of representing. In this sense, 'manifestness' is a more dynamic and flexible concept which can account better for constraints on
particular interactions. By the same token, the concept of 'control' is too static a category because its emphasis on automatic processes potentially renders it insensitive to the dynamics of pragmatic interactions. In other words, 'control' describes a state rather than the process by which experiences in interactions are converted into explicit and implicit assumptions by learners. To capture this flexibility, the mechanism of 'control' needs to be expanded to include an understanding of how it works, and how it builds cognitive context. As Schmidt (1992) has argued, it is not enough to claim that control develops with experience in its own course; rather, it has to be explained in terms of learning mechanisms. Control, then, needs to connect with theories of learning.

### 2.2 Relevance

From a Relevance Theory perspective, it can only be that inferencing forms the basis of pragmatic development, and since inferencing produces sudden insights, it is likely that the development of assumptions and of control is not a gradual cumulative process (Bialystok, 1994: 161), but one with sudden and major leaps forward. Also, inferencing is always done from background assumptions as premises, so if, as Bialystok argues, control depends on the language task required in a specific situation, then control must be construed contingently (as part of the ongoing dynamic of interaction), rather than statically as Bialystok seems to suggest. In fact, we suggest that the concept of processing for relevance can offer theoretical insights which go beyond the concepts of 'analysis' and 'control' in Bialystok’s model. Relevance Theory would predict that when a learner
attempts to process an utterance in the new language, assumptions that have been accessed frequently before (notably in a first language context of interaction expectations), come into the cognitive context very quickly (are easily manifest) and may provide a partial interpretation (see Ross, 1997; Liszka, this issue). A typical example in second language pragmatics would be when a second language learner seeks to transfer pragmatic codes and conventions of politeness from a first language learning context into a displaced (second language) context. A learner recognizing that part of an utterance he or she does not understand is relevant to understanding the whole utterance will invest the effort to either search more deeply in explicit knowledge of the language or make inferences from the context of utterance (mentally represented) as to what the whole communication might mean, and thereby provide a (probably partially) correct analysis which allows him=her to stop processing because a sufficiently relevant interpretation will have been found.

A learner's willingness to invest more effort in inferencing processes tends to be driven by the desire for strong communication since explicitness can be assumed to offset other uncertainties of second language communication. The distinction between 'strong' and 'weak' communication in Sperber and Wilson’s terms is crucial here. Strong communication aims at conveying specific assumptions, while weak communication aims to steer a hearer's thoughts in a particular direction and is deliberately vague.

Non-native speakers may not only weakly interpret both the weakly and strongly communicative utterances of others, but may also deliberately
exploit the distinction in order to give preference to pragmatic appropriateness at the expense of linguistic precision. Thus a non-native speaker might prioritize the quest for maximum effect and minimum effort by violating discoursal norms and undermining pragmatic conventions. Alternatively, he or she may prioritize certain pragmatic conventions, such as being explicit, thus losing effect and increasing effort. The result would be that there is more information to be processed and much of it would be pragmatically unnecessary from a native-speaker point of view. An argument for an account along these lines of what Edmondson and House (1991) have described as second language speaker 'waffling' can be found in Foster-Cohen (2002).

## 3. Conclusions

Whereas information-processing concepts of 'analysis’, ‘control’ and 'noticing’ are held to offer plausible insights into learning, they reach their limitations when it comes to a discussion of the process-like contingencies of communicative interaction without which pragmatic negotiations do not make sense. Here, a Relevance Theoretical framework can complement informationprocessing accounts by offering a plausible theory of cognition and communication which operates with a notion of internal context (manifestness and the effort=effect balance) where inferencing processes are central. This approach to context, however, still needs to employ the dynamic notions of 'noticing' and 'analysis' in order to shed light on the ways in which learners develop and use assumptions on-line in pragmatic contexts which are by definition displaced. A future programme for SLA
research into the acquisition of pragmatic abilities in a second language could thus be said to lie in an integration of useful information-processing concepts and Relevance Theoretical insights as part of a complex theoretical architecture capable of capturing the rich diversity of pragmatic development in second language acquisition.

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# Discovering Order ${ }^{1}$ 

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The polarisation of the experimental and observational traditions in linguistics has tended to obscure the common origins of both in intuitions. In this article I explore one form of observational work - conversation analysis - by examining its perceived limitations and the reasons for its insistence on recorded interactions. Its capacity to capture the temporal production and interpretation of utterances is what makes for its distinctive contribution to linguistics, allowing us to discover order in the organisation of talk that escapes introspection. The analysis of data extracts and the examination of case studies impels us to recognise what the investigation of single utterances and utterance pairs cannot: the importance of sequential placement to the understanding of utterances and the centrality of action in language use.

## Introduction: "Order at all points"

Informal experiments by means of the investigation of intuitions (Chomsky, 1986) have become as natural a part of linguistic inquiry as their more
formal counterparts in physics and biology. In the physical sciences the experimental tradition has progressed alongside one which is anchored in the observational and which is allied to the technological advances of the day: after all, before the advent of the electron microscope and the ultracentrifuge, it was not possible to consider questions about the sub-cellular structure of cells; without gravitational lens telescopes, astrophysicists would not be forced to rethink theories about the formation of planetary systems. In the study of language the experimental and the observational have, of course, taken more divergent paths (see also Meurers, this volume). There are varied reasons for this. Prominent among them is the view of many that the investigation of intuitions, albeit in some respects unsatisfactory, is the only means by which to overcome the perceived limitations of a reliance on samples of actual language use. As Borsley and Ingham (2002:5) note, if one wants to know if a language allows parasitic gaps within subjects, nothing is to be gained by attempting to search for naturally-occurring examples when one can more easily and fruitfully simply elicit acceptability judgements from a native speaker. Allied to this may be a reaction against a perceived "fetishism of tape per se" (Schegloff et al, 1996:18) and what may be seen as a view that discounts data which is not tape-recorded as a valid object of investigation. The divergence, even polarisation, of methods has tended to obscure the fact that the one builds on the other: what we observe is always initially guided by intuition. And, far from adhering to the impossible dream that is pure induction, observation is as much driven by specific assumptions as methods relying on introspection. It is the nature of those assumptions that I here explore in examining one
type of work grounded in the observational: conversation analysis $\left(\mathrm{CA}^{2}\right)$. I consider both the apparent limitations of naturally-occurring, tape-recorded interaction, as noted above, and the reasons for the insistence on recorded interactions and its corollary, a perceived dismissal of other forms of data.

In doing so, I shall propose that what makes this approach distinctive in its treatment of naturally-occurring, recorded material is precisely that which makes it of interest to linguistics: what is made possible by capturing the temporal production and interpretation of utterances in the particular form of transcription ${ }^{3}$ which has been adopted in this work. The temporality is made manifest not just in the transcription of pauses and overlaps but also crucially, as we shall see, in capturing the sequential context of the object of investigation; the context in which it is produced and the context which it reproduces. It is in the inclusion of the temporal dimension, the moment-bymoment construction of utterances, that we have this work's most valuable contribution to the study of language, rather than any a priori investment in recording as such.

The decision to take interaction as the source of data rests on the central assumption that:
> "...whatever humans do can be examined to discover some way they do it, and that way will be stably describable. That is, we may alternatively take it that there is order at all points" (Sacks, 1984: 22; italics added).

From the perspective of theoretical linguistics, this privileging of the way humans do things, rather than why - the emphasis on description, rather than explanation - must seem unsatisfactory. However, attempting to establish why people do what they do is surely not feasible without first
identifying the resources people use to do it: any 'why' is ultimately inextricable from the 'how'.

If, then, various kinds of experimentation consists in imposing order on language - stripping it of the so-called 'errors’ (including hesitation and dysfluency) that are commonly held to attend its production - the use of naturally-occurring interaction, and, crucially, its transcription, ${ }^{4}$ renders possible the discovery of order in language. It does so by recording and thus making available for analysis that which experimentation deletes - and, in so doing, capturing domains of organization otherwise undetectable in the apparent disorder and fragmentation of interaction.

I start by considering what may be gained from analysis that may add to our intuitive sense of what certain linguistic items are doing. Through case studies and the analysis of an extended sequence of interaction, I then go on to examine how and why this form of work uses the participants' own displayed understandings at the centre of the analysis; the units of analysis are taken to be those that the participants themselves are observed to be using. An important methodological upshot of this is that the scope of inquiry is paradoxically broader in many ways than introspection makes possible.

## 1. Introspection and beyond

"Recurrently, what stands as a solution to some problem emerges from unmotivated examination of some piece of data, where, had we started out with a specific interest in the problem, it would not have been supposed, in the first instance that this piece of data was a resource with which to consider, and come up with a solution for, that particular problem" (Sacks, 1984:27).

Sacks's reference to 'unmotivated looking' must naturally be seen in the light of the earlier assumption that he makes: that of 'order at all points'. Thus in setting aside specific hypotheses (about, say, parasitic gaps), it is possible to investigate the methods by which speakers come to do what they do. Of course, the investigation itself is shaped in the first instance by intuition. Any analysis of naturally-occurring interactional data has to develop a sense of what the particular linguistic item (at any level - lexical, syntactic, prosodic, etc.) under investigation achieves, and the use of intuition is critical in establishing this. For it is intuition, after all, which initially guides us in the selection of data and plays an important role in assessing how what is said is selected from a possible set of alternatives. In general those alternatives have to be intuited in the process of considering how what is said is designed. Reliance on intuition alone, however, risks leaving out of account what for participants is a critical resource for establishing what a given item is doing: its sequential context - what it follows and what, in turn, follows it. Consider in the first instance the simple example of the following utterance ${ }^{5}$ :
'Don't'.

Intuitively, we are likely to characterise this in pragmatic terms as a directive. Lacking a prior context to which this might be in some way a response, we are led to stipulate the meaning or function of the utterance by importing a context to which 'don't' is fitted; inuitively, then, it may be taken to be directed to stopping or preventing someone from doing something. It is, for example, what an adult might say to a child in the interests of restraint; so may wider elements of context be assumed in order
to build a plausible characterisation. In putting this particular 'don't' back into the context in which it occurred, however, we can see that the participants' own understandings of 'don't' are somewhat at odds with the intuitive reading:
(1) ( $D=$ David, adolescent client; $T=$ Therapist; from Parker, 2001 ${ }^{6}$ )

1D I always behave in all of them but (0.3) in=English and Maths and 2 Science and French (.) I can't.
3 (1.3)
4T $\rightarrow$ Don't.
5 (0.8)
6D Mm.
7 (0.5)
8T Say to yourself (0.8) [it's not that I can't, it's that I don't.
9 D
10
11D Mm
12 (0.5)
13T ${ }^{\circ} \mathrm{Oka}$ : $\mathrm{y}^{\circ}$,
14 (1.8)
15 T If you can't (0.8) you lose control, if you don't you're in 16 control.

It is quite clear from David’s assenting 'Mm' in 1.6 that what he understands the therapist to be doing is not issuing a directive but rather proposing a substitute for his assertion ('...I can't') in 1.2. ${ }^{7}$ This is evident from the therapist's subsequent turn at 1.8 , where she incorporates both what David had said at 1.2 - 'I can't' - and her own 'Don't' at l.4, explicitly counterposing the two. David's subsequent acceptance of that, at l.11, reiterates his earlier assent. Of course, the understanding of 'don't' as such is highly dependent on the postpositioning of David's 'I can't' - held off till the last possible point in the turn. The therapist, in other words, uses David's 'I can't' in 1.2 as a resource with which to build, in a form of 'syntactic parasitism' (the phrase is from Heritage and Sorjonen, 1994), her own turn.

There are important methodological and theoretical implications of an approach which considers an utterance in its sequential context, as in the example above. It is, in the first place, methodologically transparent, such that any analysis is open to dispute by being grounded in the data - or a representation of them ${ }^{8}$ - which is presented with it. And, for all the breadth of scope that introspection seems to afford, there is the risk that introspection may be limited by consensus: however wide-ranging the imagination, its products are always going to be constrained by what audiences will accept as plausible (see Sacks, 1992b: 419-20). As Sacks notes:
"a base for using close looking at the world for theorizing about it is that from close looking at the world you can find things that we couldn't, by imagination, assert were there: one wouldn't know that they were typical, one might not know they ever happened, and even if one supposed that they did one couldn't say it because an audience wouldn't believe it" (Sacks, 1992b:420; also quoted in Schegloff, 1996a:167).

The theoretical implications follow from the methodological practice of making available both prior and subsequent turns along with the target utterance. For it is this which reveals that sequential positioning - the placement of a turn after something (including, of course, as we shall see, silence) - is seen to be a crucial resource for participants in making sense of what is said. In (1), then, an intuitive sense of the meaning of an item is transformed by understanding it with respect to where it is placed in an interactional sequence: sequential placement, rather than form per se, is seen to be criterial in what will be made of it.

## 2. The primacy of sequential placement

Perhaps the simplest demonstration of this orientation to placement is the response to an utterance which clearly prefigures something else: 'guess what' standardly receives the response 'what' - a 'go-ahead' to tell - and not, as might be predicted from its form, a guess. In the same way, 'have you got a moment' routinely adumbrates some kind of claim on our time; and similarly:
(2) (from Schegloff, 1995a:24; Ju=Judy; Jo=John)

| 1Ju | Hi John. |
| :---: | :---: |
| 2Jo | Ha you doin-<say what 'r you doing. |
| $3 \mathrm{Ju} \rightarrow$ | Well, we're going out. Why. |
| 4Jo | Oh, I was just gonna say come out and |
| 5 | this evening, [but if you're going out |
| 6 | that. |
| 7Ju | ["Talk", you mean get dr |
| (3) (from Terasaki, 1976:28; $\mathrm{D}=$ Deliverer, $\mathrm{R}=$ Recipient) |  |
| 1D | Didju hear the terrible news? |
| $2 \mathrm{R} \rightarrow$ | No. What. |
| 3D | Y'know your Grandpa Bill's brother Dan? |
| 4R | He died. |
| D |  |

Following the response to the question in each case, ${ }^{9}$ the speaker at the arrowed turn clearly orients to what the first turn had projected, in (2) with 'Why' at l.3, and in (3) with 'What’ at l.2. What the first turn had projected is of course a further contingent action: an invitation in (2) (where John's report of what it was going to be endorses Judy's understanding of 1.2 as indeed its foreshadowing), and a news announcement in (3). Participants' responses to 'guess what', 'have you got a moment', 'what are you doing', and 'did you hear the terrible/wonderful news...' and their variants thus systematically display their understandings of these utterances as having a prefatory status: they are not treated, in and of themselves, as accomplishing
the actions (announcements, requests, invitations, etc.) to which they are preliminaries. The example of 'pre's', as they have come to be termed (see Schegloff, 1995a) ${ }^{\mathbf{1 0}}$, demonstrates in a very straightforward way why consideration of isolated utterances, rather than as embedded in sequences of talk, misses a basic feature of language use: its action projection. ${ }^{\mathbf{1 1}}$

## 3. Language as Action

Attention to sequences of interaction is thus able to reveal what isolated utterances cannot: the trajectory of actions. Not only subsequent turns but also prior ones may be needed to establish the action being launched by an utterance. A particularly dramatic instance of this is Schegloff's (1996a) study of repetitions ${ }^{12}$ by one speaker of another speaker's prior turn:
(4) (from Schegloff, 1996a:183. Interview with Susan Shreve on U.S. National Public Radio concerning her recent novel. E=Bob Edwards, interviewer; S=Susan Shreve)

1E Why do you write juvenile books.
2 (0.5)
3E ['s that-b- (0.?) [hav]ing [children? ]
4S [Because I love child[ren]. [I really do:]=
$5 \quad$ =.hh I enjoy children:, .hh I started writing: (.)
6 juvenile books fer entirely pra:ctical reasons, .hh
7 (.)
$85 \quad[\mathrm{u}-\mathrm{u}-$
9E [Making money::.
10S $\rightarrow$ Making [money
11 E [yes ((+laughter))
12 S that- that practical reason hhh
13 (.)
14 S I've been writing juvenile books for a lo:ng. .
(5) (from Schegloff, 1996a:174. E=Evelyn; R=Rita. Evelyn has been called to the phone)

```
1E =Hi: Rita
2R Hi: Evelyn:. How [are y'
3E - [I hadda come in another room.
4R Oh:. Uh huh.=
5E =I fee:l a bi:ssel verschickert.
6 (0.2)
7R W- why's 'a:t,
8 (0.4)
9R uh you've had sump'n t'drink.=
10E }->=I\mathrm{ had sump'n t'dríi:nk.
11R Uh huh.
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From a strictly informational perspective there could be nothing more redundant than the exact repetition of what another has just said; but Schegloff's analysis reveals these repetitions to be instances of a distinct and hitherto undescribed action. The practice of agreeing with another by repeating what they have just said is shown to constitute the action of confirming an allusion; that is, confirming both its content as well as confirming its prior inexplicit conveyance. Thus in (4) the interviewer formulates his understanding of 'entirely practical reasons' as an allusion to making money, in his next turn; Shreve's repetition of this in confirmation serves also to confirm that 'practical reasons' was indeed an allusion -
something she makes explicit ('that practical reason') in l.12. Similarly with (5), Evelyn's 'I had sump'n t'drink', notwithstanding the deictic shift indexing the change of speaker, confirms both Rita's proffered understanding in 1.9 'you've had sump’n t’drink', of why Evelyn feels ‘a bissel vershickert' ('a little tipsy’) and also that this was inferrable from her own prior talk. While neither the scope nor the subtlety of Schegloff's account can be conveyed here, the methodological upshot is clear: that such an analysis would have been impossible without data which captured the sequences in which these particular analytic objects are embedded, and with them the trajectory of the actions being implemented. In addition, the analysis itself is grounded in several exemplars of the same phenomenon to show that the findings are not idiosyncratic to particular episodes of interaction, but a systematic practice. It is only the identification of ostensibly the 'same' practice across a range of examples that makes it possible to specify ‘environments of relevant possible occurrence’ (Schegloff, 1993:104). Thus an integral part of the evidence that Schegloff adduces for his account are a case of avoidance - an observable withholding of the practice - and a case of relevant non-occurrence. Of these two 'exceptions that prove the rule', Schegloff remarks that:

> "...it is virtually certain that nothing of interest would have been seen at all were we not already familiar with the practice of confirming allusions and its environments of possible occurrence. Here then we may have some of the most distinctive fruits of inquiry in rendering what would otherwise be invisible visible in its very absence" (1996a:199).

It is thus in the strong empirical skewing from a cumulation of cases that we find normative orientations from which speakers make their own choices.

Significant divergences from those norms are thus hearable as such. It is in the collection of such cases that we can really see what it is to talk of 'the same context' or to talk meaningfully of something being 'absent'.

The theoretical implications of such work are equally clear: that phenomena which have fitted uncomfortably, if at all, into standard linguistic accounts because of their propositional redundancy and thus been dismissed as convention, formulaic, or phatic, are revealed, when considered in their sequential contexts, to be prosecuting courses of action. Thus the apparent redundancy, even apparent literal fatuousness, of an utterance such as 'you've had your hair cut' invites analysis for the range of responses as an action - as a noticing - it next makes relevant, ${ }^{13}$ and what its placement is designed to accomplish. Interactional noticings - that is, articulated noticings (to be distinguished from cognitive ones ${ }^{14}$ ) are clearly oriented to by participants as initiating talk to a proposed topic such that minimal responses ('Mm’, say, or simply 'yes’/’no') are hearably evasive and rejecting of the topic proposed. ${ }^{15}$ They are, then, distinct actions, with their own sequential organization, oriented to as such by participants.

The availability of the linguistic context from which an utterance emerges and that which it reproduces makes it possible to establish the interactional motivations for phenomena which, from a strictly logical and informational perspective, are problematic. These include contradiction (as in extract 1:‘I always behave in all of them, but in English and Science and Maths and French I can't'), indirectness, idiomaticity and falsehood. So, for example, work on so-called 'extreme case formulations' such as 'all', ‘none’, ‘always’, ‘never’, ‘everyone’, ‘no-one’, etc. has shown that in talk
these are routinely accepted and unchallenged; Pomerantz (1986) initially identified their common use in complaints and justifications and proposed that they are used in a persuasive capacity to defend potential challenges to the legitimacy of the complaints or justifications of which they form a part. Further investigation has shown how their very extremity makes them hearable ${ }^{16}$ as potentially non-literal and thus not simply as descriptive universalizations of logical statements, but also as indexical of the speaker's stance towards those descriptions. They thus lend themselves to a range of interactional practices - as well as complaining, ironizing, teasing, and so on (Edwards, 2000). In the same vein, work by Drew (2003) has identified the interactional motivations for what are revealed to be falsely exaggerated claims in conversation, such as the following; the arrowed turns show firstly the strong claim, and then a subsequent backdown by the same speaker to a weaker position:
(6) (Holt 289:1-2; L=Lesley; S=Sarah. Sarah and her family have just returned from holiday on the Isle of Arran, which Lesley has said is her daughter's favourite stamping ground)

```
1L Well sh- the:y stay in uh various hotels and they wa::lk .hhh
2S Oh I Tsee she's a walker as we:ll.
3L Yes and she's brought me back some lovely photographs of it I
4 really feel I know that island very well.
5 (.)
6S Well there's not a lot of it to know there's only fifty five
7 miles of it all round [the perimeter
8L [.hhh but there's some beautiful walks
9 aren't the::[re
10S [0:h yes (.) well we've done all the peaks.
11 (0.4)
12L Oh ye:s
13 (0.5)
14S A::h
15 (0.5)
16S }->\mathrm{ We couldn't do two because you need ropes and that
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(7) (Drew:St:98; S=Sandra, B=Becky. 'Silks' is a nightclub)

```
1B We were all talking about going out t- Silks tonight'cause
2 everyone's got the day off tomorrow?
3S Are you- cz my house is all going t- Silks tonight?=
4B =Really
5S Yea:h E[mma un Ces um Ge-
                    [Bet it'\overline{s}\mathrm{ gonner}\overline{-}\mathrm{ be absolutely pa:cked though isn't it.}
7S Yeah and C्Ces has been ra:iding my war:drobe. So: hh[h
8B [.hhh Are
9 you going.
10S No::,
11B TWhy::
12S I don't know hhh hu hu .hhh I dunno it's not really me
13B Mw:rh
14S ( ) like it .hh I've never been to one yet,
15B You \HAven't.
16S No
17B Not even t'Ziggy:s
18S }->\mathrm{ Nope (.) I've bin twi- no ( ) a bin twi:ce at home to:: a place
19 called Tu:bes which is really rubbi:sh and then I've been once
20 to a place in ( ) Stamford called erm: (.) Crystals (.) which
21 i:s o::kay: <b- n- Olivers> sorry Olivers (.) which is okay:( )
22 but nothi:ng special,
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Drew's analysis reveals how the extremity of such statements is responsive to the prior topic which prompted it. In response to the hearably sceptical uptakes that follow (such as pausing - which withholds acceptance of the claim, or, as in (7), an elliptical repeat, which has been shown to adumbrate disagreement), their speakers produce a modified version which is distinctly at odds with that asserted in the first, 'extreme' version. Sacks (1975:75) had observed that one may respond 'Fine' to the question 'How are you' even if this is not strictly true because one is aware of the sequential implications of the alternative answer - which would progress that sequence instead of closing it down. ${ }^{17}$ Drew similarly shows how the truth, or otherwise, of what is said ultimately may have an interactional basis:
"these (over-)strong versions are fitted to the slot in which speakers are announcing, disagreeing, confirming, etc.;...we can see that speakers are dealing...with the exigencies which have arisen in the immediate (prior)
sequential environment. Speakers produce versions whch are fitted to their sequential moments. When the moment is past, so too is the 'requirement' for that falsely exaggerated version: the speaker can retreat to a 'weaker' version (just as, having answered the enquiry how are you? in the conventionalised 'no problem' fashion, a speaker is then free, in a subsequent slot, to say how they really are)" (2003:54).

From a methodological perspective, sequential position is once again seen to be a central resource for participants; here, in establishing how far a description is expected to meet 'objective' standards of truth (Drew, 2003:47). Those fleeting moments - often banal and apparently inconsequential - in which speakers' trust in veracity becomes interactionally salient are surely beyond the grasp of both intuition and memory. It is, then, in such materials that we are compelled to confront the means by which speakers select among alternatives in the implementation of particular courses of action. Nowhere more pertinent is Wittgenstein's assertion that "the aspects of things that are most important for us are hidden because of their simplicity and familiarity" (1953: para.129).

## 4. The participant as analyst

The question, then, remains of how we uncover what is hidden and make it accessible to analysis in the first place. Clearly there is much linguistic data which is tape-recorded - primarily in the sociolinguistic and discourseanalytic tradition, as well as in much corpus linguistics - which does not use what to many seem to be the dense and distracting transcription conventions of the study of talk-in-interaction. The inclusion of inbreaths, the recording of silences to a tenth of a second, the precise placement of laugh particles in the production of talk - all, after all, are non-linguistic phenomena. Their
import for linguistic analysis must ultimately be understood in the context of what earlier investigation in this domain set out to establish.

The seminal work in this regard is Sacks et al's (1974) proposal of a model for the turntaking organization for conversation. ${ }^{18}$ Among the many methodological implications of this proposal, the most radical is that it places, for the first time, the participants themselves analytically front-andcentre. In doing so, it recognizes that the units with which participants interact are not necessarily reconcilable with units (such as the sentence or clause) which may be analytically imposed and by which standard they may be discovered to be incomplete or in some way deficient. ${ }^{19}$ Thus in (8), 1.3 is neither sentence nor clause; but given that Mother's turn comes right after it with no pause, we have evidence that she heard transparently that the other's turn was complete at the conclusion of 'At?':
(8) (From Jones and Beach, 1995; also in Schegloff, 1996b. T=Therapist, M=Mother)

1T What kind of work do you do?
2M Ah food service.
$3 T \rightarrow \quad$ At?
$4 \mathrm{M} \quad(\mathrm{Uh}) /(\mathrm{A})$ post office cafeteria downtown...
And in the following, Mary's contributions can be seen to be placed with careful attention to points at which Adam's talk might be possibly complete. In 1.5 she attempts to supply the word which Adam might be seeking, just after he has apparently abandoned a search for a word (which, in the event, he does not take up); at 1.17 and 1.19 her agreements are placed just after the points at which Adam's turn might have come to completion (at 'interested' and 'pride'), and when it is clear that Adam's turn is continuing at 1.20 from 1.18 she drops out after launching her turn at 1.21 , only to start again - this
time with success - at exactly the point at which Adam's turn again might have come to completion (at 'that'):
(9) (C:22. A=Adam, M=Mary. Adam has just suggested that Mary might apply for a 'Disabled' sticker for her car, because of her persistent back pain, but acknowledges that some people might be reluctant to seek charity).

01A But I think my grandmother- MY GRAndmother for example wouldn't 02 want anything to do with (accepting charity).
03 ( 0.9 )
04A She's actually (0.5) quite (1.2) I mean [I- I suggested she=
06A =actually apply for disâbility allowance.
07 (1)
08A and she said
09 (2)
10A she was complaining about the fact that she couldn't go anywhere,
11 >an'< she('d been taken away), she couldn't afford to (---) by
12 day, >and I said< (.) why didn't you apply for disâbility
13 allowsance she said< (.hh) >I can't get one of those an' I said
14 well do you kno::w, no she hadn't applie:d, an' .hh=
15 M Tuh huh. (Sounds like a slurred 'I know')
16A =an' she was just not interested cos [it was a QUEstion of pri:de=
17M [个That's right.
18A =for [he::r, I mean=
19M [Absolutely.
20A $=$ [I don't understand that, [for them it's::
21M [My fath- [My father's sister.
22 (0.7)
23M The same thing. (0.4) And eventually her daughter-in-law, ${ }^{\circ}$ they're
24 Tnot the best of friends anyway ${ }^{\circ}$, (0.6) and the daughter-in-law
25 went- (.) went ahead she works in the Na[tional Health Service= 26A [an' got it.
27M =and got it for her.
Thus, one of the 'grossly apparent facts' (Sacks et.al, 1974:700) about conversation - that overwhelmingly, one speaker speaks at at time - is achieved by speakers' careful monitoring of each others' turns for points at which they might be possibly complete; for the turntaking system provides an inherent motivation for grammatical parsing and thus for listening. So in Mary's starting to talk in l.21, dropping out and starting again after 'that' in 1.20 we see her analysis of 'I don't understand that' as a possibly complete turn at that point. ${ }^{20}$ What the talk reveals, too, are the limits of individual
intention: at lls. 20-21, first Adam and then Mary is compelled to abandon a turn-in-progress, the former completely, the latter temporarily, by the other's launching of a turn. It is therefore the participants' own analyses, as revealed in their orientations to the interactions in which they are engaged, that provides the starting point for conversation analysis; it is the only perspective which seeks to put the analyst at the deictic centre, as it were, of the talk itself. It acknowledges that the exigencies of the turntaking system may override individual intentionality, ${ }^{21}$ exerting an interactional pressure, like a closing door (Schegloff, 2001) that the speaker - with grammatical resources - has to keep open; those grammatical resources are quite clearly shaped accordingly. Analysis is therefore answerable to the inescapably temporal, situated character of talk-in-interaction.

## 5. The temporal contingency of interaction

Capturing the temporal contingency of interaction on a transcript representing time through space - thus necessitates the recording of lack of talk - silence - as surely as it does talk itself. For participants themselves orient to absence of talk, and its placement and extent, as a distinct interactional object, as anyone who has had an invitation or question greeted with silence knows; so in the following, the recognizability of a delayed response to the invitation as adumbrating a refusal that enables the inviter to start to reformulate (at l.3) the invitation so as to receive an acceptance: ${ }^{22}$
(10) (From Boden and Molotch, 1994:266)

1A Would you like to meet now?
$2 \rightarrow \quad$ (0.6)
3A [Or late-
$4 \mathrm{~B} \quad[$ well, perhaps not now. Maybe in 'bout five minutes?
For it is systematically the case that so-called 'dispreferred’ responses (negative answers to questions, declinations of invitations, refusals of offers and requests, for example) are produced in generic ways, with some or all of the following features: turn-initial particles ('well...'), dysfluency, accounts, but in the first instance, delay, quite independently of particular speakers or social contexts. A number of observations are made analytically possible by the transcription of silence, and its placement on a separate line. The turnconstruction component, which allocates one TCU to each speaker in the first instance, ${ }^{23}$ and the turn-allocation component of the turntaking system (Sacks et al., 1974:702-3) and the set of rules which governs them, all identify both the person who should speak on the completion of the turn in l.1, and the place at which they should speak. It should be stressed at this point that it is by no means a given that what looks syntactically or semantically like, say, a question, interactionally always demands an answer (what are vernacularly known as 'rhetorical questions', for example, may be performing - and understood to be performing - agreements; see Schegloff (1984) for a case in point). It is thus the turntaking system which requires an answer to come 'next'(Sacks et al., 1974:725, FN33). So here the normative operation of the turntaking system requires, at the first possible completion of the turn in l.1, a response to the invitation. What the registering of the silence in 1.2 does, then, is to make clear that a response which was normatively due in that place was not produced; the silence which ensues
upon the production of l.1, then, is unambiguously B's (the placement of the silence after A's talk in 1.1 would misleadingly have attributed it to A). It also shows the radically different interactional import of interturn and intraturn silences: compare, for example, the intraturn silences in Mary's telling of her story in extract (9), lls.23-6, where talk by another is not hearably absent. The transcription of silence and its placement thus allows us to register that something is missing, and moreover what that something is and who it is attributable to. Allows us to register because what ensues as a consequence of that silence displays that it is surely registered by the participants themselves. For what the silence also allows us to see is that 'Or late-' is not characterizable simply as a continuation of l.1. It is, rather, a response to l.2, which indicates a dispreferred response in the works. As a response to that silence the turn is syntactically built as a continuation ('Or...'), retrospectively casting the first turn - which on its production was built both syntactically and prosodically to be complete - as not, in fact, having been complete. It thus converts an interturn silence into an intraturn pause, thus neutralizing the negative interactional implications of the former, and thereby maximizes the possibility of a preferred response. ${ }^{24}$ Once again, we see the implementation of grammatical resources to interactional ends, rendered visible only by means of a transcription system which captures what the participants themselves are demonstrably oriented to. In so doing, it allows us to see that the absence of something may be identifiable as an absence of something specific, and that it may shape what gets said as surely as actions through talk itself.

The identification of such absences is, of course, only made possible by the prior identification of normative organizations operating in interaction, among which are turntaking and sequence organization (see Schegloff, 1995a) and the organization of preference (see Heritage (1984), Pomerantz (1984) and Schegloff (1988a)) and repair, addressed to problems in speaking, hearing and understanding (see, inter alia, Schegloff et al. (1977), Schegloff (1979, 1992)). These intersecting levels of organization provide normative structures by which courses of action (or, indeed, as we have seen, inaction) are recognizable and interpretable. Thus turntaking, sequence organization and preference are all implicated in the recognition of what the developing silence at 1.2 of (10) might turn out to be; but, far from being mechanistic and deterministic, these very organizations provide, through grammatical and prosodic resources, the means by which one course of action is pursued over another. The choice to say, in response to the silence, 'I said, would you like to meet NOW?' - which would have endorsed the silence as an interturn pause - was available to the speaker, along with the interactional consequences of that choice. So, far from positing crudely behaviourist models of conduct - a charge sometimes levelled at conversation analysis - the uncovering of these levels of order and organization are the discovery of the resources with which speakers organize their worlds. In place of causal explanations it identifies constraints, and the possible consequences and relevancies of those constraints with reference to normative usage. In so doing it acknowledges that, while such usage is a reference point, participants make their own choices in the face of interactional contingencies. As Heritage remarks:
"The organization of talk...participates in a dialectical relationship between agency and structure in social life and in a cognitive-moral way. Without a detailed texture of institutionalized methods of talking to orient to, social actors would inevitably lose their cognitive bearings. Under such circumstances, they would become incapable both of interpreting the actions of co-participants and of formulating their own particular courses of action. A texture of institutionalized methods of talking is thus essential if actors are to make continuous sense of their environments of action. Moreover, a range of moral considerations may be superimposed on these cognitive ones. For in the absence of a detailed institutionalization of methods of talking, actors could not be held morally accountable for their actions, and moral anomie would necessarily compound its cognitive counterpart. In the end, therefore, what is at stake is the existence of a form of social organization which is so strong and detailed as to render choices among courses of action both conceivable and possible" (Heritage, 1984: 292).

## 6. Talk-in-interaction

As we have seen, work in CA does not map straightforwardly onto the traditionally-recognized domains of linguistic inquiry. The data which form its focus might seem to locate its disciplinary home as Pragmatics. Its methods, however, have an analytical reach beyond the territory traditionally marked out by this domain. So work in recent years has, for example, addressed issues also relevant to lexical semantics (see, for example, Sorjonen, 1996, Heritage, 1998, 2002, and Clift, 2001), prosody (Couper-Kuhlen and Selting, 1996, Local, 1996, and Couper-Kuhlen 2001), and syntax (Lerner, 1996, Schegloff, 1996b, Ono and Thompson, 1996, Ford et. al, 2002, and Thompson, 2002). Yet it is also evident that the study of naturally-occurring interaction necessitates reference to domains broader than those of traditional linguistics.

The increasing use of video data to capture the intrication of the visual into the verbal has revealed further ways in which participants may mobilize a range of resources allied to the sequential properties of particular linguistic objects in the service of interaction. So work by Marjorie Goodwin (1980) and Schegloff (1987) on headshakes accompanying talk demonstrates how the common interpretation of the lateral headshake as a gestural expression of the negative (a view with its origins in Darwin's The Expression of Emotion in Man and Animal (1872)) and the vertical headshake, or nod, as a display of the affirmative is misleading; examination of video data proposes that lateral headshakes may be used to mark, not a feature of the turn itself, but rather a feature of its relationship to a prior turn. Thus they may indeed be used as a marker of the negative, but they may also be used to mark disagreement (even when the utterance it accompanies is emphatically positive) and to mark intensification (what Goodwin (1980) calls a marker of the 'out of the ordinary'. And Charles Goodwin’s (1995) study of an aphasic man, for whom only 'yes’, 'no’ and 'and' remain as the result of a stroke, shows very powerfully how these linguistic objects may be used in conjunction with gesture to prompt recipients to propose actions that are endorsed (with 'yes'), rejected (with 'no') and built on (with 'and'). The relevant lexical properties here are sequence-expansion versus sequence-closure; just as 'fine’ as a response to 'how are you' closes down a sequence and 'feeling lousy' (say), opens it up, so 'yes' is sequence-terminating and 'no' and 'and' sequence-expanding (albeit in different ways), prompting the recipient to further searching - be it for a word, or an action. So while we have seen how talk-in-interaction sets
a limit on the scope of individual intentions, we can also see how by the same token it provides us with one of our most powerful resources: our coparticipants. It is thus in the mobilization of the interactional resources of the co-present other(s) that we see at its clearest the joint construction of action in interaction.

The centrality of action to language use is perhaps best demonstrated in a context where what appears to be at issue is not action at all, but rather description. Reporting what someone said on a prior occasion would seem, on the face of it, to be an issue of accuracy, a question of being as faithful as possible to the original utterance; in short, getting the description right. In actual fact, as the following extended sequence shows, participants show themselves to be concerned not with description, but rather with action. This sequence, presented earlier as (9), is here reproduced as (11). We noted earlier the turntaking features in the first part of this excerpt, which show the speakers compelled to abandon turns when - according to the normative constraints of the turntaking system - the other has prior claims to talk. But equally here, in the production of the reported speech, we see that the other may be as much collaborator as constraint, a collaboration that here comes to fruition in lls. 40-42, where Adam takes over and completes the turn that Mary started:
(11) (A=Adam; M=Mary)

1A But I think my grandmother-MY GRAndmother for example wouldn't
>an'< she('d been taken away), she couldn't afford to (---) by
day, and I said (.) why didn't you apply for disa\uparrowbility
allow>ance
13 she said< (.hh) >I can't get one of those< an' I said well do you
14 kno::w, no she hadn't applie:d, an' .hh=
15M TUh huh. (Sounds like a slurred 'I know')
16A =an' she was just not interested cos [it was a QUEstion of pri:de=
[\uparrowThat's right.
17M
=for [he::r, I mean=
[Absolutely.
19M
20A
=[I don't understand that, [for them it's::
[My fath- [My father's sister.
(0.7)
The same thing. (0.4) And eventually her daughter-in-law, 'they're
Tnot the best of friends anyway}\mp@subsup{}{}{\circ}, (0.6) and the daughter-in-law
went- (.) went ahead she works in the Na[tional Health Service=
and got it for her.
(.)
29A Y[e:s.
30M [And it's CHA:nged my aunt's li:fe.
31 (0.4)
32A I kno:w, it('s [sad).
33M [I mean (.) she's- she phones me, she's
housebound,
34 totally.
35 (0.8)
36M TI once said to her (1.2) if you'll admit: (0.6) if you will admit
37 your disability, (.) I mean [she's hadda (.) a peculiar leg, one=
38A [Hm.
39M =(one at-) all her life. (0.5) Uhm, (0.2) you know you could get-
40M }->\mathrm{ 个I'M:-
41 (1)
42A }->\mathrm{ I'M NOT >[DISABLED, I'M FINE. I'(H)M- o(h)r I'm- I'm- I'll £cope.£
43M - [(Dis-)
44M >That's right.< Anyway, her- her (s-) daughter-in-law went ahead
45 and did it (1) and of course it's changed her \uparrowlife.=

```

At 1.42 Adam is effectively reporting what Mary's aunt said to her - a reporting that we see endorsed by Mary herself in the next turn. Intuitively this would seem to be a logical impossibility. It certainly stretches the boundaries of what is familiar to us as reported speech, for what we hear is someone proposing to report what another has said when he was manifestly absent on its original production. In investigating how this extraordinary collaboration is made possible, and what it can tell us about what the participants understand the talk to be doing, we make the following brief observations.

In the first place, we have already registered Mary's attempt to complete Adam's turn in 1.5 - a completion he does not endorse. \({ }^{25}\) It is the first indication in this sequence of an attempt by one speaker to align with the other. More explicit indicators come at the end of Adam’s story: 'That’s right' and 'absolutely'. 'That's right' is commonly used by speakers to affirm something that they already know - a conclusion they have already reached (as used by a teacher to affirm a pupil's answer, for example), and provides a portent of the experience Mary will relate; ‘absolutely', produced after it, constitutes an upgraded agreement of it and provides for her move to tell her own story. What she tells is recognizably built off the first story, in a spectacularly compressed way: ‘My father’s sister. The same thing’ (lls. 21-3) which allows her to cut immediately to the outcome, with 'And eventually', proposing that her story matches Adam's. What she then recounts from 1.23 onwards is a classic 'second story’ (Sacks, 1992a,b) in response to Adam's, which is one way speakers display understanding of the story just told to them; as Lerner notes, such second stories are 'regularly designed to include both similar events and a similar relationship between narrator and story events (to) the relationship between narrator and story events in the preceding story' (1993:232). At what is projectably the outcome of the story, after 'went ahead' in 1.25 , it is now Adam as recipient of the storytelling who attempts to complete the turn (without, it should be noted, Mary apparently soliciting it, despite the slight perturbation immediately beforehand; her talk continues straight into a parenthetical insert, and he chooses to talk alongside her, as it were) and Mary both accepts it in repeating what he says, while displaying a certain resistance to
it by adding to what he has proposed. However, having delivered the moral of the story, 'it's changed my aunt's life' and provided evidence to support it (l.33), she proceeds to recount the exchange that parallels that of Adam and his grandmother. She starts to animate her suggestion to her aunt, in what amounts to the same suggestion that Adam made to his grandmother: that she apply for disability allowance. She cuts off after 'you could get' at the very point where the rest is projectable - recognizable due to her prior claim that she is recounting a case of 'the same thing' as Adam and his grandmother. At this point, with the increased animation of her voice and the deictic shift from 'you' to ' \(I\) ' she enacts herself being interrupted by someone clearly not willing to hear the rest. Adam's characterisation of his grandmother as 'just not interested' (l.16) - as close-minded - here seems to be enacted with someone not even willing to listen, with 'I'M-' phonetically capturing the interactional collision with the prior suggestion in the course of its production. With the volume and pitch of what she portrays as her aunt's interruption of her, Mary conveys the speaker's vehement objection to something in her own interest, as Adam had portrayed his grandmother in lls. 10-14. It is is, of course, impossible to identify Mary's pause at this point as either part of the animation of speechless and stupefied outrage, or simply a stalling: in any case it has, by this stage, provided Adam with just enough information to project a possible completion: what Jefferson (1983) calls a point of 'adequate recognition'.

Note that Adam does not simply complete the turn but in effect takes it over; the repetition of 'I'M-' here is necessitated by the heightened animation of the turn which it is completing, such that the redoing of 'I'M-'
in a similarly vehement manner provides for the recipient to recognize that the speaker is saying what the other was saying immediately beforehand; without it, a continuation on its own, with similar prosody, would risk not being recognized as a completion, but as a potential counterattack in its own right. In taking the turn over, Adam has to match features that are paralinguistic, linguistic and structural. Paralinguistically, the volume matches Mary's increased loudness in indicating a switch of speaker and an incoming turn which is competitive (French and Local, 1983). Linguistically - specifically, syntactically - he is constrained by the set of possibilities after 'I'm-' in the construction of the turn. Structurally, he is constrained by the sequential aspects of the talk so far. Given that this is a second story, and given the 'I said - she said' structure of the preceding talk, which conveys contrasting positions, Adam is constrained to make a selection which matches the first story and stands in counterpoint to what Mary said. \({ }^{26}\) Moreover, Adam shows that he is abiding by what Jefferson calls the 'no later' constraint which 'relates to displaying that one does have some independent information and is using it. If one waits until the object has been completely produced, one does not prove that one knows, one merely claims it’ (1973:58-9). So as well as demonstrating - in its repetition, completion and timing - that he has analysed the beginning of Mary's utterance syntactically, Adam also demonstrates an analysis of the prior turns and the wider activity in which they are engaged. In doing so he does not just assent to, or claim a shared stance: he displays it. This is, in turn, endorsed - with ‘That’s right’ - by Mary. Since Adam provides first one completion, 'I'm not disabled, I'm fine', and then (showing a possible
orientation to the extremity of this option), another, downgraded version '...or I'll- I'll cope’, Mary’s endorsement might initially seem puzzling. Certainly Adam's reporting cannot be characterized as reported speech under the traditional definition of that term: the faithful reporting of a proposition.

What, then, does Mary's endorsement compel Adam - and us - to understand? It would seem quite clear that what is at issue for the participants is precisely not what was said, but what was done. What first Adam and then Mary reports is making a suggestion that is vehemently rebutted; what Adam does at 1.42 is thus complete the action projected for that turn by Mary, and it is to that completion - of action, not proposition that 'that's right' is addressed. Here, once again, we see compelling evidence that it is to actions rather than information that participants are oriented. \({ }^{27}\)

It has, then, only been possible to grasp the understandings of utterances for participants by examining the wider sequence in which the focus of our (and their) attention is embedded. For the understanding of any utterance necessarily invokes the sequential context from which it emerges. The jointly-produced turn at lls. 40-42 above demands the most exquisite local attention to all levels of linguistic production, but it is only when we broaden the focus that we can see it as the culmination of the gradual convergence between the speakers through time.

\section*{Conclusion}

In the preceding pages I have aimed to give some sense of what may be gained from the examination of naturally-occurring materials. At some level intuitions play an important role in any linguistic study. The issue is not whether they have a role - they form the basis of any linguistic inquiry - but whether they are sufficient. For grammatical acceptability judgements they seem the most satisfactory alternative. But, as we have seen, for a whole dimension of investigation they constitute the starting, not the end point. In the first instance they provide resources for us to identify what is striking or salient in the materials at our disposal. They also, as we have seen, play a part in the development of an analysis. But it is ultimately analysis, and not intuition, which makes it possible to be accountable to these kinds of data. For the data compel us to look more broadly - at both the construction of a turn and its position in a sequence - than introspection affords, a perspective captured by Schegloff's remark that '...both position and composition are ordinarily constitutive of the sense and import of an element of conduct that embodies some phenomenon or practice’ (1993:121). Investigating interaction transcribed in a way which captures what partipants show themselves to be orienting to, CA attempts to study language and its structures in its most basic environment - conversation and its adaptations and in its evolving temporal production. Of course, its forensic methods will not suit everyone. But without these, analysis loses its traction on the linguistic construction of particular interactional moments and becomes mere interpretation; \({ }^{28}\) after all, interactional competence is not ultimately separable from the contexts in which it is instantiated. And of course, the
materials are available for inspection against their analysis, rendering the methods by which analytic results are achieved transparent in ways which experimentation itself seeks to emulate. As Schegloff observes, naturallyoccurring materials:

\begin{abstract}
"appear to introduce elements of contingency, of variability, of idiosyncrasy, which are often taken to undermine the attainability of ideals of clarity, comparability, descriptive rigor, disciplined inquiry, etc. Meeting such goals is taken to require experimental control, or at least investigators’ shaping of the materials to the needs of inquiry - standardization (of stimuli, conditions, topics, etc.), conceptually imposed measurement instruments, etc. But in the name of science the underlying natural phenomena may be being lost, for what is being excised or suppressed in order to achieve control may lie at the very heart of the phenomena we are trying to understand. One is reminded of Garfinkel's (1967:22) ironic comment about the complaint that, were it not for the walls, we could better see what is holding the roof up" (1996c:468).
\end{abstract}

It is, then, what CA is able to capture which makes for its distinctive contribution to linguistics. It has made possible the discovery of order in the organization of talk that we hitherto did not, and otherwise could not, know existed.

\section*{NOTES}
\({ }^{1}\) I am indebted to two referees for 'Lingua' and to Bob Borsley for their helpful suggestions at an earlier stage of this paper. I am also grateful to Emanuel A. Schegloff, Andrew Spencer and Ray Wilkinson for their valuable comments on the final draft.
\({ }^{2}\) The field of what has come to be known as 'Conversation Analysis' is perhaps more accurately referred to as the study of talk-in-interaction, for it takes as its data sources the range of interactional contexts beyond ordinary, so-called 'mundane' conversation (such as that in (1), from a counselling context). It is for this reason that the term 'talk' is here throughout preferred to 'conversation'. However, as the earlier and so now more widely recognised term for this domain of study, 'conversation analysis' is adopted here for reasons of familiarity. See also FN 18.
\({ }^{3}\) The transcription for CA was devised by Gail Jefferson, and is supplied in the Appendix.
\({ }^{4}\) The transcription at any given time represents the transcriber's best efforts to capture, in detail, what is heard on the tape; but this, of course, this begs the question of the objectivity of any transcription. In this domain of work the data are represented by the recording, not the transcription, which should always be available for revision alongside it.
\({ }^{5}\) I use 'utterance' here in its basic sense of 'the thing said', to be distinguished from 'turn' as a shorthand for 'turn-at-talk', which places an utterance in an interactional sequence.
\({ }^{6}\) I am indebted to Nikki Parker for permission to use this data excerpt.
\({ }^{7}\) Indeed, this in underlined in the therapist's very next turn, 1.8 , where what again looks like a directive '...say to yourself...' is met instead by an assenting 'mm'.
\({ }^{8}\) The recording should always be available.
\({ }^{9}\) See Schegloff (1995a:156ff.) for observations on the ordering of responses to turns which implement more than one action.
\({ }^{10}\) See Schegloff, 1996b:116-117, FN8: "To describe some utterance, for example as a 'possible invitation' or a 'possible complaint' is to claim that there is a describable practice of talk-in-interaction which is able to do recognizable invitations or complaints (a claim which can be documented by exemplars of exchanges in which such utterances were so recognized by their recipients), and that the utterance now being described can be understood to have been produced by such a practice, and is thus analyzable as an invitation or as a complaint. This claim is made, and can be defended, independent of whether the actual recipient on this occasion has treated it as an invitation or not, and independent of whether the speaker can be shown to have produced it for recognition as such on this occasion". Thus the class of utterances known as 'pre's' are recognizable as such, independently of whether they come to fruition, so to speak, in the action to which they are preliminaries.
\({ }^{11}\) Levinson, 1983 and Schegloff, 1988b show how the investigation of these types of utterance - what in speech act theory are indirect speech acts - in empirical materials invites the reanalysis of such utterances as 'pres'.
\({ }^{12}\) Other studies of repetitions - which do not look at the sequential environment of their deployment - include Jucker (1994) and Blakemore (1993) from a Relevance-theoretic perspective, and Norrick (1987) and Tannen (1997a,b). The latter three include within their scope transformations such as paraphrase and reformulation. It would seem that from an interactional perspective such transformations are alternatives to repetitions and collapsing them risks underspecifying both practices (see Schegloff, 1996a:FN 9).
\({ }^{13}\) Notwithstanding 'wiseguy' responses such as 'I know, I was there' which, by very dint of their recognizability as such, throw into relief routine responses to such utterances as noticings, rather than informings (which 'wiseguy' responses propose).
\({ }^{14}\) Viz, Schegloff 1995a:82, FN30: ‘The initial understanding might be that an interactional noticing can only follow a perceptual/cognitive one, but, of course, one can say "Isn't that a new X?" when one "knows" it is not; an interactional noticing need not be engendered by a perceptual/cognitive one.

And many (perhaps most) perceptual/cognitive noticings do not get articulated interactionally at all. But one key normative trajectory is an interactional noticing presented as occasioned by a perceptual/cognitive one'.
\({ }^{15}\) Canonically noticings are placed as early as possible in the interactions such that in their absence they may be solicited or prompted ('D'you notice anything different...?’) (Schegloff, 1995a:81) or, when placed later than the routinely early position, from the noticer's perspective marked as 'out-ofplace' by some kind of misplacement marker (Schegloff and Sacks, 1973) ('by the way’/‘incidentally’/‘hey'/‘oh’...).
\({ }^{16}\) One reader of this paper queries the use of the term 'hearable', so some clarification is in order. 'Hearable' is not here simply an unwieldy substitute for 'understandable'. It makes a specific claim about the public availability of an utterance (say), to be heard as doing something, where what is understood remains inscrutable.
\({ }^{17}\) Jefferson (1980) notes how some responses, e.g. 'pretty good' in response to 'how are you' are what she calls 'trouble-premonitory', namely that they may portend the subsequent telling of a trouble which provides for the initial response specifically not being 'Fine'.
\({ }^{18}\) The words 'for conversation' should perhaps be stressed here, for it will be noted that the overwhelming focus in CA to date has been on the structures of so-called 'mundane conversation' as the domain in which interactional competence is developed. The CA work which focuses on other types of interaction - the institutional talk of medical and courtroom encounters, interviews, and calls to the emergency services (see, for example, the collection in Drew and Heritage, 1992), to name but a few, have displayed compellingly how the very identity of these institutional interactions derives from the means by which participants adapt the turntaking system for conversation to the particular purposes of their institutions by selection and reduction of the full range of conversational practices (see Drew and Heritage, 1992:25-7). In endorsing the 'baseline' identity of conversation, such work also throws into relief the risks of making claims about general linguistic usage based on material gathered outside ordinary conversational contexts. Schegloff, for example, notes how what questioners in ordinary conversation are doing is systematically different from what interviewers in various types of interviews are doing, such that, in the latter case "'that it is an interview' may hover over the occasion and its participants as a continuing set of relevances showing up in this or that respect what we could recognize for its 'interviewness'" (1993:111).
\({ }^{19}\) There have been pragmatic treatments of what what one might term fragmentary utterances, such as Stainton (1994, 1997). Where CA differs from approaches such as these is in its treatment of an object such as 'At?' not as a fragment or elliptical version of a larger unit, but as complete in itself, since the participants themselves treat it as complete in itself.
\({ }^{20}\) So observant are speakers of the norms of the turntaking system that even what one might consider to be purely reactive behaviour has been shown to be carefully ordered and placed with respect to it. Thus Whalen and Zimmerman (1998) show how displays of what is known vernacularly as 'hysteria' on the part of callers to emergency services may be carefully
regulated so as not to obscure the turn of the call taker; and Heath (1989) shows how the social organization of the medical examination governs the participants' management of the expression of pain. Thus if a doctor is manipulating part of a patient's anatomy, the patient may initiate a cry of pain not with reference to the moment at which presumably the pain has been experienced but at the point at which it is his/her turn to speak (or moan) in the turntaking system of the examination.
21 "...The very conception of action having its origins in the acting individual's 'intention' treats the single action as the unit to be analyzed, and the single individual as the proper locus of analysis...here again the availability of tape-recorded, repeatably inspectable material, is deeply consequential. If one is committed to understanding actual actions (by which I mean ones which actually occurred in real time), it is virtually impossible to detach them from their context for isolated analysis with a straight face. And once called to attention, it is difficult to understand their source as being in an 'intention' rather than in the immediately preceding course of action to which the act being examined is a response and to which it is built to address itself" (Schegloff, 2003:39).
\({ }^{22}\) Space constraints forbid a fuller account of preference, which is the organizing principle at work here; but see, for example, Heritage (1984), Pomerantz (1984), and Schegloff (1988a).
\({ }^{23}\) After the first TCU, speakers have to deploy specific practices (such as storytelling prefaces) to gain more - keeping the door open, so to speak. See extract (11), which shows both participants implementing such procedures.
\({ }^{24}\) See Schegloff (1995b) for a more extended example across several turns; and Ford (1993) on the use of increments to completed turns after silences, foreshadowing incipient disagreement or rejection.
25 Adam's subsequent abandonment of the characterization of his grandmother in favour of a telling which displays her attitude may be seen to orient to a general preference in interaction for displaying over characterizing when the characteristic proposed is negative.
\({ }^{26}\) To invoke a traditional linguistic distinction, Adam has to make both a syntagmatic and paradigmatic selection of the available options.
\({ }^{27}\) Of course, giving information (in the form of description, say) may be an action in its own right.
28 "One key difference between 'interpretation' and 'analysis' ...is that analysis lays bare how the interpretation comes to be what it is - ie., what about the target (utterance, gesture, intonation, posture, etc.) provides for the interpretation that has been proposed for it. So interpretation may be more or less subtle, deep, insightful, etc. but remains vernacular interpretation nonetheless; the issue is not its excellence. Analysis is 'technical'; it explicates by what technique or practice of uptake the interpretation was arrived at. And analysis grounds those claims in the observable conduct of the parties whose interaction is being examined" (Schegloff, 1996d:26)

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\section*{APPENDIX}

The transcripts are notated according to the system developed by Gail

Jefferson, with the following conventions (adapted from Ochs et al.
1996:461-5):
[ Separate left square brackets, one above the other on two successive lines with utterances by
[ different speakers, indicates a point of overlap onset
] Separate right square brackets, one above the other on two successive lines with utterances by
] different speakers indicates a point at which two overlapping utterances both end, where one ends while the other continues, or simultaneous moments in overlaps which continue:
4A She's actually (0.5) quite (1.2) I mean [I- I suggested she= 5M
[Stubborn, 6A =actually apply for disâbility allowance.
\(=\quad\) Equal signs ordinarily come in pairs - one at the end of a line and another at the start of the next line or one shortly thereafter. They are used to indicate two things:
(1)If the two lines of transcription connected by the signs are by the same speaker, then there was a single, continuous utterance with no break or pause, which was broken up in order to accormodate the placement of overlapping talk: 4A She's actually (0.5) quite (1.2) I mean [I- I suggested she=
\[
5 \mathrm{M}
\]
[Stubborn,
6A =actually apply for disâbility allowance.
(2) If the lines connected by the signs are by different speakers, then the second followed the first with no discernable silence between them, or was 'latched' to it. 4R Oh: . Uh huh. \(=\) 5E =I fee:l a bi:ssel verschickert.
Numbers in parentheses indicate silence, represented in tenths of a second. Silences may be marked either within turns or between them.
(.) A dot in parentheses indicates a 'micropause', ordinarily less than \(2 / 10\) ths of a second.
These options are represented below:
04AShe's actually (0.5) quite (1.2) I mean [I- I suggested
.?, The punctuation marks indicate intonation. The period indicates a falling, or final intonation contour, not necessarily the end of a sentence. A question mark indicates a rising intonation, not necessarily a question, and a comma indicates 'continuing' intonation, not necessarily a clause boundary.
::: Colons are used to indicate prolongation or stretching of the sound preceding them. The more colons, the longer the stretching.
- A hyphen after a word or part of a word indicates a cut-off or self-interruptions, often done with a glottal or dental stop.
word Underlining is used to indicate some form of stress or
WORD Especially loud talk relative to that which surrounds it may be indicated by upper case.
word \({ }^{\circ} \quad\) The degree signs indicate that the talk between them is markedly softer than the talk around them.
\(\uparrow \downarrow \quad\) The up or down arrows mark particularly emphatic rises or falls in pitch.
>wordk The combination of 'more than' and 'less than' symbols indicates that the talk between them is compressed or rushed.
hh Hearable aspiration is shown where it occurs in the talk by the letter ' h ': the more ' h 's, the more aspiration.
.hh If the aspiration is an inhalation it is preceded by a dot. (---) Words unclear and so untranscribable
(word) Best guess at unclear words

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