## On Word-Order Variability: A Study from a Corpus of Italian

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1. One of the points that seem to deserve a closer scrutiny in contemporary research on word order (henceforward WO) is the relationship between invariance and variability in WO patterns. While invariance has been the main (and often exclusive) interest of Greenberg's style typologies, the investigation of variability has never gained ground outside the circles of those who study style. Each of these approaches is legitimate per se: the first has produced an aerial view of WO in natural languages, the second an atomistic description of WO in individual dialects, but the comprehensive view has been lost. The question thus arises of how to integrate the two perspectives. A different way of expressing this problem would be to ask to what extent the WO patterns that are «typical» of a language can be affected by variability.

In recent years one of the current models for the treatment of this problem has been the differentiation of basic from dominant WO: the first is an all-or-nothing property, which is related to a set of structural properties defining the language type, while the second is a statistical property with no influence at the structural level; a statement simply asserting a higher frequency. The two kinds of WOs may coincide, but do not necessarily do so; in other words, in principle we can think of a language whose basic WO is S V O and whose dominant order is different <sup>1</sup>.

The model of basic vs dominant WO is carved out of the traditional linguistic conception opposing structure (or competence) to performance. In fact, insofar as basic WO pertains to the structural level of a language, it is a property of competence, while, on the other hand,

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<sup>&</sup>lt;sup>1</sup> On the difference between basic and dominant WO see Siewierska (1988: 8 f.).

mere statistical prevalence has to do with «realization» or performance. In this framework it is obvious that the two properties might diverge in a language and that – still more important – variations in performance are to be considered as mere oscillations or fluctuations devoid of any structural value, as long as they do not alter the structural regularities in WO patterns.

Yet this is not the only possible way to treat WO mechanisms. In recent years it has become increasingly clear that performance facts play a crucial role – among other things – on WO. On the other hand, the importance of structural factors on WO has long been recognized. In fact, the effect of forces such as the configurationality principle (for configurational languages) is well known.

Structural factors account for *prima facie* regularities, i.e. those which can be seen in possible vs impossible WOs in a given language. For example, in configurational languages sentences with both S and O preceding or following the verb are not allowed. Modern English offers what is perhaps the most famous case in point (cf. \* *Peter Mary kisses*, \* *Kisses Peter Mary*), but other languages conform to this regularity as well, although in a less strict way. Prosodic conditions, in fact, can play a role in sorting out well-formed and ill-formed sentences. In Italian sentences such as \* *Piero Maria bacia*, \* *Bacia Pietro Maria* would not be allowed with the intonation contour of a «normal» (unemphatic) declarative sentence. While these sentences are not «basic», they would be perfectly possible with emphatic prosodic contours (*Pietro MARIA bacia, Bacia PIETRO Maria*).

Other structural regularities may be less evident at first sight. Two examples from the corpus of Italian sentences that has been gathered for this research will do. The first example concerns WO in subordinate clauses. It is well-known that in various languages subordination strongly affects WO (consider German); in Italian, this influence, though effective, is less powerful: evidence can be given that V S order is highly favoured with one-argument verbs in locative-relatives (see this paper on p. 39 f. n. 22), but it seems less clear at the moment whether this tendency also shows up in a wider range of subordinate clauses. The second example concerns WO in main clauses and with one-argument verbs. V S is favoured when a non-Subject constituent occurs in Topic position. Once more one can compare this syntactic behaviour, which is only tendential in Italian, with that of German and English, where this is a regular outcome.

Other factors affecting WO are more difficult to accommodate in the structural vs non-structural dichotomy: consider, for example, the Animate-first principle, the heavy constituent-last principle, as well as rhythmic (i.e. the prosodic weight of constituents) and pragmatic factors (for example, thematic continuity, the Given-New strategy). The

same consideration holds true for further sources of variability that will emerge in this study, such as the lexical idiosyncrasies and the aspectual features of verbs. Still other sources of influence, though, can induce WO variability: register and text sort, as well as idiosyncratic (stylistic) preferences of the individual speaker. The joint consideration of all these factors has characterized the typology in the Prague School tradition, and more generally the best historically and philologically oriented reasearch<sup>2</sup>.

This interest involves a view of WO that could be defined as the «radical performance» perspective. This requires the choice of particular methodological procedures (i.e. starting with actual texts and carefully observing real distributions of WOs, instead of expected (ideal) ones) and has broader implications: the consideration of the complex interplay of multiple factors affecting WO in samples of real cases goes hand in hand with the refusal of any a priori identification of WO regularities<sup>3</sup>. Obviously, in this approach the consideration of supposed structural correspondences of the «wholistic» kind is not the main purpose; these, if any, have to be checked, like any other generalization. Above all, what deserves special attention is the fact that structure and its realization are not kept rigidly apart. This is a theoretical assumption with two - at least - remarkable consequences: a) change in WO is not seen as abrupt substitution in the structure of a pattern that has kept oscillating in performance for decades; WO is (at least partially) a non-deterministic phenomenon (we will come back to these two points later on in the discussion).

The undoubtedly empirical character of this approach leads to asking questions rather than to deducing regularities from overall principles: what is the amount of WO variability induced by the interplay of multiple factors in a language? How is it related to invariance? And what is invariance itself, apart from the supposed coherence in other patterns of the language? Is it possible that a «radical performance» framework makes us reconsider consolidated approaches to WO? I have to admit that it would be too ambitious even to try to answer one of these questions. The aim of this paper is much more modest. It could be considered as taking a first step towards the exploration of the range of WO variability in a language. This, in turn, could raise unsuspected problems of some interest for the more general questions asked before 4.

<sup>&</sup>lt;sup>2</sup> For a general view of the Prague School approach to WO cf. the papers in Sornicola e Svoboda (1992: Section 4). The Latin Linguistic studies offer classical examples of this philologically oriented research: see Marouzeau (1949) and more recently Adams (1976), Panhuis (1982).

<sup>&</sup>lt;sup>3</sup> This is the standpoint of a recent paper by Pinkster (1992).

<sup>&</sup>lt;sup>4</sup> An interesting approach to the problem of WO variability has been presented in Hawkins (1990).

In this work we will examine the WO patterns of basic constituents (S, V, O) in a corpus of contemporary Italian sentences belonging to different text types; register variation will also be taken into account for one of the text types (unplanned spoken language). Both sentences with transitive verbs and sentences with intransitive verbs have been considered, as one of the aims of the work is to ascertain the possible difference in the mutual position of S and V in different sentence structures.

2. The second kind of problem emerging from our analysis concerns the interplay of factors in WO phenomena. In a brilliant presentation of the theoretical questions related to WO, Hawkins has noted that none of the traditional factors which are assumed to explain WO works in a categorical way, that is, no factor is absolutely determinant.

This is precisely what our data show. Syntactic, semantic and pragmatic factors mix together in different ways in different text types, but in the great majority of cases it cannot be ascertained which one is the real «causer» of the WO pattern actually occurring. One has to admit that this amounts to saying that the nature of the relationship between such factors and WO phenomena is probabilistic, not deterministic.

Special attention should be paid to the different incidences of the various factors in the various text types. Newspaper reports show the most complex interplay of factors. As we have seen, WO is sensibly affected by lexico-semantic factors (the verb sub-class) as well as pragmatic factors (the Given/New distribution), textual strategies (the reportive vs narrative polarity), syntactic factors (the occurrence of a constituent in top position, the relative-locative context), rhythmic factors (heavy constituency).

On the other hand, both scientific prose and unplanned spoken texts show, each in a peculiar way, a reduction in the range of factors operating on WO. Roughly speaking, one could say that syntax and pragmatics play a major role in scientific prose, while in unplanned spoken texts the situation is much more difficult to describe. The verb sub-class, as well as the Given/New distribution seem the most important factors, yet both up to a point. Moreover, individual variability is very strong and can sensibly alter the action of these factors, while, interestingly, syntactic factors such as the relative sentence context seem to behave in a deterministic (categorical) way.

The Given/New distribution seems to behave in different ways in different text types. It is fairly regular in newspaper reports, while it does not conform to the expectations in unplanned spoken texts. Needless to say, it should be kept in mind that our expectations

depend on models and these are nothing more than tentative idealizations, often marred by technical difficulties. To give just one example, the inspection of real texts shows that in many cases it is not easy to isolate what is really New in a text, as the textual cohesion is built up with isotopic relations. Paradoxically, one could wonder whether there is anything really New in a text. Thus, a general caution is needed in dealing with models when experimental analyses are to be done.

3. The corpus of contemporary Italian sentences was selected from newspapers, scientific and unplanned spoken texts. It contains 853 sentences. The 15 journalistic texts are reports concerning everyday city life. They are not homogeneous as to text sort; although narration prevails, a few passages with descriptive or argumentative value also appear.

The sample of scientific style consists of a historical essay and excerpts from two handbooks (an introduction to algebra and an introduction to phonetics). The historical essay is uniform as to the text sort, being argumentative; the two handbooks, on the other hand, although mainly argumentative, present a few passages with descriptive purposes (the introduction to algebra also has definitions) <sup>6</sup>.

The sample of unplanned spoken language was set up with the recording and transcriptions of stretches of informal conversation between young people. Each conversation lasts approximately ten minutes (in a few cases, however, variations in length occur), with very few and short interruptions by the interviewer. The seven speakers who were interviewed are all university students from Naples; the texts thus

The sources for the study of the scientific prose are: Arnaldo Momigliano, Le regole del giuoco nello studio della storia antica, in Idem, Storia e storiografia antica, Bologna, Il Mulino, pp. 15-23; Antonella Giannini e Massimo Pettorino, La fonetica sperimentale, Napoli, Edizioni Scientifiche Italiane, pp. 135-179; Giuseppe Zwirner, Complementi di algebra e nozioni di analisi matematica, Padova, CEDAM, pp. 193-215.

<sup>&</sup>lt;sup>5</sup> See Hawkins (1988), especially on pp. 7-15.

<sup>&</sup>lt;sup>6</sup> The sources for the study of newspaper prose are: Un altro poker di onorevoli by Goffredo Buccini, «Corriere della Sera», 13.8.1992, p. 14; In quattro violentano ragazzina by Aldo Grandi, «Corriere della Sera», 13.8.1992, p. 14; E ora vacilla anche la Texas connection, by Giuseppe Josca, «Corriere della Sera», 17.8.1992, p. 3; Violenze su una quindicenne. Due slavi arrestati in riviera, «Corriere della Sera», 17.8.1992, p. 28; Rapina in casa da mezzo miliardo, «Corriere della Sera», 17.8.1992, p. 28; Cercano hashish, sono scippati, «Corriere della Sera», 17.8.1992; Killer ucciso dai carabinieri, «Corriere della Sera», 17.8.1992, p. 28; Milano d'agosto, trappola per anziani. Pensionato muore davanti al televisore, by Elisabetta Rosaspina, «Corriere della Sera», 18.8.1992, p. 28; Ladri distratti, assonnati, isterici. Non tutti duri i balordi dell'estate, «Corriere della Sera», 18.8.1992, p. 28; Blitz contro michetta selvaggia, «Corriere della Sera», 18.8.1992, p. 28; Tossicomane muore dopo essere stato picchiato, «Corriere della Sera», 18.8.1992, p. 28; Anziani e soli: le croci di agosto. Altri due morti in casa senza che nessuno abbia potuto tentare un soccorso. «Corriere della Sera», 19.8.1992, p. 26; In vacanza i donatori di sangue. SOS dell'AVIS per gli ospedali, «Corriere della Sera», 19.8.1992, p. 26; Un piromane bersaglia centro cinematografico, «Corriere della Sera», 19.8.1992, p. 26; Stupri in famiglia. 50 casi in 8 mesi, «Corriere della Sera», 19.8.1992, p. 27.

recorded can be characterized as (sub)standard Italian. The interviewers were friends, and this makes each conversation spontaneous enough. Here text sort variability is rather conspicuous, as narration, description and argumentation are interwoven in the texture of the discourse.

Thus the whole corpus is set up with 25 different texts. For each text the subset of sentences has been taken into account with the following structural characteristics:

- 1) Sentences with a transitive verb and explicit object; idioms such as *battere a tappeto*, if followed by an Object NP, have been considered as a transitive verbal unit; in fact, the W0 of such constructions is somewhat less flexible than that of a non-idiomatic VP and thus they can be considered distributionally as a unit <sup>7</sup>;
- 2) Sentences with a transitive verb without explicit objects, i.e. the so-called «pseudo-intransitives». Note that for the purposes of classification and counting of frequencies of structural types these have been considered as intransitives<sup>8</sup>;
- 3) Sentences with an intransitive verb; here too idioms such as *essere* nell'aria, far gola, fare un giro, have been considered as an intransitive verbal unit?
- 4) Sentences with a verb with passive morphology and no explicit agent (so-called «impersonal passives»);
- 5) Objectless sentences with a verb having a *si*-construction (the so-called «intransitive reflexives»).

Both main and subordinate sentences have been taken into account (but note that the first are more than two thirds of the corpus). Moreover, the WO patterns of particular sentence structures, such as left-dislocation, right-dislocation, topicalization, rising, have been noted.

4. 232 sentences have been considered from the newspaper reports. The frequencies of VS structural types are the following:

TAB. 1.

Transitives	Intransitives	Intrans. Reflexives	Passives	
81	104	28	18	

<sup>&</sup>lt;sup>7</sup> In principle, idiomatic VPs do not seem to have a reduced flexibility in WO: both battere a tappeto la città and battere la città a tappeto are possible. It is an interesting fact, however, that in the corpus the constituent modifying or complementing the verb in idiomatic VPs is always adjacent.

More generally, every instance of fare + NP has been considered as an idiom.

The transitive sentences show a very high frequency of S V O order, while S O V has a low frequency and both O V S and V O S are extremely sporadic; note that V S O never occurs.

TAB. 2.

S V O	S O V	OVS	VOS
71	7	2	1
87,5%	8,75%	2,5%	1,25%

It is to be noted that in all the sentences with S O V order O is a proclitic pronoun; the same is true of the two instances of O V S order:

(1) ce lo aveva accompagnato qualcuno che poi...

On the other hand, only 3 out of the 71 instances of S V O order have an enclitic pronoun as O, all the remaining cases having occurrences of full NPs. Interestingly, in the only case of V O S order O is a full NP:

(2) hanno mantenuto la saracinesca alzata 636 botteghe

Note that here the only constituent carrying the pragmatic feature [+ New] is the numeral, while all the remaining constituents are cotextually [+Given].

If we consider the relative position of S and V<sup>10</sup>, the percentage of cases with S before V amounts to 96,25%.

WO patterns of objectless sentences (i.e. sentences with either intransitive or intransitive reflexive or else passive verbs <sup>11</sup>) show different frequency figures for the relative position of S and V (obviously, in these cases the relative position is the crucial WO pattern):

TAB. 3.

	(Pseudo-) Intransitives	(Intr) Reflexives	(Impers.) Passives
s v	67 (64,42%)	21 (75%)	10 (55,55%)
V S	37 (35,57%)	7 (25%)	8 (44,44%)

<sup>&</sup>lt;sup>10</sup> For the concept of relative position, cf. Connolly (1991: 4-5).

<sup>&</sup>lt;sup>8</sup> This choice is perhaps disputable, but what seems important for WO regularities is the fact that the structural configuration of pseudo-intransitives is – at least at some level of representation – similar to that of intransitives.

<sup>&</sup>lt;sup>11</sup> There exists a wide consensus in the literature as to the «detransivizing» character of passives and intransitive reflexives (see Cennamo 1993 for a discussion).

We can see that with these verbs there is no WO pattern with such a strong cumulation of percentages as in the previous case, although intransitive reflexives reach the peak of 74,07%. The variability of the relative order of S and V with these classes of verbs is in itself no surprise. It seems, in fact, that in different languages the patterns under scrutiny allow for a greater freedom in WO. Since at some level of representation they can all be regarded as one-argument structures, we shall use this term as a useful label throughout the paper to refer to intransitives, intransitive reflexives and passives. This point has been discussed in recent years in various approaches. V S order with intransitive verbs has often been considered as the mark of a different, nonpredicative value of these constructions, that is, as the mark of «theticity». This idea, which goes back to philosophers like Brentano and Marty, has been revived in the last few years in many works of various orientation 12. Pragmatists, for example, have observed that the only argument of the so-called «presentative» verbs typically occurs on the right of the verb 13. In both relational and generative grammar, on the other hand, it has been claimed, that intransitives assuming essere as auxiliary (like arrivare, venire, etc.) and intransitive reflexives belong to a class of «ergative» verbs, whose subject is a NP base-generated on the right of the verb (i.e. in the position of an object NP). We will see that this hypothesis is immediately relevant in what follows 14.

A more detailed inspection of the three subclasses of one-argument verbs mentioned before has revealed that the linear (surface) order is affected by semantic and pragmatic factors rather than by structural properties (i.e. by the deep structure configurations of these verbs). Had the structural properties really influenced linear order, we should have found a predominance of V S pattern.

Let us have a look at the intransitives first. These have been further subclassified according to syntactico-semantic criteria as

- (a) verbs of saying occurring in an environment where a quotation either precedes or follows (dire [3], rispondere [2], urlare, sentenziare, sottolineare, spiegare [4], raccontare [2], tuonare) <sup>15</sup>; note that here, as in the case of pseudo-intransitives, a constructional criterion is involved in the sub-class identification: although raccontare, sottolineare and spiegare are potentially transitive verbs, the actual configuration they belong to is similar to that of intransitives; just one case has been found of a verb of saying in a different environment <sup>16</sup>;
  - (b) verbs of movement (arrivare [6], uscire [3], scendere, fuggire, scappare,
  - 12 See Ulrich (1985) for a discussion.
  - 13 See Hetzron (1971); Givón (1984: 207-208).
- <sup>14</sup> See Burzio (1986). He shows with structural tests that intransitives are not homogeneous in Italian.
- <sup>15</sup> In one case the verb splits up the quotation, thus functioning like an adposition.
  <sup>16</sup> This case has been included in the calculation of total percentages of S V vs V S order, but it has not been included in the calculation of the percentages of S V vs V S order with verbs of saying.

traballare, partire [4], venire [2], andare, passare 'andare da ... a' [2], passare 'transitare' [3], ripassare, intervenire [2], tornare);

- (c) durative/stative verbs (dominare, esserci, disporre 'esser dotato', scarseggiare, durare [2], rimanere [3], puzzare, dormire, abitare, mancare [2]);
- (d) verbs expressing a change of a state/a process (cambiare, finire 'cessare' [2], finire 'terminare coll'andare', accadere, aumentare [3], cominciare [3], emergere, proseguire, comparire, decedere [3], morire [4], insorgere, scoppiare, scattare [2], rifiorire, squillare, risalire, risuonare, telefonare, obbedire);
  - (e) pseudo-intransitives (accettare, mollare, vincere);
- (f) idioms (perdere i sensi, voltare le spalle, aver paura, fare il punto, essere nell'aria, fare un giro, far gola, essere in gravi condizioni, far appello);
  - (g) others (aver bisogno, bastare, servire).

Idioms occur exclusively with S V order; this is, in a way, easy to understand, if we think of an idiom as a kind of heavy constituent, similar either to a transitive or to an existential/copulative structure and behaving like either of them, as regards WO.

A few comments will suffice for pseudo-intransitives. The three instances that were collected seem to be clearly influenced by pragmatic and textual factors <sup>17</sup>. The WO in the sentences with *bastare*, *servire*, and *aver bisogno* (i.e. the residual group labelled «Others») is affected by pragmatic and syntactic factors. *Servire* occurs in a sentence with a non-subject argument in Topic position, a fact that in many languages favours inversion. An inherent lexical property is shown by *bastare*, as the verb, here as elsewhere in the corpus, has V S order. Here are the percentages of the two WO patterns, with verbs of saying, movement, duration/state, change of state/process:

TAB. 4.

	Saying	Movement	Dur./State	Change of state/proc.
s v	3	19	11	21
	(21,42%)	(65,51%)	(78,57%)	(66,66%)
V S	11	10	3	11
	(78,57%)	(34,48%)	(21,42%)	(33,33%)

The situation emerging from this picture is rather intriguing <sup>18</sup>. Why is it that the various sub-classes show different percentages? If the

<sup>&</sup>lt;sup>17</sup> «Quando ... la ragazza ([+Given]) ha accettato...»; «I giudici antimazzette non mollano neppure a Ferragosto» (this sentence occurs at the beginning of the report «e ha vinto il migliore» (quotation).

<sup>&</sup>lt;sup>18</sup> I am well aware of the fact that the small size of this sample does not allow us to reach any final conclusion here. Further investigation is needed on this point.

percentages were the direct reflex of what is considered as the D-structure order we should expect a neat split between the percentages of verbs taking *essere* and those of verbs taking *avere* as an auxiliary: in other words, the former, having an S that is base-generated in the object position are expected to show a very high percentage of V S order, while the latter, whose D-structure configuration has S in the «normal» pre-verbal position, should exhibit very high percentages of the S V pattern. As we have already noted, however, the point concerning the relationship between D-structure and S-structure order is most controversial. We will come back to it later.

For the time being there is another point that deserves some discussion. One could legitimately ask us to justify the syntactico-semantic grouping of intransitive verbs we have attempted. Would not a syntactic criterion – say the *essere/avere* regularity – have been preferable? I would be inclined to answer in the negative: if such had been the choice, the result would have been in a way vacuous, as the verbs with the *avere*-auxiliary have a higher frequency of V S order, while the verbs with the *essere* auxiliary have a higher frequency of S V order:

TAB. 5.

*11D. >.		
<u> </u>	S V=11	V S = 14
avere	<ul><li>3 (Saying)</li><li>1 (Movement)</li><li>3 (Change of state/proc.)</li><li>4 (Duration/State)</li></ul>	11 (Saying)  - 1 (Change of state/proc. 2 (Duration/State)
	SV=43	VS=21
essere	<ul><li>(Saying)</li><li>18 (Movement)</li><li>18 (Change of state/proc.)</li><li>7 (Duration/State)</li></ul>	<ul><li>(Saying)</li><li>10 (Movement)</li><li>10 (Change of state/proc.</li><li>1 (Duration/State)</li></ul>

This, of course, is a result evidencing that other factors must be involved in the linearization of WO with these classes of verbs. Incidentally, however, we may note that the semantic criterion we have chosen is consistent with the *essere/avere* property. As a matter of fact, the four sub-classes show the following distribution of *essere* and *avere*:

TAB. 6.

Saying	Movement	Duration/State	Change of state/ process
14	19	14	32
avere (14)	essere (18)	avere (6)	essere (28)
#1010 (11)	avere (1)	essere (8)	avere (4)

With the exception of the duration/state sub-class, the groups have an almost clear-cut distribution of the auxiliaries.

It can be noted at this point that the semantic classification adopted seems to have been fruitful. It reveals interesting different behaviours of the four sub-classes as to WO. Tab. 4 clearly shows that the verbs of saying have the most idiosyncratic behaviour. This sub-class, in fact, has a conspicuous drop in percentage for the S V pattern. Conversely, the verbs of duration/state exhibit the highest frequency of the S V pattern with an impressive drop in the percentage of V S. The verbs of movement and those expressing a change of state or a process have almost equal values for both S V and V S patterns. Note that such values are close to those of the whole intransitive class.

As to the verbs of saying, in all three instances of S V order the quotation follows the verb, as in (3):

(3) E dopo un lungo silenzio, il pensionato rispose: «Va bene, ho capito...»

while in 6 out of the 11 cases of V S order the quotation precedes the verb, as in (4):

(4) «In queste settimane le richieste di intervento per furti o tentativi di furto sono aumentate del 30 per cento», spiega un ufficiale del reparto operativo

and in the remaining instances the whole verb-subject construction splits the quotation, as in (5):

(5) «George – tuona John Hackney, deputato all'Assemblea statale –, assicura che intende ritirarsi qui...»

This regularity, which is possibly related to topicalization devices, has been further confirmed by repeated inspections of other newspaper report sentences, not belonging to the corpus. It justifies the «anomalous» percentages shown by the verbs of saying in Tab. 4.

The percentages of verbs of duration/state, on the other hand, seem to reflect a semantic property affecting the relative order of subject and verb. It seems, in fact, that an interesting mechanism is involved here, concerning both a semantically inherent feature of the verb (the so-called *Aktionsart*) and its functioning in the text.

As regards the impact of *Aktionsart* features of the verb on WO, the first explanation that comes to mind is that the features [+Durative] or [+Stative] are incompatible with an eventive interpretation of the sentence, which is typically coded by the structural device of V S; on the contrary, verbs expressing a movement, or a change of state, or a

process show an inherent semantic «affinity» with an eventive interpretation of the sentence <sup>19</sup> and in fact they show a higher rate of V S construction. Consider the following four couples of sentences:

(6a) Mario è morto di infarto, È morto Mario di infarto;

(6b) Mario è precipitato dalle scale, È precipitato Mario dalle scale;

(6c) Lo sciopero dei benzinai è finito, È finito lo sciopero dei benzinai;

(6d) La situazione politica generale è cambiata, È cambiata la situazione politica generale.

Here the first member of each couple can have either a predicative or an eventive value (i.e. it could be an answer either to the question 'What about X?' or to the question 'What happens?'), while the second can only have an eventive value (it can only be an answer to the question 'What happens?').

Let us compare the previous sentences with the following ones:

(7a) L'ufficio affaccia sul cortile, ? Affaccia l'ufficio sul cortile;

- (7b) La scuola sta al numero 8 di via Palizzi, ? Sta la scuola al numero 8 di via Palizzi:
- (7c) La loro amicizia dura da tempo, ? Dura la loro amicizia da tempo;
- (7d) Mario abita a via Crispi, ? Abita Mario a via Crispi.

Here the first member of each couple can only have a predicative value, while the second member can only have a contrastive one, with the post-verbal NP in Focus, i.e. Affaccia L'UFFICIO sul cortile 'It is the office (not the laundry) that...' <sup>20</sup>. Unmarked interpretation is only possible with the post-verbal NP occurring as an extra-sentential constituent, that is as a tail or an adposition: Dura, la loro amicizia, da tempo. What seems important, however, is the fact that these sentences cannot be considered answers to the question 'What happens?' <sup>21</sup>.

Also to be noted is the fact that in the first set of sentences both members of each couple admit an eventive reading, while in the second set neither member admits such a reading. This may well speak in favour of the idea that *Aktionsart* features of the verb «orient» the semantic interpretation of the sentence as to the predicative/eventive reading and consequently affect WO selections.

Let us turn to some repercussions of the situation described so far

<sup>19</sup> Note that these semantic values do not set up any *Aktionsart* class of features, apart from the extremely general class [-Stative].

<sup>20</sup> Note that in the first set of couples the post-verbal NP need not have a contras-

tive value.

at the textual level. Verbs with [+ Durative] or [+ Stative] features often show up in descriptive environments, while verbs expressing movement, or a change of state or a process often appear in narrative sequences. It cannot be by chance that most of the occurrences of verbs in the newspaper reports which are [+ Durative] or [+ Stative] function as a descriptive tool of the setting:

(8) il fiato dell'uomo puzzava di vino

or else as means for giving further details in the narrative:

(9) L'incubo è durato oltre un'ora 22

The textual phenomena in question may well be a reflex of the fact that the features [+ Durative] or [+ Stative] of the verb are unsusceptible (or less susceptible) to an eventive interpretation of the sentence, while the features associated with verbs of movement etc. naturally harmonize with an eventive interpretation.

Thus one can envisage two sets of relations, the first linking the features [+ Durative] or [+ Stative], descriptive interpretations/contexts and S V order, the second linking the features [- Durative] or [- Stative], eventive interpretations/contexts and V S order. As far as can be seen from the data at the moment, the two sets of relations seem to set up an «affinity» or «congruence», rather than a logical link of the 'If A, then B' kind. One can expect, however, that further research on this point will shed more light on the problem.

Our data confirm that the choice of S V or V S order with verbs of movement or of change of state/process is strongly affected by pragmatic and textual features. The Given/New distribution explains a large portion of the data<sup>23</sup>. Of the 40 instances of S V order in these two

<sup>&</sup>lt;sup>21</sup> Things are more complicated with certain verbs with a [+ Durative] feature like dormire. Consider the couple of sentences Mia sorella dorme in salotto, Dorme mia sorella in salotto, where the first sentence can be either predicative or eventive and the second eventive (of course, contrastive interpretation for the second sentence is not excluded, with the appropriate prosodic contour). I do not pursue this problem further here.

<sup>&</sup>lt;sup>22</sup> It should be observed that two of the three examples of V S order with verbs belonging to the durative/stative sub-class can be justified with the taking over of other factors; in two cases the inversion seems to be due to syntactic factors:

<sup>«...</sup> ha scoperto che nella sua Peugeot 205 ... stava dormendo un ragazzo di colore» «in cui abitano alcune amiche delle ragazze»

The two sentences instantiate two syntactic contexts highly favouring V S order, that is, a structure with a non-subject constituent occurring in Topic position and a relative-locative clause. More generally, the subordinate clause seems to be a syntactic environment favouring V S order: see examples (13), (14), (50) and (51); however, further research is needed on this issue.

<sup>&</sup>lt;sup>23</sup> For the practical purposes of the analysis, the notion of 'Given' referred to here is defined either in terms of information occurring in the linguistic context or in terms of information which can be assumed to be present in the so-called «encyclopedic knowledge» of speakers (writers)/listeners (readers).

sub-classes, 30 (75%) have a S with the feature [+Given]<sup>24</sup> and 9 a S with the feature [+New].

Of the 20 instances of V S order, 15 (75%) could be explained by the feature [+New]<sup>25</sup> associated to the NP with S function (note that this amounts, again, to an incidence of the Given/New factor close to 70%). In a way, however, this is too simplistic: one cannot be sure that the real factor affecting WO in these cases is the pragmatic factor in question.

Sometimes the Given/New assignment is more complicated. In the following passage the subject of the main sentence is a complex NP (NP + NP); the definite descriptions evecchi genitori, enonni, are in a paraphrastic relationship to the preceding co-text, which was about old people who died alone in August in the city. Stories have been told about sons who, while on holiday, called old father left at home and had no answer. Yet, evecchi genitori, and enonni, are not the same pieces of information as before: the referential conditions are different, as these two definite descriptions lack the features [+Referential] [+Specific] and have the feature [+Generic]:

(10) Muoiono dimenticati vecchi genitori, nonni, spesso vedovi che, anche in inverno riescono al massimo a scambiare due parole con la droghiera

Here the Given/New distribution does not seem to be responsible for subject inversion. Rather, what seems to be involved is both the heavy constituent factor and a textual condition: the V S order marks, in fact, a turning point in the text, from the report of individual events to more general considerations.

If we turn our attention to the remaining instances of V S order, we

<sup>24</sup> In 4 out of the 30 cases S is partially Given, showing the normal relations of textual cohesion: «Un'altra onda parte dalla procura» (the co-text mentions 'scossoni'...); «il suo nome era comparso negli elenchi della P2» (the name of the person has been mentioned immediately before); «I soccorritori passano quindi dalle finestre o dai balconi»; a different case is «Le ricerche dei due slavi sono cominciate immediatamente», where the NP «le ricerche dei due slavi» has a head «le ricerche» with the feature [+New] and the PP «dei due slavi» has the feature [+Given]; a sequence such as sono cominciate immediatamente le ricerche dei due slavi would also have been possible.

Finally, among the other cases two occurrences of *tutto* as S are to be noted («Tutto è cominciato verso le 21»; «Tutto è cominciato verso le 15»): here *tutto* has a resumptive value, as it recapitulates a whole sequence where an event was announced.

<sup>25</sup> The assignment of the feature [+New] is problematic in at least one case: «sia perché l'ospedale non ha ridotto l'attività in estate sia perché aumentano gli interventi di chirurgia d'urgenza e di pronto soccorso» («interventi chirurgici» occurs in the previous co-text). Here the subject inversion might also be due to the heaviness of the constituent.

will see that in 8 of the 14 cases the pattern is either at the beginning or at the center of a strictly narrative sequence in the text:

(11) Dall'altra parte della porta tornò improvvisamente la calma

It is interesting, however, that in almost all these cases the subjects are [- Agentive] [- Human] [- Animate], a fact that makes one wonder about the role played by semantic factors in the structures under scrutiny. As a matter of fact, verbs such as *rifiorire*, *comparire*, *risuonare*, *arrivare*, which occur in the remaining cases of V S order, in different textual environments (i.e. non-narrative), show the subject inversion:

(12) nei menù dei ristoranti alla moda comparvero i piatti forti della cucina texana

To sum up then, although the Given/New factor has a certain «weight» in influencing WO, it appears to be significantly altered by textual and syntactic factors, as well as by semantic idiosyncrasies of the verb (I am referring here to the WO tendencies of the different verb sub-classes). Besides, it seems that a role is played by a further factor, that is, what we may call the «reportive» progression as opposed to the narrative one.

The analysis that has been made so far for the intransitives finds some correspondence in the behaviour of reflexives and passives, although the scarcity of data in these two classes does not allow us to report very reliable results.

The intransitive reflexives do not seem to be conditioned so much by the semantic type of the verb (Durative/stative, etc.) as by the «Animate-and-Human-first» principle, in addition to the presumably ever active syntactic factors. It is more difficult to say what role is played by the Given/New distribution. Moreover, the influence of the textual diversification of reportive comment vs narration cannot be detected with certainty.

The semantic hierarchy of Human and Animate seems to be involved also in WO with passives: 8 out of the 10 instances of S V order have S = [+Human] and 2 have S = [-Human] [- Animate]; conversely, only 3 out of the 8 instances of V S order have S = [+Human], while the remaining cases are  $[-Animate]^{26}$ . Again, the Given/New factor is influential, although not decisive.

5. The data from scientific prose give a somewhat different picture

<sup>&</sup>lt;sup>26</sup> To be more precise 4 cases have the features {[-Human] [-Animate]}, 1 has the feature {[+Human] [-Animate]} (the body of a dead man is being spoken about).

of WO tendencies. Here are the absolute frequencies and percentages for the three texts that have been scrutinized:

TAB. 6

Transitives						
	svo	SOV	ovs			
Momigliano	48	1	1			
Pettorino	59	-				
Zwirner	18	-	-			
Total	125	1	1			

It can be observed here that the predominance of the S V O order is almost absolute (98%); both the instance of S O V and that of O V S have a proclitic pronoun as O <sup>27</sup>; no occurrence of either topicalization or left dislocation has been found.

A look at the behaviour of one-argument verbs reveals no more than a trend similar (with a few chaotic variations) to that of the report prose.

Tab. 7.

Intransitive					
	Intransitives	Reflexives	Passives		
sv	76 (77,%)	50 (66,66%)	60 (77,92%)		
VS	24 (23%)	25 (33,33%)	17 (22,07%)		
Total	100	75	77		

Here, in fact, the S V trend shows an increase, as regards the percentages in Tab. 3, of more than 10% with intransitives and more than 20% with passives, with a slight decrease (7%) with reflexives. But how significant are these variations? Before attempting to give an answer, it will be better to disaggregate the data, as the texts belonging

to the corpus of scientific prose are not homogeneous in these WO tendencies:

TAB. 8.

Intransitive					
	Intransitives	Reflexives	Passives		
Momigliano	SV 19 (90,47%)	SV 9 (75%)	SV 5 (100%)		
	VS 2 (10%)	VS 3 (25%)	VS -		
Pettorino	SV 40 (86,95%)	SV 15 (71,42%)	SV 43 (72,88%)		
	VS 6 (13,04%)	VS 6 (28,57%)	VS 16 (27,11%)		
Zwirner	SV 16 (50%)	SV 27 (64,28%)	SV 12 (92,30)		
	VS 16 (50%)	VS 15 (35,71%)	VS 1 (7,69)		

As to the intransitives, Momigliano's and Pettorino's texts show similar percentages for S V and V S orders. However, the conditions involved in the two patterns are different. As a matter of fact, V S occurs in Momigliano's paper with the verb *esistere* only, which means that virtually neither the lexical differentiation nor any syntactic condition affects WO.

Pettorino's paper, on the other hand, shows a clear incidence of pragmatic and syntactic factors, that is, subordinate clause and the occurrence of a non-subject constituent in Topic position are the two contexts highly favouring V S order:

- (13) il modo in cui ... varia lo spettro acustico
- (14) ... come variano le altezze delle formanti
- (15) Al variare della lunghezza ... varia la configurazione del segnale

It seems interesting, however, that in (13) S is [+Given], i.e. syntax is the only causer of V S order, while in (15) S is partially New (more precisely, what is New is the head of the NP), i.e. here syntax and pragmatics cooperate in the result. On the other hand, it should be noted that although the vast majority of sentences with S V order exhibit S = [+Given], sporadically S = [+New] is found, a piece of evidence, again, that this is not an absolute regularity:

(16) Il palatografo è stato oggi sostituito dall'elettropalatografo ... Sul palato artificiale vengono fissati 62 elettrodi d'argento ... Un segnale a basso voltaggio passa attraverso il corpo del soggetto

The whole picture emerging, in any case, confirms the well-known expectation that texts with a high degree of referential (topical) continuity have a very low frequency of V S order. Furthermore, it could be

<sup>&</sup>lt;sup>27</sup> Note that the O V S pattern occurs in a subordinate clause: «Ed Erodoto non diventa un documento di lotta di classe perché lo studia uno storico marxista» (Momigliano, op. cit., 21).

added that when this occurs it is conditioned mainly by syntactic factors.

The third sample of scientific prose, the excerpt from Zwirner's Handbook of Algebra, disconfirms this property. Here the percentages of the two orders are fifty-fifty for intransitives, but this result requires further comment. It is heavily biased by the fact that 8 of the 32 occurences of intransitives are tokens of the verb esistere, all having V S order. This is only to be expected, as no instance of S V order with this verb has been found in either report or scientific prose; one could guess that esistere is inherently a V S verb, were it not for the corpus of spoken language, where things are different (see further below, 65). If we count the tokens of this verb as one (i.e. if we reduce the weight of esistere in Zwirner's text), it will result that against 16 cases of S V order we have 9 cases of V S order (64% against 36%). Although different from the previous percentages, these are close to the «tendential» ratio of S V to V S in Italian intransitives seen in report prose. From an inspection of the V S order cases (leaving apart the instances of esistere) it results that syntactic conditions play the fundamental role, as in Pettorino's text.

Less clear are the conclusions in other cases, where a combination of various factors seems to be involved. Lexical and semantic factors (the verb is of movement) play a role in 17) and 18):

- (17) Dalle considerazioni svolte viene la seguente definizione di funzione dovuta a Dirichlet
- (18) Infatti per conoscerne il valore in un certo istante nel passato, occorre aver tenuto nota dei valori segnati dal termometro nel passato, mentre per averne un valore nel tempo futuro, bisogna attendere che giunga quell'istante per leggere sul termometro il corrispondente valore della temperatura.

Of course, rhythmic and pragmatic factors also affect WO in (17): S is a heavy constituent; the informative progression goes from [+Given] to [+New]; in (18) it is mainly pragmatic factors that contribute to V S order: as a matter of fact, «quell'istante» is a constituent with the feature [+New], its referential value being different from the previous occurrence of «istante» (in fact, a time in the future is being spoken about, while in the previous case a time in the past is being spoken about). However, it is not easy to assign an exact weight to the various factors. To sum up, both in scientific prose and in the prose of newspaper reports, various factors concur in the determination of the relative order of S and V. However, in comparison with newspaper reports, scientific prose shows the following peculiarities:

- a) a higher incidence of syntactic factors;
- b) a minor incidence of lexico-semantic idiosyncrasies of the verb (what we have called the verb class and sub-class);
  - c) a lower sensitivity to the Given/New factor.

Furthermore, the inspection of different results in WO percentages of the scientific text hints at a greater stylistic variability than that of newspaper reports.

In addition, when we look at the aggregate figures that result for scientific prose, intransitives and passives show an increase in S V percentages in comparison with newspaper reports, and this trend is even more remarkable if we consider the unbiased V S figures proposed for Zwirner's text. As a matter of fact, the rectification of the total amount of V S gives a percentage of 81,72% for S V and a percentage of 18,27% for V S (for further comments on this point see 16).

6. Spoken language presents a still different trend in WO, as well as a higher incidence of other structures (left-dislocation, right dislocation, topicalization, rising), a very low frequency of passives and a decrease of intransitive reflexives. The general classification of the data is shown in Tab. 9 and 10-12:

TAB. 9. (The letters from A to G each denote a different speaker, I = intransitives, R = reflexives, P = passives, Tr = transitives, LD = left dislocation, RD = right dislocation, Top = topicalization, Ris = rising)

-	A	В	С	D	E	F	G	Total
I	9	31	10	11	24	6	26	117
R	3	2	4	6	2	3	7	27
P	_	_	_	5	_	1	1	7
Tr	8	15	3	16	9	15	6	72
LD	1	_	3	_	1		5	9
RD	_	4	-	1	_	_	1	6
Тор	1	_	_	_	_	1	1	3
Ris	1	-	-	-	-	-	_	1

TAB 10.

Transitives				
SVO	58			
S V O S O V	14			

				Intran	sitives				
	A	В	С	D	E	F	G	Total	
SV	4	19	7	8	13	4	9	64	54,70%
VS	5	11	3	2	11	2	19	53	45,29%

TAB. 12.

Intransitive	Reflexives	Passiv	es
S V	12	s v	1
v s	16	v s	6

The WO patterns in sentences with two-argument verbs (tab. 10) show the generalized S V O trend which has emerged in other text types as well (note that all the instances of S O V order have a clitic pronoun as O). The three cases of topicalization (i.e. O V S) all have emphatic stress falling on the O NP:

- (19) io questo dico sempre
- (20) un sacco di soldi ha speso il Monte dei Paschi di Siena
- (21) radici spagnole abbiamo dentro di noi

As for WO patterns in sentences with one-argument verbs (see Tabs. 11-12), at least two considerations can be made. The first concerns the stronger overall tendency to V S order in the corpus of spoken language, in comparison with the prose of newspaper reports and scientific texts. This tendency is even more meaningful, if we think that a conspicuous part of the S NPs are personal pronouns, which are expected to occur in an initial position in the sentence.

The second consideration deals with the variability in WO patterns exhibited by individual speakers. Before attempting a comment on the two results, a closer scrutiny of individual variability is useful, although no systematic study of it can be attempted here, because of the asymmetry of the data. The variability shown by individual speakers is in fact due to the different incidences of particular sub-classes of verbs, each having its own special behaviour. Thus as far as our sample of texts is

concerned, little can be said about the type of cross-individual variability. What can be clearly recognized for the moment is only the existence and the extent of such variability.

However, the data at our disposal permit other considerations on the overall incidence of the lexico-semantic properties of the verb (see Tab. 13<sup>28</sup>), as well as on the incidence of the various syntactic, semantic and pragmatic factors (see Tab. 14).

TAB. 13.

Saying	Movement	Dur./State	Chang. st./proc.
S V 11 (61%)	S V 16 (64%)	S V 15 (54%)	S V 13 (52%)
V S 7 (39%)	V S 9 (36%)	V S 13 (46%)	V S 12 (48%)

TAB. 14.

	s v	V S
S has thematic continuity	2	_
S is Given	21	15
S is a personal pronoun	31	9
S is an indefinite pronoun	3	6
S is an indefinee pronoun	1	2 -
S is New	3	8
S is contrastive focus		5
S is a heavy constituent	2 *	2 **
The sentence is subordinate	2	4
The sentence is a relloc.	-	4
The sentence has the value of a general truth	2	_

<sup>\*</sup> In one of the cases S also has the feature [+New] and thus has been counted separately among the occurrences of S = [+New].

As can be seen comparing Tab. 13 with Tab. 4, unplanned spoken texts and newspaper reports have almost equal percentages only for verbs of movement, all the other percentages being sensibly different. Apart from the case of the verbs of saying, which poses special pro-

<sup>\*\*</sup> Both cases have also been registered separately under other labels, as one of the Ss also has the feature [+Given], and the other is a NP with an indefinite negative pronoun as the head of the construction.

Tab. 13 presents only the most frequent verb sub-classes. The sub-classes that are not represented here are Pseudo-intransitives (9 item; S V = 6, V S = 3), Idioms (2 items; S V = 1, V S = 1), Verbs of perception or emotion (6 items; 1 token of parere, selecting S V order, 5 tokens of piacere, all selecting V S order), Others (2 items, S V = 1, V S = 1).

blems in the comparison <sup>29</sup>, the verbs of state or duration as well as the verbs of change of state or process in spoken texts show a decrease of S V and, conversely, an increase of V S.

Tab. 14 seems particularly interesting for several reasons. The first is that it shows a minimal overlapping of factors, which suggests that the multiple causation of WO observed in newspaper reports and, to a minor degree, in scientific prose, does not hold true in unplanned spoken language. However, before reaching firmer conclusions on this point further tests are needed. Secondly, the traditional hypothesis that the Given/New distribution in unmarked cases tends to coincide with pre-verbal/post-verbal subjects, respectively, is confirmed up to a certain point. If we aggregate the cases of S [+Given], and those with S as a personal pronoun as well as those with S as a thematically continuous element <sup>36</sup> (all these being «Given» elements) we can see that preverbal Ss are associated with Givenness in almost 80% of the cases. On the other hand, post-verbal Ss are associated with Newness only in 15% of the cases, a percentage which is equal to that resulting from the sum of the syntactic factors involved. Interestingly enough, 45% of the cases of post-verbal Ss are associated with the feature [+Given], an estimate that contradicts traditional expectations. I will comment further on this point in 7.

On the whole, it would seem that syntactic factors, although important, do not play a major role in unplanned spoken language, while pragmatic factors are powerful, at least as far as the feature [+Given] is concerned. However, in order to understand why the data contradict traditional pragmatic expectations, as far as post-verbal Ss are concerned, one has to consider them in more detail.

- 6.1. The 4 occurrences of SV in speaker A's text can all be accounted for by the pronominal nature of the S NP and by the fact that in each case the pronoun is [+Given]. Note that 3 cases are tokens of the verb of movement *entrare*:
- (22) Questi giocatori entreranno in campo nel momento in cui...

Somewhat more interesting is the occurrence of sentences with V S order. The verbs involved here are *piacere* (2), *bastare* (1) and *criticare* (1). This latter case can be accounted for by contrast (although syntactic factors such as the *come*-clause context may also be working):

<sup>30</sup> As to these cases, cf. the discourse stretch quoted below as 26). The S in italics there sets up a case of isotopy.

(23) si critica meno con una facilità minore di come siamo portati a criticare

(24) a me piacciono tutti i tipi di sport ... Mi piace il basket/la pallavolo/la pallacanestro/il tennis/eccetera

(25) bisogna avere un'attenzione/una grandissima attenzione/basta una minima distrazione ... e ta!

6.2. Speaker B's text offers some useful data for the study of WO variability with verbs of saying and verbs of movement. These two subclasses, taken together are in fact 80% (24 out of 30) of the set of intransitives in speaker B's discourse. The special interest of these data is that they can give an idea of the range of fluctuations in WO when an important parameter such as the sub-class of the verb is kept constant.

The 15 verbs of saying are tokens of two verbs only, *dire*, *fare*. All the tokens satisfy the condition of quotation context, with the quotation always following. However, their behaviour is completely different from the one we saw in newspaper reports. As a matter of fact, the choice of S V (8 cases) or V S (7 cases) seems almost chaotic.

S V gains ground with verbs of movement (6 cases against 3 of V S), which, again, given the minimal lexical variation of the verbs involved (andare, venire, entrare, uscire), permits a further inspection of micro-oscillations in WO. Although the comparison cannot have an inferential statistical import, it can be observed that the percentages of the two WO patterns are surprisingly close to those found for verbs of movement in journalistic prose (in newspaper reports S V = 65,51%, V S = 34,48%; in the spoken texts, S V = 66,66%, V S = 33,33%). All the sentences with verbs of movement have a personal pronoun as S, except one and this shows V S order:

(26) ha detto lei / eh può darsi che è successo così / comunque ci siamo chiariti / alla fine ho capito / vabbè / alla fine ti sei confusa / è entrato il marito / è salito sopra / ha detto / no / è stato meglio così

As is clear, here the V S sentence marks a turning point from the quotation to a narrative progression where something happened that changed the situation. We have already observed a similar value of the V S order in newspaper report texts. The other two instances of V S in speaker B's discourse might have the same justification, as they too mark a turning point from quotation to narration:

- (27) quando tornai con Francesco / no / il padre fece / Francesca / sali sopra / con un'aria un po' arrogante / sali sopra e vai a dare gli auguri a mia moglie perché non glieli hai dati / andai io e feci / ma come non glieli ho dati / io li ho dati gli auguri a vostra moglie
- (28) gli hai detto solamente / come state? / chi ti ha detto che non stava bene? // sono andata io sono rimasta di pietra / non riuscivo a capire

<sup>&</sup>lt;sup>29</sup> The quotation, in fact, always occurs after the verb in the spoken texts, while in newspaper reports it occurs either after or before the verb, with different orders preferred according to this choice.

However, the two passages present us with a difficulty. The verb andare, in fact, does not have the meaning 'to move'; rather, it looks like what traditional grammarians used to call an «expletive» or «pleonastic» form.

It is also to be mentioned here that the sentences with durative verbs (rimanere (2), stare (1)) all have S V order <sup>31</sup>.

- 6.3. The data from speaker C's text are easier to analyse in the light of the main factors that have been taken into account so far:
- (29) ho cominciato a capire che le cose stavano in una maniera completamente diversa (the NP with S function is a «pro-form»; the verb is durative)
- (30) perché io credo (the verb can be considered as having a durative-stative value [i.e. 'I am a believer'])
- (31) i miei per esempio non sono mai andati sempre in Chiesa (the verb takes the feature [+habitual] from the co-text)

The S V order of the sentences in italics in the following conversation stretch seems to be due to thematic continuity in the text:

(32) Interv. So che tu non hai vissuto sempre qui in Italia

No / infatti / dunque / sono infatti sono nato all'estero, a New York / perché i miei genitori sono degli immigrati

Interv. Immigrati da generazioni o ?

C:

C: eh guarda / da parte di mia mamma / sì / sono emigrati / già il mio bisnonno era emigrato in America / e poi di conseguenza tutti i figli / i nipoti / hanno tutti continuato a emigrare negli

Stati Uniti / quindi io sono nato li nel sessantotto

Lexical peculiarities as well as pragmatic factors are involved in the three instances of V S order, where S is [+New] (cf. 34) or partially so (cf. 33):

(33) credo molto e sono praticante / ripeto / però i preti mi lasciano molto perplesso / non non mi piacciono tutti i modi che hanno di comportarsi (here, however, the heavy constituent factor too plays a role)

(34) oltretutto poi conta anche la la vita familiare

6.4. Semantic and pragmatic factors as well as lexical properties of the verb are most responsible for WO patterns in speaker D's text, which is the one with the highest rate of S V order. Here, in fact, the only instances of V S are two tokens of *piacere*, a verb – as we already know – that inherently selects such order (note that in one of the instances the NP with S function is [+Given]<sup>32</sup>). As to S V order, apart from three cases with a pronoun or a pro-form as S NP (a

32 An example with a similar case is (38).

condition, as is well-known, that highly favours the pre-verbal position of S), two examples seem worth mentioning:

(35) il sole nasce da destra

(36) l'arte nasce da questo sentimento diciamo fortissimo

In these sentences the verb clearly has a feature [+habitual], as the overall semantic value in both could be considered of the «eternal truth» kind (cf. 31) for a similar effect on WO of the feature [+habitual]). Another sentence from speaker D's text offers an example of a pre-verbal S with the feature [+New]:

- (37) per esempio i futuristi/gli espressionisti/ ci riescono altrettanto
- 6.5. The data from speaker E's text further confirm the incidence of the various syntactic, semantic and pragmatic factors on WO, although a few oscillations occur that are difficult to account for. The S V pattern occurs when S is an indefinite pronoun or a pro-form:

(38) ognuno di noi ha bisogno di un amico

(39) tutto mi pareva bello

E:

(40) penso che la cosa parta da lì

or when it has the feature [+Given], as in the following stretch of discourse:

(41) Interv. Tu cosa pensi dell'amicizia?

Guarda la mia opinione sull'amicizia è cambiata/perché ... cioè la mia opinione è cambiata

On the other hand, as can be expected, V S order occurs as the realization device of contrastive focus, as in

(42) ci dovrebbe fare più paura questo che la morte in sé

The V S patterns is also selected with verbs such as *succedere*, *capitare*:

(43) anche se succedevano queste cose

(44) a me sono capitate delle cose/come dire

(45) cioè innanzitutto sono capitati dei pettegolezzi

(note that 43) is an evidence that the lexical property of the verb overrides Givenness).

Various sentences, in any case, show a different WO pattern than the one expected. Although chaotic at a first sight, these cases can be accounted for by a more complicated interplay of the previous factors. In the following examples pragmatic factors override lexical properties (V S order is expected with *esserci*, *starci*, *succedere*, yet, on the contrary, S V occurs)

<sup>&</sup>lt;sup>31</sup> In one case the heaviness of the constituent with S function may have concurred to the resulting WO.

- (46) l'interesse o c'è subito o non c'è più (here the S NP l'interesse is topicalized)
- (47) invece a noi questo è successo perché in fondo cioè non ci vediamo più

Note the difference between (47), where the structure under scrutiny is predicative, and (43-45), whose structures are eventive.

On the other hand, in the following examples pragmatic factors are overridden (V S occurs, with S being either [+Generic] or [+Given])

- (48) e poi ho notato che in un gruppo / cioè / se ovviamente si fa una cosa / o comunque / sì / insomma / nasce una cosa / tutti quanti la sanno
- (49) però eravamo piccoli / e vabbuò insomma / piano piano è nata l'amicizia (amicizia is [+Given])

One possible solution with these two examples would be to assign to *nascere* the lexical property of requiring the S NP on the right; however, I would be inclined to think that we are confronted here with a sort of backgrounding of the subject.

The verbs of movement show an uncertain behaviour. Two of the three occurrences have V S order and this cannot be accounted for by pragmatic factors; S is an indefinite pronoun in (50) and is a NP with the feature [+Given] in (51). It might be that the WO pattern is due here to syntactic factors, i.e. subordination ":

- (50) non è che se arriva uno e mi uccide...
- (51) appena entra nella tua mente la parola morte

The third case shows an «abnormal» order, very interesting, though, as evidence of the potentialities of the speakers' idiosyncratic variability (the larger co-text is quoted here to give the appropriate clarification for this example):

(52) Non lo so / io ho sempre la sensazione che la mia vita sia breve / cioè / ti è mai capitato? / Mi capita a volte di / di pensare di dover fare tutte le cose che sto facendo in fretta // cioè come se dovessi lasciare questa vita / capito cosa voglio dire? / insomma / come se stessi correndo a / per dire / mo / prendermi la maturità / quello che devo fare / come se dovessi muovermi / perché ci sta qualcuno che mi deve chiamare / insomma // perciò io penso / anzi questa è una cosa che ho sempre pensato / che penso sempre / perché mi viene / capito? // all'improvviso io è come se / mi fermo a volte / e dico / ma perché corro? / perché sto correndo? / e un'ansia mi viene / e penso...

As is clear, «ansia» is a NP with the feature [+New]; and in fact the expected order here would have been mi viene un'ansia.

<sup>33</sup> We have no evidence, anyway, that appena favours V S order, as no other example with appena occurs in the whole corpus; as to se, of the 7 cases in the corpus with this conjunction, only 2 show V S.

- 6.6. Speaker F's text has unproblematic cases only; all the instances of S V have personal pronouns as S; one of the two instances of V S, on the other hand, presents the verb *esistere* and the other a relative-locative context («... dove abita Luciano»).
- 6.7. Speaker G's stretch of discourse offers important data for WO variability. It shows the highest rate of V S order (see Tab. 11). Like speaker B's text, this too reveals interesting oscillations in WO, as most of the instances may be grouped as tokens of the verbs *esistere* (7), succedere (3), accadere (2) (also a synonym like capitare occurs).

5 out of the 7 instances of esistere have V S order, which, in a way, tan be taken for granted, given the high preference of the verb for this pattern (cf. above, p. 54). However, it is worth mentioning that the Given/New distribution is different in the various cases:

- (53) per esempio io credo nelle fatture / per esempio / negli occhi / nei malocchi / in queste cose qua // secondo me / ecco / anche se ecco / sono cattolica e non dovrei affermare queste cose / io sono convinta che sicuramente esistano queste cose /
- (54) una mia amica aveva frequentissimi mal di testa / ... / e lei praticamente ha scoperto di avere una fattura sulla sua salute / fatta dalle cognate / per cui sembra stupido / però secondo me ci sono tante / cioè esiste // esistono queste forze / tranquillamente
- (55) io sono del parere che se veramente esistono questi fantasmi...
- (56) non dico credo alle streghe / perché ecco in se / streghe in senso / come quelle col cappello / il nasaccio / eccetera / eccetera / però io credo che queste queste forze esistano / come esiste per esempio la forza cioè esistono tante il per esempio il sensitivismo

The sentences in (53-55) have S NPs with the feature [+Given], while passage (56) offers an interesting case of a tentative choice of the S NP: here «forza» is not co-referential with the previous NP «queste forze»: evidently the speaker wants to introduce a new referent in the discourse; she has something on her mind but is not capable of defining it at once (this is clear from hesitation phenomena and the changes in the syntactic and the semantic plan). We have already noted that verbs that inherently select a certain WO with their S NP are not sensitive to the Given/New distribution. However, speaker G shows two cases of S V order with esistere, where the S NP is partially Given or [+Given]:

- (57) se esiste la magia bianca [...] automaticamente noi affermiamo che la nera esista
- (58) io credo che queste queste forze esistano

It is not clear to me if what induces S V here is the feature

[+Given] of the S NP. I would rather be inclined to think that though important, these features are not determinant with verbs like esistere. It seems to me also that these data are evidence of the fact that predicative and eventive (categoric and thetic) are not lexical properties of verbs, but choices of the speaker.

Similar conclusions can be reached for the verbs of the 'happen' sub-class.

4 out of the 6 occurrences have V S order, and again this does not seem to be connected to the Given/New distribution:

- (59) cioè maledizioni nel senso di s e / si fa una determinata cosa succederà qualcos'altro di grave nella stessa famiglia / che sarà poi tramandato in tutte le persone che abiteranno per esempio quella casa? (S is [+New] and is a heavy constituent)
- (60) no / a me questo non è mai successo / però è capitato il fatto di vivere una scena e magari essere convinta di averla già vissuta (S is [+New] and is a heavy constituent)
- (61) per quanto riguarda questo fatto dei sogni / cioè questo che ti appaiono per esempio / o ti vengono in sogno dicendo / non lo so / per esempio / aiutami / è accaduto a mio nonno questo fatto / (S is [+Given])
- (62) cioè per esempio / tu vivi soltanto con i tuoi genitori / per cui / metti che una sera uscite voi tre / se un drogato vi blocca la macchina là / a chi chiedi aiuto? / ... / e possono succedere frequentemente queste cose / perché là non c'è nessuno (S is [+Given])

On the other hand, the two cases of S V order both have a S NP with the feature [+Given]:

- (63) Interv. però / per esempio / ti è mai capitato che nel sogno tu vedi una persona che non hai mai visto e nella realtà poi / per esempio / un mese / due mesi / tre mesi / quattro mesi / cinque anni / tu rivedi quella persona che quel giorno vedesti nel sogno?
- G: no / a me questo non è mai successo

  (64) oppure / per esempio / il caso di mio cugino / mio cugino era piccolo / abitava dalla nonna e ogni volta che mia / che la nonna praticamente lo metteva a letto / lo trovava la mattina dopo a terra / pieno di sangue / però il bambino non ha mai avuto né traumi / né contusioni / niente // quando se ne sono andati da quella casa il il fatto non è accaduto più

The behaviour of other sub-classes of verbs, such as verbs of movement and stative verbs is difficult to ascertain *per se*, as it is strongly affected by various other factors:

(65) ora viene in atto quello che ti dicevo prima» (S is a heavy constituent)

- (66) se qualcuno ti blocca la macchina non ti viene nessuno ad aiutare (focus on *nessuno*)
- (67) se entra qualcuno (influence of se?)
- (68) Non è che tu entri là/ tutta bella/ (S is a personal pronoun)
- (69) eppure io non ci abiterei mai là (S is a personal pronoun)
- (70) lei sta da sola (S is a personal pronoun)
- (71) più di questo non può esserci niente (focus on niente) 34

7. From the previous analysis emerge some results that need further comment. As has been anticipated in 1., some of them set up open problems rather than answering to the questions we have posed preliminarily.

The first result to deal with concerns the issue of WO variability across text types. A neat split has emerged between sentences with S, V, O constituents and sentences with S, V constituents only (for the sake of simplicity, we will call the first «tripartite» sentences and the latter «bipartite» sentences). The tripartite sentences show a much higher incidence of one of the competing WO patterns, i.e. S V O, across text types, than the bipartite sentences do:

TAB. 15.

	s v o	
Newspaper Reports	Scientific Prose	Unplanned spoken texts
87,5%	98,30	77,33

If we consider that the cases of S O V order almost always have a clitic pronoun as O and the extremely rare cases of O V S are always marked (emphatic), the conclusion can be reached that S V O is the unmarked order in all text types with a percentage of occurrences approaching 100% when O is a full NP.

Things are different with bipartite sentences. Here the range of oscillation in WO patterns is greater both within and across text types:

The remaining cases conform to our expectations: two are instances of a relative locative sentence with V S order; a case of V S with a contrastive value occurs in «non si fanno vedere quando vogliamo noi/ ma quando decidono loro»; we have to mention, besides, two examples with *dire* and *lavorare* (pseudo-intransitive) respectively, both having S V order.

	s v		
	Newspaper Reports	Scientific Prose	Unplanned spoken texts
I	64,42%	81,72%	54,70%
R	75%	66,66%	43,85%
P	55,55%	77,92%	(14,28%) 35

TAB. 17. (Average values in percentage of S V pattern for intransitives, intransitives reflexives and passive)

Newspaper Reports	Scientific Prose	Unplanned spoken texts
65%	75,66%	49%³6

As can be seen from Tab. 16 and Tab. 17, the greater tendency towards S V is shown by the scientific texts, the lesser by the unplanned spoken texts.

Consider now the average values for S V across all text types, for intransitives, intransitive reflexives and passives, respectively:

TAB. 18.

I	R	P
67%	62%	76%³7

The fact that I, R and P show very close or equal average values is rather interesting, as it seems to suggest the existence of a regularity.

How are the values of bipartite sentences to be interpreted, in the light of the prevailing explicative models of WO? The question that immediately comes to mind is why in performance (but is it only in performance?) the order of tripartite sentences so closely reflects the expected abstract order, while the order of bipartite sentences turns out to have a stronger variability. It could be argued that this variability simply reflects the expected underlying difference in abstract WO

of a sub-class of intransitives (those with essere as auxiliary verb) and intransitive reflexives, according to Burzio's framework. Yet, as we have already noted, this model does not account for the data (see above, on p. 34 ff.). It has to be recognized, however, that cases such as esistere, bastare, capitare, succedere, which in the overwhelming majority of the instances occur with V S order, make one think that for this subset of verbs the performance order coincides with the abstract order postulated by Burzio.

Things are more difficult, though. Of course, neither performance order, nor even what is considered the surface order of a sentence need coincide with the abstract or underlying one; in other words, this latter may be altered by «disturbance» factors of different kinds. Thus our initial question could be reversed into: why is it that disturbance factors do not alter the abstract order of the tripartite sentences, while they do alter the abstract order of bipartite sentences? However we may frame the question, the most obvious reason that comes to mind is that the «cause» is the need for maximal differentiation of S and O. Although this idea is a current resort in many typological treatments, it explains nothing: apart from more general considerations, it is to be noted that very few of the cases in the corpus could have produced ambiguity or misunderstandings, had the order been different.

However, even if one admits the non-coincidence of abstract and surface/performance WO, various problems still remain unsolved.

The average values 67% of S V for intransitives and passives, 62% for reflexives suggest that these verb types too have a certain preference for the order with S in pre-verbal position. Is this just a tendency in performance or does it reflect something related to more abstract regularities of the language? This is precisely where the competence/performance dichotomy comes to a standstill. It cannot capture the intricacies of phenomena with a dynamic structure. After all, one should explain why one-argument structures of the type we have been discussing show a recurrent value around 60% for S V order.

It is clear, however, that the preference for S V is a matter of type of text, with scientific prose leading the trend and unplanned spoken language tailing it. This difference raises another question. If we assign the meaning 'S V is categorical' to the value 100%, and the meaning 'V S is categorical' to the value 0, we can see that scientific texts approximate the first situation, while the frequencies for unplanned spoken language are scattered around the value 50%. This is a crucial value for any variation phenomenon. As far as our problem is concerned it could be argued that all the values between 0 and 49% (or 50%?) are evidence of the underlying categorical V S order, while all the values between 50% (or 51%?) and 100% are evidence of the S V categorical order. Yet, this is simply a conventional choice. It is far from being

<sup>35</sup> This value has no real statistical import and cannot be compared to the others, due to the smallness of the sample of passives in unplanned spoken texts (6 items in all).

<sup>&</sup>lt;sup>36</sup> This figure has been obtained without calculating the percentage for passives.

<sup>37</sup> Again, this value is obtained with the exclusion of the percentage of passives in unplanned spoken texts.

indisputable on both theoretical and methodological grounds. A different argumentation would be that there is a whole set of values around the critical point of 50%, where variability ceases to be a mere performance phenomenon and becomes something revealing structural regularities. The view that is defended here is still different: structural regularities may appear even with percentages of WO patterns that are not immediately scattered around the threshold of 50%. This is but one of the reasons why the competence/performance dichotomy is misleading when WO phenomena are concerned.

7.1. The individual oscillations in the unplanned spoken texts are the most puzzling and difficult kind of variability which emerged. They show no clear regularity, not even tendential, i.e. of a probabilistic nature. Frankly, it should be admitted that in many cases WO variability is almost chaotic.

The different considerations we have made in this paper lead us to conclude that WO is a dynamic, not a static phenomenon. Although in some areas (cf. the tripartite sentences) it shows outstanding regularities, which are typical of a deterministic phenomenon, in others it reveals a puzzling variability, sometimes behaving according to tendencies, sometimes chaotic.

As in other fields of science, this situation emphasizes the role of the so-called «singularities», i.e. individual, unpredictable phenomena. In the last thirty years it has been demonstrated that deterministic systems may co-exist with non-deterministic ones. In other words, the two perspectives do not exclude each other. Rather, deterministic systems are static, while non-deterministic systems are dynamic, and the tools that are needed for their study are different.

To support the radical performance point of view in the study of WO does not mean the exclusion of the structural dimension, nor does it mean that everything is assigned to the performance level. On the contrary, it means that whenever areas of variability are found, one should neutralize the dichotomy competence/performance, structural vs non structural, which holds true for deterministic systems and assume the standpoint from which non deterministic, dynamic systems can be studied. This paper is intended as an experiment towards this goal.

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## **SOMMARIO**

In questo lavoro ci si è proposti di esaminare l'ordine relativo dei costituenti basici della frase (Soggetto, Verbo, Oggetto), a partire da un corpus di testi di italiano contemporaneo, tipologicamente differenziati. I modelli di ordine sono stati studiati al variare del tipo di testo, ed inoltre rispetto a parametri sintattici, semantici e pragmatici. È emersa una biforcazione netta tra la situazione delle frasi con verbo transitivo e quella delle frasi con verbo intransitivo, intransitivo-riflessivo o passivo senza agente specificato, per quanto riguarda l'ordine relativo di Soggetto e Verbo. Nel primo caso la frequenza del modello con il Soggetto che precede il Verbo è assai elevata, indipendentemente dal tipo di testo, mentre nel secondo gruppo di casi si determinano forti oscillazioni tra l'ordine Soggetto-Verbo e l'ordine Verbo-Soggetto, su cui sembrano influire, spesso in maniera non prevedibile, tutti i parametri presi in considerazione.