PRESENTATIONAL-TYPE STRUCTURES IN MEDICAL REPORTS

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Margarita Suñer[1] has analysed in depth two types of presentational sentence (with *haber* and with intransitive verbs) and pointed out a third type (*se* reflexives). While drawing on her theoretical insights, I intend to look at these sentences from the perspective of text or discourse, the level at which they operate according to her definition: «Presentational sentences are functionally defined as those which introduce the referent of the noun phrase into the universe of discourse.»

The discourse of medical research reports is characterised by a highly stylised format, known as IMRAD (Introduction, Methods, Results and Discussion) plus a Summary or Abstract. The Abstract is expected to reflect this four-part structure by expressing the main purpose, methods, results and conclusion in 200 to 250 words.[2] The other sections also have their peculiarities. Thus, the Introduction is seen as funnel-like. It typically starts with a general statement establishing the field, followed by a brief review of relevant research and the creation of the authors' own «research space», and narrows to end with the presentation of the paper.[3] The Methods is usually chronological and often a list-like litany of patients, procedures and parameters. The Results section need only have enough text to guide the reader through the illustrations, figures and tables, sometimes in a regularly repeating pattern. It is perhaps only the Discussion that the layman would recognise as coherent cohesive discourse characteristic of other genres.

Although this conventional macrostructure and rhetorical organisation is shared by Spanish and English, writers in the two languages resort to very different syntactic, and particularly thematic, patterns within this larger framework. In English, the starting point of the sentence, the theme,[4] is usually realised by the grammatical subject; the frequency of this in medical research reports may be as high as 80%. In contrast, a feature of Spanish medical writing is the high proportion of sentences that have initial thematic elements that are either less frequent or even impossible in English: for example, preposition plus noun phrase and verb groups of different types. Such elements are often related to presentational structures. The syntactic and thematic differences can

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[1]M. Suñer: *Syntax and Semantics of Spanish Presentational Sentence-Types*, Washington DC, Georgetown UP, 1982.

[2]F. Salager-Meyer: «Discoursal flaws in Medical English abstracts: A genre analysis per research- and text-type», *Text* (1990), 10, 4, pp. 365-384.

[3]J. Swales: *Aspects of Article Introductions*, Aston ESP Reports No. 1, Birmingham, Aston Univ., 1981.

[4]Based on Halliday's system of analysis. M.A.K. Halliday: *An Introduction to Functional Grammar*, London, Edward Arnold, 1985, pp. 38-67.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

make it difficult for the translator to achieve a natural text which will meet the expectations of the reader of a research report.

I shall begin by looking at the different kinds of presentational sentence in Spanish. I shall then discuss their syntactic and semantic features. Finally, I shall look at the implications at discourse level and illustrate them with examples of translations.[5]

SPANISH PRESENTATIONAL STRUCTURES

We can consider 5 types of presentational sentence.

1. *Haber* + a noun phrase (NP) direct object:
   Entre los enfermos portadores de neoplasia colo-rectal *habrá un porcentaje* que presentarán más de una lesión maligna [...] *Este porcentaje* puede variar...
   [Note how the second sentence picks up the NP introduced.]

2. Intransitive verb + NP subject:
   a. *Existen varios tratamientos paliativos* para el cáncer de esófago.
      [A list of treatments follows in the paragraph.]
   b. *Destaca la presencia de pólipos colorrectales sincrónicos* en el 80% de estos pacientes.

3. *Se* reflexive verb + NP subject:[6]
   a. En dos pacientes *se descubrieron 3 tumores sincrónicos.*
   b. En los últimos años *se han desarrollado dos técnicas endoscópicas* para el tratamiento paliativo de la disfagia en estos enfermos:...

4. Impersonal: copulative verb + modal adjective (+ infinitive) + NP
   a. No obstante, a veces *no es posible realizar una colonoscopia completa*, especialmente en los casos de tumoraciones estenosantes, lo cual ocurre aproximadamente en un 15% de los pacientes (2, 10).
   b. En las neoplasias obstructivas, para conseguir una eficaz aplicación del láser *fue necesario dilatar* antes *la lesión.*

5. First person forms + NP direct object
   Efectuamos un estudio retrospectivo sobre 360 enfermos intervenidos por neoplasia colorrectal con intención radical entre los años 1982 a 1990 con el objetivo de determinar la incidencia de carcinomas sincrónicos colorrectales en nuestro centro, así como analizar distintos aspectos relacionados con esta entidad:...

Of these, type 1 is always presentational, types 2 and 3 are either presentational or declarative depending on the discourse, and types 4 and 5 are, as we shall see, pseudo-presentationals.

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[5]Spanish examples are mainly taken from two articles: E. Meroño y cols: «Tratamiento paliativo de tumores de esófago con láser (Nd-YAG). Resultados de experiencia inicial», in *Revista Clínica Española,* 192, 1993, pp. 365-368; y R. Masvidal Calpe y cols: «Carcinomas sincrónicos de colon y recto», *Revista Española de Enfermedades Digestivas* (1993), 84, 4, pp. 231-234.

[6]The true passive is rare with a presentational function, but examples con be found: e.g., «Han sido publicadas previamente descripciones detalladas de la técnica utilizada en la laserterapia».

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

SYNTACTIC FEATURES

There are two compulsory features. The first involves word order: the verb precedes the NP introduced. This is normal for *haber* and is, therefore, significant only for intransitive verbs and transitives (*se* reflexive form). The NP, grammatically the subject, must be placed after the verb for the sentence to be interpreted as presentational, although not all sentences with this word order will be presentationals. If the subject NP precedes the verb, the sentence can only be declarative. The second feature involves valence: whereas *haber* and intransitives always have a valence of 1, transitive verbs (*se* reflexive form) have their valence reduced from 2 to 1, with the agent being implicit (see examples 3a and 3b).

In addition, a number of other features are associated with presentationals. Relative clauses (example 1) add information to the NP introduced. Adverbial expressions of time and space (examples 1, 2b, 3a, 3b) may be placed initially as themes and discourse organisers, or within the rheme, where they introduce information of more limited scope (example 2b). Logical connectors (example 4) indicating a shift in the discourse may well be followed by a presentational sentence.

Types 4 and 5 are called pseudo-presentationals because they do not meet the two basic requirements of true presentationals. The use of *ser* or other copulative verbs (*parecer*, *resultar*, etc.) and certain modal adjectives (*posible*, *necesario*, etc.) and an infinitive are variants of *se* reflexive forms but more flexible in terms of nuance. Thus, example 4a could be recast: «*No obstante, a veces no se puede realizar...*»

The case of 1st-person forms is less clear, because these active forms have a valence of 2, with the subject representing either the researchers or authors and readers, depending on the context. Example 5, the opening sentence in a Summary, could be recast: «*Se efectuó un estudio...*» First-person forms with a presentational function occupy a limited number of positions in the discourse: the opening of Abstract or Methods, the introduction of the current paper in the Introduction, or the presentation of the main result and the conclusions. This use should not be confused with contrastive use in the Discussion and the systematic choice of the 1st person in extended sequences, which can occur in Spanish but rarely in English.

Presentationalism is not restricted to any particular clause type. Here, I shall consider mostly main clauses but presentationals also occur in coordinate[7] and subordinate[8] clauses.

SEMANTIC FEATURES

There are no real restrictive semantic features and, in theory, any verb could occur in a presentational sentence. However, transitive verbs must either be passive to reduce their valence or be interpreted as semantically intransitive (e.g., *tener lugar*, *tomar*

[7]«Los pacientes eran sedados con diazepam [...] y en algún caso *se añadía petidina*».

[8]«...en el caso de que *se produzca fibrosis*».

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

cuerpo/forma). The one consistent semantic feature is a weakening of the meaning, with the verb acquiring existential overtones: exist, appear, occur. In medical discourse, because of the influence exerted by the rhetorical organisation of the different sections, this semantic weakening also seems to affect procedural and defining verbs (Methods) and observational verbs (Results). Such verbs can clearly be presentationals, as in the following examples:

6. *Se utilizó un gastroscopio Fujinon* (UGI-FP7) y una microvideocámara R. Wolf 5370. El láser era vehiculizado a través de una fibra de vidrio flexible cubierta por un catéter de Teflon que se introduce por el canal de biopsia del endoscopio. Como fuente de láser, *utilizamos un Nd-YAG láser* tipo Sharplan 2100 de 100 vatios de potencia.

7. En el grupo de pacientes afectos de carcinomas sincrónicos *se analizan las exploraciones diagnósticas preoperatorias* (enema opaco y colonoscopia) y el diagnóstico preoperatorio comparado con el diagnóstico histológico (grado de diferenciación y estadio), así como la asociación de pólipos.

8. *Se han incluido* en el estudio *360 enfermos portadores de neoplasia colo-rectal* que han sido intervenidos en nuestro centro con intención radical entre los años 1982-1990, excluyéndose pacientes intervenidos con carácter urgente y pacientes sometidos a cirugía paliativa.

9. Grado de diferenciación celular: *se consideraron tres grados* siguiendo los criterios de la OMS: tumores bien, medianamente y pobremente diferenciados.

10. En un paciente de este grupo, un día después de la aplicación del láser en un tumor localizado en esófago alto, *se comprobó la existencia de una fístula broncoesofágica*, que requirió la realización de una yeyunostomía.

However, the presence of sentence elements which highlight the meaning of the verb hinder the presentational interpretation because they attract attention away from the NP, which is where the focus of a presentational sentence should lie. Thus, presentationalism can be a question of degree. Spanish Methods sections may be thematically organised around procedural verbs, but only some sentences will be presentational. The others may have the same word order for consistency, but their focus will fall on elements other than the NP.

IMPLICATIONS IN TRANSLATION SPANISH-ENGLISH

The word order of Spanish presentational sentences allows a natural linear movement from general to specific, outside to inside.[9] Structural changes in translation into English may place the information flow at risk. The application of certain translation procedures can produce a natural and acceptable English version, which might not be the case if the Spanish syntax were strictly adhered to. The main problem is that the theme, the point of departure, in most sentences in English research reports is realised

[9] T. van Dijk: *Text and Context*, London, Longman, 1977, p. 106.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

by the grammatical subject. Too many sentences starting with other elements makes the prose less dynamic. Even sentences with initial «there» and the verb «be» are rare as they lack directness. The basic strategy that will be applied to the Spanish examples cited so far is to maintain the information flow of the original as far as possible.

Spanish themes that are not subjects can become English subjects provided they are recoverable from the general context and follow on naturally from the previous co-text:

1. *A proportion of patients with colorectal cancer* will have more than one malignancy... *This proportion* may vary...

The English introduces the theme directly in the subject NP, and this is developed in the second sentence. However, an introductory statement could be maintained when its scope as a global discourse organiser extends over several sentences:

2a. *There are a number of palliative treatments* available for cancer of the oesophagus.

The introduction of an important result might warrant the use of a marked structure in English, but usually an appropriate noun will serve:

2b. *Of significance was the presence* of synchronous colorectal polyps in 80% of these patients. [*A significant finding was...*]

Acceptable syntax can be achieved without changing the word order by using complementary verb types: active «have», «show», «present» within a reporting framework with «find» or «see» convey the same meaning as passive observational verbs like «detect»:

3a. Two patients *were found to have* 3 synchronous tumours.

Spanish often organises stretches of text around thematic time expressions. Attaching these to an appropriate noun subject in English can result in a successful version:

3b. *Developments in recent years* have led to the introduction of two endoscopic techniques for the palliative treatment of dysphagia in these patients.

In impersonal statements with modal adjectives, if following the original word order means loss of directness, content words should be brought as far forward as possible:

4a. However, *complete colonoscopy is not always possible*, particularly in patients with stenosing tumours, and this may be true of about 15% of cases (2, 10).

Sometimes, the presentational order is conserved with a semantically related verb:

4b. For the obstructive tumours, effective application of the laser first *required* dilatation of the lesion.

When Spanish 1st-person forms are avoided with the passive, the verb should not be postponed too far: a general noun (e.g., study, analysis) and an «empty» verb (perform, make, etc.) usually makes a satisfactory opening for the Methods section:

5. *A retrospective study was carried out* on 360 patients with colorectal cancer and undergoing curative surgery between 1982 and 1990. The study aimed to determine the incidence of synchronous colorectal carcinoma in our centre and to analyse several aspects related to this disease:...

Presentational structures in clauses other than main clauses usually provide local detail and do not usually present difficulties.

The examples (6-10) from the Methods and Results sections are of greater interest. The three sentences of example 6 are organised textually from the outside in: gastro-

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

scope with a channel for the laser inside its protective covering and then details about the laser. A parallel English text that started with the laser and moved outwards could serve as a model:

6a. All procedures were performed with a 100 watt Nd YAG laser. The laser light is delivered through a single flexible fibre enclosed in a Teflon sheath [...] The catheter system is passed down the biopsy channel of a standard flexible gastroscope.

Translation would thus involve textual reorganisation:

6b. The laser source was a 100 watt Nd YAG laser (Sharplan 2100). The laser light was delivered through a flexible fibre enclosed in a Teflon sheath. This was passed down the biopsy channel of a Fujinon gastroscope (UGI-FP7), which was used with a microvideocamera (R. Wolf 5370).

The semantic weakness, or generality, of procedural verbs (e.g., analyse) used as presentationals means that they can be applied to many nouns, in our example to the patients rather than the clinical details, and word order is again maintained:

7. *The group of patients* with synchronous carcinomas *were analysed* in terms of preoperative diagnosis (opaque enema and colonoscopy), preoperative versus histological diagnosis (grade of differentiation and stage), and associated polyps.

Patient populations are often characterised with the verbs «include» and «exclude», which allow inversion in the passive but this should not be used systematically:

8. *The study included* 360 patients [...] *Excluded from the study were* those patients undergoing either emergency operation or palliative surgery.

Spanish presentationals are common in parameter definitions and other criteria. The subheading can be maintained in English, but parameter names can also be integrated into the sentence. Whichever method is used, with or without a change in word order, the choice will depend on consideration of all parameters since the method should be applied consistently:

9a. *grade of cell differentiation* – the criteria of the WHO were followed and the three grades considered were well, moderately and poorly differentiated.

9b. *The grade of cell differentiation was classified* into three grades according to the WHO criteria: well, moderately and poorly differentiated.

The first version (as published) maintains the subheading and changes the word order whereas the second maintains the word order and adjusts the syntax.

The final example shows the complexity involved in maintaining information flow and, at the same time, achieving natural syntax:

10. One patient in this group who had had laser treatment for a tumor in the upper oesophagus was found the next day to have a broncho-oesophageal fistula, which required a jejunostomy.

This sentence has the same basic structure as example 3a. The prepositional NP has become the subject; information has been extracted from the adverbial time phrase and placed in a relative clause, leaving only the time element attached to the verb group, to which the complementary active verb «have» has been added.

The basic strategy applied maintains Spanish presentational order as far as possible, and achieves natural English syntax with the expected directness of the English sentence.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

IMPLICATIONS IN TRANSLATION ENGLISH-SPANISH

For this part of the analysis I have taken a sample text,[10] published both in English and Spanish. We can see the translator's task as identifying opportunities to use presentational structures naturally within the context of the wider discourse. In general, the translator was aware of the need for the Spanish to have the appropriate syntax of presentational sentences in the different rhetorical sections. For example, the opening sentences of the Abstract and the Methods were both presentational:

11. *A review* of 130 consecutive large bowel examinations at which a cancer of the colon or rectum was diagnosed *has been undertaken*. [Abstract]
Se ha realizado una revisión *de 130 exploraciones colónicas consecutivas en las que se diagnosticó un cáncer de colon o recto.*

Moreover, the first part of the Spanish Methods section was organised around «se» presentationals, which contrasts with the listing of largely unrelated English themes and the awkward position of the passive verb:

12a. A review was carried out...
Se han revisado *130 exploraciones...*
b. Patients [+ definition] were not included in the study.
No se ha incluido *a los enfermos...*
c. The extent of the examination, [etc.] was recorded.
Se registró *la extensión de la exploración*, [etc.]...
d. In addition, the presence of other benign disease [...] was noted.
Además, se tuvo en cuenta *la presencia de otras enfermedades...*

However, the final translation was not always successful or natural because other discourse or semantic implications had not been considered.

13. *There is a significant risk* of synchronous neoplasia in patients being treated for colorectal cancer.
Los enfermos sometidos a tratamiento por cáncer colorrectal presentan un riesgo significativo de desarrollar neoplasias sincrónicas

The translator has ignored the direct presentational translation perhaps because it seemed too stark at the head of the Introduction. As a result, the meaning becomes confused. Synchronous neoplasia does not develop; it is already present. Use of an initial prepositional NP helps to solve the syntactic and the denotative problem:

* *En los pacientes tratados por carcinoma colorrectal* existe un riesgo significativo *de que presenten neoplasias sincrónicas.*

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[10] J. Tate *et al*: «Preoperative or postoperative colonic examinations for synchronous lesions in colorectal cancer», *British Journal of Surgery* (1988), *75*, pp. 1016-1018; and Br J. Surg (ed. esp), Vol. 1, 1989, pp. 85-89.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

Identifying the focus and maintaining the information flow can be important in moving from English to Spanish:

14. Of 50 patients examined by colonoscopy, the whole colon was seen *in only 21_(42%)* and almost half of these had a tumour in the caecum or ascending colon. [Abstract]
De los 50 pacientes explorados mediante colonoscopia, únicamente en 21 (42%) de ellos pudo observarse el colon en su totalidad; aproximadamente en la mitad se detectó un tumor en el ciego o en el colon ascendente.

The translator has concentrated on the whole-part relationship and has missed the focus of the English (underlined) and the connection with the subsequent explanatory detail. A transformation to a presentational with a different preposition produces better information flow with correct focus:

* *En los 50 pacientes explorados mediante colonoscopia,* pudo observarse el colon_completo de tan sólo 21 (42%) *y en aproximadamente la mitad de éstos se detectó un tumor en el ciego o en el colon ascendente.*

In English, the whole of a statement embedded in a reporting matrix clause is asserted:

15. It is clear that *pre-operative* diagnosis of synchronous lesions is preferable as the choice of operative procedure may be affected;
Está claro que es preferible realizar *el diagnóstico preoperatorio de las lesiones sincrónicas, puesto que ello afecta a la elección de la técnica quirúrgica*;

Here, the focus falls on «pre-operative», and a comparison is implied through «preferable» with intra-operative and post-operative. This interpretation is confirmed by the explanatory subordinate clause. In Spanish, the change in word order is justified, but the addition of «*realizar*» now appears to establish a comparison between doing or not doing the examination, «pre-operative» has lost its focus, and the connection with the following statement is more difficult to see. However, the infinitive is not a compulsory component in this structure, the noun being sufficient, while separating the adjective allows the focus to be restored:

* *Está claro que es preferible* el diagnóstico *de las lesiones sincrónicas* en el preoperatorio, *porque puede verse afectada la elección de la técnica quirúrgica.*

The position of certain elements related to presentational sentences is not trivial. The scope of an initial infinitive of purpose can extend beyond the limits of the sentence in which it occurs.[11]

16.*To assess the results*, patients were divided into those with proximal and distal cancers (Figure 1).

[11]S. A. Thompson: «Grammar and written discourse: Initial vs. final purpose clauses in English», *Text* (1985), *5*, pp. 55-84.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

Los pacientes se dividieron en 2 grupos según la localización del cáncer fuera proximal o distal con el propósito de evaluar los resultados obtenidos *(fig. 1)*.

The patients are clearly not going to do their own assessment, and the reader who looks at the figure will only find the location of the tumours. The scope of the infinitive, in fact, covers the whole paragraph of 4 sentences. This has been lost in the Spanish, where the infinitive can only have local scope and appears to refer to the figure. The reader will be mystified until he has read the whole paragraph. Interpretation can be made easier by maintaining the initial position and using a typical presentational sentence of the defining type:

* *Para el análisis de los resultados,* se consideraron dos grupos de pacientes *según la localización del cáncer fuera proximal o distal (fig. 1).*

In the Results section, new concepts are not usually introduced and the frequency of presentationals is lower than in other sections. However, elements may need reintroduction. The next example occurred in a paragraph in which incidence was the main topic. Having dealt with malignant tumours, the authors make a slight jump to consider benign tumours:

17. *Synchronous adenomatous polyps* were noted in six patients (8%) having DCBE and eight patients (16%) having colonoscopy. The overall incidence of synchronous polyps is not known.
Seis (8%) pacientes sometidos a EODC y 8 (16%) a colonoscopia presentaron pólipos adenomatosos sincrónicos. Se desconoce la incidencia global de los pólipos sincrónicos.

The statistical rather than the pathological information should be included in the rheme as new information. A presentational sentence again solves the problem:

* Se observaron pólipos adenomatosos sincrónicos *en seis (8%) pacientes sometidos a EODC y en 8 (16%) sometidos a colonoscopia.* Se desconoce...

The second sentence still connects thematically as there is a move from observed data to information that cannot be evaluated from the results.

Presentationals can also be standard formulae in specific parts of a research report. These can introduce the paper through the main aim:

18. *A study has been undertaken to determine* the quality of pre-operative examination of the large bowel in patients with colorectal cancer.
El propósito de este estudio ha sido determinar *la calidad de las exploraciones preoperatorias del colon en enfermos afectos de cáncer colorrectal.*

While the author has used a recognised formula, the following (pseudo-) presentational version is closer to the original:

* *Con el fin de determinar la calidad de la exploración preoperatoria del colon y recto en pacientes con carcinoma colorrectal* hemos realizado [se ha realizado*] el siguiente estudio.*

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes

This is also a standard formula and links better with what went before and what comes after. Either a 1st-person form or a reflexive form could be used.

Such formulae also introduce citations, especially in the Discussion:

19. *It has been suggested that* such patients should have total colectomy and ileocolic anastomosis, but we agree with others who favour such radical treatment only in younger patients with multiple adenomas.
Se ha indicado que *dichos pacientes deberían someterse a colectomía total más anastomosis ileocólica; en este sentido, coincidimos con otros autores en que dicho tratamiento radical debe reservarse para los individuos más jóvenes que presenten adenomas múltiples.*

The reflexive passive is unnatural with this function in Spanish and does not connect cohesively with the second part of the sentence, hence the addition of the discourse marker.

* Aunque hay autores que *defienden la colectomía total más anastomosis ileocólica para estos pacientes, coincidimos con otros en que dicho tratamiento radical debe reservarse para los individuos más jóvenes que presenten adenomas múltiples.*

Here, the reporting framework introduces «*autores*» connecting the two parts cohesively, and further coherence is achieved through subordination, restoring the overt contrast of the original.

This section has demonstrated the translator's need to identify the opportunities for presentational sentences and to translate them with the appropriate syntax and information focus. Failure to do so will lead to unnatural or unacceptable Spanish.

To conclude, it is perhaps paradoxical that English should have become the *lingua franca* of scientific communication since its fixed word order can make it syntactically unsuitable. Languages with a freer word order, such as Spanish, are in fact better equipped for natural presentation of the concise and sometimes fragmented discourse of scientific reporting.

La Palabra Vertida. WILLIAMS, Ian. Presentational-type structures in medical reports
Centro Virtual Cervantes