# Title: The circuit of symbolic violence in Chronic Fatigue Syndrome (CFS)/Myalgic Encephalomyelitis (ME) (I): A preliminary study

Author: Xavier Gimeno Torrent (https://xaviergimeno.net/, https://x.com/Xavier\_Gimeno)

**Affiliation:** Department of Sociology, Universitat Autònoma de Barcelona (Autonomous University of Barcelona)

Correspondence to: xavier.gimeno@xaviergimeno.net

**Funding details:** This research has not had any public or private funding or crowdfunding in any of its stages for any purpose. The author also does not receive any funding of any kind.

Disclosure statement: No conflict of interest at all.

Acknowledgments: This research has been carried out within the framework of the Sociology PhD program of the Department of Sociology of the Universitat Autònoma de Barcelona (Autonomous University of Barcelona).

Abstract: Objective: How can it be that a disease as serious as CFS affecting such a large number of people could be so unknown to the general population? The answer given to this question is based on Pierre Bourdieu's analyzes of symbolic violence, a field of study of which he was the forerunner and main theoretician. Method: The "letters to the editor" by CFS patients to three national Spanish newspapers were subjected to various qualitative (analysis of themes and subthemes) and quantitative analyzes (univariate description by themes and Multiple Correspondence Analysis [MCA] combined with an Agglomerative Hierarchical Clustering [AHC]). Results: Based on the qualitative analyzes and their theoretical interpretation, 13 mechanisms of symbolic violence were identified: non-recognition (27%), institutionalized uncare (16%), condescension (0%), authorized imposition of illegitimate verdicts (15%), delegitimization (11%), disintegration (16%), imposition of discourse (1%), euphemization (4%), silencing (1%), invisibilization (2%), isolation (3%), uncommunication (0%), and self-blaming (4%). MCA made it possible to identify that the structural mechanisms (non-recognition, disintegration) were combined with the most symbolic ones (i.e., imposition of discourse, euphemization), which came to the forefront producing the observed effects of symbolic violence. The 13 clusters obtained in the AHC confirmed this result.

**Keywords:** chronic fatigue syndrome, myalgic encephalomyelitis, negative symbolic capital, symbolic capital, symbolic violence.

This is the "accepted" or "postprint" version of the manuscript. The Version of Record (orpublisher's version or final version) of this manuscript has been published and is available inHealthCareforWomenInternational,2022,https://doi.org/10.1080/07399332.2021.1925900.

**How to cite:** Gimeno Torrent, X. (2022). The circuit of symbolic violence in Chronic Fatigue Syndrome (CFS)/Myalgic Encephalomyelitis (ME) (I): A preliminary study. *Health Care for Women International*, *43*(1-3), 5-41. https://doi.org/10.1080/07399332.2021.1925900.

# The circuit of symbolic violence in Chronic Fatigue Syndrome (CFS)/Myalgic Encephalomyelitis (ME) (I): A preliminary study

"What the social world has done, it can, armed with this knowledge, undo." Pierre Bourdieu, *The Weight of the World*, p. 629.

## 1. Symbolic violence in CFS: Theoretical contextualization and objectives of the study

Chronic Fatigue Syndrome (CFS) is a highly disabling and highly prevalent disease that mostly affects women (Dinos et al., 2009; Goldman, 2017). But how can it be that a disease as serious as CFS and that affects such a large number of people (it is estimated that in Catalonia between 2,000-13,500 cases; in Spain between 15,000-90,000 cases) (Fernández Solà, 2002) is so unknown by the general population, especially if we compare it with other diseases (such as cancer) that are more widely known and recognized? To answer this question, this research is based on the fact that the processes of social perception are not simple acts of registration, of a neutral and natural description of reality, but rather that the social relations of power intervene, leading one's eyes "with all the passivity" in such a way that reality is defined so that it favors the most powerful social groups. What Pierre Bourdieu has called "symbolic violence" is fundamental in this phenomenon. It consists of that process through which social groups impose in the form of common sense; that is, without the need to explicitly or deliberately state it, to others what is socially thinkable and unthinkable in such a way that the latter give the former a relational and symbolic power, a doxical domination, an epistemological privilege (Bourdieu, 2008) over them. To put it briefly, most *well-integrated people* (who, on the other hand, are the majority) give a cognitive advantage to the established way of doing things, as it cannot be otherwise, so that, by omission and without knowing it, they end up to define reality in favor of the most powerful and against, to the detriment of those who have less power, which end up being completely relegated to a subordinated status (Bourdieu, 1991). The intention of this study is to reveal the mechanisms (Bunge, 1999) by which this intolerable symbolic violence is generated and perpetuated by denying recognition (Bourdieu, 2000a, 2015) in its most diverse forms in the case of CFS.

It is an entirely social, structural, and symbolic approach that seems absolutely necessary. From the study of the field of scientific production on the social effects of CFS from its inception until now (1990-2021) (scientific articles, letters to the editor of scientific journals, comments in scientific journals, editorials of scientific journals, conference papers, book chapters, gray literature, undergraduate, MA-MSc, and PhD dissertations), I have identified 236 productions revolving around 12 paradigms: social and cultural factors in the somatization of CFS (14 [documents]; 6%) (Abbey & Garfinkel, 1991; Ware & Kleinman, 1992); attributions about CFS (18; 6%) (Moss-Morris et al., 1996); knowledge, attitudes, and beliefs before CFS (33; 14%) (Bowen et al., 2005; Ho-Yen & McNamara, 1991; Raine et al., 2004); physician/medical fieldpatient relations (20; 8%) (Åsbring & Närvänen, 2003; Broom & Woodward, 1996; Cooper, 1997); alternative treatments and management of CFS by patients (patient groups) (11; 5%) (Edwards et al., 2007; Jones et al., 2007; Lian & Nettleton, 2015); barriers to medical care in CFS (14; 6%) (Bayliss et al., 2014; Deale & Wessely, 2001; Dumit, 2006); pediatric CFS (14; 6%) (Crawley et al., 2012; Lievesley et al., 2014); stigmatization/delegitimization/discrimination processes in CFS (18; 8%) (Åsbring & Närvänen, 2002; Ware, 1992); the body, identities, experiences, and narratives of CFS (28; 12%) (Åsbring, 2001; Clarke & James, 2003; Larun & Malterud, 2007); activity, disability, and CFS (7; 3%) (Gray & Fossey, 2003; Taylor, 2005); effects/impact of CFS on family and caregivers (9; 4%) (Donalek, 2009; Sabes-Figuera et al., 2010); power relations between science and society in the definition and legitimation of CFS (9; 4%) (Jason, 2012; Jason et al., 1997; Richman et al., 2000). As can be seen, 52% (124) of these productions are based on the dominant "medical paradigm" that studies the social effects of CFS either from a theoretical approach purely medical (somatizations, attributions, pediatrics, alternative treatments) or from those typical factors of the medical field (medical encounter, barriers to medical care, physician attitudes) that are supposed to contribute to produce these effects. But what gives an even clearer idea of the hegemony of this medical paradigm and, more

importantly, of the monopolistic dominance of a biomedical model based on the same biomedical field that underpins it is the fact that it concentrates all symbolic (it receives 99.5% of citations!) and material resources (the adjusted residual for "medical paradigm" & "funded" is 3.430, whereas for "non-medical paradigm" & "non-funded" is 3.858; that is, if you work with the medical paradigm you are more likely to get funding than if you do not!) of a field of research like the one of the social studies of CFS that requires a better and global knowledge of the social, structural, and symbolic mechanisms not at all provided by this medical paradigm, which studies the phenomenon in a very disaggregated way far removed from social science. With this preliminary study on the circuit of symbolic violence in the CFS I would like to contribute, as far as I can, to the first steps of this global model from the social sciences.

#### 2. Mechanisms of symbolic violence in CFS

Following Mario Bunge and Pierre Bourdieu, the process, which I have called the circuit of symbolic violence in CFS, would be as follows: Symbolic violence  $\rightarrow$  Negative symbolic capital  $\rightarrow$  Social death  $\rightarrow$  Demoralization (Bourdieu, 1999)  $\rightarrow$  Suicide (Bourdieu, 2000a; Bunge, 1999). In this article I can only deal with the early stages of this process but the whole circuit must be kept in mind.

## 2.1. Non-recognition, institutionalized un-care and condescension

"Non-recognition," based on the most basic institutionalized mechanism of symbolic violence naming, performative naming or categorization (Bourdieu, 1987, 1998, 2000a, 2001, 2014), consists in the fact that the State, through the diverse Public Administration agencies, acts according to the principle of non-recognition of CFS directly denying the relevant certifications. Other deterrent strategies of the State to achieve the same result are: humiliations and systematic mistreatment of CFS patients so that they despair and give up, violation of the rights of CFS patients, repeated social abuse to patients, and delay of recognition requests. The main consequence of all these behaviors is the denial of the social value of CFS patients both as people and sick. But it also leads to the difficulty of the patient to accept himself and his limitations and the internalization of the denial of recognition, the violation of the right to dignity of affected families, the judicialization of disability recognition, and the double bind (Elias, 1987), which refers to contradictions between spheres of the State that follow opposite logics, mainly between financial agencies and spending or social agencies (Bourdieu, 1999, 2000b, 2014). These contradictions occur when the diagnoses of the members of healthcare professions are directly unauthorized and denied by the relevant certification of disabilities institutions (Spanish Social Security Administration, Catalan Institute of Medical Assessments [CIMA], etcetera). This leaves patients and their families without knowing what to expect, in no man's land, and always in falsehood, in a social vacuum.

In addition, in fields such as public healthcare system, social services, and socio-health assistance this principle of non-recognition of CFS will be accompanied by two complementary mechanisms: *"institutionalized un-care"* (or, in the words of different patients, "helplessness") and *"condescension."* Institutionalized un-care can easily lead to diverse kinds of discrimination. There is also a scientific un-care referred to the shortage or, rather, the lack of funds (public and private) for CFS research.

The Annex provides illustrative examples of all the aspects described here (as well as of the mechanisms of the later sections) for ease of understanding.

#### 2.2. Authorized imposition of illegitimate verdicts

It is intimately interrelated with the three previous mechanisms and also based on naming and categorization. The rule here is that the medical assessment tribunals responsible for declaring patients legally disabled or ill, end up ruling that CFS patients have a different disease than the one they really have. Also, it can happen that a patient is not diagnosed until many years after the first symptoms appear. During the interim it is very possible that an alternative disease is assigned to her or him that is in accordance with all the preventions of public institutions regarding CFS. Very often, what takes place is a *"doxical imposition."* The so-called "alternative therapies" and

"gurus" of all kinds are one of the most obvious signs of this to which, unfortunately, many CFS sufferers cling in a desperate attempt to find the solution to a situation that literally puts them at the limit of their strength.

#### 2.3. Delegitimization

Non-recognition of CFS patient and CFS disease by the State generates their delegitimization in social space (Bourdieu, 2015; Weber, 1946). He or she finds himself in a situation of moral and logical non-conformism (Durkheim, 1964). That is, he does not meet the expectations from common sense (Bourdieu, 2000a, 2014, 2015) of the healthy society, its "normality," and, above all, he cannot follow its social rhythms, so that the CFS patient will feel himself continuously "misunderstood." This "incomprehension" on the part of healthy society is one of the most common complaints made by CFS patients. Other times, this delegitimization is expressed explicitly, in the form of insults or expressions to discredit or dishonor CFS patients.

But perhaps the main indirect indication of the existence of this delegitimization is generalized questioning of the patient and his illness by healthy society of the following type: "you are psychically creating yourself the disease," "What you must do is work, do you have any higher education qualifications, do not?", "you are young and you look so nice," "She cannot be so bad in health." These "defenseless trials," in the words of a patient, will be commonplace for those affected by CFS.

Another aspect of this delegitimization is the "decredibilization" of the patient and the disease, the inverse product of what Bourdieu (2014) calls the *belief effect of the State*. As one patient says: "If you laugh, it is that you are not sick, if you cry, you make a lot of fuss (about nothing)."

#### 2.4. Disintegration

From a social point of view, the main symptom of the disease is the inability of patients to follow the social rhythms established in our societies. Following legitimate social rhythms is the main source of social integration (Bourdieu, 2000a; Bourdieu & Passeron, 1979; Durkheim, 1964). Not being able to follow them produces the "disintegration" of the patient both at the primary (family) and secondary (friends, work, etc.) level.

This is how phenomena such as the following occur: divorces; social, labor-productive and labor-reproductive disintegration; necessary re-adaptation of CFS patient and his social circle to the social rhythms and customs required by the disease; conflicts between customs and labor/social rhythms of sick and non-sick; or resistance to social and labor disintegration and difficulty of adaptation to it. For example, as shown by several letters and interviews, the ill people accustomed to receiving greater professional recognition, who are usually those who carry out trades that place them in a higher social position (orchestra directors, professors, architects, mayors, senior managers of leading musical institutions, etc.), are those who find it more difficult to accept the disease, since this implies failing to obtain the symbolic capital or recognition to which they are so accustomed. Frequently, they tend to resist diagnoses (which leads to a very likely worsening of the disease) and, from the point of view of discourse, they are the most likely to resort to strategies of self-blaming and euphemization, precisely to avoid transmitting to others a whole series of negative signals that drive away the non-sick, which could mean that they cannot obtain the recognition they need as much as the air they breathe.

Moreover, not being able to take part in socially instituted rhythms entails the loss of the *privilege* of being able to fulfill a social function, and the loss of socially shared temporal horizons. That is, it implies not having a future, a lack of expectations. The CFS patient feels that he has no social value, that his life is worthless and meaningless. This phenomenon is accentuated in a socio-historical context in which time becomes a "scarce commodity" because no one has time for anyone and, therefore, time dedicated to others tends to reflect its importance and social value. CFS sufferers, expelled from this symbolic capital market of time very often highly ingrained with the labor market and with conspicuous consumption (Bourdieu, 2000a; Greenfield, 2018; Veblen, 1922), are the most likely to capture the value of time that no one else dedicates them and that is an index of the value of their own person. That is, they are much more vulnerable

than any other social category to the ravages of being no one to anyone. Under these circumstances, it should not be surprising that some informants consider life "a death in life." A description that, however figurative and metaphorical it may seem, must be taken literally because the circuit of symbolic violence in the CFS inevitably leads in the social death of the CFS patients.

### 2.5. Imposition of discourse

Linked with everything that has just been said there is another dimension, that of the *"imposition of discourse"* or *symbolic imposition* (Bourdieu, 1991). The imposition of discourse refers to the fact that CFS patients will be socially forced to show only those aspects of their disease that generate social acceptance and are in line with the "normality" patterns of healthy society. As we have seen before, delegitimization and non-recognition of CFS leads to the social disintegration of the patient, so she or he will try to show himself in a way that generates less social rejection and greater social desirability to counteract this disintegration, not "making the healthy society feel uncomfortable." That is, normality is imposed on him (Bourdieu, 2001), and to show that he meets these criteria of normality he will resort to the necessary symbolic and discursive *strategies* (Bourdieu, 2014; Bourdieu & Wacquant, 1992). The main goal here is hiding any negative social signal. The variants I have identified in the letters to the editor are as follows: imposition of heroic discourse, imposition of normality discourse, imposition of non-victimist/non-self-pitying discourse.

To grasp the overall dynamics of this process, we must understand that what "tries to avoid the sick" (a finalist language is used throughout this article to describe processes that by no means are finalist) is to send negative social signals. This is what the patient wants to hide and this is what the non-sick people flee from, what generates "discomfort," according to the formula "one is discriminated not by what one is (sick), but by what one is not (non-sick)" which is the expression of what might be called, following Bourdieu and Goffman, negative symbolic capital or stigma (Bourdieu, 2000a; Goffman, 1963). Because, it has already been pointed out in this article, the search out for recognition, the fact of being appreciated by others, the non-sick, is the driving force of the social action of the CFS patient. His extraordinary lack of enjoyment of a dignified social existence makes him especially sensitive to all those comminations that involve obtaining recognition from the extreme subordination to a social order in which the difference between the sick and the non-sick is the difference between non-existing and existing (Bourdieu, 2000a). The absolute subordination to this principle of vision and division, which separates the sick from the non-sick is, for those affected by CFS, the sacred frontier that they will be unable to subvert and which, in most cases, explains most of their social behaviors. The difference between the *deprived* (Bourdieu, 2015) symbolic capital and the negative symbolic capital is for them the difference between heaven and hell, between life and death in life, that social death that they know so well.

## 2.6. Euphemization

Euphemization is another mechanism very similar to the previous one. But in this case, it consists more in the hiding of what the social relations in which the CFS patient is immersed imply and, very especially, of the symbolic effects they have for him or her (Bourdieu, 1998, 2017). Making an abstraction of the social conditioning to which he is subjected and of the exaggerated social impositions that it entails, *making a virtue of necessity*, what he tries, again, is to present a favorable image of himself that does not generate social rejection. What I have identified in this case is a continued use of the discourse of self-knowledge, a kind of rhetoric close to that of positive psychology that is very well accepted socially and is very widespread.

## 2.7. Silencing and invisibilization

Silencing is the fact that the patient will not talk to anyone about their illness to avoid the symbolic effects already indicated. It is another concealment strategy. It seems that is one of the most common behaviors among CFS patients. Invisibilization refers to the fact that CFS and patients are not visible because they have not been endowed with the socially legitimized signs that identify patients as patients and CFS as a disease. Indeed, as one patient says: "However, the

external appearance of the patient does not reflect the disease, it is normal. Moreover, so far there is no medical evidence that demonstrates conclusively that someone suffers from the disease."

#### 2.8. Isolation

Sometimes, it is a protective mechanism. CFS patient begins to stop interrelating with the healthy society because she or he feels constantly judged. It is a mechanism against constant banns and calls to "normality," to order, against the continuous questioning, attacks, signs of non-acceptance, incomprehension, and other effects. Other times, it is the result of extreme disintegration. These two modalities usually coexist.

# 2.9. Uncommunication

Isolation usually leads to the experience of *"uncommunication."* Very soon the patient finds it difficult to communicate with others, because the healthy society does not seem to be willing to understand him. But uncommunication can also occur independently of isolation.

## 2.10. Self-blaming

The symbolic violence generated by this circuit, the patient internalizes it in the form of a great social devaluation of himself, of his *amour propre*, and an extreme symbolic subordination to such an extent that he ends up contributing to impose on himself the observed effects of symbolic violence, which is an intrinsic characteristic of these phenomena (Bourdieu, 2000a, 2001).

Thus, a self-blaming effect takes place according to the model of what Robert K. Merton (1968) called *self-fulfilling prophecy* (see also Bourdieu, 2014). CFS patient will find the answers about what happens to him in a psychology based on explanations such as: "I have worked hard to learn about what is happening to me, to understand it..., and to change myself, to correct my old psychic structure, which was harmful to me," "All of my life I had done things (and left make others) to please, to fit within society, to be recognized... And to act seeking out external approval is to despise your essence," "This disease derives from a retention of action, not doing what you feel, repressing emotions. You're not loving yourself: the body somatizes the conflict, and it complains itself," "Yes, because women today demand more of themselves, to gain recognition of a male world... And that's why I was a perfectionist, self-demanding, rigid, proud."

Sometimes, the medical profession contributes to this self-blaming process. As one patient says, "I've had tests of all kinds, I've gone through psychiatrists who said it was postpartum depression and others who said I did not know how to organize myself. For years I have come to think that I had lost my mind or that I was a lazy person who did not know how to run the household and take care of my son." Thus, it seems that the medicalization of this symbolic violence can also be a way to contribute to the self-blaming of the patient.

#### \*\*\*

This type of symbolic violence is structured hierarchically in three levels (State, group, individual) since, by its very nature, symbolic violence is fundamentally generated, exercised and reproduced from top to bottom. Hardly in the opposite direction. A basic outline of its operation could be represented with the following *Boudon-Coleman diagram* (Bunge, 1999):

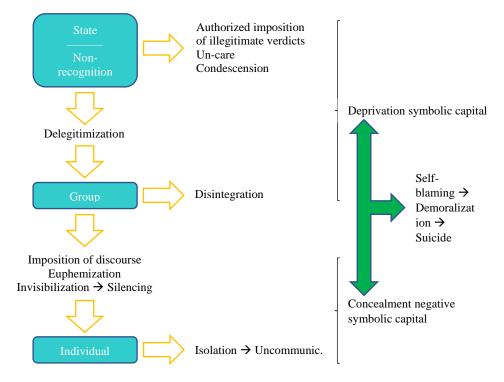


Figure 1. The circuit of symbolic violence in CFS.

## 3. Data and methodology

To produce the knowledge of this article, two complementary analyzes have been carried out. In the first place, a qualitative content analysis (Ruiz Olabuénaga, 1999) of all the "letters to the editor" sent by CFS patients to the three Spanish national newspapers *El Periódico, La Vanguardia,* and *El País* from 1/1/1999 to 12/31/2018 (tables 1 & 3). These letters to the editor have not been referenced in the bibliography to preserve the identity of the senders. All occurrences of the term "chronic fatigue" (in Spanish) were searched in the database MyNews in the three journals from 1/1/1999 to 7/16/2018. Between 7/17/2018 and 12/31/2018 very few materials were added manually only for *El Periódico*.

Absolute freq.	%
46	60
28	36
3	4
77	100
	46 28 3

Table 1. Distribution by newspapers.

Year	Absolute freq.	%
2001-2005	6	8
2006-2007	15	19
2008-2009	10	13
2010	8	10
2011	11	14
2012	2	3
2013-1014	7	9
2015	6	8
2016	7	9
2017	5	7
TOTAL	77	100

Table 3. Distribution by years.

<b>Document type</b>	Absolute freq.	%
Letter to the editor	64	83
Interview	9	12
Testimony	4	5
TOTAL	77	100

Table 2. Distribution by document type.

Sender	Absolute freq.	%
CFS patient	49	63
CFS patient father/moti	<b>her</b> 13	17
Husband of CFS patien	<i>t</i> 3	4
Known friend of CFS p	atient 1	1
CFS patient daughter	2	3
CFS patient relative	1	1
<b>Ex-CFS</b> patient	2	3
Doctor	2	3
Missing values	4	5
TOTAL	77	100

Table 4. Distribution by sender.

And it must be emphasized that these are documents produced by "CFS affected people" or in which they are the protagonists because, as can be seen in table 4, the documents analyzed (exactly not only "letters to the editor," as evidenced in table 2, although these were majority) have not been elaborated only by CFS patients. Although 66% (51 cases) of the materials examined have been written directly by patients or ex-patients, 29% (19) have been written by other people, usually those closest to the patient. This multi-agent strategy has been indispensable to study in a global way the functioning of very complex symbolic violence processes with many people involved in and affected by it apart from CFS patients themselves, so that to understand these processes it has been necessary not to focus on who, but especially on what. That is, on the mechanisms (on the thing which was explained), not on the people (on the person who told it). In this sense, the repetition of the same informant has never been an exclusion criterion. On several occasions, the same person is the author or the interviewee of more than one document. Obviously, this would invalidate any description of the demographic characteristics of a set of documents that, on the other hand, has never been intended to be described in this way, in the first place, because these variables were almost never provided. And second, because the adopted methodological strategy prevents the representativity of the population described. To say, anyway, that 35% (27) of the documents are of men and 62% (48) of women (in two documents it was not possible to find the sex of the senders because they signed them with their abbreviations). That age is a variable that cannot be obtained in 69% of the cases (53 of a total of 77). And that the same thing happens with the profession in 42% of cases (32), and with the years of illness (41 cases, 53%). Finally, adding that the distribution in terms of the diseases suffered is as follows: CFS (18 cases; 23%), CFS+Fibromyalgia (FM) (8; 10%), FM (3; 4%), CFS+FM+others (2; 3%), CFS+others (2; 3%), CFS+FM+Multiple Chemical Sensitivity (MCS) (20; 26%), CFS+MCS (5; 6%), CFS+MCS+others (1; 1%), Missing values (16; 21%), Ex-CFS patient (2; 3%).

The aim of the qualitative content analysis has been to identify and explain the mechanisms of symbolic violence. The results of this analysis have just been presented and they have consisted in the classification and theoretical interpretation of themes and subthemes.

In a second moment, the results of this qualitative content analysis have been treated quantitatively, following the traditional guidelines of a classical analysis of content, according to the criteria set out by Cea D'Ancona (1999) in her book *Metodología cuantitativa [Quantitative Methodology]* (see also Krippendorff, 2004). This analysis has been done manually. The content encoded or registered have been the themes or categories, which corresponded to each of the mechanisms of symbolic violence that have just been presented. Since the length of the texts was short (on average they had 278 words), the entire text has been analyzed in each case. This brevity of the texts has also led to the context units being each of the letters. Even in some cases, when it came to analyzing letters from people who had published more than one, the context was given by the letters analyzed previously, since these allowed to interpret their content with greater guarantees of not committing classification errors. It must be said, however, that once all the contents of the letters were classified, it was verified that there were no classification errors, and to correct them if necessary.

Needless to say, that in the coding of the categories it has been ensured that they meet the three basic requirements: completeness (they must cover the entire range of the object of study), exclusivity (it is necessary that each unit of registration is classified in a single category), and precision (categories cannot be ambiguous). The categories of analysis, in addition, are also relevant, since they are adapted to the objectives of the research, and homogeneous, since they respond to a single classification principle: symbolic violence against CFS patients. Thus, apart from the 13 categories corresponding to each of the mechanisms presented here, the following variables have also been codified:

Variable	Description	Labels
NEWSPAPE	Journal publishing the letter	El Periódico, El País, La Vanguardia
YEAR	Year of publication of the	2001-2005, 2006-2007, 2008-2009, 2010, 2011,
	letter	2012, 2013-2014, 2015, 2016, 2017
PROFESSI	Sender's profession	Various
SEX	Sender's sex	Man, Woman
AGE	Sender's age	27-37, 38-42, 43-46, 47-51, 52-54, 55-57, 58-59
SENDER	Person writing the letter	CFS patient, A known friend of CFS patient,
		Husband of CFS patient, Ex-CFS patient, CFS
		patient relative, CFS patient daughter, Doctor, CFS
		patient father/mother
RECEIVER	Who is the letter addressed to?	Health authorities, Catalan minister of health, CFS
		patients, Public hospitals, Reader, Media,
		Government agencies' disability impact assessment,
		Public powers
DISCTONE	Discursive tone	Support-complaint, Complaint-committed,
		Informative-neutral, Request-complaint, Request-
		informative, Claiming, Positive tone
HEALTH	Sender's diseases	Various
DURATION	Years of illness	2-5, 6-8, 9-12, 13-17, 18

Table 3. Additional variables in content analysis.

The classical quantitative analysis of content mentioned above has consisted of a univariate description of the themes that has been complemented later with a Multiple Correspondence Analysis combined with an Agglomerative Hierarchical Clustering (Benzécri, 1992; Greenacre, 2007; Hjellbrekke, 2019; López-Roldán & Fachelli, 2015) which have allowed to explore the relationship of the various mechanisms of symbolic violence between themselves and between some of the additional variables to deepen the dialectic that is established between symbolic capital and negative symbolic capital, unveil the latent structures of symbolic violence, the strategies of the agents in this regard, and build a possible preliminary typology of their *habitus*. The results of these analyzes are presented in the next section.

#### \*\*\*

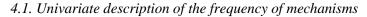
As for the quality of the data and its relevance for the analyzes carried out, it should be noted that of a total of 108 documents obtained, 77 (71%) were analyzed. In the following table the explanatory incidents of the discarded documents are indicated:

Incidence	Absolute freq.	%
Repeated contents	7	23
CFS was not the subject of the document	14	45
The document was not a letter or interview	6	19
Lack of information in the analysis	3	10
Repetitive document	1	3
TOTAL	31	100

Table 4. Explanatory incidents of discarded documents.

Finally, adding only that the total classification rate, which refers to the percentage of words classified by the model over the total, is 73%. This indicator gives a fairly clear idea of the power of the model to cover all the themes that appear in the analyzed materials.

## 4. Results and analysis



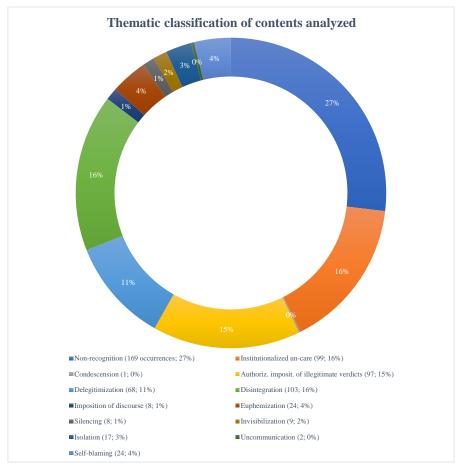


Figure 2. Thematic classification of contents analyzed.

As expected, the centrality of the explanatory mechanism that revolves around the dialectic that is established between the deprivation of symbolic capital and the concealment of negative symbolic capital is clearly shown when interpreting figure 2. It can easily be seen that it is divided into two distinct bands. The first is formed by six mechanisms of symbolic violence that account for 85% of the observations: non-recognition, which is the majority, institutionalized un-care, condescension, authorized imposition of illegitimate verdicts, delegitimization, and disintegration. A look at figure 1 will serve to verify that it is precisely the six mechanisms of deprivation of recognition, a symbolic capital, which, as patients first and later persons, is systematically denied to them, and that is why they denounce this fact, and they vindicate it insistently through the letters they write and the interviews they answer. Because we must not forget that these are documents published in newspapers whose objective is to be seen publicly. And that is a fundamental feature that will end up giving full meaning to the role they fulfill for those affected. In fact, it is not surprising to realize that among all the possible "discursive tones" of the contents analyzed ("Support-complaint" 2 documents [3%]; "Complaint-committed" 47 [61%]; "Informative-neutral" 20 [25%]; "Request-complaint" 2 [3%]; "Request-informative" 3 [4%]; "Claiming" 2 [3%]; "Positive tone" 1 [1%]), the "claiming" tone represents 70%. That is, a clear correspondence is established between the explanatory mechanism of the deprivation of symbolic capital, which accounts for 85% of the contents analyzed, and the tone of the documents, predominantly claiming, which ends up giving light to certain behaviors of CFS patients around the symbolic violence they suffer.

In the same way, the second strip is formed by the rest of the mechanisms. In this case, it is the strategies of concealment of negative symbolic capital that, as it cannot be otherwise, are entirely minority. Obviously, nobody would risk showing in a newspaper, that is, *in public view*, publicly, what she or he is so zealous to hide. This is the reason why the mechanisms of imposition of discourse, euphemization, silencing, invisibilization, isolation, uncommunication and self-blaming only cover 15% of the contents examined.

These thirteen mechanisms constitute the main conditions for the socialization of patients as such in the CFS experience (that is, the construction of the identity of "CFS patients") to such an extent that they constitute a *habitus* (Bourdieu, 2000a), that of "CFS patient." This *habitus*, with its well-defined and relatively stable dispositions, is what explains the regularities shown by the data regarding the centrality of the explanatory mechanism around the dynamics of the deprivation of symbolic capital and the concealment of negative symbolic capital which is reflected so well in the content of the documents, seen as behaviors of claiming-denunciation or of concealment of a symbolic violence that governs every aspect of the behaviors and the lives of the sick, usually without full awareness, also when it comes to a behavior such as writing a letter or answering an interview that everyone will see, which is open to everyone. In this lies the incalculable value of these documents for this study.

#### 4.2. Multivariate analyzes

The guideline that has governed the multivariate analysis performed has been broadmindedness in order not to limit or define in any way (especially, mistakenly) the orientation of a preliminary study that, due to the very indeterminacy of a phenomenon of which everything remains unknown, it must allow to obtain a panoramic image as wide as possible of the object of study. For all practical purposes, this has led to unprecedented research decisions such as retaining a considerable number of axes in the Multiple Correspondence Analysis (MCA), mainly due to the inclusion of variables that, because of the insignificant number of cases they collect, would not have any statistical justification; or also such as performing an Agglomerative Hierarchical Clustering (AHC) with more groups than would be recommendable and much smaller than what the good classificatory judgment would dictate to us; and that can only be explained by the intuition that, sometimes, the technical precepts should be skipped so as not to violate and make disappear some objects of study that from the first moment are condemned to not exist by the action of concealment, indefiniteness and insignificance that they exert themselves, and that usually involves anomalies such as statistical insignificance.

Therefore, the multivariate analyzes performed consisted of an MCA combined with an AHC. To perform them, the statistical software XLSTAT has been used (Addinsoft, 2021). The strategy of the combination of techniques has been chosen because the results of the analyzes have served to validate them mutually. In this way, the number of axes to be considered in the MCA and the number of groups in the AHC have been chosen from five criteria. First, cumulative percentage of adjusted inertia for each of the axes. Second, cumulative percentage of unadjusted inertia for the rest of the axes; a criterion that has come into play when it has been verified that the axes with an eigenvalue higher than the inverse of the total number of variables were not enough to explain 80% of the adjusted total inertia. Third, the various cophenetic coefficients of all the AHCs performed to the various solutions of the MCAs between 2 and the total of 24 axes. Fourth, total, intraclass, and interclasses variance of these various solutions. Fifth, the number of groups resulting from the various AHCs.

The combination of both techniques has not only facilitated the "cross-control" of their respective validities. It has also enabled one of the fundamental tasks after the interpretation of the axes obtained in the MCA: the characterization of the observations. At the same time that the MCA has provided a precise and rigorous description of the axes of symbolic violence and the symbolic strategies of the agents, the AHC has provided a preliminary typology of their *habitus*.

\*\*\*

The main requirement of the MCA is that all variables under study must be multiple nominal. As some of the variables in the database (the age, the year of publication of the document, and the years of illness; which were finally not used) were originally collected at a level of measurement different from the nominal/categorical (they were discrete variables), they were subjected to transformations to convert them into multiple nominal variables. This is how the module of discretization of variables of the software was used to transform these discrete variables

into interval variables assimilable to multiple nominal variables. This module automates this process from several options to be chosen by the user. In our case, the procedure was based on Fisher's classification algorithm, which is a technique built on Fisher's linear discriminant analysis. We chose this alternative for two reasons. The first because the procedure is especially indicated in samples of less than 1,000 cases. The second because, although it is necessary to establish previously the number of intervals that will be created, the method is able to automatically combine similar observations in the same class, so that finally the total number of intervals ends up being smaller than initially stipulated, which is highly recommended when performing an MCA. On the other hand, the 13 dimensions of each of the symbolic violence mechanisms, which for the univariate analysis were also discrete, were also transformed into interval variables as an indispensable condition to carry out the MCA, but in this case the recoding was not based on Fisher's algorithm. These variables were submitted to several MCAs to see how the inertia of the obtained axes behaved, and later they were recoded. The main criterion of this recoding has always been to respect the original number of categories as much as possible, but when it has been greater than 3, there has been no choice but to limit it to 3. The second criterion that has been tried to follow has been to distinguish between the absence of these mechanisms in the discourses (0 appearances) and their presence (one appearance or more), beyond their intensity. The third, attempt to preserve as much as possible the extreme values, keeping them separate from the rest. As noted above, epistemological vigilance has advised to safeguard these exceptional cases (which are not always the least abundant), the true depositaries of the most supreme symbolic violence, not deliberately confusing them with the rest by means of the statistical device of the recodification of the least frequent categories. Then, the MCA included here has been carried out. Some variables such as profession, age, years of illness, or the diseases suffered, which were fundamental in the MCA, were not included because they contained such a number of missing values that drastically reduced the volume of cases analyzed. Possibly, in order to better characterize the population, this obstacle could have been overcome considering all these variables as supplementary variables. This alternative was rejected since this could lead to error when interpreting that certain categories were associated with other categories of variables with high rates of missing values, when in fact what would be observed would be the overrepresentation of the present categories of the variables with high rates of missing values compared to the absent ones for which the pertinent information would not be available.

\*\*\*

The number of valid cases was 71 out of a total of 77. The total inertia explained by the thirteen axes retained was 82.78%. Such number of axes not only accumulates almost the totality of the inertia, but also corresponds to the number of axes that, accounting for most of the variability of the data, maximizes the interclasses variance of the optimal classification in the AHC, which is 74% and it is associated to a cophenetic correlation coefficient of 0.72. The first statistical parameter is indicative of the grouping of elements dissimilar than those of the other groups and similar to each other (intraclass variance: 26%), and the second that there have been no large jumps in the variability of successive pairs of clusters that have been grouped. In short, they guarantee that we are grouping apples with apples and pears with pears.

The decomposition of the different axes in terms of the contribution of the variables and the oppositions between their categories is as follows. F1 is the axis of the discursive tone: symbolic subordination vs. denunciation. It identifies the discourse of ex-CFS patients who speak to patients adopting very strongly strategies of concealment of negative symbolic capital such as self-blaming, euphemization, doxical imposition (Authorized Imposition of Illegitimate Verdicts AIIV-5-12 times), informative-neutral tone, and delegitimization; and it is opposed to discourses denouncing the State's helplessness towards CFS patients not focused on delegitimization. F2 deals with the social effects of CFS according to sender, receiver, and sex of discourse' spokenperson: men ex-CFS patients-men relatives of CFS patients-women. It is the discourse of men ex-CFS patients addressed to CFS patients employing symbolic strategies as self-blaming and doxical imposition (AIIV-5-12 times); and also that of men relatives of CFS patients who criticize the State without mentioning disintegration. This rhetoric is opposed to the discourse of women who are mostly CFS patients (but not always, as in the case of woman doctor) and who

also act as CFS patients' spokenpersons describing one of the main mechanisms of deprivation of symbolic capital experienced by CFS patients, their strong disintegration and their ways of coping with it, such as uncommunication, silencing (to avoid further disintegration), or isolation in an informative-neutral tone to raise society's awareness of CFS. F3 is the axis of the symbolic strategies associated with positive tone as a way of seeking social legitimacy. They focus on imposition of discourse and euphemization without mentioning non-recognition. F4 is clearly the axis of the symbolic strategies according to sex of type of sender: women CFS patients vs. men relatives of CFS patients. Distinguishes women CFS patients who face disintegration with the imposition of discourse, and who oppose men relatives of CFS patients who talk about the extreme social invisibilization and the strong disintegration of their patients leading them to intense isolation. Only these four axes accumulate 69.72% of the adjusted total inertia.

F5 is the axis of the symbolic violence generated in the socio-sanitary field and the doctorpatient relationship: socio-sanitary helplessness vs. medical invisibilization. It is about discourses centered on uncommunication, a strong disintegration and secondarily on condescension and institutionalized un-care where non-recognition is not mentioned. They oppose statements strongly impregnated with an imposition of discourse that account for the strong invisibilization, the moderate disintegration, and the AIIV of CFS patients, and where institutionalized un-care is not mentioned. F6 is the axis that describes the situation of CFS patients according to the presidents of their associations: perceptions of doctor presidents (who probably do not suffer from the disease) vs. perceptions of non-doctor presidents/spokespersons (who probably do suffer it). The discourse of the doctor presidents has a relatively high degree of disintegration and institutionalized un-care and a null silencing with a high level of isolation that seem to capture the most socio-sanitary-structural aspect of social disintegration and medical helplessness, and it is opposed to that of the non-doctor presidents/spokespersons, that gives a more symbolic aspect to disintegration focusing on social invisibilization, where the silencing appears once, the disintegration is very high, institutionalized un-care is not mentioned, and instead of it appeared uncommunication, euphemization, and invisibilization.

F7 is the axis of the strategies of the patients before the symbolic violence produced by the two main forms of social negation of CFS: State's non-recognition vs. social invisibilization. Thus, it emphasizes the imposition of discourse, condescension, and the agents who direct their discourses to the State, like a known friend of CFS patient, also related to a strong non-recognition and a null invisibilization, which, naturally, opposes a very high invisibilization and receivers like the readers, who represent society, without mentioning non-recognition. F8 is the axis of the mechanisms of symbolic violence that lead to the social death of CFS patients: disintegration, medical helplessness and social invisibilization vs. delegitimization. A powerful invisibilization, imposition of discourse, and silencing conform the social invisibilization and the symbolic aspects, while institutionalized un-care (socio-sanitary field) and disintegration constitute the structural aspect, where no trace of delegitimization appears; and that they oppose two prototypical representatives of the broader social space: media and social circle (a known friend of CFS patient), examples of the great social delegitimization of the sick, and without any relation to institutionalized un-care. F9 is the axis of perception of CFS according to the social distance with the disease: affected people (far from the sick) vs. patients (and, ultimately, non-sick vs. sick). Focused mainly on those people most distant from the disease (as a known friend of CFS patient), it also identifies, but much less, the impressions of presidents of associations of CFS patients or relatives, highlighting the moderate or extreme disintegration, and secondarily its symbolic aspect through a low social invisibilization; that oppose the perceptions of CFS patients (a sender who addresses to the media is also a CFS patient), who concentrate exclusively on the symbolic facets of the violence they suffer: condescension (an aspect of medical invisibilization), a high invisibilization, and imposition of discourse, without ever mentioning disintegration.

F10 is the axis of the relational and symbolic effects of social rejection of CFS patients: selfexclusion vs. self-censorship of their situation. The internalization on the part of the patients of the rejection generated from the social space, not from the official instances (the non-recognition does not play any role in this case), gives rise to their isolation and uncommunication, and thus they contribute to their own invisibilization. The patient mentioned by a known friend of CFS patient may be representative of these phenomena. This self-exclusion of patients is the counterpart of symbolic strategies of self-censorship of their situation, such as euphemization, which is naturally related to extreme disintegration, and to figures such as the woman doctor presiding over an association of CFS patients. F11 is the axis of the mechanism of condescension, strongly related to (medical) invisibilization as part of the symbolic violence generated in the doctor-patient relationship. It is associated with the patient mentioned by a known friend of CFS patient. Very secondarily, it opposes non-recognition and forms of self-censorship and concealment of negative symbolic capital as the imposition of discourse. F12 is the axis of the modifying discourses of the social images of CFS: legitimizing and awareness-raising discourses vs. testimonial discourses. Distinguishes the rhetoric of associations of CFS patients addressed to the media that seek to legitimize the disease or raise awareness of society about the terrible isolation of the sick, as well as those of CFS patients themselves who offer society and offer themselves positive self-images of social legitimacy of CFS strongly influenced by an imposition of discourse inherent to the symbolic violence they suffer; that oppose the testimonial discourses of sick and non-sick people (such as a known friend of CFS patient) who address readers in general (society), and where it is highlighted the euphemization of a content related to a condescension and the informative-neutral tone of the person who tells what he has seen or experienced about CFS. F13 is the axis of family members' perceptions vs. those of CFS patients. In the constitution of this axis, the impressions of the father of a CFS patient who sent many letters to the newspapers have been decisive. But the results obtained seem to indicate that they are representative of the perceptions of family members as a whole, beyond this particular case, however important it may be in the analysis. Indeed, these discourses are characterized by their emphasis on aspects such as uncommunication, delegitimization, or imposition of discourse, although much less, and its informative-neutral tone. Of course, they are discourses of family members, and the fact that they are associated to the masculine sex is consequence of the protagonism of this father. And it seems that they could be extrapolated to the perceptions of family members as a category because they are clearly opposed to the perceptions of CFS patients who, unlike the former, what they usually emphasize is the more purely symbolic side of the violence they suffer. Although this facet already appears in the discourse of the relatives, it is emphasized here, especially as regards the social and medical invisibilization in which the sick live: the great invisibilization, the isolation, the silencing, and the authorized imposition of illegitimate verdicts (a component of medical invisibilization), which oppose delegitimization and non-recognition by the State, make it clear. This result seems to be completely compatible with the previous analyzes, which have repeatedly revealed the great symbolic suffering of the sick, who point it out ahead of other affected people precisely because they are the only ones who really live it, feel it, and suffer it. Unfortunately, as much as this violence affects all those "affected," the sick are the only ones who experience daily a social death that for them is an authentic death in life.

Then, an AHC was made from the coordinate matrix of each of the 71 observations in the factorial plane defined by the 13 axes described. The process of agglomeration of the different units was based on the closest neighbor Ward's method, and the truncation criterion of the number of groups in the automatic technique of entropy. This resulted in the following 13 groups. Cluster 1 of a single observation, where the male sex is 3 times overrepresented with respect to the overall distribution, and the mechanism of condescension is 71 times higher. It is the grouping of the habitus most sensitive to condescension, so exceptional in the database that it has been necessary to classify them separately, as already made foresee the fact that in the MCA the F11 axis of condescension became a factor independent of all the others, which has not happened with any other mechanism of symbolic violence. Cluster 2, again with a single observation, where the male sex and the mechanism of a moderate disintegration are 3 times more represented than in the overall distribution and the absence of non-recognition appears 4 times higher than in the total sample, it is mainly characterized by the overrepresentation of the positive tone and an extreme imposition of discourse 71 times higher in both cases, and by symbolic mechanism of a very high euphemization 14 times higher than in the overall distribution. It is a type of *habitus* associated with the need to obtain a recognition that the disease systematically denies and that leaves as the

\*\*\*

only alternative the concealment of negative symbolic capital and the endowment of a social legitimacy to the fact of suffering the disease that some patients try to achieve by covering their discourse with a positive tone that moves them away from self-pity. Cluster 3, composed of 20 observations, the second most numerous and the most homogeneous with the lowest intraclass variance of all of only 0.213, is characterized by an overrepresentation of the male sex that exceeds by 56 points the overall distribution, and also that of the relatives in 48 points. These direct their discourses against the State (overrepresentation of 34 points) in a tone of complaint (overrepresentation of 17 points). Regarding all the mechanisms of symbolic violence, the members of this category tend to be always more or less overrepresented in the extremes that indicate low intensity or absence of effects of symbolic violence, except for the mechanism of non-recognition, in which they are slightly overrepresented (3 points more) in the 1-10 times modality, indicative of greater symbolic effects. It is the group of the habitus of the male relatives who defend, tooth and nail, by all means, against all odds, the dignity of their sick relatives vindicating the restoration of recognition, symbolic capital and health that has been taken from them without any regard and with total impunity. Cluster 4, with 3 observations, is not as uniform as the previous one, but its intraclass variance of only 0.422 remains low. They are women CFS patients with discourses of informative-neutral tone 3 times higher than in the overall distribution that suffer a moderate disintegration also 3 times higher. But what distinguishes them most is their silencing and their moderate imposition of discourse, 4 and 24 times higher than the overall respectively. This is the group of female *habitus* that are characterized by their discretion around the disease, which make imposition of discourse and silencing, daily pretense and concealment, and the internalization of social rejection of self-pity, a second skin that becomes a shell from which to protect against the rejection generated by CFS. Cluster 5, composed of 4 observations with an overrepresentation of 9 points for women, 23 points for family members, 54 points for readers and society, and 27 for those who employ a tone of complaint, is, with an intraclass variance of 0.255, the second most homogeneous. It stands out for its moderate disintegration, which exceeds by 15 points the overall distribution, but above all for its marked presence of delegitimization and moderate invisibilization, 29 and 93 points higher respectively than the overall ones. It gathers the habitus of those who denounce with more insistence the social rejection and delegitimization of both a disease that society has decided not to see, making it invisible, and a CFS patients to whom is very easy to judge from the most absolute ignorance blaming them for their illness.

Cluster 6, which with 29 observations and a low intraclass variance of 0.266 is the largest of all, is a group of women (overrepresentation of 30 points compared to the overall distribution) CFS patients (overrepresentation of 34 points) that are aimed primarily at readers and society (overrepresentation of 12 points) in a tone of complaint (overrepresentation of 6 points). As for the mechanisms of symbolic violence, this category has a moderate disintegration 6 points higher than the overall, but what is more remarkable is the overrepresentation of institutionalized uncare, 15 points higher. It groups, then, the *habitus* of women CFS patients who denounce the intense socio-sanitary helplessness to which they are subjected and the disregard with which they are socially and healthily treated. Cluster 7, with 4 observations and an intraclass variance of 1.032, is the second least homogeneous. Constituted by women 34 points higher than the overall distribution, and by sick 9 points higher, those who direct their discourses against the State are overrepresented 24 points higher, and the tone of complaint is slightly overrepresented. But what is striking in this category is the extreme overrepresentation of those who denounce the nonrecognition to which they are the subject (28 points higher) and their silencing (92 points higher), since they are the totality of 4 women that constitute this cluster. Secondarily we can point out the importance of overrepresentations affecting extreme disintegration (21 points higher), extreme delegitimization (slightly higher), extreme AIIV of 5-12 times (18 points higher), and moderate invisibilization (18 times higher), which usually affect a single member of the group. These results set the trends associated with the *habitus* of those who have suffered a more extreme and probably more durable symbolic violence, in which the purely symbolic effects of nonrecognition, AIIV, social delegitimization and disintegration have become internalized to the point that have been incorporated and normalized, becoming inherent dispositions towards the invisibilization and silencing of CFS, dispositions which would be perceived almost as inevitable

by patients themselves. Cluster 8, with 2 observations and an intraclass variance of 1.217, is formed by two sick women with an informative-neutral discourse 4 times higher than overall distribution. The magnitudes of the relative distributions of this group for the mechanisms of disintegration (8-17 times), extreme delegitimization, extreme extreme isolation. uncommunication, and silencing multiply by 12, 2 (very slight), 5, 35, and 6 respectively the overall ones. We are dealing with the *habitus* in which the structural and symbolic effects of what might be called social death are more visible from the point of view of the repercussions of the lack of relationships on patient's own sense of social value and on his symbolic capital, which she will fiercely seek. Cluster 9, of a single observation, stands out only for the extreme overrepresentation of 71 times of the Media as a receiver of discourse, which is related to an extreme delegitimization (1-7 times) in which no overrepresentation is observed. Here are represented the *habitus* of the patients that reveal the distortion of public images of CFS which are disseminated through mass communication channels that what they actually do is reflect social representations of the disease that were previously already socially distorted.

Unipersonal cluster 10 stands out 71 times higher than the overall distribution because of the fact that is made up of members like a known friend of CFS patient. Comparatively, what most surprises this person about the situation of sick people and the disease is a purely structural aspect that has abounded here on several occasions: its moderate disintegration, which it is pointed out 3 times higher than in the overall distribution. This group is constituted, then, by the *habitus* associated with the social circle of the sick, whether they are friends or acquaintances, who throw a "behavioral" type of look at the disease that is characterized by only capturing what is perceived as external behaviors derived of the fact of suffer from the disease, such as disintegration, and which are very different from the impressions that the patients themselves emphasize, focused mainly on the purely symbolic effects of the disease. Cluster 11, with two observations and an intraclass variance of 1.607, the highest of all, is formed by 2 ex-patients 35 times higher than overall distribution, who direct their discourses to patients with a relative frequency that also multiplies by 35 the overall one. They are ex-CFS patients with discourses of informative-neutral tone 4 times higher than the overall one, carried out by a doxic imposition (AIIV-5-12 times) 14 times higher than the overall one, and by an extreme self-blaming and euphemization 35 and 7 times superior respectively to the overall one. Here we have the habitus of the symbolic subordination for whom to obtain the social recognition that the disease has denied them and to whom their life before becoming ill had accustomed, most likely because of their profession, is something so highly indispensable that they depend in an extreme way on the subordination to a social order where the CFS patient is only considered worthy if he submits to the imperialism of the image of the patient built from a psychology completely moralizing, alienating and profoundly erroneous, in which the patient himself is the culprit of all his misfortunes. Cluster 12 of a single observation is represented by Doctor category 35 times higher than the overall distribution, and 4 times higher by the informative-neutral tone discourse. The mechanisms of extreme disintegration and isolation are overrepresented 12 and 5 times higher respectively. It consists of the *habitus* of certain presidents of associations of patients who, not suffering from CFS, what they have a greater propensity to perceive about the effects of the disease are, again, the most external structural facets of the manifest behavior of patients as their disintegration and isolation. Cluster 13 is composed of a man, sexual category represented 3 times higher than in the overall distribution. It is a relative of CFS patient with an informative-neutral tone discourse where these two characteristics are represented 4 times higher than in the overall one, and the mechanisms of isolation, extreme AIIV (5-12 times), and extreme invisibilization, 10, 14, and 74 times higher respectively. Here we see the habitus of relatives of CFS patients who make known the medical invisibilization of the disease, and the social invisibilization of patients, who are relegated to live in a non-existence because the disease they suffer and that does not allow them to have a normal life is also invisible.

Finally, the projection of all these clusters in the factorial plane of F1 and F2 axes with concentration ellipses will make it possible to verify that these are groups of elements that are clearly dissimilar to the elements of the other groups and similar to those of the same group that confirm the oppositions described throughout the MCA.

#### 5. Discussion

This proposed model of analysis on the circuit of symbolic violence in the CFS is completely new in the field of study of the social effects of CFS. But it seems that both its preliminary results and its approaches are, with important nuances that will be noted, in the same line as those obtained in other previous research. The general logic of the model based on the dialectic established between its two components, the deprivation of symbolic capital and the concealment of negative symbolic capital, had already been raised, albeit from very different points of view. In some cases, the processes of stigmatization and the strategies of CFS patients to counteract them, these two great dimensions of the circuit of symbolic violence, were explained based on a psychosocial response from the medical paradigm built on theories of medical anthropology of psychomatization or sociomatization (Ware, 1998, 1999). In other cases, these two dimensions were accounted from an identity-based perspective (Åsbring, 2001; Åsbring & Närvänen, 2002). It is quite surprising that there are only 4 articles in the whole field that have raised the need for the interaction between these two aspects. In my model these two general components serve to explain the processes of symbolic violence and delegitimization of patients and CFS disease from a structural perspective in which the State has a key role as emphasized by Max Weber (1946) in his legitimation theory that was expanded by Bourdieu (2015) later. This view has nothing to do with a psychosocial or identity response, however the term delegitimization is used, which Norma Clara Ware (1992) proposed in her article with a completely opposite meaning.

With regard to the mechanisms of deprivation of symbolic capital, it should be noted that while their conceptualization is entirely new, disaggregated research has already been conducted on something that would be similar to some of these mechanisms separately. Non-recognition had already been pointed out by Åsbring & Närvänen (2003), Blease et al. (2017), Broom & Woodward (1996), and Ho-Yen & McNamara (1991). In my database of the 236 documents on the social effects of CFS I have identified, there are 34 additional materials that address aspects assimilated to non-recognition. The second aspect that has been pointed out by previous research is institutionalized un-care: Deale & Wessely (2001), Dumit (2006). There are other 42 documents in the database that have dealt with this aspect. Delegitimization, understood from any perspective however opposed to the one observed here may be, has been identified as a problem faced by CFS patients by Jason et al. (1997), Looper & Kirmayer (2004), and Ware (1992). In my database there are other 49 articles that have dealt with this aspect. Finally, disintegration has been addressed by authors such as Åsbring (2001), Donalek (2009), or Lian & Nettleton (2015). There are other 20 documents on disintegration in the database. These results are in complete harmony with those obtained in my research: these 4 mechanisms account for 70% of the discourse of CFS patients, so it should come as no surprise that what is most studied is what is most talked about. But, as will be seen below, it is not enough to study these mechanisms in isolation, because they give a wrong idea of the real phenomenon of symbolic violence in CFS. On the other hand, what is most striking is that of the total of these 157 documents, 97 correspond to the medical paradigm. The medical paradigm focuses on the study of the social effects of CFS only from medical theories or from factors typical of the medical or scientific field that are supposed to produce these effects. That is, 62% of these documents do not take into account that this symbolic violence does not originate only in the medical field, but that there are other social fields not studied by them and that would seem to be much more decisive as the State and the Public Administration in order to understand these effects. It is very striking that the State is not the object of direct study of any research. An aspect as important as the claims of non-recognition of the condition of CFS patients in Social Security has not been studied by anyone, and there is only one document about this aspect, which has been cited only once, among the 236 I have identified: this is the intervention of Albert L. Harrison (1995), Acting Director, Division of Medical and Vocational Policy, Office of Disability, Social Security Administration, at a conference on CFS. In this sense, it would seem that the power of the medical and scientific field has been overestimated in regards to the observed effects of symbolic violence. It is very possible that their contribution is much smaller and is probably determined by the action of the State that would be the main cause.

On the other hand, there are other mechanisms of deprivation of symbolic capital that do not appear to have been previously pointed out by any author: condescension, and authorized imposition of illegitimate verdicts. Nor had any of the mechanisms of concealment of negative symbolic capital (imposition of discourse, euphemization, silencing, invisibilization, isolation, uncommunication, self-blaming) been investigated relatively thoroughly before.

But contrary to what the univariate analysis would seem to suggest, which highlights the importance of the 4 previous mechanisms of deprivation of symbolic capital, the MCA indicates that what actually explains the recorded effects of symbolic violence is the concerted action of the mechanisms of deprivation of symbolic capital (e.g., non-recognition, institutionalized uncare, disintegration) with those of concealment of negative symbolic capital (i.e., imposition of discourse, euphemization, self-blaming), which came to the forefront producing the observed effects. This is what is evident when comparing the discourses of the sick with those of the nonsick: while, in the first case, the prominence is played by the mechanisms of concealment of negative symbolic capital against social relegation (which in the univariate analysis seemed absolutely secondary), in the second is played by the mechanisms of deprivation of symbolic capital against social relegation. The interpretation of the first four axes resulting from the MCA, which accumulate 69.72% of the adjusted total inertia, that is, which explain most of the variability of the data, goes exactly in this direction. Behind the F1 axis, which corresponds to the discursive tone and confronts the symbolic subordination to the denunciation, what there really are are the strategies of concealment of negative symbolic capital of patients. F2 is again a discursive axis, very focused on explaining the social effects of CFS to an audience that one tries to raise awareness and which modulates the tone of discourse: whether the speaker is a patient or ex-patient who addresses other patients, negative symbolic capital concealment strategies become central; if it is a relative of a patient who addresses the audience, these strategies disappear and the tone of denunciation and the mechanisms of deprivation of symbolic capital become prominent; if they are sick women (and some non-sick women) as spokespersons addressing an audience to raise awareness, again the mechanisms of deprivation of symbolic capital and the like (disintegration, among others) and the informative-neutral tone reappear. Here, the preeminence of the mechanisms of concealment of negative symbolic capital for the sick is not so clear, but the F6 axis, which expands what does not appear here, makes it very clear that non-sick (doctors) as spokespersons emphasize more the structural aspects (disintegration and institutionalized uncare), and CFS patients as spokespersons highlight symbolic aspects based on the concealment of negative signals (silencing, uncommunication, euphemization, and invisibilization). F3 is the axis of the symbolic strategies of patients associated with the positive tone as a form of search for social legitimacy closely related to the mechanisms of concealment of negative symbolic capital. F4 opposes symbolic strategies of women CFS patients against disintegration based on imposition of discourse to those of men relatives of CFS patients who denounce their disintegration, invisibility, and social isolation.

But what does all this mean? Actually, something very fundamental. That CFS patients try to hide as much as possible all those signs that in the eyes of non-patients can turn them into people with whom it is better not to relate. Given the incredible social relegation they suffer and the lack of social desirability that they inspire to non-patients, who do not want to relate to them, the only strategies at hand are these forms of concealment of this whole series of negative signals that drive away the non-sick. That is, they try to resort to strategies of conservation or preservation of the little symbolic capital they still have left. This would be perhaps one of the best definitions of the mechanisms of concealment of negative symbolic capital. This is the dialectic between the deprivation of symbolic capital and the concealment of negative symbolic capital. It is understood that non-patients do not have to resort to them, because they have nothing to hide, and this is exactly what the interpretation of the first four axes of the MCA indicates, which, as I have already pointed out, accumulate 69.72% of the adjusted total inertia. Perhaps this is the main defining feature of the circuit of symbolic violence in CFS. The interpretation of both the other axes and the AHC follows this same general pattern. The qualitative analyzes also seem to be in line with this interpretation, which, moreover, is entirely consistent with the postulates of Pierre Bourdieu's theory of symbolic violence. Once explained, this may seem very obvious, but the fact is that so far none of the 236 researches in my database had reached this conclusion, except for the four mentioned above (Åsbring, 2001; Åsbring & Närvänen, 2002; Ware, 1998, 1999), which, with many differences, already pointed in that direction in a very preliminary way. The interpretation

I propose seems to be a preliminary answer to the question posed by this research: how is CFS such a little known and recognized disease? Indeed, in a more in-depth answer to this question, the fact that CFS is a disease that mostly affects women will be a central aspect in terms of understanding the action of these mechanisms of symbolic violence, extreme social relegation, and invisibility. Therefore, this model of symbolic violence should soon focus on delineating the very complex relationships between the mechanisms outlined here and the role of gender in their explanation with the relevant qualitative tools (mainly focus groups and individual interviews) that favor this in-depth study.

## Annex 1: a rhetoric of delegitimization

#### "Strict medical protocols"

"The Catalan Institute of Medical Assessments (CIMA) supports GPs in the management of work incapacity and sick leave. CIMA professionals work under strict medical protocols, carried out with the opinion of medical experts in different pathologies, with independence, impartiality, professionalism and rigor. But, as doctors, their fundamental values are respect for the rights and responsibilities of people. This effort of good practice of our professionals is based on their ethical codes, the best predisposition and powerful programs of continuous learning and updating of knowledge, which are especially oriented to the treatment of the most complex and difficult to assess diseases. Sometimes, however, the result of the assessment does not coincide with the expectations of the patients and this can generate situations of discomfort. There is a program of attention to complaints, suggestions and claims, which are all answered with promptness."

## Analysis

The first thing that draws attention to this letter is, as one commentator points out, its "stereotyped response." Indeed, its main characteristic is this rhetoric of neutrality and impersonality (Bourdieu, 1987) that manifests itself from the first line: it is the Catalan Institute of Medical Assessments itself who "dictates" it. On the other hand, the fact that he dictates it in the person of his manager would seem to indicate that the managerial view should have a very prominent role when it comes to fulfilling the Institute's mission of "supporting GPs in the management of work incapacity and sick leave." And the truth is that an act of bad faith cannot be seen in the fact of pointing out this "economistic" drift of CIMA (now the Catalan Government' Sub-directorate General of Medical Assessments, CGSGMA) from such an "apparently" insignificant detail as the position held by the signatory of a letter that is published in a newspaper, can see the whole world, and, therefore, has a public significance, let's not forget it, because the observations of Ermengol Gassiot and Paco Pareja corroborate this economistic bias (Ubieto, 2018). This personification of the institution through the rhetorical figure of prosopopoeia, speaking *publicly* on behalf of an absent reality, has the function, as will be seen below, to state "a discourse designed to be unanimously recognized as the unanimous expression of the unanimous group" (Bourdieu, 2014:75). That is, to say what is the "official truth," which, for that matter, seems to be an eminently economic official truth that marks its most symbolic side very sharply.

This neutralizing effect is expressed through the use of various types of syntactic devices, such as depersonalization (Goethals & Delbecque, 2001). As can be seen, the sentences refer to a "they"—), although it is obvious that the letter is self-referential, since the CIMA speaks mostly of itself all the time. Only once does identification between the sender and the subject of the text ("our professionals") become explicit. Thus, the sender becomes a universal subject that is both impartial and objective. In fact, both traits are those that emphasize forms such as "strict medical protocols," "medical experts," "independence," "impartiality," "professionalism," "rigor," "continuous learning," and "updating of knowledge." But at the same time that it leads us to this rhetoric of science, the paradigmatic subject representative of impartiality and objectivity and of which the "medical profession" ---something that appears numerous times in its most diverse variants: "medical," "doctor," "CIMA professionals," "our professionals," or "experts"- would be one of its most prototypical examples, the text points out the justness of its moral principles: "fundamental values," "respect," "rights," "responsibilities," "effort of good practice," "ethical codes," "the best predisposition." These efforts of impartiality, objectivity and good practices would be especially evident in the evaluation "of the most complex and difficult to assess diseases." A peculiar way of referring to CFS without mentioning it once, which will be seen later, beyond being anecdotal, is indicative of how the CIMA sees the disease and the sick.

This neutralizing effect is reinforced by the convergence with an effect of universalization that is based on the use of conjugated verbs in the third person of the simple present ("CIMA professionals work," "as doctors, their fundamental values are") and in impersonal phrasing ("is based," "There is..."). In fact, the letter is the public, and therefore, published, representation of the official, which is the universal, adopting this characteristic form of stereotyped rhetoric that is the very essence of the (self-)legitimizing action of the State (Bourdieu, 2014). This text represents an exemplary case of the two essential properties of the official truths of the State: the reconciliation of the universalization imperative, and that of moralization, noted above when pointing out CIMA's moral principles.

But this strategy of presentation of the self, in the manner of Goffman (Bourdieu, 2015; Goffman, 1956), based on these effects of neutralization, universalization, and moralization never reveals itself as clearly as when the sender of the text and its true receptor are contrasted, compared, put in relation. From this moment, the text reveals in its most manifest unconsciousness, the reality of its message and these rhetorics of neutralization, universalization, and moralization show the authentic voice that dictates them. Indeed, unlike CIMA professionals, trained doctors characterized by their impartiality and objectivity, the subjects assessed expect something. This idea, which is repeated in different ways in no more than four consecutive words ("the expectations of the patients"), presents the patients as persons who, contrary to the "professionals" of the CIMA, are governed by certain interests and who, therefore, are neither objective nor impartial and to whom, guite possibly, it would be better not to take too much notice. Because -needless to say it?- CIMA's opinion is the enlightened opinion, the opinion that deserves the name, the official opinion, the authorized opinion, the legitimate opinion against CFS patients' opinion, which is the illegitimate, delegitimized opinion, the opinion which does not count, but that, in order to save the fiction of the equality of opinions that governs in modern democratic States based on the qualified definition of public opinion (Bourdieu, 1984, 1995, 2014), it will appear that it counts for something when in reality it does not count for anything, as will be seen shortly.

This effect is not only due to this way of presenting the sick. It also owes much of its effectiveness to the fact that another of the mechanisms from which this delegitimization of CFS patients becomes effective is based on the fact that, from the point of view of extension, the role of patients is purely residual: these are protagonists of 15% of the text (21 words out of 144), while the CIMA is the center of interest of 73% of the total (105 words). That is, not only are they denied legitimacy but also their voice. The most surprising thing about this is that this letter from the CIMA manager is the answer to a reader's letter with full name. Both missives were published the same day. As was the case with the name "CFS," the CIMA's letter does not mention the name of the patient at any time. Maybe because for the CIMA there are neither CFS patients nor this disease.

In addition, and to further delegitimize CFS patients, we are informed that "Sometimes" patients receive assessments with which they disagree. That is, the text downplays, again, the great difficulties that patients have for the Public Administration to recognize their illness and the disability that causes them, since this *almost never happens* according to the CIMA. And when it happens, it only generates "situations of discomfort" to patients.

Next, to emphasize again these ideas of the infrequency of the disagreement with the CIMA's assessments and of the little importance of the inconvenience that they may cause, the text informs that "complaints, suggestions and claims [...] are all answered with promptness." In this way, the serious problems that the patients have so that State agencies like the CIMA certify their disabilities and respond to the so-called "situations of discomfort" caused by them, which far from being the exception ("Sometimes") are the norm, are put on the same level as unimportant trances that can be solved by making a "complaint."

All these devices, which very properly could be called "rhetoric of delegitimization," are more than just dialectical strategies. They constitute a point of view (Bourdieu, 2000a). The point of view of State agencies such as the CIMA regarding CFS patients. Their way of perceiving them, assessing them, judging them and *evaluating them* (well said, and in the broadest sense of the term) to them and their illness obeys a *doxa*, common discourse of common sense so suspiciously similar to the whole long series of anathemas, prejudices and preconceived ideas about CFS, that its alleged impartiality, objectivity and scientificity are conspicuous by their absence: it consists in pretending that the disease does not exist and in ignoring the sick, in delegitimizing them, and finally in considering that its serious problems, beyond being caused by the strategy of non-recognition and institutionalized un-care of the Health Administration itself, are simple infrequent inconveniences that are solved by making the relevant complaint or writing a letter of claim as who writes the letter to Santa Claus. The filing of a complaint or a claim constitutes the clearest recognition of the legitimacy of an official truth against those *particular* claims that, by definition, are illegitimate, because they do not pursue the *general interest*, but that modern democratic States must appear to have in consideration since they are based on the (real) fact that they have mechanisms that allow all parties to defend their interests *equally* when they have been violated. An equality *de jure* that for delegitimized voices such as those of CFS patients is a *de facto* inequality that prevents any complaint or claim from being considered legitimate. Because CFS sufferers are not worthy of even having an opinion.

#### Annex 2: science as a counter-doxical discourse: a response to delegitimization

The analysis of these letters also holds some surprises. This is how one comes across suddenly, after having read and reread almost eighty missives thinking that one had already seen everything, with some texts that stand out for the uniformity of their content but that had been discarded for the analysis, directly cataloged as "not classifiable contents" and that the progressive definition of the model of analysis forced to rescue. It was, in all cases, fragments drawn from about twenty writings that did not seem to fit within any of the categories related to each of the expected mechanisms. Normally, this type of content was characterized by a clear identification between the subject of the text and the sender of the letter that allowed a rapid association between an agent and a mechanism, which in these fragments was not observed. It was not until much later that the mechanism of delegitimization was outlined that the purely informative and suspiciously "objective" appearance of these texts —this phenomenon of the appearance of "objectivity" or "impartiality" of reactions which in reality hide a deep emotional involvement, it was already identified by Robert K. Merton, Marjorie Fiske and Patricia L. Kendall in their qualitative studies of Allied film propaganda during World War II (Merton et al., 1990)— revealed in a clearly evident way its legitimating role. Indeed, faced with the brutal delegitimization suffered by the sick and their illness, the only possible alternative seemed an informed counter-doxical response that went beyond "official" and "unofficial" commonplaces about CFS and stood out for its sought-after "objectivity."

Because overcoming these discourses is precisely the first of the rules of the "correct" social presentation of CFS. As an informant explicitly states, this presentation must be done "closing the door once and for all to the fallacies and speculations about alleged psychological origins of the disease that may continue to serve as a basis for the perpetuation of social and legal injustice in which we live those who suffer it." Indeed, the "psychological discourse" is perhaps the main "official" commonplace, a psychologized moral or a moralizing psychology, dominant discourse of cultivated common sense with which it is intended to define CFS and those who suffer it, subjecting them to the imperatives of a supposed "normality." It is a rhetoric that has become a great *vulgata*, a kind of *lingua franca* present everywhere which the continuous repetition of the media has become a model of reference when talking about CFS that is imposed on the patients themselves and that "they themselves" contribute to reproduce.

That is why it should not be surprising that, faced with this frightful perversion of scientific language and the valid uses of science, the only option seen as legitimate and legitimating is scientific discourse. Precisely this is the second rule that these legitimizing discourses have to accomplish, as two patients say: "I thank the newspaper for the information about our disease, but I also ask you to do it in a clear and scientific way," "the lack of scientific information is surprising [...]. In your texts you do not talk about research." This type of discourse is characterized by the oversaturation of references to the scientific institution. Mainly, medical terminology such as "central sensitivity syndromes (CSSs)," "myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS)," "post-viral chronic fatigue syndrome/myalgic encephalomyelitis," "fibromyalgia," "HIV/AIDS," "biomarkers," "immunological etiology," "organic, multisystemic and chronic disease," "immunological, cardiovascular, endocrine and neurological systems," "lymphoma," "Rituximab," and "XRMV retrovirus." But also mentions to medical institutions (Vall d'Hebron and Dexeus Hospitals, Barcelona Clinical Hospital, Royal Academy of Medicine of Catalonia) and biomedical research (Irsi Caixa, Whittemore Peterson Institute), researchers ("a group of Dutch oncologists," "an scholar," "according to researchers"), scientific publications and discoveries ("published in Plos One on October 19, 2011," "published in the renowned journal Science," "This fact was preceded by the discovery that," "a Norwegian study has observed that a chemotherapy treatment managed to improve the symptoms of Chronic Fatigue Syndrome, which demonstrates its autoimmune character," "Their scientists have found in 95% of blood samples of CFS patients a new retrovirus, the XRMV, with characteristics similar to HIV, which presumably can be transmitted, as in AIDS, by blood and body fluids. The incidence in healthy

people is 4%,"<sup>1</sup> "strong biomedical evidences that cannot be continuously ignored by the health authorities of many countries"), papers or conferences on the CFS ("On October 24 was held in Seville an international conference, in which our diseases were discussed," "On May 29, the IV international conference on care, treatment and latest advances in the research of myalgic encephalomyelitis (Chronic Fatigue Syndrome) was held in London," leading medical authorities (Gaietà Alegre Marcet, Joaquim Fernández Solà, Jordi Carbonell, "Disease which WHO registered with code G93.3"), or other social authorities ("The reaction of the Norwegian Government has been immediate: dissemination in the media," "American agencies are evaluating the news in order to take the corresponding measures regarding blood banks, transfusions, etc. [see footnote 1]"). Obviously, in these uses, science is employed as a guarantor of what is stated as an argument of authority, something completely understandable when it comes to giving credit to a disease and patients systematically discredited. It is no coincidence that, in order to bring more legitimacy to the message communicated, two of the letters are signed by the presidents of two associations of CFS patients, which is explicitly emphasized in the letters.

In any case, this legitimizing discourse cannot be used incoherently, since, as the third rule says, if its coherence and systematicity are broken, alternating it, or rather confronting it, with any other type of discourse that can sow the confusion in the reader regarding the legitimacy of the disease, as is the case of the previous "psychological" discourse, the sought effects of legitimacy will automatically vanish. As one patient says, "However scientific and vindictive the writing may be, end it with the testimony of a man known to have healed using the mind invalidates everything that has been explained before."

From a more formal point of view, in order to achieve the desired objectivity effect, the texts tend to impersonality and disidentification between the subject of the text and the sender of the letter. Thus, impersonal phrasing abounds ("as you know," "It is," "are unknown," "it is known that," "until establishing," "were investigated," "were published," "can be considered," "were provided," "is considered," etc.). As for the effects of disidentification, in most cases they converge with the effects of impersonality to reinforce the objectivity of scientific discourse following the logic of the pure verification of the facts described by a "neutral" agent such as science ("Two of the three CSSs (myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) and fibromyalgia) were investigated and the findings were published before HIV/AIDS," "As is known, chronic fatigue syndrome is an organic, multisystemic and chronic disease that in most cases is invalidating," "It is a complex disease the causes of which are unknown," etcetera). In contrast, on other occasions, there is an identification between the subject of the text and the sender of the letter, so what stands out is the "personal narration" of the sender. Here we no longer follow exactly the logic of the pure verification of facts by a neutral subject, but rather, what is sought is precisely the opposite effect, the first-hand manifestation of an "experience" by the one who lives or suffers it. The subject himself is the living proof of what he is telling himself. It is, then, a variant of the logic of the verification of a fact in which the verification of the fact is based on the protagonist through his own experience narrated.

In these cases, in some cases what is revealed is the function "of testimony," as in: "This was the title of the conference I attended on December 20," "It was a delight to see how" or "The one which interested me the most was," which they simply want to attest to the celebration of certain scientific acts on CFS and the impressions in this regard. In others, the evaluative function is highlighted, as in "I would like to make a reflection," "I thought," etc., which they refer to how patients value the information published by the newspapers about their disease, an aspect that has already been addressed previously; but most of the time what is intended is to convey firsthand the experience of the suffering of the disease and its social consequences and, above all, to verify the existence of CFS: "the perpetuation of social and legal injustice in which we live those who

<sup>1</sup> The supposed discovery of the XRMV retrovirus was made by the Whittemore Peterson Institute and published in *Science* on October 9, 2009. But later it was found that the finding was not valid and the researchers had to retract. If it has been included in this analysis is because, although now retrospectively we know that it was not relevant to the study of CFS, at that time it was considered authentic and was part of the discourses which through the use of science provided a legitimacy to CFS.

suffer it," "our illness," "how we live those affected," "and we are on the cards to have four diseases in a short time." In all these expressions, the use of the first person is the most usual.

One of the typical forms adopted by this discourse is the experiential narrative, whether it be about the symptoms of the illness ("I was always sick, I was cured of one thing and sick of another, they were all very complicated, incredible infections. One day I had a bronchospasm, which is a serious respiratory failure, and ended up at the Barcelona Clinical Hospital," or another CFS patient, "It's a flu for life, the worst flu that lasts forever, with fever, with fatigue, it is like feeling a bit ropey forever, my best time is the first hour of the day, because from the moment I open my eyes, everything starts to get worse") or about the limitations derived from disease ("Going up the curb on each sidewalk it is unbearable, and going down the stairs of the subway, it is an impossible thing" or "At first I was showering sitting down. Hanging up clothes standing, holding it with two washing tweezers, can be a martyrdom which causes a terrible pain in my lumbar bones"), but no doubt its more important and frequent variant, by far, is the testimony given by the patients of the enormous suffering of social origin that implies suffering from the disease, as evidenced by the fact that, of the total content analyzed in this article, 60% corresponds to these socially inflicted ill-treatments.

Especially representative of this type of testimony from the patient's own experience, since it is a paradigmatic example where all the characteristic features of this legitimizing strategy appear increased and even improved, is the narration of how the disease is lived, shown in one of the letters. Here the goal is no longer just the identification of the reader with what the patient tells him, but also that the reader takes ownership of the story, that he puts himself in the shoes of the patient. In order to achieve this last goal, the text puts the reader in the situation of various situations in the daily lives of those affected, of their most usual daily activity. The first novelty of this writing is that with the use of the second person the reader is placed in the very center of the text. He is the protagonist. And this is how, once placed in the center of the story, the analogy with imaginary but perfectly plausible situations of the reader's daily life is the shortest way to get an idea which is not exaggerated, as the text says, of what CFS is as if the reader himself suffered it in its own flesh: "Imagine at the end of the day, one of those hard days of work and occupation, when you have finished dinner and finally you lie down on the sofa to zap a while. You are worn out. Imagine for a moment that at that moment, when you just lie down on the sofa, they tell you that you have to go to the office, to the building site or to the market, to start the work day again. That, day after day. Could you stand it? Well, that's chronic fatigue syndrome. A patient with CFS rises in the morning at least as exhausted as you go to sleep at night. Now add the pain [...]. Can you imagine the kind of life has to live a CFS patient?" The second novelty is that now the identifications between subject of the text and sender of the letter, which are still common in other parts of the text, are mostly built, unlike those seen previously in the first person, in the second person (there is a single impersonal "one" that clearly refers to the sender of the letter as a particular case representative of all other patients), so that the distinction between the author and the reader becomes confused, contributing to enhance the identification of the reader. These are constructions with a clear impersonal value that are used to involve the reader in the narration: "The pain is there, it is constant and one learn to live with it, but when you are experiencing an outburst... you cannot open a CD. You are thirsty and you cannot drink because you cannot hold the water bottle. It seems exaggerated, but it is not. If to all this we add the sleeping problems... [...]. But that is not all. When you cannot take it anymore and you lie down on the sofa all day, you cannot read a book either, because you are unable to concentrate on reading; you cannot watch a movie, because you cannot follow the plot. Chronic fatigue syndrome is a very difficult disease to overcome because it affects all facets of your life."

A separate case, different from the previous two and that might come to represent the fusion, conciliation, or overcoming of these two explanatory logics, scientific and experiential, is the interview with Anna Maria Cuscó, doctor, psychologist and president of the Foundation for Fibromyalgia and Chronic Fatigue Syndrome. In his discourse, the scientific rhetoric based on the pure observation of facts is combined with the narration of the experiences of the sick, as it cannot be otherwise taking into account the position she occupies in an institution halfway between activism and science. Thus, she describes the symptomatology, and the possible etiology and treatments of both CFS and fibromyalgia. But it also gives voice to the ailments of more

purely social origin with which the sick must face, on this occasion without the identification between the subject of the text (the sick) and the interviewee. The fact that the proportion between these two types of discourse so differentiated be respectively 49% (331 words devoted to acting as a spokesperson for the social discomforts of the sick) and 51% (342 words dedicated to the discourse on the etiology, treatments, symptoms and historical origins of the disease), gives a very clear idea of the coexistence between these two rhetorics. The authority of science as a doctor and psychologist and the social legitimacy that gives her to preside over the Foundation converge in his person, which endorse his message, making it a depository of a special effectiveness.

Finally, it should be noted a fact that can give a fairly accurate global measure of the importance of the legitimating function of some texts the social existence of which would be impossible without the indispensable task of publication and, therefore, of visibility of the newspapers where they appear, which allows the sick to have their voices heard, no matter how many people delegitimize and silence them. It is all those signs of gratitude that these letters contain for those articles or news reports that grant public existence and credibility to the CFS: "El Periódico should be congratulated for the articles it has devoted to diseases called central sensitivity syndromes (CSSs)," "not without first recognizing their sensitivity to publicize this disease [CFS]," "I thank the newspaper for the information about our disease," "I appreciate the news report they published on fibromyalgia and chronic fatigue syndrome, invisible diseases (Sick in the labyrinth, January 31)," "I would like to thank *El Periódico* for the complete news report Sick in the labyrinth," "To finish, I want to add a thanks to La Vanguardia for publishing writings like this," "I give you the thank you with all my heart." It is another variant of this identification between the subject of the text and the sender of the message that shows the immense importance for the sick of being able to publicly count on testimonies that ratify the legitimacy of the CFS. A "privilege" reserved for those who suffer diseases that are "well considered" socially and which these newspapers allow them to enjoy.

# Annex 3: Examples drawn from the letters of each mechanism of symbolic violence (themes and subthemes)

# Non-recognition

[Non-recognition of the sick and the disease:] "They deny me the condition of chronic condition disease [...]"

[Humiliations and systematic mistreatment of CFS patients by Public Administration as a deterrent strategy for the recognition of disabilities:] "His illness is not recognized by the Spanish Social Security Administration, so by pure process they decide to make his life more difficult [...]. They take away her joy. They discourage her. They take away her desire to fight. They kill her little by little. And nobody feels responsible. She wants to be happy, but her illusions are stolen. It seems incredible that our society, instead of helping CFS patients, could destroy the small steps that they are taking."

[Non-recognition of patients as human beings:] "How sad to know that as people we do not count for much."

[Violation of the rights of CFS patients:] "High Court of Justice of Catalonia ruled that fibromyalgia is a reason to obtain absolute disability, and these people ignore so that you despair and give up."

[Repeated social abuse to patients:] "Because abuse is being told that you need a good fucking when what really happens is that you are extremely sick."

[Delay of recognition requests as a mechanism of resignation and non-recognition of CFS patients:] "The request for a first disability impact assessment, a function that depends on the Catalan Ministry of Social Affairs and Citizenship, takes two years to be attended. Everyone who has requested it, knows it. The request for a subsequent review of the disability impact assessment also takes two years to be attended. Everyone who has requested it knows it."

[Difficulty of the patient to accept himself and his limitations; internalization of the denial of recognition:] "It is very hard to accept weakness; it has cost me 40 years. With psychological help I have done it and now I know that life can continue even if you have poor health, you can lean on all the good things you have and continue to live and be useful and capable of something."

[Violation of the right to dignity of affected families:] "It is very painful what my daughter and my husband suffer [said by a woman CFS patient]."

[Double bind:] "In October 2015 I applied for absolute disability and they sent me to the Catalan Institute of Medical Assessments (CIMA) for an assessment. CIMA's doctor told me that my disability was totally justified. In February 2016, after delivering a lot of reports from different specialists, they notified me that they rejected my request. I do not understand how they can omit the diagnosis of so many doctors who agree that I cannot do any kind of common daily or work activity and that they ignore the 11 different medications that I have to take each day."

[Judicialization of disability recognition:] "At the time I was denied disability by the Spanish Social Security Administration, but after going to trial, a social court granted me absolute disability due to an accident at work. After two years, the Superior Court of Justice denied me disability."

## Institutionalized un-care

[Medical un-care:] "I do not have doctors to take care of me."

[Scientific un-care:] "What we really need to cure ourselves is research."

[Discrimination resulting in un-care:] "There is the ironic paradox that a small bonus has been applied to me in a spa because I am a member of a club. And, nevertheless, in my condition of

fibromyalgia and severe chronic fatigue syndrome patient, recognized by the Spanish Social Security Administration, no right protects us."

[Social services un-care:] "institutions do not help them."

[Socio-sanitary un-care:] "The situation has also affected his family. Her husband lost his job because he had to constantly take care of Sílvia and her two children, who have grown up living with the mother's illness. 'They do not deserve this burden without anyone helping us.'"

# Condescension

[Condescension:] "On the other hand, before the explanation I gave to the psychologist about how helpless we were the affected by these diseases on the part of public healthcare system, she told me that it is due to the lack of consensus around these diseases [...]"

# Authorized imposition of illegitimate verdicts

[Authorized imposition of illegitimate verdicts:] "CIMA's doctor has made her stand on tiptoe and move her arms up and down, and just with this he has told her to return to duty overlooking all medical reports."

[Doxical imposition:] "What I see every day is how many people try all kinds of things, like her, looking to lighten their suffering."

[Assignment of successive verdicts over time until correctly diagnosed:] "It took me six years to find a doctor who could explain what I had."

[Arbitrary determination of a maximum period of incapacity for work for a disease that is chronic and without treatment:] "They say I am able to work only because the sick leave is finishing."

# Delegitimization

[Incomprehension:] "At the beginning, everyone understands me, but this changes as outbreaks arise because of the increased effort [in the workplace]. Then nobody understands me."

[Incomprehension:] "If society in general and our families in particular come to know CFS, at least we will have the comfort of their understanding."

[Delegitimization:] "and then in addition to all that, they call them neurasthenic, hysterical, exaggerated..."

[Generalized questioning of CFS patient:] "As a CFS affected, I am very angry and fed up with having to continually explain myself."

[Decredibilization:] "What do they think, that I invent my illness? That doctors invent my medical history?"

# Disintegration

[Social, labor-productive and labor-reproductive disintegration:] "Being healed means being able to eat what you want without feeling bad, going to work and fulfilling your responsibilities without bursting, running the household, taking care of your children and having time and strength to enjoy leisure time, among many other things."

[Lack of expectations:] "There is no self-projection into the future."

[Resistance to social and labor disintegration and difficulty of adaptation to it:] "I resisted recognizing that I had to change my life, because for me work was not a sacrifice. I had a good time. I enjoyed."

[Resistance to social and labor disintegration and difficulty of adaptation to it:] "I, who went to [X] every day and who was in contact with so many people... That part has been very hard, I am still adapting."

[Conflicts between customs and labor/social rhythms of sick and non-sick:] "Do not be angry if yesterday I told you that today we would see us, but today I cannot stand it anymore and I cancel the appointment."

[Necessary re-adaptation of CFS patient and his social circle to the social rhythms and customs required by the disease:] "We can control many things, but not everything. [...] We have made all the changes that were in our hands."

[Divorces:] "My husband got fed up with me."

[Consequences over identity of labor disintegration:] "I have had to sacrifice my profession, my life."

# Imposition of discourse

[Imposition of heroic discourse:] "but you have not chosen well at all, because in another body you could have been more harmful if possible, on a psychological level, so you have failed in that purpose. Since we have to live together, I am getting to know you thoroughly, studying you, so as not to provoke your outbursts of unbridled violence that hurt my physique so much. Although, remember, you only have my body."

[Imposition of normality discourse:] "I spend the week pretending I'm fine and crying secretly [...]"

[Imposition of non-victimist/non-self-pitying discourse:] "His prospects are grim, but he resists self-pity."

# Euphemization

[Making a virtue of necessity:] "But I would not like to convey a pessimistic view of my situation. [...] That this has made me learn. That here I have realized that you have to be happy with the little things that life puts you ahead."

## Silencing

[Silencing:] "I have never wanted to make public something that I considered too personal."

Silencing behaviors: Some patients send anonymous or signed letters with their acronyms. This is assimilable to the silencing, since the person hidden that suffers from CFS.

# Invisibilization

[Invisibilization:] "It is imperceptible in the eyes of society."

[Absence of biological markers:] "It is lacking of any physiological marker could identify it."

[Without any sign capable of operating as negative symbolic capital:] "These people do not look bad, they can walk, they do not have the signs that usually define a disabled person."

## Isolation

[Isolation as a product of disintegration:] "Well, think that they are people who live... Some live in the most absolute loneliness."

[Isolation as a protective mechanism:] "I just leave home; I feel protected there."

## Uncommunication

[Uncommunication:] "[...] that they feel lonely [...]"

# Self-blaming

[Self-blaming:] "For years I have come to think that I had lost my mind or that I was a lazy person who did not know how to run the household and take care of my son."

[Psychologization of symbolic violence with the effect of self-blaming:] "No miracle: I have worked hard to learn about what is happening to me, to understand it..., and to change myself, to correct my old psychic structure, which was harmful to me."

[Medicalization of symbolic violence:] "Did you get medication to cope with depression? Yes."

	Counting per themes and subthemes
Non-r	ecognition (169 occurrences; 27%)
	Non-recognition of the sick and the disease (54; 32%)
	Humiliations and systematic mistreatment of CFS patients by Public Administration as a deterrent strategy for the recognition of
	disabilities (34; 20%)
	Non-recognition of patients as human beings (31; 18%)
	Violation of the rights of CFS patients (25; 15%)
	Repeated social abuse to patients (6; 4%)
	Delay of recognition requests as a mechanism of resignation and non-recognition of CFS patients (5; 3%)
	Difficulty of the patient to accept himself and his limitations; internalization of the denial of recognition (5; 3%)
	Violation of the right to dignity of affected families (4; 2%)
	Double bind (3; 2%)
	Judicialization of disability recognition (2; 1%)
Institu	ntionalized un-care (99 occurrences; 16%)
	Medical un-care (67; 68%)
	Scientific un-care (23; 23%)
	Discrimination resulting in un-care (5; 5%)
	Social services un-care (3; 3%)
	Socio-sanitary un-care (1; 1%)
Cond	escension (1 occurrence; 0%)
Autho	rized imposition of illegitimate verdicts (97 occurrences; 15%)
	Authorized imposition of illegitimate verdicts (43; 44%)
	Doxical imposition (30; 31%)
	Assignment of successive verdicts over time until correctly diagnosed (15; 16%)
	Arbitrary determination of a maximum period of incapacity for work for a disease that is chronic and without treatment (9, 9%)
Delegi	itimization (68 occurrences; 11%)
	Decredibilization (26; 38%)
	Incomprehension (20; 30%)
	Delegitimization (13; 19%)
	Generalized questioning of CFS patient (9; 13%)
Disint	egration (103 occurrences; 16%)
	Social, labor-productive and labor-reproductive disintegration (52; 50%)
	Lack of expectations (16; 15%)
	Resistance to social and labor disintegration and difficulty of adaptation to it (14; 14%)
	Conflicts between customs and labor/social rhythms of sick and non-sick (8, 8%)
	Necessary re-adaptation of CFS patient and his social circle to the social rhythms and customs required by the disease (8; 8%)
	Divorces (3; 3%)
	Consequences over identity of labor disintegration (2; 2%)
Impos	ition of discourse (8 occurrences: 1%)
mpo	Imposition of heroic discourse (5; 62%)
	Imposition of normality discourse (2; 25%)
	Imposition of non-victimist/non-self-pitying discourse (1; 13%)
Funh	emization (24 occurrences; 4%)
Lupin	Making a virtue of necessity (24; 100%)
Silone	ing (8 occurrences; 1%)
Shene	Silencing (4: 50%)
	Silencing (4, 50%)
Inviai	bilization (9 occurrences; 2%)
	Invisibilization (5; 55%)
	Absence of biological markers (2; 22%) Without any sign capable of operating as negative symbolic capital (2; 22%)
Icolat	
isolati	Indexing an angle of disintegration (15, 899)
	Isolation as a product of disintegration (15; 88%)
	Isolation as a protective mechanism (2; 12%)
	nmunication (2 occurrences; 0%)
Self-b	laming (24 occurrences; 4%)
	Self-blaming (17; 71%)
	Psychologization of symbolic violence with the effect of self-blaming (6; 25%)
	Medicalization of symbolic violence (1:4%)

## Annex 4: MCA & AHC results

# Annex 4.1: MCA, variables, axes, and graph

Disjunctive table of 77 lines (observations; 6 elements excluded by the analysis) and 17 columns (variables), without illustrative/supplementary observations or variables.

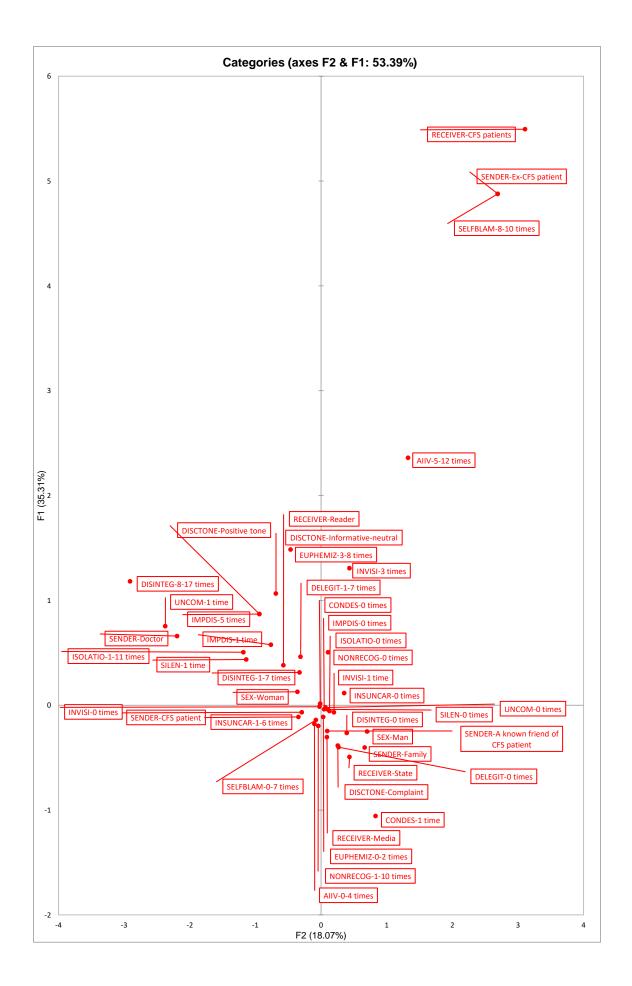
Variables: sex 2 [modalities]; sender 5; receiver 4; disctone 3; disinteg 3; delegit 2; isolatio 2; uncom 2; silen 2; nonrecog 2; condes 2; insuncar 2; impdis 3; invisi 3; aiiv 2; selfblam 2; euphemiz 2.

Three of these variables adopted a different coding from the one they had when the data was originally collected, which is the one that appears in section 3 "Data and methodology." Thus, the recoding of variable "sender" is as follows: CFS patient (if nothing is indicated, the category has not been recoded), A known friend of CFS patient, Ex-CFS patient, Doctor, Family (includes the following original categories: Husband of CFS patient, CFS patient relative, CFS patient daughter, CFS patient father/mother); the recoding of the variable "receiver": CFS patients, Reader, Media, State (includes: Health authorities, Catalan minister of health, Public hospitals, Government agencies' disability impact assessment, Public powers); the recoding of the variable "disctone": Informative-neutral, Positive tone, Complaint (includes: Support-complaint, Complaint-committed, Request-complaint, Request-informative, Claiming). In general, efforts have been made to respect the criteria point out by Hjellbrekke (2019). Thus, it has been tried that there was no variable that predominated over the others, so that all had the same number of categories, although it has not always been possible, as shown by sender and receiver variables. On the other hand, it has not been considered pertinent to treat as passive or merge with other categories those that gather relative frequencies lower than 5%, as illustrated by categories such as A known friend of CFS patient, Ex-CFS patient, Doctor, Media or Positive Tone.

The total inertia is 1.529, and the adjusted total inertia is 0.076. The sum of the eigenvalues of the 13 axes considered is 1.266. The sum of the adjusted eigenvalues for the 10 axes with an unadjusted eigenvalue > 1/total number of active variables (17) [0.0588] is 0.055.

Axes: Eigenvalues	Inertia %	Cumulative %	Axes: Adjusted eigenvalues	Adjusted inertia %	Adjusted cumulative %
F1: 0.213	13.952	13.952	F1: 0.027	35.311	35.311
F2: 0.169	11.076	25.027	F2: 0.014	18.073	53.385
F3: 0.149	9.740	34.768	F3: 0.009	12.012	65.397
F4: 0.113	7.381	42.149	F4: 0.003	4.322	69.719
F5: 0.093	6.089	48.238	F5: 0.001	1.739	71.458
F6: 0.084	5.519	53.757	F6: 0.001	0.968	72.426
F7: 0.076	4.985	58.742	F7: 0.000	0.448	72.874
F8: 0.073	4.743	63.485	F8: 0.000	0.278	73.152
F9: 0.067	4.405	67.889	F9: 0.000	0.108	73.260
F10: 0.065	4.255	72.145	F10: 0.000	0.058	73.318
F11: 0.058	3.799	75.944	X	Х	Х
F12: 0.056	3.650	79.593	X	Х	Х
F13: 0.049	3.183	82.777	Х	Х	Х

The different adjusted parameters have been calculated only for the axes with unadjusted eigenvalues > 0.0588.



Variable-category	F1%	F2%	F3%	F4%	F5%	F6%	F7%	F8%	F9%	F10%	F11%	F12%	F13%
SEX-Woman	0.298	2.958	0.737	6.768	0.053	0.001	0.595	0.001	0.039	0.160	0.109	0.156	1.755
SEX-Man	0.584	5.792	1.444	13.253	0.103	0.001	1.166	0.002	0.077	0.313	0.214	0.306	3.436
SENDER-Known friend CFS pat.	0.024	0.005	0.180	1.493	2.253	0.250	3.849	8.488	34.295	5.510	3.411	12.218	1.052
SENDER-Ex-CFS patient	18.477	7.095	0.008	0.363	2.292	0.147	0.093	0.001	0.137	0.190	0.055	0.003	0.096
SENDER-Family	1.199	4.122	0.253	12.699	1.580	0.162	1.106	1.532	3.115	1.015	0.343	0.288	11.403
SENDER-CFS patient	0.083	1.968	0.288	5.137	0.261	0.466	0.056	0.171	6.115	1.842	0.014	0.072	3.045
SENDER-Doctor	0.338	4.704	0.442	2.161	0.896	14.529	0.163	0.050	4.152	22.070	0.694	4.283	2.350
RECEIVER-State	3.402	3.336	0.172	0.109	1.677	1.042	6.668	0.067	1.540	1.309	0.064	0.350	0.285
RECEIVER-Reader	1.859	5.278	0.369	0.004	2.222	1.063	7.222	0.348	1.291	1.334	0.001	4.246	0.192
RECEIVER-CFS patients	11.720	4.730	0.295	1.425	1.382	1.419	0.628	0.442	1.202	1.107	0.050	7.743	0.016
RECEIVER-Media	0.036	0.004	0.210	1.295	0.146	0.977	0.719	31.485	4.055	1.645	2.277	30.301	0.311
DISCTONE-Complaint	2.999	1.662	0.043	0.744	0.035	0.021	0.211	0.037	0.372	0.599	0.461	0.718	1.815
DISCTONE-Informative-neutral	7.930	4.148	0.966	1.580	0.002	0.180	0.347	0.022	1.443	2.149	1.660	3.461	4.835
DISCTONE-Positive tone	0.293	0.431	32.139	0.790	1.408	0.568	0.666	0.581	0.491	0.408	0.327	3.174	0.148
DISINTEG-0 times	1.166	3.237	0.103	0.564	2.137	2.040	1.243	1.476	3.011	0.432	0.032	0.727	0.004
DISINTEG-1-7 times	0.950	1.298	0.561	3.030	8.135	6.256	1.770	2.890	2.415	2.150	0.001	0.918	0.240
DISINTEG-8-17 times	1.626	12.407	0.893	4.754	7.285	3.284	0.144	0.095	4.341	3.048	0.599	0.214	1.399
DELEGIT-0 times	2.373	1.354	1.623	0.222	1.573	0.034	0.562	5.360	0.019	0.961	1.180	0.616	6.091
DELEGIT-1-7 times	2.733	1.559	1.869	0.256	1.812	0.039	0.648	6.172	0.022	1.106	1.359	0.709	7.014
ISOLATIO-0 times	0.076	0.524	0.149	1.587	0.002	0.407	0.035	0.012	0.006	0.880	0.005	0.362	0.593
ISOLATIO-1-11 times	0.694	4.789	1.362	14.506	0.020	3.718	0.316	0.107	0.055	8.043	0.043	3.311	5.418
UNCOM-0 times	0.013	0.159	0.025	0.043	0.300	0.184	0.006	0.001	0.001	0.501	0.009	0.015	0.486
UNCOM-1 time	0.442	5.503	0.869	1.493	10.336	6.345	0.200	0.017	0.018	17.270	0.321	0.510	16.761
SILEN-0 times	0.041	0.351	0.091	0.002	0.007	2.827	0.189	0.572	0.151	0.043	0.056	0.113	0.417
SILEN-1 time	0.442	3.799	0.985	0.027	0.072	30.627	2.046	6.199	1.634	0.469	0.602	1.221	4.512
NONRECOG-0 times	1.976	0.112	3.268	0.167	4.213	0.001	8.490	0.874	0.154	5.515	3.561	0.444	4.652
NONRECOG-1-10 times	0.775	0.044	1.282	0.066	1.652	0.000	3.329	0.343	0.060	2.163	1.396	0.174	1.824
CONDES-0 times	0.006	0.005	0.001	0.002	0.049	0.007	0.101	0.012	0.125	0.000	0.794	0.052	0.000
CONDES-1 time	0.433	0.338	0.060	0.124	3.423	0.502	7.045	0.822	8.780	0.008	55.603	3.656	0.020
INSUNCAR-0 times	0.181	2.140	0.971	0.005	2.460	6.087	0.006	3.713	1.041	1.974	1.330	0.375	1.812
INSUNCAR-1-6 times	0.176	2.081	0.944	0.005	2.392	5.918	0.006	3.610	1.012	1.920	1.293	0.364	1.762
AIIV-0-4 times	0.820	0.327	0.077	0.141	0.327	0.098	0.040	0.124	0.090	0.052	0.129	0.071	0.192
AIIV-5-12 times	10.818	4.312	1.010	1.867	4.311	1.290	0.531	1.632	1.192	0.689	1.704	0.941	2.529
IMPDIS-0 times	0.039	0.076	0.308	0.069	0.838	0.132	0.872	0.253	0.148	0.013	0.075	0.112	0.148
IMPDIS-1 time	0.388	0.856	0.421	3.087	13.260	1.652	15.532	7.929	4.948	0.826	2.642	0.308	2.550
IMPDIS-5 times	0.293	0.431	32.139	0.790	1.408	0.568	0.666	0.581	0.491	0.408	0.327	3.174	0.148
INVISI-0 times	0.006	0.015	0.059	0.240	1.039	0.192	2.400	0.480	0.033	0.105	1.260	0.049	0.017
INVISI-1 time	0.009	0.096	0.161	0.027	4.697	2.812	30.112	10.005	3.682	0.030	15.524	1.593	0.827
INVISI-3 times	0.663	0.092	1.125	18.618	11.382	0.049	0.048	2.218	8.031	4.959	0.058	1.083	9.432
SELFBLAM-0-7 times	0.536	0.206	0.000	0.011	0.066	0.004	0.003	0.000	0.004	0.005	0.002	0.000	0.003
SELFBLAM-8-10 times	18.477	7.095	0.008	0.363	2.292	0.147	0.093	0.001	0.137	0.190	0.055	0.003	0.096
EUPHEMIZ-0-2 times	0.324	0.040	0.851	0.008	0.014	0.279	0.006	0.090	0.005	0.464	0.025	0.815	0.022
EUPHEMIZ-3-8 times	4.282	0.522	11.238	0.105	0.191	3.679	0.074	1.188	0.071	6.125	0.333	10.754	0.292

Annex 4.2: MCA, explanatory variables-categories of axes F1-F13

In bold, explanatory categories: 1/total number of categories (43)  $\ge 2.326\%$ . Explanatory variables: 1/total number of variables (17) > 5.882\%. In red, categories with positive coordinates on the axis, in blue with negative coordinates. The information on the coordinates was obtained from the table of principal coordinates of the variables, which is not included.

Annex 4.3: MCA, explanatory variables-categories of each axis according to coordinates/importance

	F1
Positive coordinates	Negative coordinates
SENDER-Ex-CFS patient: 18.48%	RECEIVER-State: 3.40%
SELFBLAM-8-10 times: 18.48%	DISCTONE-Complaint: 3.00%
RECEIVER-CFS patients: 11.72%	DELEGIT-0 times: 2.37%
AIIV-5-12 times: 10.82%	Total: 8.77%
DISCTONE-Informative-neutr.: 7.93%	
EUPHEMIZ-3-8 times: 4.28%	
DELEGIT-1-7 times: 2.73%	
Total: 74.44%	

	F2
Positive coordinates	Negative coordinates
SENDER- Ex-CFS patient: 7.10%	DISINTEG-8-17 times: 12.41%
SELFBLAM-8-10 times: 7.10%	UNCOM-1 time: 5.50%
SEX-Man: 5.79%	RECEIVER-Reader: 5.28%
RECEIVER-CFS patients: 4.73%	ISOLATIO-1-11 times: 4.79%
AIIV-5-12 times: 4.31%	SENDER-Doctor: 4.70%
SENDER-Family: 4.12%	DISCTONE-Informative-neutr.: 4.15%
RECEIVER-State: 3.34%	SILEN-1 time: 3.80%
DISINTEG-0 times: 3.24%	SEX-Woman: 2.96%
Total: 39.73%	Total: 43.59%

F3
Negative coordinates
DISCTONE-Positive tone: 32.14%
IMPDIS-5 times: 32.14%
EUPHEMIZ-3-8 times: 11.24%
NONRECOG-0 times: 3.27%
Total: 78.79%

F4		
Positive coordinates	Negative coordinates	
SEX-Woman: 6.77%	INVISI-3 times: 18.62%	
SENDER-CFS patient: 5.14% ISOLATIO-1-11 times: 14.51%		
IMPDIS-1 time: 3.09% SEX-Man: 13.25%		
DISINTEG-1-7 times: 3.03% SENDER-Family: 12.70%		
Total: 18.03%	DISINTEG-8-17 times: 4.75%	
	Total: 63.83%	

F5			
Positive coordinates Negative coordinates			
UNCOM-1 time: 10.34%	IMPDIS-1 time: 13.26%		
DISINTEG-8-17 times: 7.29% INVISI-3 times: 11.38%			
NONRECOG-0 times: 4.21% DISINTEG-1-7 times: 8.14%			
CONDES-1 time: 3.42%	INVISI-1 time: 4.70%		
INSUNCAR-1-6 times: 2.39%	AIIV-5-12 times: 4.31%		
Total: 27.65%	INSUNCAR-0 times: 2.46%		
	Total: 44.25%		

F6			
Positive coordinates Negative coordinates			
SENDER-Doctor: 14.53%	SILEN-1 time: 30.63%		
DISINTEG-1-7 times: 6.26% UNCOM-1 time: 6.35%			
INSUNCAR-1-6 times: 5.92% INSUNCAR-0 times: 6.09%			
ISOLATIO-1-11 times: 3.72% EUPHEMIZ-3-8 times: 3.68%			
SILEN-0 times: 2.83%	DISINTEG-8-17 times: 3.28%		
Total: 33.26%	INVISI-1 time: 2.81%		
	Total: 52.84%		

F7			
Positive coordinates	Negative coordinates		
IMPDIS-1 time: 15.53%	INVISI-1 time: 30.11%		
CONDES-1 time: 7.05%	NONRECOG-0 times: 8.49%		
RECEIVER-State: 6.67%	RECEIVER-Reader: 7.22%		
SENDER-Known frien. CFS p.: 3.85%	Total: 45.82%		
NONRECOG-1-10 times: 3.33%			
INVISI-0 times: 2.40%			
Total: 38.83%			

F8			
Positive coordinates	Negative coordinates		
INVISI-1 time: 10.01%	RECEIVER-Media: 31.49%		
IMPDIS-1 time: 7.93%	SENDER-Known frien. CFS p.: 8.49%		
SILEN-1 time: 6.20%	DELEGIT-1-7 times: 6.17%		
DELEGIT-0 times: 5.36%	INSUNCAR-0 times: 3.71%		
INSUNCAR-1-6 times: 3.61%	Total: 49.86%		
DISINTEG-1-7 times: 2.89%			
Total: 36%			

F9				
Positive coordinates	Negative coordinates			
SENDER-Known frie. CFS p.: 34.30%	CONDES-1 time: 8.78%			
DISINTEG-8-17 times: 4.34%	INVISI-3 times: 8.03%			
SENDER-Doctor: 4.15%	SENDER-CFS patient: 6.12%			
INVISI-1 time: 3.68%	IMPDIS-1 time: 4.95%			
SENDER-Family: 3.12%	RECEIVER-Media: 4.06%			
DISINTEG-1-7 times: 2.42%	DISINTEG-0 times: 3.01%			
Total: 52.01%	Total: 34.95%			

F10			
Positive coordinates	Negative coordinates		
UNCOM-1 time: 17.27%	SENDER-Doctor: 22.07%		
ISOLATIO-1-11 times: 8.04%	EUPHEMIZ-3-8 times: 6.13%		
NONRECOG-0 times: 5.52%	DISINTEG-8-17 times: 3.05%		
SENDER-Known frien. CFS p.: 5.51%	Total: 31.25%		
INVISI-3 times: 4.96%			
Total: 41.3%			

F11				
Positive coordinates	Negative coordinates			
CONDES-1 time: 55.60%	NONRECOG-0 times: 3.56%			
INVISI-1 time: 15.52%	IMPDIS-1 time: 2.64%			
SENDER-Known frien. CFS p.: 3.41%	Total: 6.2%			
Total: 74.53%				

F12			
Positive coordinates	Negative coordinates		
RECEIVER-Media: 30.30%	SENDER-Known frie. CFS p.: 12.22%		
<b>RECEIVER-CFS</b> patients: 7.74%	EUPHEMIZ-3-8 times: 10.75%		
SENDER-Doctor: 4.28%	RECEIVER-Reader: 4.25%		
ISOLATIO-1-11 times: 3.31%	CONDES-1 time: 3.66%		
DISCTONE-Positive tone: 3.17%	DISCTONE-Informative-neutr.: 3.46%		
IMPDIS-5 times: 3.17%	Total: 34.34%		
Total: 51.97%			

F13		
Positive coordinates	Negative coordinates	
UNCOM-1 time: 16.76%	INVISI-3 times: 9.43%	
SENDER-Family: 11.40%	DELEGIT-0 times: 6.09%	
DELEGIT-1-7 times: 7.01% ISOLATIO-1-11 times: 5.42%		
DISCTONE-Informative-neutr.: 4.84% NONRECOG-0 times: 4.65%		
SEX-Man: 3.44% SILEN-1 time: 4.51%		
IMPDIS-1 time: 2.55% SENDER-CFS patient: 3.05%		
Total: 46%	AIIV-5-12 times: 2.53%	
	SENDER-Doctor: 2.35%	
	Total: 38.03%	

Annex 4.4: MCA, observations with greater contributions to each axis

- **F1:** DB1-76 (42.51%), DB1-88 (25.58%)
- **F2:** DB1-20 (17.62%), DB1-76 (13.62%), DB1-80 (12.42%), DB1-88 (7.3%), DB2-12 (6.92%)
- **F3:** DB1-2 (81.39%)
- **F4:** DB1-83 (35.73%), DB1-80 (6.44%), DB1-20 (4.63%), DB1-8 (3.75%)
- **F5:** DB1-83 (18.02%), DB1-20 (12.11%), DB1-6 (10.18%), DB1-25 (5.70%), DB2-15 (5.56%), DB1-1 (5.42%), DB1-79 (5.02%)
- **F6:** DB2-12 (13.18%), DB2-8 (12.70%), DB1-20 (9.14%), DB1-19 (8.66%), DB1-80 (8.37%), DB1-16(14) (6.29%)
- **F7:** DB1-72 (14.08%), DB1-10 (11.35%), DB1-1 (9.13%), DB1-13 (8.95%), DB1-6 (8.69%), DB2-15 (7.94%)
- **F8:** DB1-44 (38.82%), DB1-19 (11.44%), DB1-64 (10.47%), DB2-15 (6.65%)
- **F9:** DB1-64 (39.28%), DB1-1 (10.06%), DB1-83 (9.20%), DB1-44 (4.64%)
- **F10:** DB2-8 (12.98%), DB1-80 (11.46%), DB1-20 (10.50%), DB2-12 (9.22%), DB1-79 (8.65%), DB1-64 (6.10%)
- **F11:** DB1-1 (54.92%), DB1-19 (7.40%)
- **F12:** DB1-44 (28.75%), DB1-64 (11.59%), DB1-76 (7.35%), DB1-88 (6.96%), DB3-3 (5.01%), DB1-29 (4.27%)
- **F13:** DB1-79 (18.83%), DB1-83 (7.81%), DB1-25 (5.90%), DB2-3 (5.22%), DB1-16(14) (4.80%), DB1-15 (4.43%), DB1-73 (4.20%), DB1-70 (2.96%)

Annex 4.5: AHC

Validation tests of the groups (2-24 axes). Truncation: automatic-entropy					
Axes	Crowns	Conhanatia convolution	Variance of the optimal classification		
Axes	Groups	Cophenetic correlation	Intraclass	Interclasses	Total
2	4	0.743	0.063 (16.34%)	0.325 (83.66%)	0.388
3	5	0.739	0.084 (15.56%)	0.455 (84.44%)	0.539
4	6	0.722	0.118 (18.09%)	0.536 (81.91%)	0.654
5	5	0.596	0.236 (31.50%)	0.513 (68.50%)	0.748
6	6	0.65	0.289 (34.60%)	0.545 (65.40%)	0.834
7	5	0.573	0.421 (46.19%)	0.490 (53.81%)	0.911
8	6	0.633	0.418 (42.43%)	0.567 (57.57%)	0.985
9	7	0.659	0.462 (43.86%)	0.591 (56.14%)	1.053
10	8	0.651	0.451 (40.27%)	0.669 (59.73%)	1.119
11	10	0.667	0.424 (36.01%)	0.754 (63.99%)	1.178
12	12	0.703	0.379 (30.70%)	0.856 (69.30%)	1.235
13	13	0.72	0.339 (26.42%)	0.945 (73.58%)	1.284
14	13	0.761	0.408 (30.69%)	0.922 (69.31%)	1.330
15	13	0.752	0.453 (33.01%)	0.919 (66.99%)	1.372
16	13	0.712	0.526 (37.27%)		
17	13	0.749	0.481 (33.29%)		
18	13	0.706	0.556 (37.80%) 0.914 (62.20%)		1.470
19	14	0.747	0.518 (34.75%)	0.972 (65.25%)	1.490
20	12	0.703	0.655 (43.46%)	0.853 (56.54%)	1.508
21	15	0.745	0.527 (34.58%)	0.996 (65.42%)	1.523
22	17	0.779	0.451 (29.40%)	1.084 (70.60%)	1.536
23	7	0.744	1.123 (72.71%)	0.422 (27.29%)	1.545
24	16	0.692	0.511 (32.97%)	1.040 (67.03%)	1.551

Annex 4.6: AHC, observations by membership class

Class	Elements	Observations	Intraclass var.
1	1	DB1-1	0.000
2	1	DB1-2	0.000
		DB1-3, DB1-7, DB1-8, DB1-11(9), DB1-11(10), DB1-12, DB1-	
3	20	24, DB1-26, DB1-38, DB1-45, DB1-51, DB1-53, DB1-54, DB1-	0.213
		57, DB1-58, DB1-67, DB1-68, DB1-70, DB1-73, DB1-78	
4	3	DB1-6, DB1-25, DB2-15	0.422
5	4	DB1-10, DB1-13, DB1-72, DB2-3	0.255
		DB1-15, DB1-16(15), DB1-17(16), DB1-17(17), DB1-21, DB1-	
		27, DB1-29, DB1-30, DB1-31, DB1-32, DB1-33, DB1-34, DB1-	
6	29	39, DB1-40, DB1-41, DB1-43, DB1-61-62, DB1-71, DB1-75,	0.266
		DB1-77, DB1-82, DB1-84, DB1-85, DB1-86, DB2-1, DB2-5,	
		DB2-9, DB2-16, DB3-3	
7	4	DB1-16(14), DB1-19, DB1-60, DB2-12	1.032
8	2	DB1-20, DB1-79	1.217
9	1	DB1-44	0.000
10	1	DB1-64	0.000
11	2	DB1-76, DB1-88	1.607
12	2	DB1-80, DB2-8	0.668
13	1	DB1-83	0.000
N/C	6	DB1-36, DB1-37, DB1-65-66, DB1-74, DB1-81, DB1-87	Х

Annex 4.7: AHC, overall distribution of variables-categories

Variable-category (n = 71*)	Absolute frequency	%
SEX-Woman (Mo)	47	66
SEX-Man	24	34
SENDER-A known friend of CFS patient	1	1
SENDER-Ex-CFS patient	2	3
SENDER-Family	19	27
SENDER-CFS patient (Mo)	47	66
SENDER-Doctor	2	3
RECEIVER-State (Mo)	36	51
RECEIVER-Reader	33	46
RECEIVER-CFS patients	1	1
RECEIVER-Media	1	1
DISCTONE-Complaint (Mo)	52	73
DISCTONE-Informative-neutral	18	25
DISCTONE-Positive tone	1	1
DISINTEG-0 times (Mo, Me)	43	61
DISINTEG-1-7 times	25	35
DISINTEG-8-17 times	3	4
DELEGIT-0 times (Mo, Me)	38	54
DELEGIT-1-7 times	33	46
ISOLATIO-0 times (Mo, Me)	64	90
ISOLATIO-1-11 times	7	10
UNCOM-0 times (Mo, Me)	69	97
UNCOM-1 time	2	3
SILEN-0 times (Mo, Me)	65	92
SILEN-1 time	6	8
NONRECOG-0 times	20	28
NONRECOG-1-10 times (Mo, Me)	51	72
CONDES-0 times (Mo, Me)	70	99
CONDES-1 time	1	1
INSUNCAR-0 times	35	49
INSUNCAR-1-6 times (Mo, Me)	36	51
AIIV-0-4 times (Mo, Me)	66	93
AIIV-5-12 times	5	7
IMPDIS-0 times (Mo, Me)	67	94
IMPDIS-1 time	3	4
IMPDIS-5 times	1	1
INVISI-0 times (Mo, Me)	65	92
INVISI-1 time	5	7
INVISI-3 times	1	1
SELFBLAM-0-7 times (Mo, Me)	69	97
SELFBLAM-8-10 times	2	3
EUPHEMIZ-0-2 times (Mo, Me)	66	93
EUPHEMIZ-3-8 times	5	7

\* Only the 71 observations included in the MCA/AHC have been considered. Mo: mode; Me: median. The distribution of the variable AIIV for these 71 cases is as follows: 0 times  $\rightarrow$  37 observations (obs.); 1 time  $\rightarrow$  15 obs.; 2 times  $\rightarrow$  6 obs.; 3 times  $\rightarrow$  7 obs.; 4 times  $\rightarrow$  1 obs.; 5 times  $\rightarrow$  1 obs.; 6 times  $\rightarrow$  1 obs.; 7 times  $\rightarrow$  1 obs.; 8 times  $\rightarrow$  1 obs.; 12 times  $\rightarrow$  1 observation.

The distribution of the variable SELFBLAM: 0 times  $\rightarrow$  66 obs.; 1 time  $\rightarrow$  1 obs.; 2 times  $\rightarrow$  1 obs.; 3 times  $\rightarrow$  1 obs.; 8 times  $\rightarrow$  1 obs.; 10 times  $\rightarrow$  1 observation.

The distribution of the variable EUPHEMIZ: 0 times  $\rightarrow$  65 obs.; 1 time  $\rightarrow$  1 obs.; 3 times  $\rightarrow$  2 obs.; 4 times  $\rightarrow$  1 obs.; 5 times  $\rightarrow$  1 obs.; 8 times  $\rightarrow$  1 observation.

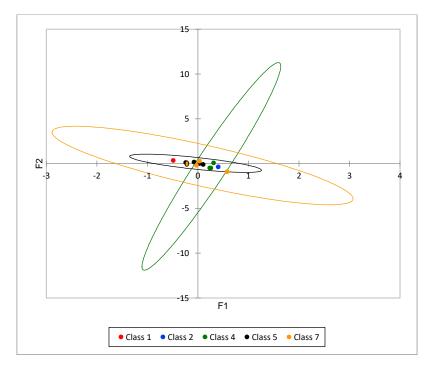
Annex 4.8: AHC, morphology of each class compared with the overall distribution

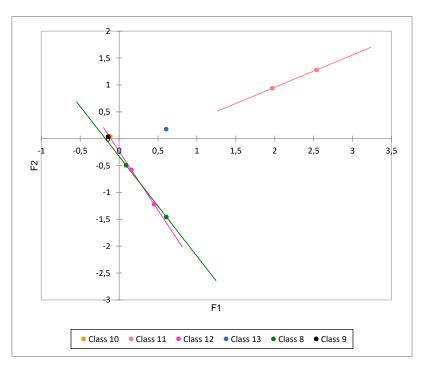
Variable-category	I F	l (n=1; 1)		F	2 (n=1; 1		3 (n=20; 28%) F % p-P		4 (n=3; 4%) F % p/P				5 (n=4; 6		6 (n=29; 41%) F % p-P				7 (n=4; 6%)			
SEX-Woman	0	% 0	p/P 0	F 0	% 0	p/P 0	F 2	% 10	p-P -56	F 3	100	p/P 2	F	% 75	p-P 9	28	% 97	p-P 30	4	% 100	p-P 34	
SEX-Man	1	100	3	1	100	3	18	90	56	0	0	<u>+</u>	1	25	-9	20	3	-30		0	-34	
SEX-Man SENDER-Known friend CFS p	0	0	0	0	0	0	18	90	-1	0	0	0	0	23	-9	0	0	-50	0	0	-34	
SENDER-Ex-CFS patient	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
SENDER-Ex-CFS patient	0	0	0		0	0		75	÷	0	0	0	2	÷	÷	0	0	-27		25	-3	
		÷	2	0	÷	÷	15		48		÷	2	2	50	23	29			1		-2	
SENDER-CFS patient	1	100	<u>.</u>		100	2		25	-41	3	100			50	-16		100	34		75		
SENDER-Doctor	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	-3	0	0	-3	0	0	-3	
RECEIVER-State	1	100	2	0	0	0	17	85	34	1	33	1	0	0	-51	12	41	-9	3	75	24	
RECEIVER-Reader	0	0	0	1	100	2	3	15	-31	2	67	1	4	100	54	17	59	12	1	25	-21	
RECEIVER-CFS patients	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
RECEIVER-Media	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
DISCTONE-Complaint	1	100	1	0	0	0	18	90	17	1	33	0	4	100	27	23	79	6	3	75	2	
DISCTONE-Informative-neut.	0	0	0	0	0	0	2	10	-15	2	67	3	0	0	-25	6	21	-5	1	25	0	
DISCTONE-Positive tone	0	0	0	1	100	71	0	0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
DISINTEG-0 times	1	100	2	0	0	0	17	85	24	0	0	0	2	50	-11	17	59	-2	2	50	-11	
DISINTEG-1-7 times	0	0	0	1	100	3	3	15	-20	3	100	3	2	50	15	12	41	6	1	25	-10	
DISINTEG-8-17 times	0	0	0	0	0	0	0	0	-4	0	0	0	0	0	-4	0	0	-4	1	25	21	
DELEGIT-0 times	1	100	2	1	100	2	16	80	26	1	33	1	1	25	-29	15	52	-2	2	50	-4	
DELEGIT-1-7 times	0	0	0	0	0	0	4	20	-26	2	67	1	3	75	29	14	48	2	2	50	4	
ISOLATIO-0 times	1	100	1	1	100	1	19	95	5	3	100	1	4	100	10	26	90	0	4	100	10	
ISOLATIO-1-11 times	0	0	0	0	0	0	1	5	-5	0	0	0	0	0	-10	3	10	0	0	0	-10	
UNCOM-0 times	1	100	1	1	100	1	20	100	3	3	100	1	4	100	3	29	100	3	4	100	3	
UNCOM-1 time	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	-3	0	0	-3	0	0	-3	
SILEN-0 times	1	100	1	1	100	1	20	100	8	2	67	1	4	100	8	29	100	8	0	0	-92	
SILEN-1 time	0	0	0	0	0	0	0	0	-8	1	33	4	0	0	-8	0	0	-8	4	100	92	
NONRECOG-0 times	0	0	0	1	100	4	5	25	-3	0	0	0	2	50	22	9	31	3	0	0	-28	
NONRECOG-1-10 times	1	100	1	0	0	0	15	75	3	3	100	1	2	50	-2.2	20	69	-3	4	100	28	
CONDES-0 times	0	0	0	1	100	1	20	100	1	3	100	1	4	100	1	29	100	1	4	100	1	
CONDES-1 time	1	100	71	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
INSUNCAR-0 times	0	0	0	0	0	0	12	60	11	2	67	1	3	75	26	10	34	-15	3	75	26	
INSUNCAR-1-6 times	1	100	2	1	100	2	8	40	-11	1	33	1	1	25	-26	19	66	15	1	25	-26	
AIIV-0-4 times	1	100	1	1	100	1	20	100	7	2	67	1	4	100	-20	29	100	7	3	75	-18	
AIIV-5-12 times	0	0	0	0	0	0	0	0	-7	1	33	5	0	0	-7	0	0	-7	1	25	18	
IMPDIS-0 times	1	100	1	0	0	0	20	100	6	0	0	0	4	100	-/	29	100	6	4	100	6	
IMPDIS-0 times IMPDIS-1 time	0	100	0	0	0	0	20	100	-4	3	100	24	4 0	100	-4	290	100	-4		100	-4	
IMPDIS-5 times	0	0	0	1	100	71	0	0	-4	0	100		0	0	-4	0	0	-4	0	0	-4	
	1		1			+	20			3	+	1	0	0		29			3	75	-17	
INVISI-0 times INVISI-1 time	0	100	0	1	100	1	20	100	-7	3 0	100 0	1	0 4	100	-92 93	29	100	-7	1	25	-1/	
		÷	÷		÷	÷	0		÷		÷÷				÷			÷			÷	
INVISI-3 times	0	0	0	0	0	0		0	-1	0	0	0	0	0	-1	0	0	-1	0	0	-1	
SELFBLAM-0-7 times	1	100	1	1	100	1	20	100	3	3	100	1	4	100	3	29	100	3	4	100	3	
SELFBLAM-8-10 times	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	-3	0	0	-3	0	0	-3	
EUPHEMIZ-0-2 times	1	100	1	0	0	0	20	100	7	3	100	1	4	100	7	27	93	0	3	75	-18	
EUPHEMIZ-3-8 times	0	0	0	1	100	14	0	0	-7	0	0	0	0	0	-7	2	7	0	1	25	18	

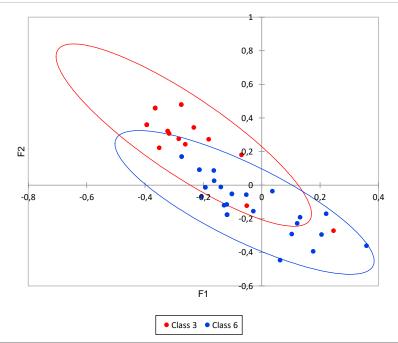
F = Absolute Frequency. If n of a group is < 5%, the comparison between p (relative frequency of the category in the group) and P (relative frequency of the category in the overall distribution) is made from p/P and the relevant deviations are > 2. If n > 5%, the comparison is made from p-P and the relevant deviations are > 5% (positive or overrepresentations; or negative or underrepresentations).

Variable-category	8 (n=2; 3%)				9 (n=1; 1%)			10 (n=1; 1%)			1 (n=2; 3			2 (n=2; 3		13 (n=1; 1%)			
	F	%	p/P	F	%	p/P	F	%	p/P	F	%	p/P	F	%	p/P	F 0	%	p/P	
SEX-Woman	2	100	2	1	100	2	1	100	2	1	50	1	2	100	2		0	0	
SEX-Man	0	0	0	0	0	0	0	0	0	1	50	1	0	0	0	1	100	3	
SENDER-A known friend of CFS patient	0	0	0	0	0	0	1	100	71	0	0	0	0	0	0	0	0	0	
SENDER-Ex-CFS patient	0	0	0	0	0	0	0	0	0	2	100	35	0	0	0	0	0	0	
SENDER-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100	4	
SENDER-CFS patient	2	100	2	1	100	2	0	0	0	0	0	0	0	0	0	0	0	0	
SENDER-Doctor	0	0	0	0	0	0	0	0	0	0	0	0	2	100	35	0	0	0	
RECEIVER-State	1	50	1	0	0	0	1	100	2	0	0	0	0	0	0	0	0	0	
RECEIVER-Reader	1	50	1	0	0	0	0	0	0	1	50	1	2	100	2	1	100	2	
RECEIVER-CFS patients	0	0	0	0	0	0	0	0	0	1	50	35	0	0	0	0	0	0	
RECEIVER-Media	0	0	0	1	100	71	0	0	0	0	0	0	0	0	0	0	0	0	
DISCTONE-Complaint	0	0	0	1	100	1	1	100	1	0	0	0	0	0	0	0	0	0	
DISCTONE-Informative-neutral	2	100	4	0	0	0	0	0	0	2	100	4	2	100	4	1	100	4	
DISCTONE-Positive tone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DISINTEG-0 times	1	50	1	1	100	2	0	0	0	1	50	1	0	0	0	1	100	2	
DISINTEG-1-7 times	0	0	0	0	0	0	1	100	3	1	50	1	1	50	1	0	0	0	
DISINTEG-8-17 times	1	50	12	0	0	0	0	0	0	0	0	0	1	50	12	0	0	0	
DELEGIT-0 times	0	0	0	0	0	0	0	0	0	0	0	0	1	50	1	0	0	0	
DELEGIT-1-7 times	2	100	2	1	100	2	1	100	2	2	100	2	1	50	1	1	100	2	
ISOLATIO-0 times	1	50	1	1	100	1	1	100	1	2	100	1	1	50	1	0	0	0	
ISOLATIO-1-11 times	1	50	5	0	0	0	0	0	0	0	0	0	1	50	5	1	100	10	
UNCOM-0 times	0	0	0	1	100	1	1	100	1	2	100	1	2	100	1	1	100	1	
UNCOM-1 time	2	100	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SILEN-0 times	1	50	1	1	100	1	1	100	1	2	100	1	2	100	1	1	100	1	
SILEN-1 time	1	50	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NONRECOG-0 times	1	50	2	0	0	0	0	0	0	2	100	4	0	0	0	0	0	0	
NONRECOG-1-10 times	1	50	1	1	100	1	1	100	1	0	0	0	2	100	1	1	100	1	
CONDES-0 times	2	100	1	1	100	1	1	100	1	2	100	1	2	100	1	1	100	1	
CONDES-1 time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
INSUNCAR-0 times	Ő	0	0	1	100	2	1	100	2	2	100	2	0	0	0	1	100	2	
INSUNCAR-1-6 times	2	100	2	0	0	- 0	0	0	- 0	0	0	- 0	2	100	2	0	0	0	
AIIV-0-4 times	2	100	1	1	100	1	1	100	1	0	0	0	2	100	1	0	0	0	
AIIV-5-12 times	0	0	0	0	0	0	0	0	0	2	100	14	0	0	0	1	100	14	
IMPDIS-0 times	2	100	1	1	100	1	1	100	1	2	100	14	2	100	1	1	100	1	
IMPDIS-1 time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IMPDIS-5 times	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
INVISI-0 times	2	100	1	1	100	1	1	100	1	2	100	1	2	100	1	0	0	0	
INVISI-0 time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
INVISI-1 time INVISI-3 times	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100	71	
SELFBLAM-0-7 times	2	100	1	1	100	1	1	100	1	0	0	0	2	100	1	1	100	1	
SELFBLAM-0-7 times SELFBLAM-8-10 times	0	0	0	0	0	0	0	0	0	2	100	35	0	0	0	0	0	0	
EUPHEMIZ-0-2 times	2	100	1	1	100	1	1	100	1	1	50	35	2	100	1	1	100	1	
EUPHEMIZ-0-2 times EUPHEMIZ-3-8 times	0	100	0	0	100	0	0	100	0	1	50	7	0	100	0	0	100	0	
EUT HEIMIZ-3-8 UIIIES	0	U	U	U	: 0	. 0	U	U	U	1	50	/	0		. 0	U	U U	. 0	

Annex 4.9: AHC, projection of the clusters in the factorial plane (axes F1 & F2) of the MCA with concentration ellipses







## References

- Abbey, S. E., & Garfinkel, P. E. (1991). Neurasthenia and chronic fatigue syndrome: The role of culture in the making of a diagnosis. *American Journal of Psychiatry*, 148(12), 1638-1646. https://doi.org/10.1176/ajp.148.12.1638.
- Addinsoft. (2021). XLSTAT statistical and data analysis solution [Computer software]. Addinsoft. https://www.xlstat.com/en/.
- Åsbring, P. (2001). Chronic illness A disruption in life: Identity-transformation among women with chronic fatigue syndrome and fibromyalgia. *Journal of advanced nursing*, *34*, 312-319. https://doi.org/10.1046/j.1365-2648.2001.01767.x.
- Åsbring, P., & Närvänen, A. L. (2002). Women's experiences of stigma in relation to chronic fatigue syndrome and fibromyalgia. *Qualitative Health Research*, 12(2), 148-160. https://doi.org/10.1177/104973230201200202.
- Åsbring, P., & Närvänen, A. L. (2003). Ideal versus reality: Physicians perspectives on patients with chronic fatigue syndrome (CFS) and fibromyalgia. *Social Science and Medicine*, *57*(4), 711-720. https://doi.org/10.1016/s0277-9536(02)00420-3.
- Bayliss, K., Goodall, M., Chisholm, A., Fordham, B., Chew-Graham, C., Riste, L., Fisher, L., Lovell, K., Peters, S., & Wearden, A. (2014). Overcoming the barriers to the diagnosis and management of chronic fatigue syndrome/ME in primary care: A meta synthesis of qualitative studies. *BioMed Central Family Practice*, 15(44). https://doi.org/10.1186/1471-2296-15-44.
- Benzécri, J.-P. (1992). Correspondence Analysis Handbook. Marcel Dekker.
- Blease, C., Carel, H., & Geraghty, K. (2017). Epistemic injustice in healthcare encounters: Evidence from chronic fatigue syndrome. *Journal of Medical Ethics*, 43(8), 549-557. https://doi.org/10.1136/medethics-2016-103691.
- Bourdieu, P. (1984). Culture and Politics. In *Distinction: A Social Critique of the Judgment of Taste* (pp. 397-465). Harvard University Press.
- Bourdieu, P. (1987). The Force of Law: Toward a Sociology of the Juridical Field. *Hastings Law Journal*, *38*(5), 814-853.
- Bourdieu, P. (1991). Language and Symbolic Power. Polity Press.
- Bourdieu, P. (1995). Public Opinion Does Not Exist. In Sociology in Question (pp. 149-157). Sage.
- Bourdieu, P. (1998). Practical Reason: On the Theory of Action. Stanford University Press.
- Bourdieu, P. (1999). *The Weight of the World: Social Suffering in Contemporary Society*. Stanford University Press.
- Bourdieu, P. (2000a). Pascalian Meditations. Stanford University Press.
- Bourdieu, P. (2000b). The Left Hand and the Right Hand of the State. In Acts of Resistance: Against the New Myths of Our Time (pp. 1-10). Polity Press.
- Bourdieu, P. (2001). *Masculine Domination*. Stanford University Press.
- Bourdieu, P. (2008). Sketch for a Self-Analysis. University of Chicago Press.
- Bourdieu, P. (2014). On the State: Lectures at the Collège de France (1989-1992). Polity Press.
- Bourdieu, P. (2015). Sociologie générale, volume I: Cours au Collège de France (1981-1983). Raisons d'agir/Seuil.
- Bourdieu, P. (2017). Anthropologie économique: Cours au Collège de France (1992-1993). Raisons d'agir/Seuil.
- Bourdieu, P., & Passeron, J.-C. (1979). *The Inheritors: French Students and their Relation to Culture*. The University of Chicago Press.
- Bourdieu, P., & Wacquant, L. J. D. (1992). An Invitation to Reflexive Sociology. Polity Press.
- Bowen, J., Pheby, D., Charlett, A., & McNulty, C. (2005). Chronic Fatigue Syndrome: A survey of GPs' attitudes and knowledge. *Family Practice*, 22(4), 389-393. https://doi.org/10.1093/fampra/cmi019.
- Broom, D. H., & Woodward, R. V. (1996). Medicalisation reconsidered: Toward a collaborative approach to care. *Sociology of Health and Illness*, *18*(3), 357-378. https://doi.org/10.1111/1467-9566.ep10934730.
- Bunge, M. (1999). The Sociology-Philosophy Connection. Transaction Publishers.

- Cea D'Ancona, M. Á. (1999). El análisis de contenido cuantitativo. In *Metodología cuantitativa* (pp. 351-376). Editorial Síntesis.
- Clarke, J. N., & James, S. (2003). The radicalized self: The impact on the self of the contested nature of the diagnosis of chronic fatigue syndrome. *Social Science and Medicine*, *57*(8), 1387-1395. https://doi.org/10.1016/s0277-9536(02)00515-4.
- Cooper, L. (1997). Myalgic Encephalomyelitis and the medical encounter. *Sociology of Health* and Illness, 19(2), 186-207. https://doi.org/10.1111/1467-9566.ep10934404.
- Crawley, E., Hughes, R., Northstone, K., Tilling, K., Emond, A., & Sterne, J. A. (2012). Chronic disabling fatigue at age 13 and association with family adversity. *Pediatrics*, 130(1), e71-e79. https://doi.org/10.1542/peds.2011-2587.
- Deale, A., & Wessely, S. (2001). Patients' perceptions of medical care in chronic fatigue syndrome. Social Science and Medicine, 52(12), 1859-1864. https://doi.org/10.1016/s0277-9536(00)00302-6.
- Dinos, S., Khoshaba, B., Ashby, D., White, P. D., Nazroo, J., Wessely, S., & Bhui, K. S. (2009). A systematic review of chronic fatigue, its syndromes and ethnicity: Prevalence, severity, comorbidity and coping. *International Journal of Epidemiology*, 38(6), 1554-70. https://doi.org/10.1093/ije/dyp147.
- Donalek, J. G. (2009). When a parent is chronically ill: Chronic fatigue syndrome. *Nursing Research*, 58(5), 332-339. https://doi.org/10.1097/NNR.0b013e3181ac156f.
- Dumit, J. (2006). Illnesses you have to fight to get: Facts as forces in uncertain, emergent illnesses.SocialScienceandMedicine,62(3),577-590.https://doi.org/10.1016/j.socscimed.2005.06.018.
- Durkheim, É. (1964). The Elementary Forms of the Religious Life: A Study in Religious Sociology. George Allen & Unwin.
- Edwards, C. R., Thompson, A. R., & Blair, A. (2007). An 'overwhelming illness': Women's experiences of learning to live with chronic fatigue syndrome/myalgic encephalomyelitis. *Journal of Health Psychology*, *12*(2), 203-214. https://doi.org/10.1177/1359105307071747.
- Elias, N. (1987). Involvement and Detachment. Blackwell.
- Fernández Solà, J. (2002). El síndrome de fatiga crónica. Medicina Integral, 40(2), 56-63.
- Goethals, P., & Delbecque, N. (2001). Personas del discurso y despersonalización. In G. Vázquez (Coord.), *Guía didáctica del discurso académico escrito: ¿Cómo se escribe una monografía?* (pp. 67-80). Editorial Edinumen.
- Goffman, E. (1956). The presentation of self in everyday life. University of Edinburgh.
- Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. Prentice Hall.
- Goldman, B. (2017, July 31). Researchers identify biomarkers associated with chronic fatigue syndrome severity. Stanford Medicine News Center. https://med.stanford.edu/news/allnews/2017/07/researchers-id-biomarkers-associated-with-chronic-fatigue-syndrome.html.
- Gray, M. L., & Fossey, E. M. (2003). Illness experience and occupations of people with chronic fatigue syndrome. *Australian Occupational Therapy Journal*, 50, 127-136. https://doi.org/10.1046/j.1440-1630.2003.00336.x.
- Greenacre, M. J. (2007). Correspondence Analysis in Practice (2nd ed.). Chapman & Hall.
- Greenfield, L. (Director). (2018). Generation Wealth (Documentary). Evergreen Pictures.
- Harrison, A. L. (1995). Development and Evaluation of Claims Involving Chronic Fatigue Syndrome (CFS) Under the Social Security Disability Provisions. *Journal of Chronic Fatigue Syndrome*, 1(3-4), 131-133. https://doi.org/10.1300/J092v01n03\_21.
- Hjellbrekke, J. (2019). Multiple Correspondence Analysis for the Social Sciences. Routledge.
- Ho-Yen, D. O., & McNamara, I. (1991). General practitioners' experience of the chronic fatigue syndrome. *British Journal of General Practice*, 41(349), 324-326.
- Jason, L. A. (2012). Small wins matter in advocacy movements: Giving voice to patients. *American Journal of Community Psychology*, 49(3-4), 307-316. https://doi.org/10.1007/s10464-011-9457-7.
- Jason, L. A., Richman, J. A., Friedberg, F., Wagner, L., Taylor, R., & Jordan, K. M. (1997). Politics, science, and the emergence of a new disease: The case of chronic fatigue syndrome. *American Psychologist*, 52(9), 973-983. https://doi.org/10.1037/0003-066x.52.9.973.

Jones, J. F., Maloney, E. M., Boneva, R. S., Jones, A. B., & Reeves, W. C. (2007). Complementary and alternative medical therapy utilization by people with chronic fatiguing illnesses in the United States. *BioMed Central Complementary and Alternative Medicine*, 7(12). https://doi.org/10.1186/1472-6882-7-12.

Krippendorff, K. (2004). Content Analysis: An Introduction to Its Methodology (2nd ed.). Sage.

- Larun, L., & Malterud, K. (2007). Identity and coping experiences in Chronic Fatigue Syndrome: A synthesis of qualitative studies. *Patient Education and Counseling*, 69(1-3), 20-28. https://doi.org/10.1016/j.pec.2007.06.008.
- Lian, O. S., & Nettleton, S. (2015). 'United We Stand': Framing Myalgic Encephalomyelitis in a Virtual Symbolic Community. *Qualitative Health Research*, 25(10), 1383-1394. https://doi.org/10.1177/1049732314562893.
- Lievesley, K., Rimes, K. A., & Chalder, T. (2014). A review of the predisposing, precipitating and perpetuating factors in Chronic Fatigue Syndrome in children and adolescents. *Clinical Psychology Review*, 34(3), 233-248. https://doi.org/10.1016/j.cpr.2014.02.002.
- Looper, K. J., & Kirmayer, L. J. (2004). Perceived stigma in functional somatic syndromes and comparable medical conditions. *Journal of Psychosomatic Research*, 57(4), 373-378. https://doi.org/10.1016/j.jpsychores.2004.03.005.
- López-Roldán, P., & Fachelli, S. (2015). *Metodología de la Investigación Social Cuantitativa*. Universitat Autònoma de Barcelona.
- Merton, R. K. (1968). The Self-Fulfilling Prophecy. In *Social Theory and Social Structure* (pp. 475-490). Free Press.
- Merton, R. K., Fiske, M., & Kendall, P. L. (1990). *The Focused Interview: A Manual of Problems and Procedures* (2nd ed.). Free Press.
- Moss-Morris, R., Petrie, K. J., & Weinman, J. (1996). Functioning in chronic fatigue syndrome: Do illness perceptions play a regulatory role?. *British Journal of Health Psychology*, *1*(1), 15-25. https://doi.org/10.1111/j.2044-8287.1996.tb00488.x.
- Raine, R., Carter, S., Sensky, T., & Black, N. (2004). General practitioners' perceptions of chronic fatigue syndrome and beliefs about its management, compared with irritable bowel syndrome: Qualitative study. *British Medical Journal*, 328(7452), 1354-1357. https://doi.org/10.1136/bmj.38078.503819.EE.
- Richman, J. A., Jason, L. A., Taylor, R. R., & Jahn, S. C. (2000). Feminist perspectives on the social construction of chronic fatigue syndrome. *Health Care for Women International*, 21(3), 173-185. https://doi.org/10.1080/073993300245249.
- Ruiz Olabuénaga, J. I. (1999). Análisis de contenido. In *Metodología de la investigación cualitativa* (2nd ed.) (pp. 191-210). Universidad de Deusto.
- Sabes-Figuera, R., McCrone, P., Hurley, M., King, M., Donaldson, A. N., & Ridsdale, L. (2010). The hidden cost of chronic fatigue to patients and their families. *BioMed Central Health Services Research*, *10*, 56. https://doi.org/10.1186/1472-6963-10-56.
- Taylor, R. R. (2005). Can the social model explain all of disability experience? Perspectives of persons with chronic fatigue syndrome. *American Journal of Occupational Therapy*, 59(5), 497-506. https://doi.org/10.5014/ajot.59.5.497.
- Ubieto, G. (2018, November 10). Los trabajadores de baja ya pueden entrar acompañados a las revisiones. *El Periódico de Catalunya*. https://www.elperiodico.com/es/economia/20181110/trabajadores-de-baja-tienen-derecho-a-entrar-acompanados-a-las-revisiones-7138919.
- Veblen, T. (1922). *The Theory of the Leisure Class: An Economic Study of Institutions*. B. W. Huebsch.
- Ware, N. C. (1992). Suffering and the Social Construction of Illness: The Delegitimation of Illness Experience in Chronic Fatigue Syndrome. *Medical Anthropology Quarterly*, 6(4), 347-361. https://doi.org/10.1525/maq.1992.6.4.02a00030.
- Ware, N. C. (1998). Sociosomatics and illness in chronic fatigue syndrome. *Psychosomatic Medicine*, 60(4), 394-401. https://doi.org/10.1097/00006842-199807000-00003.
- Ware, N. C. (1999). Toward a model of social course in chronic illness: The example of chronic fatigue syndrome. *Culture, Medicine and Psychiatry, 23*(3), 303-331. https://doi.org/10.1023/a:1005577823045.

Ware, N. C., & Kleinman, A. (1992). Culture and somatic experience: The social course of illness in neurasthenia and chronic fatigue syndrome. *Psychosomatic Medicine*, *54*(5), 546-560. https://doi.org/10.1097/00006842-199209000-00003.

Weber, M. (1946). From Max Weber: Essays in Sociology. Oxford University Press.