

## Phenomenological Understanding of Behavioural and Psychological Symptoms of Dementia: A Clinical Case Presenting Howls and Shouting. The Melancholic Type and Phenomenology of Separation

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### Abstract

**Background:** Behavioural and psychological symptoms of dementia cause great suffering in patients and their families. Phenomenology can help us to clarify the diagnosis and propose some new therapeutic responses, using Daseinanalyse. Phenomenology, that may be complementary to a complete clinical examination, is a Science and a Philosophy. Separation issue and the melancholic type (MT), described by Tellenbach, could explain a melancholy in dementia, using clinical assessment and phenomenology.

**Subject and methods:** A 90-year-old woman who presents a mixed dementia Cluster Dementia Rating, shouting and howls, is the clinical case. The BPSD crisis factors are highlighted. Our first hypothesis is a separation anxiety. We evaluated depression and BPSD using the NPI\*, Cornell scale and Montgomery Asberg Depression Rating Scale in order to confirm our second diagnosis hypothesis that is a melancholy. The Big Five inventory validated-scale (hetero-evaluation) was also used to investigate her personality. Thirdly, of his relation to the Time, the Space, the Self and the other (the usual standardized evaluation in Phenomenology), we propose to explain VDB\* and melancholy in dementia.

**Results:** Melancholy was confirmed. We found an inhibited temperament and a low openness to new experience was measured significantly. Phenomenology of the Separation explains here MT and melancholy that is hidden by the patient's howls. This particular clinical case, the patient who is shouting, must be considered as a psychotic depression in mixed dementia.

**Conclusion:** MT, melancholy, and a symbiotic relationship led to a situation known as "unbearable" for the patient and the Other (a close relative), unable to separate each other and delegate care to a specialized team. Finally, an effective individualized treatment and perspectives are mentioned.

**Keywords:** Attachment; Separation; Behavioral inhibition; Melancholic type; Phenomenology; Depression; BPSD; Openness to experience

**Abbreviations:** BPSD: Behavioural and Psychological Symptoms of Dementia; CDR: Cluster Dementia Rating; NPI: Neuro Psychiatric Inventory (Assessment); MADRS: Montgomery Asberg Depression Rating Scale; VDB: Vocal Disruptive Behaviour

### Introduction

Phenomenology is a science, and a philosophy, which studies the experiences of the Subject, its intentionality and the existential modalities of the human being. It is not a theory, but a study centered on the Subject itself. According to its founders, Husserl and Heidegger, Phenomenology allows a return to things themselves and a return to the Subject "Being at World", in order to highlight what appears ("phenomenon") and also, what does not appear in the foreground [1]. Thus, we propose to understand behavioural and psychological symptoms of dementia, and to review each subject as unique, in order to determine the diagnosis with a phenomenological approach. A complete clinical examination is also necessary, for an optimal individualized treatment, already recommended recently by specialized teams [2]. This scientific idea, to have a phenomenological approach in psychiatry, was proposed by the phenomenologists Tatossian and Heidegger to be able to pass from a clinical case to the theory [1,3-5]. This article focuses on BPSD and melancholy which appears in some vocally disruptive behaviour in patients [6-9]. Finally, we propose here to study a melancholic type patient (MT) [10-15] to clarify what means: vocal disruptive behaviour, highlighting risk factors in a particular howls' case in dementia.

### Clinical Case, Hypothesis and Methods

Mrs R., a 90-year-old woman, has been admitted in an Institution (a retirement home) three weeks ago. She shouts, every day, sometimes also in the presence of the family and shows a weight loss, repetitive cries, temporo-spatial disorientation, without obnubilation. The insomnia is severe (fragmented sleep, awakenings every 2 to 3 hours, early wak up at 5'0 clock). Agitation and aggressiveness are also important, particularly in some care situations such as showering, taking treatment or accompanying activities (where possible). It is the mobile team of geriatric psychiatry who intervenes in this crisis situation.

Shouts and screams express complaints and requests, such as "I want to come home", "pity", "pity my God", or "I want to go to Mom". Indeed, the cognitive disorders are evolved (Mini Mental State Examination (MMSE) <10), but the patient recognizes the caregivers, the psychiatry

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team and may become a little calm when her son is present. In fact, she may be calmer in certain situations, in the presence of her son, and also two or three hours after getting up in the morning. Mrs R. has sometimes psychotic symptoms such as delusions: “you want to poison me” (during meals or giving to her the usual treatment). In fact, she is convinced of the reality of these delusions. No hallucination is noted. The patient was admitted to this institution for falling several times, and refusing treatment at home. Another unexpected problem is highlighted: The only son wants to intervene in the care and comes every morning to check the care and see his mother. He tends to want to control and do the prescription.

The medical exam shows severe pain due to a fracture vertebral compression (three weeks ago, without surgery treatment), A diabetes, and chronic headache and migraine. The mixed dementia Cluster Dementia Rating 3 (Cluster dementia rating) was already confirmed by a complete neuropsychological exam a few month ago, at Lausanne Hospital University, though any cerebral MRI (Magnetic Resonance Imaging) was done (only a cerebral scan showing up leukoaraiosis).

### Our hypothesis

A major depressive disorder of melancholy as the following signs: howls and shouting, her complaints and requests, important lost of weight, the culpability (through her words “pity, my God”), and severe insomnia and agitation. These symptoms have been evolving for three weeks.

- A separation anxiety from the family.
- A melancholic type with behavioral inhibition (a temperamental characteristic) according to our clinical observations.
- A calm single room was given to Mrs R. Based on our psychiatric hypothesis, treatment that we prescribed is trazodone (25 mg three times per day) and haloperidol (0.5 mg oral solution in the morning and again only once if crisis appears). Individual activities (music therapy, physiotherapy, walking in the garden with a caregiver) are also prescribed. Melatonin is used at bedtime (3 mg then 5 mg). Analgesic treatment (pain, headache) is taken up by the general practitioner doctor, then treatment are monitored (clinical and biological exam).

We invested the anamnesis with a complete informative interview with the family to understand the life history and the life events since childhood and adolescence. The psychiatric histories have been noted and explored, interviewing the family and her general practitioner. The NPI explores BPSD. Depression is evaluated using two validated scales: the MADRS and Cornell, in order to allow the follow-up of the clinical case. Finally, using Daseinanalyze we tried to understand and explain what appears here. Phenomenology of depression and attachment may explore separation issues.

## Results

### Anamnesis: Vulnerabilities and resources of the patient

The interview provides some important informations for this women who has latin origins, living in the south of France. Firstly, the patient has already suffered from depression requiring antidepressant therapy. Anxious disorder as panic and generalized anxiety disorders were comorbid. Secondly, we have found conjugal violence before the divorce, according to the testimony of the son. Then, she accompanied her son to Switzerland thirty years ago, after divorcing. She lived with her son, in the same apartment, for 2 years. Health care have become very difficult: she refused the treatment and she was aggressive with

caregivers at home. Cognitive disorders have become more important, such as praxical disorders.

During World War II, she was in the Resistance, in France. Then, she became a nurse after the war. According to the family, she has always shown an excessive moral conscience, for work and in life. Indeed, she is demanding with herself. Moreover, she did not have a good social quality of life for refusing some new social situations. She did not remarry. Little leisure, apart from holidays in France with her family, she liked to cook, to take care of the garden, to play card with a longtime friend, were her habits of life. She had become lonely in recent years.

Shyness, inhibition and avoidance of novelty were part of his personality traits. This could be an inhibited temperament such as behavioral inhibition. We note also that her mother suffered from depression and anxiety.

### Vocal Disruptive vocally (VDB) and Major Depressive Disorder (MDD) of Melancholy type

So we can highlight here MDD associated with VDB for this patient. We can say it is a melancholy with VDB, agitation and psychotic symptoms (MADRS= 48). Figure 1 shows the scores on the MADRS and Cornell scale reflect a rapid improvement with the antidepressant started. Indeed, this depression has to be treated effectively from the first day here, using trazodone (Figure 1).

Finally, the diagnosis is confirmed since the antidepressant treatment is effective, which is confirmed by the evolution of the MADRS and Cornell scales. We note the end of moral suffering, sadness, and insomnia. Shouting stopped after about two weeks of antidepressant therapy. The depression remains in remission after more than three months of maintenance of the treatment (MADRS score=10; Cornell score=8) (Figure 1). Agitation and aggressiveness stopped, confirming the diagnosis of severe depression.

### Personality and BF Inventory (French Validated Scale)

To better define who suffers from depression with VDB, we need to clarify the underlying personality and vulnerability of the patient. The anamnesis confirms MT premonitory personality, such as the following characteristics (according to Ueki et al. who define precisely the MT with the Kasahara scale [16]):

1. She liked to work.
2. When she started something, she always finished it thoroughly.

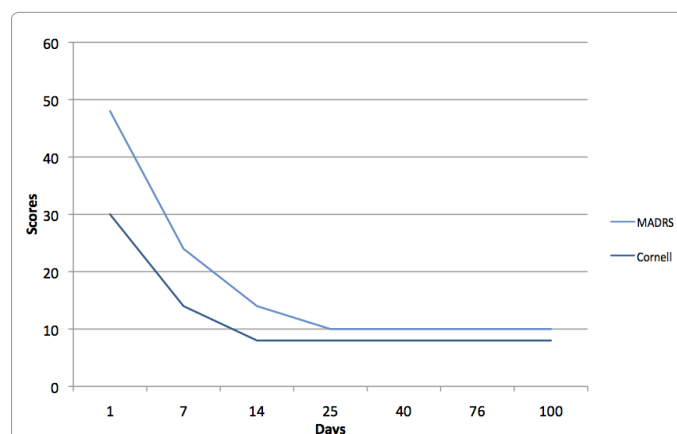


Figure 1: Evolution of major depressive episode/MADRS scale/Cornell scale.

3. She had a strong sense of responsibility.
4. She would rather avoid confrontation with somebody.

According to also with Kronmüller et al. [15,17], we have found equally:

1. Dependence to her relatives.
2. Perfectionism.
3. Intolerance of ambiguity.
4. Hypernomy, a tendency to want to be perfect and being as a perfect social role (according to social and religious or cultural norms).

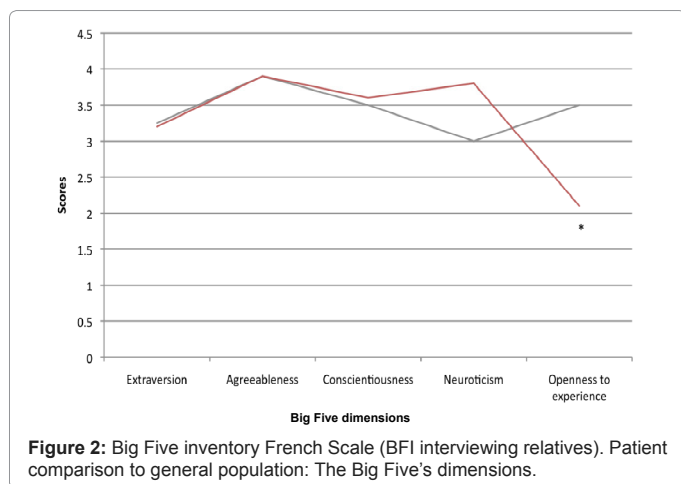
Behavioral inhibition was found during the anamnesis, although there is no validated scale in adulthood: social inhibition, neuroticism, low novelty seeking, inhibition to the unfamiliar are some characteristics of her personality.

The assessment by BF inventory (french version) shows: higher neuroticism, agreeableness and conscientiousness were found, but these results are not statistically significant compared to the general population. However, a low openness to experience was significant (z scores < 2 standard deviation), to compare with the general population (according to Plaisant and Lignier [18,19]). (Figure 2, Tables 1 and 2).

### Phenomenology

The Subject is studied using phenomenology. The disorders of consciousness due to dementia are as follows:

- The alteration of the pre reflexive consciousness with the loss of the self.



Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to experience
3.25	3.90	3.55	3.75	2.1 (*)

(\*) z score < 2DS

**Table 1:** Scores found for the patient on the scale Brief Personality Inventory-French version- hetero-valuation by a relative-5 personality factors.

Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to experience
3.2 (0.8)	3.90 (0.6)	3.4 (0.7)	3.0 (0.8)	3.5 (0.6)

**Table 2:** Scores found in the general population (Mean and standard deviation) Scale Brief Personality Inventory-French version- hetero-valuation by a relative-5 personality factors [18,19].

- There is a maintaining awareness without the self (explaining the sensitivity of the subject to the environment).

- The alteration of the imagining and conceptual consciousness due to the cognitive disorders.

- These elements are noted at each interview, and the ability to elaborate and to develop reasoning is permanently affected.

- Indeed, several levels of consciousness are altered, due to a mixed-dementia CDR.

So, the Subject could present anxiety and be disoriented in time and space. This is the case here, at any time.

The circadian biological rhythm is also lost, because of the anxiety, the altered consciousness and the melancholic underlying type, but not only. An important crisis factor is noted: in fact, we have found a separation anxiety problem in this particular case since the admission to home retirement and departures from the single son.

Consequently, the phenomenology of separation [20] (and Attachment in depression's older women [21]) has to be used to explain the Subject, her Melancholy and the Melancholic Type. We will discuss later this point of view understanding and explaining the intentionality of the subject being at world.

### Discussion

#### Shouting: Meanings in dementia with melancholic type

Few articles [6-9] studied the cries and howls in dementia, and the authors evoke, each time, a lack of understanding and knowledge in this field. Even if the literature reviews very precisely all possible meanings, we lack accurate diagnosis and rigorous scientific follow-up.

Although a lot of meanings of shouting are well studied [6-9] they concluded the diagnosis is difficult to do. They confirmed the depression is atypical and masked by howls and behavioral disorders. Specialized care team proposes to evaluate VDB as a symptom in BPSD [8]; so, they are looking for causes such as organic pain, psychosis, depression, or specific environmental factors which can trigger shouting. In fact, using an etiological investigation, they propose to search for a direct psychological, environmental or organic cause. A need or lack expressed by the patient has also to be sought. They propose also some interesting environmental and psychological interventions. Individual activities are cited in order to give calm and well-being for the patients (e.g. music therapy, physical activity, relaxing massage, to take care of a little garden). Caregivers' training and their supervision are also indicated [2].

Finally authors showed that most aspects surrounding VDB are misunderstood, and the heterogeneity of these VDB's symptoms lead to some difficult standardized interventions. So, we agree to say there are so many different situations in BPSD and VDB. That is the reason to highlight this particular clinical case because we found this profile several times. In fact, according to our clinical observations, we found several times this situation underlying by melancholy.

Here, we show a clinical report that reveals a depression, a difficult diagnosis masked by the cries and calls of the patient. Thus, the NPI did not allow the detection of depression. Indeed, to the first question, "Is your patient sad?" the answer is no, according to the healthcare team. Consequently, we propose to use the MADRS and the Cornell scale to evaluate depression [22] in dementia, mostly in this situation of shouting.

Three other similar clinical cases have been reported by the mobile geriatric psychiatry team this year [23]. In these cases, treatment was also effective, taking into account severe depression of melancholy type, then evaluating separation anxiety in each family. Therefore, we must consider these howls in dementia as a melancholy with agitation, especially if there is a history of depression (also found in patients presenting migraine and headache [24,25]). Moreover, MT and conjugal violence were found several times, during the life history. Or, Post-Traumatic Stress Disorder is probably a risk of dementia, even if it appears in infancy [26,27]. The inhibited temperament (BI) is also found by the entourage's interview (significant timidity, and inhibition, and anxiety or discomfort in new social situations are found). It is an important vulnerability to anxiety disorders, since childhood into adulthood [28-33]. It looks like to the intolerance of uncertainty, a personality trait [34]. Moreover von Gunten et al. [7] indicate that most shouting patients have an underlying premorbid psychiatric disorder that is confirmed here. So, these findings will require further prospective studies to evaluate this temperament in older age and confirm whether it is part of the MT.

### Low openness to experience

We found an unexpected result, which is reproduced for other cases of melancholia, not developed here. Indeed, it is not the high scores of neuroticism or consciousness that are normally expected, but a low score for the openness-to-experience dimension is found significant. This may explain a vulnerability to depression. Otherwise, the low openness to experience are correlated with the serotonin transporter promoter variant 5-HTTLPR (short allele) in depressed patients suffering from headache, according to two recent studies [35,36]. High neuroticism was already known to be connected to depression and headache (Mrs R. suffers from migraine) [35,36]. That serotonin transporter polymorphism lead to higher amygdala's reactivity that is

found in behavioral inhibition [28,37]. Further longitudinal studies have to be done.

In addition, the melancholic type could be linked to a weak openness to experience and novelty. The subject refuses to leave his close relative to face novelty, preferring to change nothing. This could explain the significant levels of social anxiety found in the melancholic type, as well as the separation anxiety of the family. Thus, there are several (confounding) factors that can stabilize the low level of novelty seeking (and also a low consciousness to experience) through the patient's life. Therefore we can hypothesize the insecure attachment and high levels of inhibited temperament lead to the MT, with low openness to experience which seems not to be a well-being characteristic of personality, according to Rizzutto et al. [38].

### Trajectory from BI/MT to adulthood into the elderly: a theoretical synthesis from a clinical case

We analyzed here the life's trajectory of the patient to understand the MT based on a systematic review of the literature. We propose some risk factors which explain here a stable melancholic endogenous type (Figure 3). We can't analyze behavioral inhibition in the elderly: there is no validated scale. The retrospective clinical interview is the only way to do this hypothesis: shyness, social inhibition to the unfamiliar situations is possible, but it may be difficult to interpret if this is really behavioral inhibition. The MT premorbid personality is easier to explore: the Kahasara scale studies 15 situations and ways of being: social anxiety and excessive moral consciousness are investigated. It seems to be a stable type from childhood to adulthood.

### Unbearable situation and separation's phenomenology

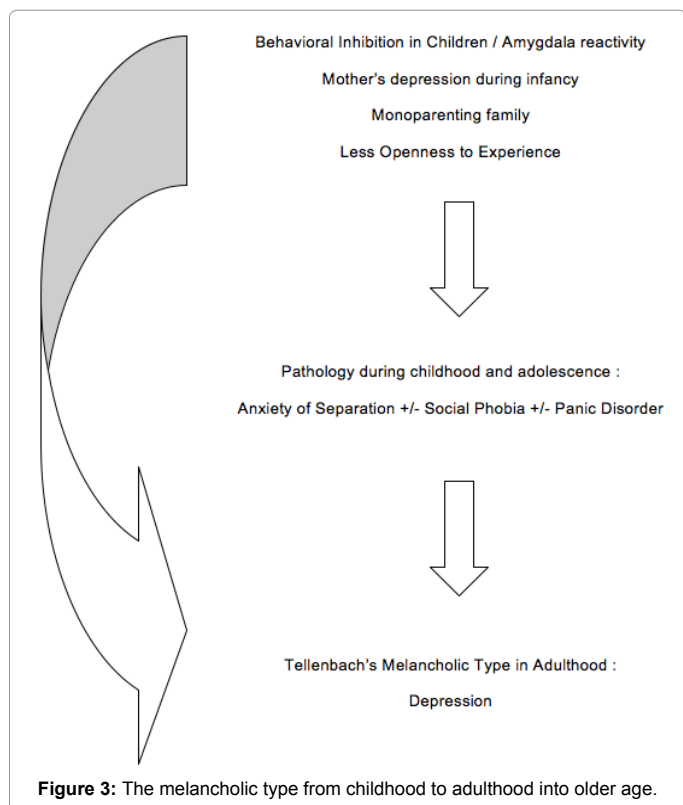
We saw several levels of consciousness are altered. The person can not "be able to be". The person can not be otherwise but the intentionality of the subject exists through shouting and howls. It is the untenable situation defined by Plagnol using Phenomenology [39]. The subject suffers and any position in the world is untenable, whereas it is impossible not to be present. Psychotic symptoms are explained by the loss of the Fundamental Trust, and the patient's experience.

We show here to understand the howls and shouting of this subject, we have to study the separation and attachment phenomenology.

In fact, separation and attachment are two asymmetric dimensions. Imagining and conceptual consciousness are involved in each separation process. Here, each separation can be lived as a death, and the experience of the death itself [40]. Otherwise, the Subject presents a melancholic type which can be explained through biological endogenous type with a separation issue from the family, probably since childhood, involving the mother-infant separations and attachment process (for example: insecure and ambiguous attachment learning).

So, the separation is a reflection of a mode of Attachment which is the story of the bond between two persons. It begins with the main attachment figure, the mother most often. Attachment may be implicated in agitation in BPSD [41,42]. For example, exhaustion of relatives may influence agitation reactions and BPSD [43], as well as separation issues. Indeed, the Subject's attachment ("Being at World") is a dynamic co-constitution from the other (between two subjects). It must allow individuation, but may generate a symbiotic relationship, as found here in the melancholic type.

Consequently, we can explain here this situation as an unbearable situation for the Other, according to Plagnol and Pringuey [1,39]. The son can not delegate the care to a specialized team, as this is lived as an abandonment of his mother. The subject (the son) cannot let the other





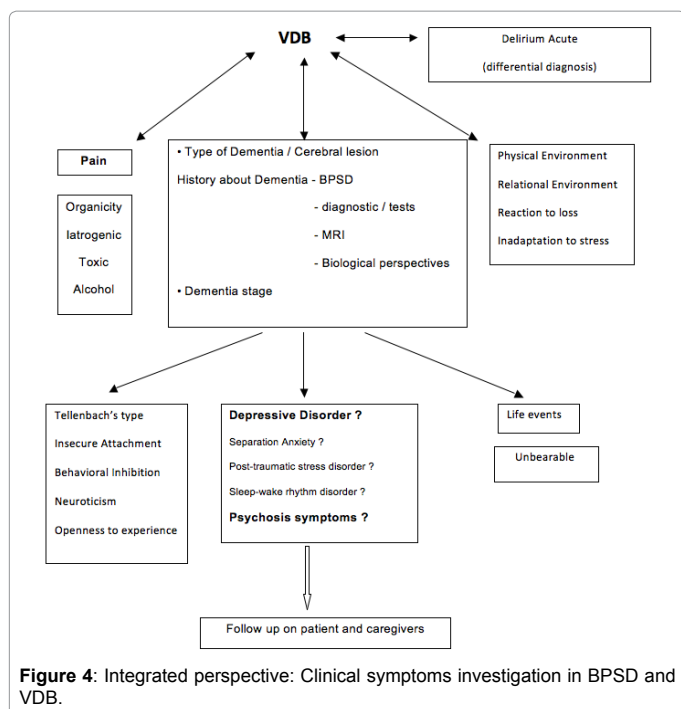


Figure 4: Integrated perspective: Clinical symptoms investigation in BPSD and VDB.

(the mother) suffer alone, because it would destroy the Other, and lead the Subject to destroy itself, as an ethical Subject [39].

Moreover, time slows down due to the separation and also during the depression [1,44,45]. It cause great suffer for the patient and his relative. Time in patients suffering from depression or separation, slows down and stops. Moreover, the subjectivity is lost [1,44], explaining a Subject without Subjectivity lead to melancholy [1,44].

That is why BPSD could not be connected sometimes with the neurobiological disorders and the cerebral lesions. Indeed, we have shown here, for certain cases, the phenomenological understanding can explain some symptoms such as VDB and BPSD [46,47].

## Conclusion and Perspectives

Thus, we highlight a particular clinical case, sometimes found in clinical practice. A women shouting, suffering from AD with vascular component, has a melancholy associated to BPSD. The melancholic type is also found and we highlighted a low openness to experiences, with anxious disorders in the separation from the family. Moreover, according to some authors, this personality dimension has already been connected with the polymorphism serotonin transporter involved in depression. Another studies showed this low dimension in the migraine population suffering from depression, which here is the case. Then, we found an insecure attachment from the family. The separation has to be taken into account to understand these clinical cases which present VDB and shouting. Behavioral inhibition (including low openness to experience) and MT could be two precursors to melancholy through a separation anxiety disorder with an insecure attachment. MT is conceptualized here as a vulnerability, probably underlying to an etiopathogenesis complex (insecure attachment / BI / separation anxiety / social avoidance). Thus, we can explain here a particular life's trajectory, and propose to reinforce depistage and psychological interventions in these cases [48]. Finally, we have to evaluate the patient with his relatives [49,50] to do a best management of the depression in dementia (Figure 4).

The remission of depression treated by antidepressant therapy (trazodone) is confirmed by the standardized evaluation using the MADRS scale, thus confirming the clinical diagnosis a posteriori, also with the Cornell (Figure 1).

## References

1. Pringuey D, Pachoud B (2008) IVème Journée de Psychiatrie Phénoménologique de Nice. Le Soi, le vivant et la souffrance. Phénoménologie de la Subjectivité—Implications psychiatriques. 16th May 2008. Bibliothèque de psychiatrie. Pôle Neurosciences. CHU Pasteur Nice, USA.
2. Tible O, Riese F, Savaskan E, Von Gunten A (2017) Best practice in the management of the behavioral and psychological symptoms in dementia. *Ther Adv Neurol Disord* 10: 297–309.
3. Englebert J, Stanghellini G (2016) Typus mélancholicus and melancholia: A theoretical synthesis using a clinical case. *Encephale* 42: 105-111.
4. Novais F, Starkstein S (2015) Phenomenology of depression in Alzheimer's Disease. *J Alzheimers Dis* 47: 845-855.
5. Stanghellini G, Rosfort R (2010) Affective temperament and personal identity. *J Affect Disord* 126: 317-320.
6. Von Gunten A, Alnawaqil AM, Abderhaleh C, Needham I, Schupbach B (2008) Vocally disruptive behavior in the elderly: A systematic review. *Int Psychogeriatr* 20: 653-672.
7. Von Gunten A, Favre M, Gurtner C, Abderhaleh C (2011) Vocally disruptive behavior (VDB) in the institutionalized elderly: A naturalistic multiple case report. *Arch Gerontol Geriatr* 52: e110-6.
8. Calvet B, Clément JP (2015) Shouting in dementia. *Press Med*. 44: 150-158.
9. De-Boves P (2015) NPG Neurologie Psychiatrie Gériatrie 15: 55-62. Online
10. Schwartz MA, Wiggins OP (2003) Philosophical anthropology and psychiatry: Typus melancholicus as a human disposition. *Seishin Shinkeigaku Zasshi* 105: 522-532.
11. Tellenbach H (1985) La mélancolie. Editions Broché. p. 336.
12. Stanghellini G, Bertelli M, Raballo A (2006) Typus melancholicus: Personality structure and the characteristics of major unipolar depressive episode. *J Affect Disord* 93: 159-167.
13. Belzeaux R, Naudin J (2007) Des phénomènes aux phénotypes: le typus melancholicus comme endophénotype de la dépression. *L'information psychiatrique* 83: 179-182.
14. Azorin JM, Pringuey D, Fakra E, Adida M, Belzeaux R et al. (2012) Temperamental endophenotypes. *Encephale* 38 (Suppl 3): S70-74.
15. Widakowich C (2016) Typus Melancholicus as endophenotype of melancholic depression. *Vertex XXVII* 125: 56-60.
16. Ueki H, Holzappel C, Washino K, Inoue M, Ogawa N, et al. (2001) Reliability and validity of Kasahara's scale of melancholic type of personality (Typus mélancholicus) in a German sample population. *Psychiatry Clin Neurosci* 55: 31-35.
17. Kronmüller KT, Backenstrass M, Kocherscheidt K, Hunt A, Fiedler P, et al. (2005) Dimensions of the typus melancholicus personality type. *Eur Arch Psychiatry Clin Neurosci* 255: 341-349.
18. Plaisant O, Courtois R, Réveillère C, Mendelsohn GA, John OP (2010) Factor structure and internal reliability of the French Big Five Inventory (BFI-Fr). Convergent and discriminant validation with the NEO-PI-R. *Ann Med Psychol (Paris)* 168: 97-106.
19. Lignier B, Petot JM, Plaisant O, Zebdi R (2016). Validation of the French Big Five Inventory (BFI-Fr) in peer-report assessments. *Ann Méd Psychol* 174: 436-441.
20. Tible O (2009) Phenomenology of separation. 28<sup>th</sup> Congress of Franco-Maghrebian Psychiatry. Presidency of Professor Henri Léo and Professor Farid Kacha, France.
21. Reynaud M (2011) The model of adult attachment in the perturbation Emotional regulation and the affective Hospitalized women suffering from depression. Université de Bourgogne, France.
22. Camus V (2004) Evaluation of the depressive symptomatology in the elderly. *Psychol Neuropsychiatr Vieil* S13-17.

23. Tible O (2016) Presentation of mobile psychogeriatric teams, Brussels, Belgium. 32<sup>nd</sup> Congress of the Société de Psychogériatrie de Langue Française (SPLF). pp. 25-26.
24. Lee SH, Kang Y, Cho SJ (2017) Subjective cognitive decline in patients with migraine and its relationship with depression, anxiety, and sleep quality. *J Headache Pain* 18: 77.
25. Schäfer ML (1994) Typus melancholicus as a personality characteristic of migraine patients. *Eur Arch Psychiatry Clin Neurosci* 243: 328-339.
26. Flatt JD, Gilsanz P, Quesenberry CP, Albers KB, Whitmer RA (2017) Post-traumatic stress disorder and risk of dementia among members of a health care delivery system. *Alzheimers Dement* S1552-5260: 30221-30222.
27. Radford K, Delbaere K, Draper B, Mack HA, Daylight G, et al. (2017) Childhood stress and adversity is associated with late-life dementia in aboriginal australians. *Am J Geriatr Psychiatry* S1064-7481: 30316-30320.
28. Tible O, Bioulac S, Bouvard MP (2008) Social phobia and behavioral inhibition in childhood and adolescence: A study to valid Liebowitz Social Anxiety Scale for children and adolescent (French version). Thèse de Médecine. Numéro 3030. Université Bordeaux 2 Victor-Segalen. p. 155.
29. Hirsfeld-Becker DR, Micco J, Henin A, Bloomfield A, Biederman J (2008) Behavioral inhibition. *Depress Anxiety* 25: 357-367.
30. Stevenson-Hinde J, Shouldice A, Chicot R (2011) Maternal anxiety, behavioral inhibition and attachment. *Attach Hum Dev* 13: 199-215.
31. Lewis-Morrarty E, Degnan KA, Chronis-Tuscano A, Pine DS, Henderson HA, et al. (2015) Infant attachment security and early childhood behavioral inhibition interact to predict adolescent social anxiety symptoms. *Child Dev* 86: 598-613.
32. Rotgé JY, Grabot D, Aouizerate B, Pélioso A, Tignol J, et al. (2011) Childhood history of behavioral inhibition and comorbidity status in 256 adults with social phobia. *J Affect Disord* 129: 338-341.
33. White LK, Degnan KA, Henderson HA, Pérez-Edgar K, Fox NA, et al. (2017) Developmental relations among behavioral inhibition, anxiety, and attention biases to threat and positive information. *Child Dev* 88: 141-155.
34. Cornacchio D, Sanchez AL, Coxe S, Roy A, Pincus DB, et al. (2017) Factor structure of the intolerance of uncertainty scale for children. *J Anxiety Disord* Epub ahead of print
35. Rahman MS, Guban P, Wang M, Melas PA, Forsell Y, et al. (2017) The serotonin transporter promoter variant (5-HTTLPR) and childhood adversity are associated with the personality trait openness to experience. *Psychiatry Research* 257: 322-326.
36. Magyar M, Gonda X, Pap D, Edes A, Galambos A, et al. (2017) Decreased openness to experience is associated with migraine-type headaches in subjects with lifetime depression. *Front Neurol* 8: 270.
37. Johnson VC, Kryski KR, Sheikh HI, Smith HJ, Singh SM, et al. (2016) The serotonin transporter promoter polymorphism moderates the continuity of behavioral inhibition in early childhood. *Dev Psychopathol* 28: 1103-1116.
38. Rizzuto D, Mossello E, Fratignoni L, Santoni G, Wang HX (2017) Personality and survival in older age: the role of lifestyle behaviors and health status. *Am J Geriatr Psychiatry* S1064-7481: 30352-30354.
39. Plagnol A (2014) Pain, suffering and untenable. *L'évolution psychiatrique* 79: 98-808.
40. Csef H (1987) Death and neurosis. Anxiety, the death instinct, object loss and narcissism as the background of the human experience of death. *Fortschr Neurol Psychiatry* 55: 164-73.
41. Van Assche L, Luyten P, Van de Ven L, Vandenbulcke M (2013) The impact of attachment on behavioral and psychological symptoms in dementia. *Tijdschr Gerontol Geriatr* 44: 157-165.
42. Schaub C, Morin D, Von Gunten A (2016) Agitation in people with dementia: scoping review and putting the phenomenon into perspective using the comfort theory and the concept of attachment. *Rech Soins Infirm.* 125: 68-83.
43. Fujii M, Butler JP, Sasaki H (2014) Emotional function in dementia patients. *Psychogeriatrics* 14: 202-209.
44. Pringuey D (2010) Phénoménologie de la dépression. Ed Lavoisier. In *Les états dépressifs* pp. 21-25.
45. Stanghellini G, Ballerini M, Prezenta S, Mancini M, Northoff G, et al. (2017) Abnormal time experiences in major depression: An empirical qualitative study. *Psychopathology* 50: 125-140.
46. Vion Dury J (2012) Can there be a neurophenomenology of dementia processes? In Geneviève Arfeux-Vaucher, *Dementia at the crossroads of non-knowledge*, Presses de l'EHESP. In *Psychology and Aging*. pp 67- 80.
47. Vion Dury J, Azorin JM, Naudin J, Cermolacce M, Balzani C, et al. (2012) Phenomenology of dementia. "Awareness" without the "self" and double blurring in Alzheimer's disease. *PSN* 10: 35-50.
48. Khalaila R (2016) Depression statuses and related predictors in later life: A 10-year follow-up study in Israel. *Eur J of Ageing* 13: 311-321.
49. Dham P, Colman S, Saperson K, McAiney C, Lourenco L, et al. (2017) Collaborative care for psychiatric disorders in older adults: A systematic review. *Can J Psychiatry*
50. McCusker J, Yaffe M, Sussman T, Cole M, Sewitch M, et al. (2017) The management of depression in older adults and their family caregivers: Findings from a research program in Quebec. *Sante Ment Que* 42: 273-288.