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Letter on Alzheimer's Disease in Light of My Research and the Distinction Between the Mental and the Physical

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As clearly explained in the work by Zhang et al. (2024), dementia—and Alzheimer's disease in particular—afflicts an increasing number of people worldwide, reducing them to a devastating condition of life. Even today, Alzheimer's remains an incurable and largely misunderstood disease. Various explanatory hypotheses exist, which—as with the early stages of any theoretical framework—link one dysfunction after another in the search for a triggering or at least dominant cause.

This way of speaking without technical jargon may raise a smile, but I am a philosopher, and if I am to speak about this issue, it is my responsibility to avoid technicalities as much as possible, so as not to confuse a theoretical and philosophical treatment with an empirical one, which rightly belongs to the domain of medicine and biology.

Patients with Alzheimer's disease present abnormal accumulations of proteins in the brain, neuroinflammation, synaptic dysfunction, mitochondrial and bioenergetic disturbances, and classic circulatory anomalies. The symptoms include depression, anxiety, social withdrawal, and disturbed sleep. As the condition worsens, we observe memory loss, hallucinations, and delusions, along with behavioral and emotional problems. Added to these already debilitating symptoms—which are not sporadic but frequent and persistent—there are visual-spatial issues, language difficulties, executive function impairments, and motor skill loss. To complete the clinical picture, patients often suffer from high cholesterol, hypertension, diabetes, obesity, depression, and cardiovascular disorders.

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To appear credible, perhaps I should review all the current explanatory hypotheses on the origin of the disease. But I find myself more credible in simply noting that a quick overview of current theories shows how each focuses on one group of symptoms, disconnected from the overall brain functioning, in an attempt—as mentioned—to find a triggering or dominant mechanism. In most cases, the various disease dynamics aren't even correlated. The fact remains that, judging by the symptoms and disease progression, Alzheimer's affects the entire body, not just the brain.

I decided to write this letter because I sincerely and responsibly believe that the theories and ideas I have been developing for years in the field of the Philosophy of Neuroscience—a label I personally find limiting for my research and for this field in general—could shed light on Alzheimer's disease research.

If we understand the mental and the transcendent as extending beyond our individual mind to the entire environment we experience every day—including ourselves within it—and interconnected in various ways with the body that allows us to move in the physical world, then the progression of symptoms and the nature of Alzheimer's become much clearer, at least to me.

From the progressive disconnection between higher functions that regulate our mental life and entire experience (referred to in basic terms as "cortical" functions) and lower ones that regulate our movement in the physical environment (commonly called "cerebellar" and "autonomic"), the development of symptoms becomes natural. Synaptic and other general brain dysfunctions—such as inflammation, protein accumulation, and mitochondrial or bioenergetic issues—could easily be interpreted as the result of this separation between higher and lower functions: cortical, cerebellar, and autonomic.

From the perspective of psychic symptoms, likewise—when we speak of transcendent everyday experience and personal mind—we can see them as the gradual detachment of the mental sphere from the body, beginning with the self, where we observe classic symptoms typically attributed to mental disorders, and leading up to a hallucinatory and delusional environment that overtakes the entire human transcendent experience.

On the other hand, the progressive detachment of the lower functions—cerebellar and autonomic—from the higher ones would lead to the gradual breakdown (as is indeed the case) of the body's ability to move in the physical world and to its material degradation, as if the body itself were dying, in the advanced stages of the disease. High cholesterol, hypertension, diabetes, obesity, depression, and cardiovascular disorders would be consequences of this condition.

This picture appears clear and definite to me, and I propose it because, according to what has been said, one might begin to consider interventions aimed at maintaining cohesion between higher and lower functions, thus mitigating the stigmatization of those still suffering from what used to be called *dementia praecox*, which, judging from my description of Alzheimer's disease, seems to be something quite different—affecting not just the personal mind but the entire embodied human experience.

References

Zhang J. Recent advances in Alzheimer's disease: mechanisms, clinical trials, and new drug development strategies. *Signal Transduct Target Ther*. 2024;9:211.