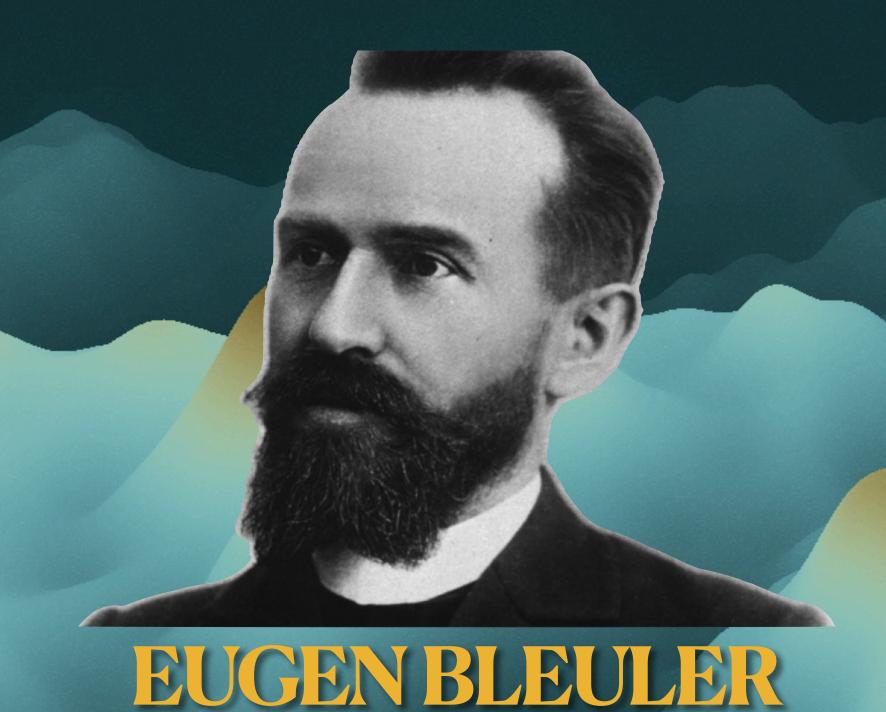
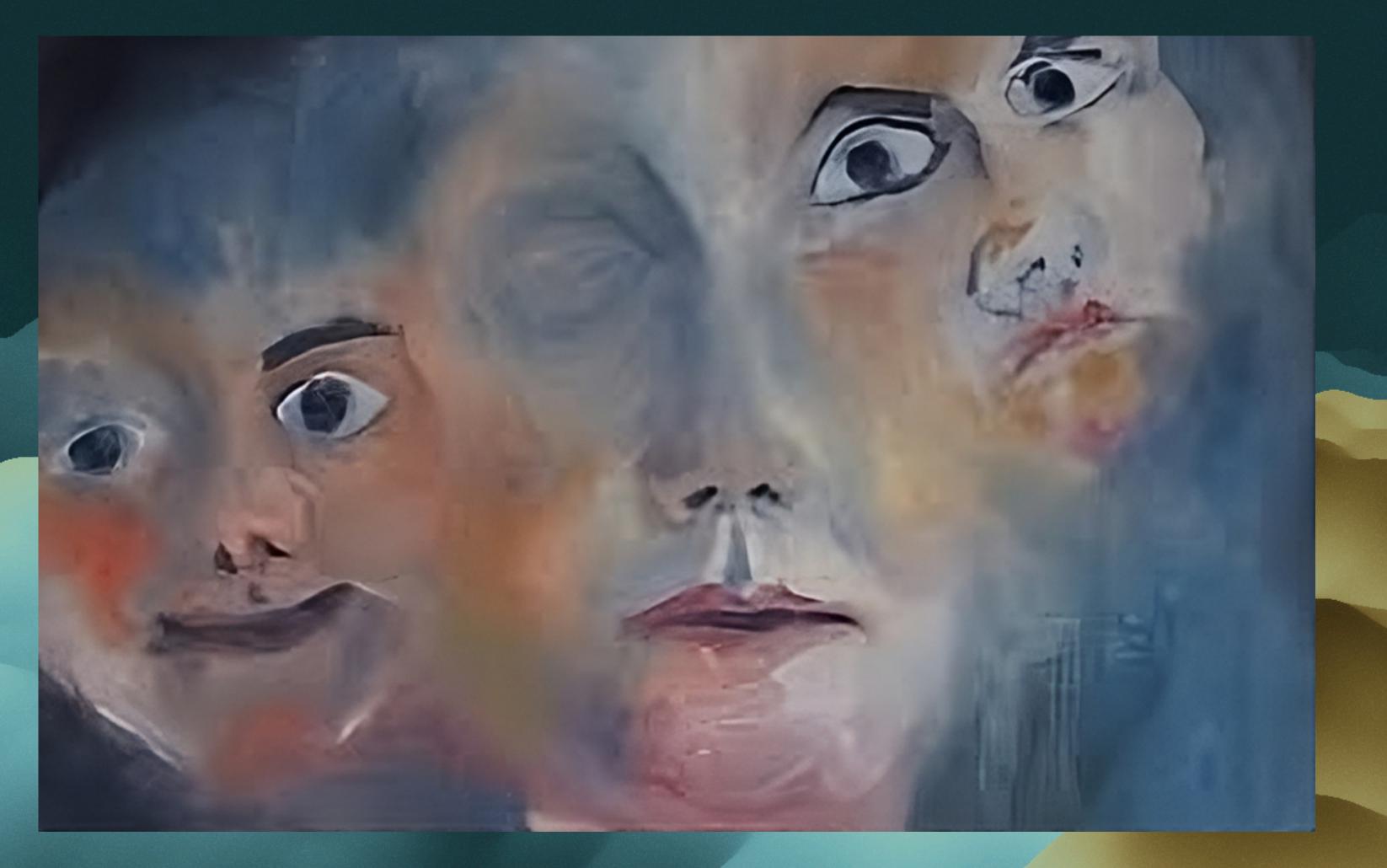
STRES, METAKOGNICE & SCHIZOFRENIE

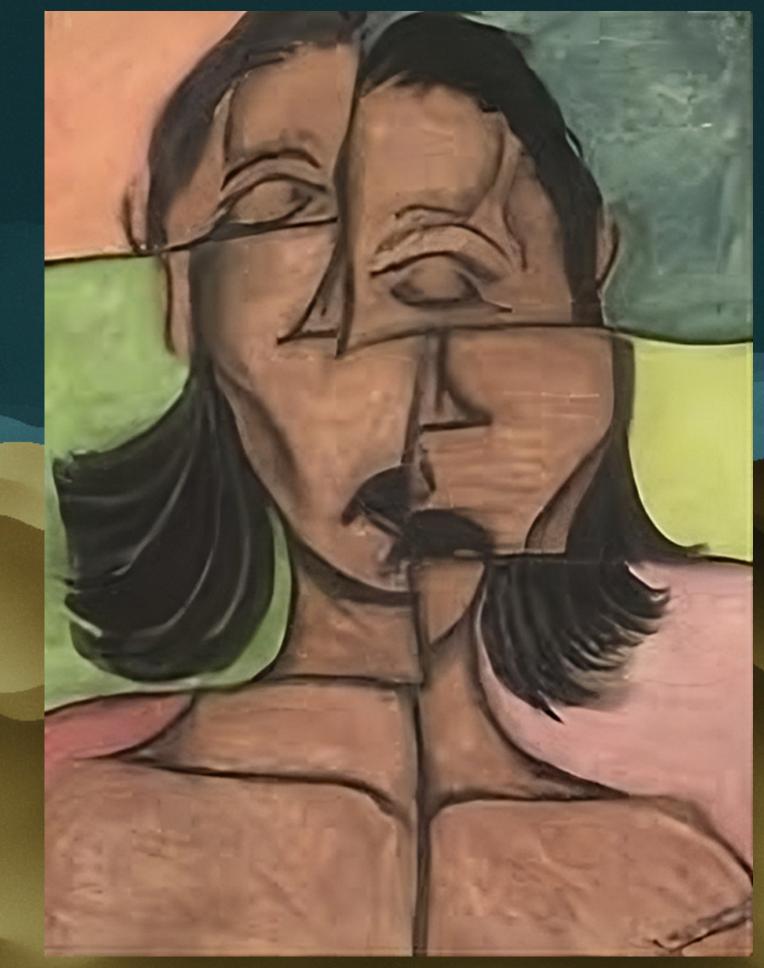
JAKUB HAJNÝ

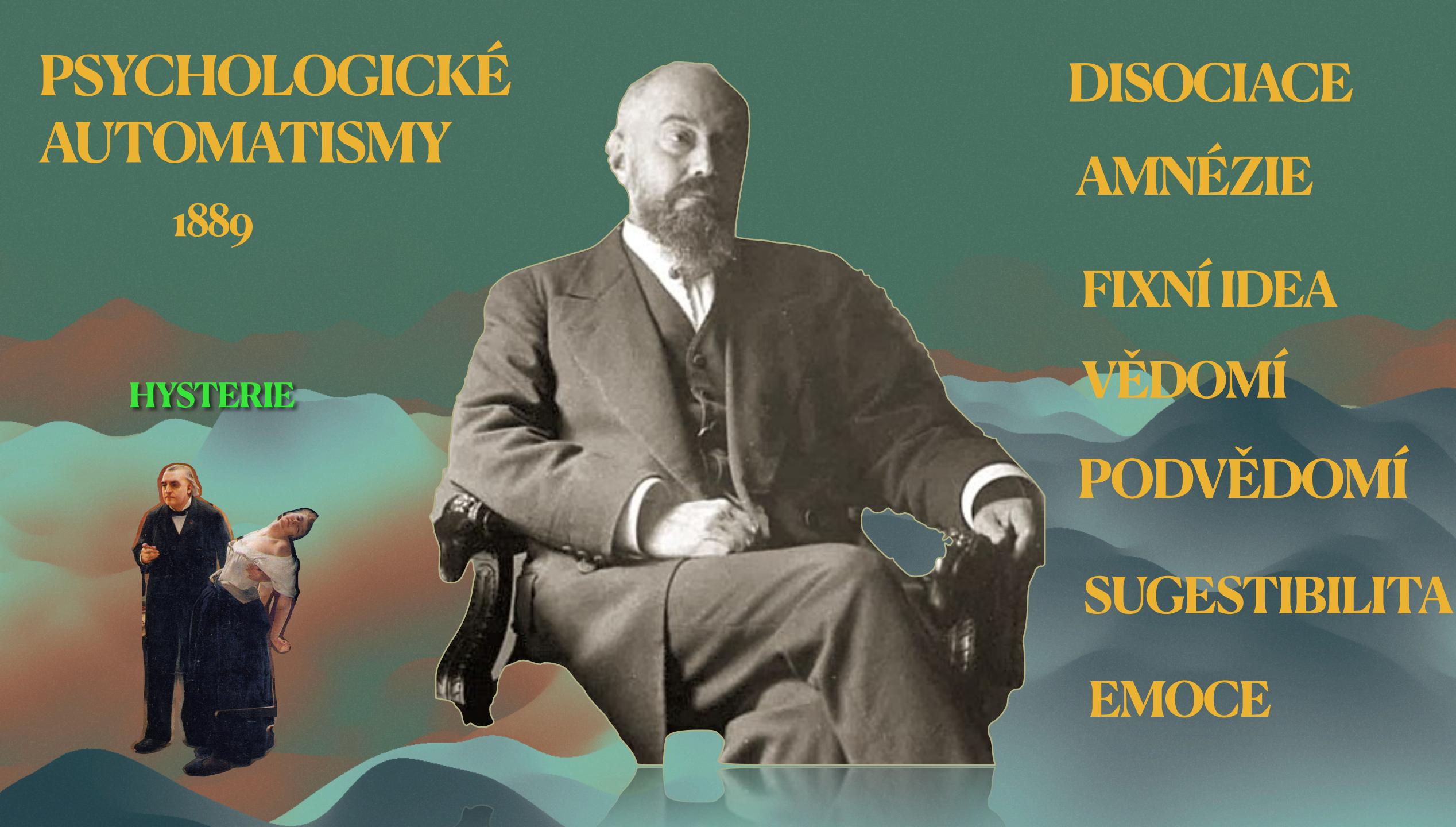
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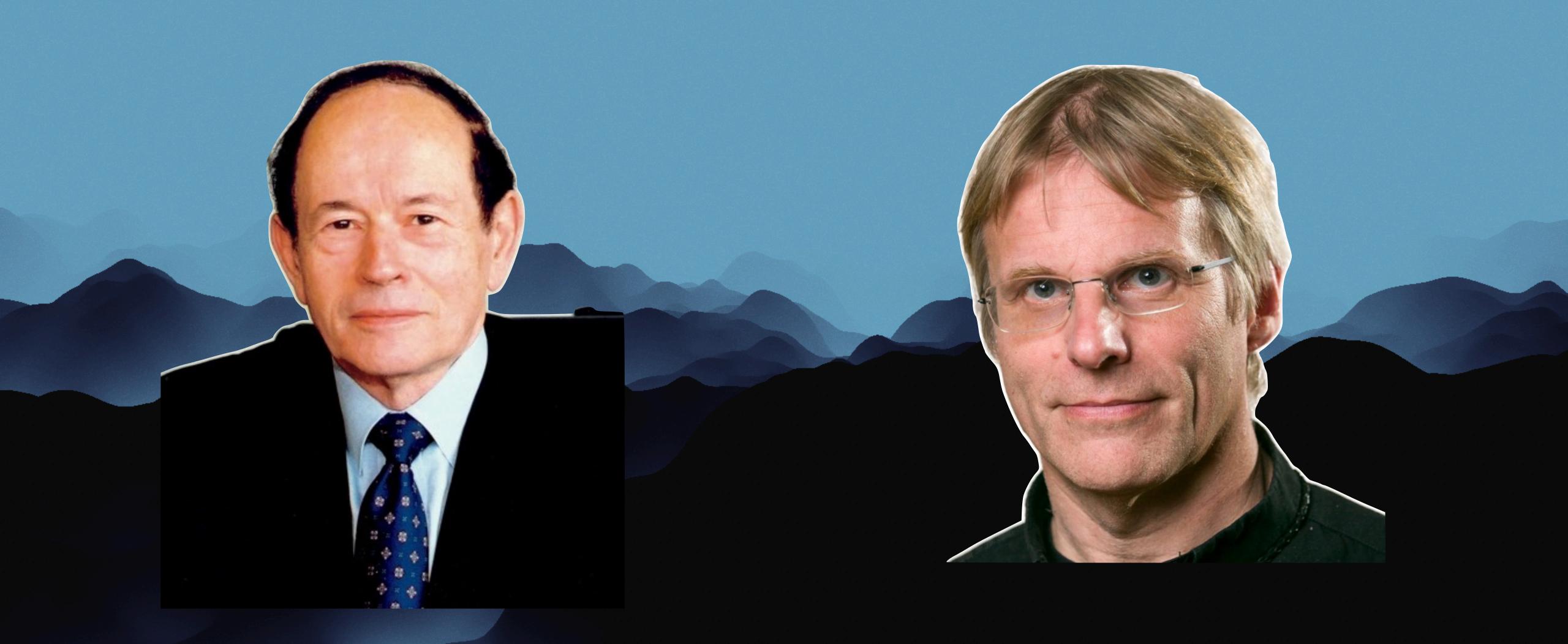


"I CALL DEMENTIA PRECOX SCHIZOPHRENIA BECAUSE, AS I HOPE TO SHOW, THE SPLITTING OF THE DIFFERENT PSYCHIC FUNCTIONS IS ONE OF ITS MOST MPORTANT FEATURES. IN EACH CASE THERE IS A MORE OR LESS CLEAR SPLITTING OF THE PSYCHOLOGICAL FUNCTIONS: AS THE DISEASE BECOMES DISTINCT, THE PERSONALITY LOSES ITS UNITY"





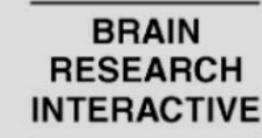




GERALD M. EDELMAN

GUIULIO TONONI





Brain Research Reviews 31 (2000) 391-400

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Interactive report

Schizophrenia and the mechanisms of conscious integration¹

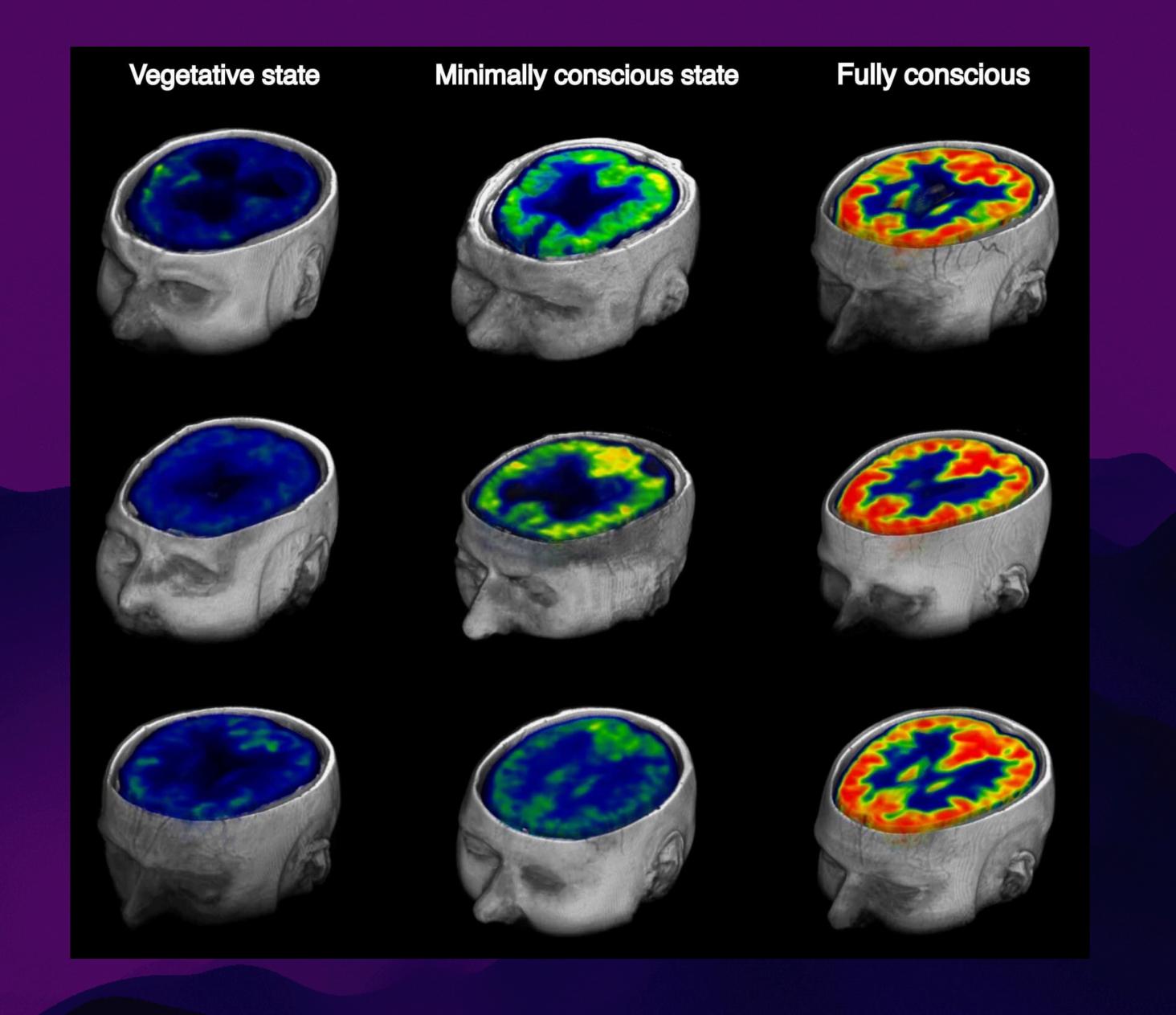
Giulio Tononi *, Gerald M. Edelman

The Neurosciences Institute, 10640 John J. Hopkins Drive, San Diego, CA 92121, USA
Accepted 30 June 1999

Abstract

This article considers the possibility that defective interactions among distributed brain areas may underlie certain dysfunctions of conscious integration such as those seen in schizophrenia. Recent experimental evidence obtained using whole-head magnetoencephalography during binocular rivalry is first reviewed. The results outline a cortical network that underlies conscious integration in the normal brain. This network is not localized to a small part of the brain but it is distributed over frontal, parietal, temporal, and occipital areas. Large-scale simulations of the dynamics of thalamocortical integration are then examined. These studies indicate that several factors can affect the rapid integration of the activity of distributed thalamocortical regions and the resulting behavioral performance. These simulations show that an altered dynamics of corticothalamic and corticocortical re-entrant circuits can result from increased conduction delays, blockade of voltage-dependent connections, reduced synaptic density, and disruptions of the local connectivity within a single cortical area. It can also result from alterations in the activity of diffuse ascending systems that lead to defective reinforcement of integrated activity patterns. Finally, the article briefly reviews theoretical measures of the integration of multiple brain areas, such as measures of functional clustering. These measures have been applied to PET data obtained from schizophrenic subjects and controls while performing cognitive tasks. The results show a change in the functional interactions among distributed brain areas in schizophrenics despite the absence of a change in activation patterns. The possibility is raised that disruption of re-entrant interactions among cortical areas may contribute to the pathophysiology of schizophrenia. © 2000 Elsevier Science B.V. All rights reserved.

Keywords: Schizophrenia; Imaging; PET; Functional clustering; MEG; Consciousness; Re-entry; Binocular rivalry



ZÁKLADNÍ DOMÉNY

SELF REFLEXIVITY

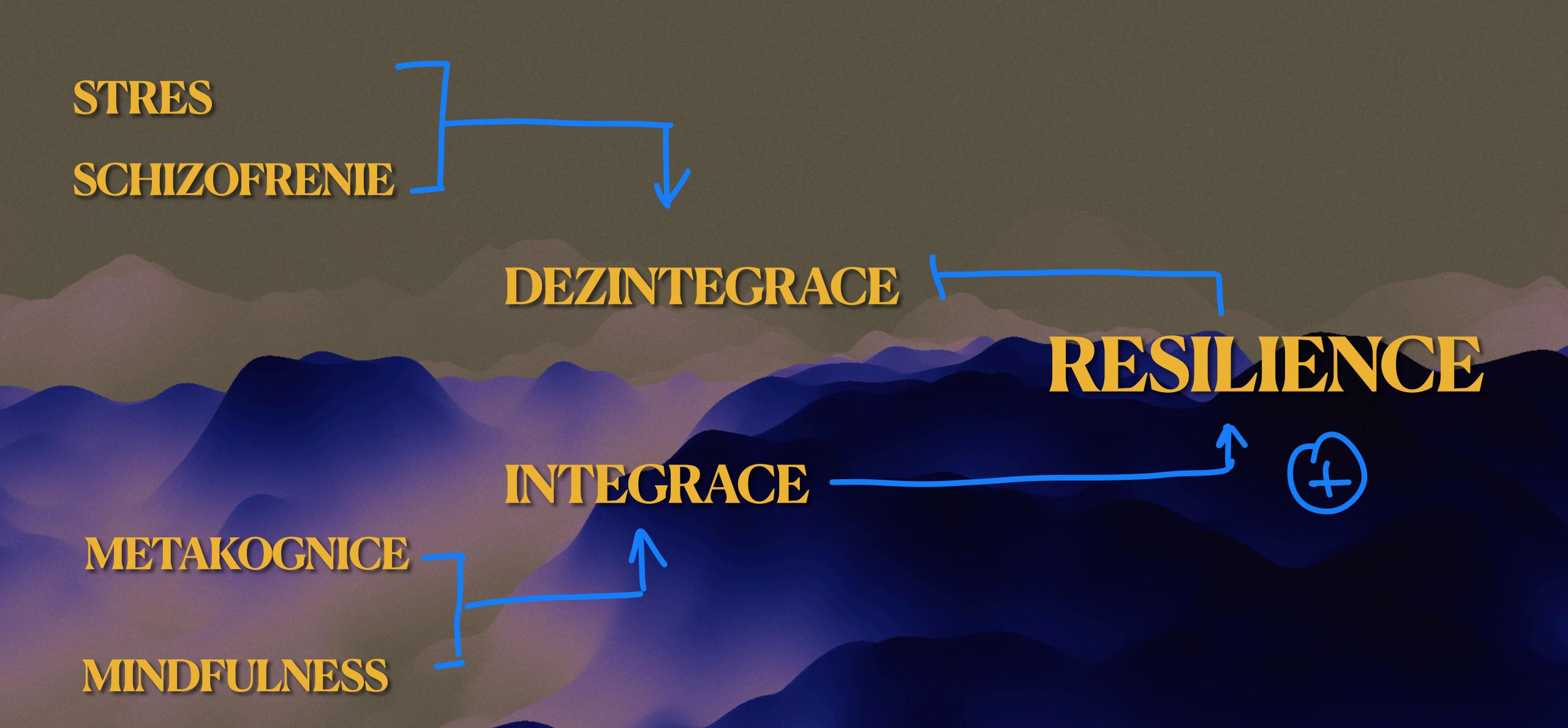
UNDERSTANDING OTHER'S MIND

DECENTRATION

MASTERY



PAUL H. LYSAKER



DĚKUJI ZA POZORNOST