

Article

The Human Aspect of Christ between Classic and Quantum Consciousness: Gethsemane - Anxiety & Depression between Biochemistry & Anthropology

^{†‡}Massimo Cocchi*, [†]Lucio Tonello, [†]Fabio Gabrielli

[†]Institute "Paolo Sotgiu" Quantitative & Evolutionary Psychiatry & Cardiology, L.U.de.S. Univ., Lugano, Switzerland, Via dei Faggi. 4, Quartiere La Sguancia CH – 6912 Lugano Pazzallo

[‡]Dept. of Med. Veterinary Sciences, Univ. of Bologna, Via Tolara di Sopra 50, 40064 Ozzano dell'Emilia, Bologna

Abstract

The studies carried out in recent years on the molecular dynamics of consciousness, especially in relation to diseases such as major depression and bipolar disorder, on man considered as a synthesis of nature and culture, in their interdisciplinary and transdisciplinary expression, prompted us to carry out the molecular logic involving the human component of Christ (Christ-Man). On the basis of evidence presented in the Holy Scriptures, regarding the hours that preceded his death, we tend, in the light of the molecular pathway related to mood disorders, to attribute a possible form of depression to Christ-Man, without of course, undermining the faith in the transcendent nature of the Christ-God.

Keywords: major depression, bipolar disorder, molecular hypothesis of consciousness, mysteric level of consciousness.

Synthesis of the molecular approach to consciousness

Recent results concerning the identification of biological markers of depression in platelets (Palmitic Acid, Linoleic Acid, Arachidonic Acid) in its unipolar and bipolar aspects, for the first time in years, have stimulated, as a chain reaction, a flow of thoughts and speculation about the molecular mechanisms involving the state of consciousness (Cocchi and Tonello 2010).

The molecular characteristics of Major Depression (MD) and Bipolar Disease (BD) have been evaluated by an Artificial Neural Network and by an index called B2 (B2 is obtained by the sum of the percentages of each fatty acid multiplied by its melting point and divided by its molecular weight, and that is an indirect expression of the membrane viscosity, which induce us to identify it with the neuron membrane viscosity). The B2 index is negative in MD and positive in BD, normals, psychotics and in the vast majority of the animals so far studied (Cocchi and Tonello 2010; Cocchi et al. 2009b; Cocchi et al. 2012a; Marche Region Project 2012). MD, for the above reason, has completely different molecular characteristic.

* Correspondence: Professor Massimo Cocchi, Dept. of Medical Veterinary Sciences, Univ. of Bologna, Via Tolara di Sopra 50, 40064 Ozzano dell'Emilia, Bologna. E-mail: massimo.cocchi@unibo.it

The depressed subjects, humans or animals (if some) form a particular and isolated group and MD remains a unique and peculiar finding (Cocchi et al. 2012d). Subjects with MD and BD belong to two different worlds and cannot communicate, except, perhaps, through the physics concept of “domain wall”. After the breaking of symmetry, a domain wall solution (Weinberg 1995) will correlate the two cells corresponding to the bipartition of the universal set, and, in suitable circumstances, transmit energy from side to side (Cocchi et al. scientific paper in preparation).

From the experimental results and with the exchange of ideas with some scientists, a hypothesis has been elaborated and widely accepted, regarding the molecular pathway of consciousness (Figure 1), which connects some critical points of that cellular molecular complex, defined as interactome (Figure 2).

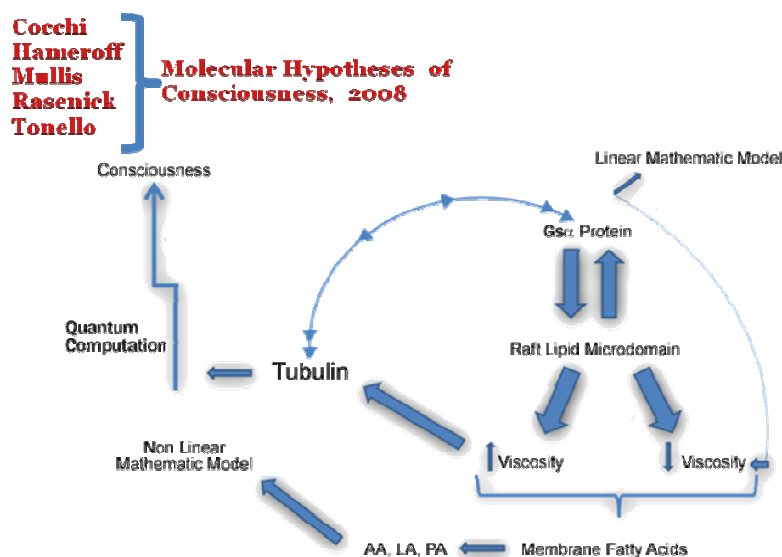


Figure 1. Molecular hypotheses of consciousness

This approach is consistent with all the quantum theories of consciousness and finds a very strong plausible biologic interpretation and mathematical proof (Cocchi et al. 2011a; Cocchi et al. 2011b; Cocchi et al. 2011c; Cocchi et al. 2010) as well as led to reflect on the pace of Genesis referred to the creation (Cocchi et al. 2012b), in the same way does not exempt us from making a series of observations and thinking about the human essence of Christ, in his relations with mood disorders, in the light of what the Bible tells us, about the stages that anticipate the Christ Man, by the waiting of death.

To do this we need to briefly go over some details of the molecular pathway of consciousness that has been assumed and reconstructed through the objectivity of the molecular interactions of the cytoskeleton with aspects of the platelet membrane viscosity and Gα protein.

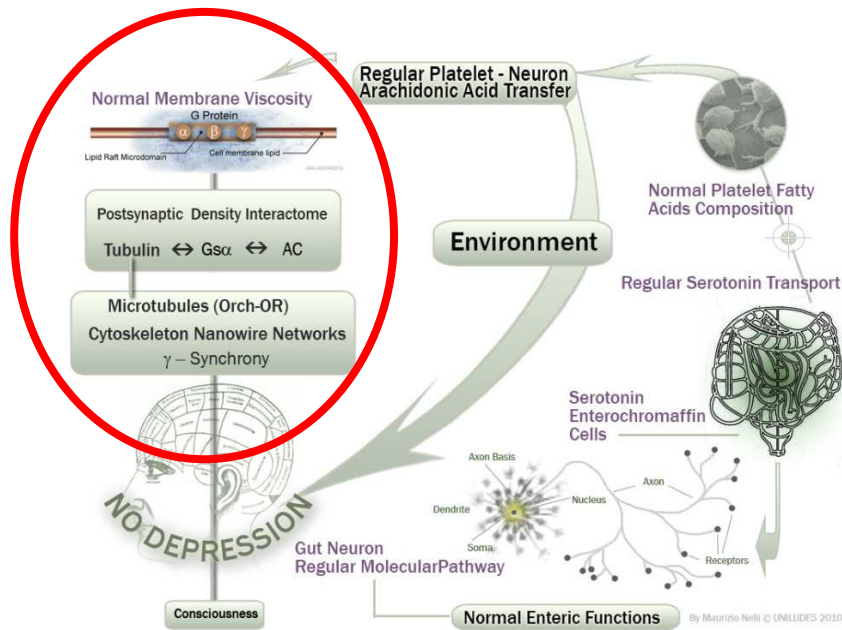


Figure 2. Figure shows a schematic description of the serotonin pathway from enterochromaffin cells (EC) to platelets and interactome regulation through membrane viscosity under normal conditions.

In the course of research, much evidence led to believe that platelets, which serve an historic role as biological markers in psychiatry, can in fact be regarded as virtual "circulating neurons" or "brain ambassadors", this aspect may offer a significant advantage in understanding the neurophysiology of psychiatric disorders including Md and BD. Critical points of potential specific linkage between platelets and depression include serotonin and membrane platelet fatty acids in relation to the Gsα protein and cytoskeletal quantum-nanowire network. The effects of altered molecular interactions (membrane viscosity, Gsα protein and tubulin), could influence dramatically the state of consciousness by disrupting the regular features of cellular automata operating through the cytoskeletal quantum-nanowire network.

There is no doubt, as the Bible makes faith, of the human nature of Christ and, therefore, that even his expressions of consciousness should pass through the molecular pathway that characterizes all living beings.

We, are certainly not able to verify or to say whether Christ Man was of normal, unipolar or bipolar nature, we are, however, able to make an analysis quite justifiable, taking into account a possible direction of our thinking about the plausibility that, during the hours of Gethsemane, the expression of his behavior was predominantly of bipolar nature (most common in human beings), without psychotic symptoms, and that could coexist, in him, thoughts that lead to end his life. He expresses this through a specific language which seems to refuse to accept what might save him from the fate of death that is reserved for the "divine" design of the salvation of

humanity. Christ, as man, could not think of death without involving those particular aspects of consciousness.

We know that wish of death belongs to both, bipolar or unipolar subjects, although the two entities do not communicate with each other, but may do so precisely at a level that would manifest itself only, as we hypothesized earlier, through the restoration of biological symmetry. A critical moment, that, for now, there is still a matter of understanding.

The Molecularity of Christ-Man

The molecularity of Christ-Man, therefore, does not escape the fate that rhythms the “being in the world” of all men, whom however, he represents and of whose is the salvific incarnation.

If you believe, implicitly, that in the path of creation exists a strong and precise molecular logic, we cannot think that Christ Man escapes it, we can not think that he is exempted from the shadow of the soul which is in the fate of most men and some animals, we cannot think that he did not suffer, bringing up to the extreme that phenomenon, now known as epigenetic, and that determines in him, through its induction on writing genetics behavioral, the desire, or rather, the will to "act quickly".

We cannot disregard, however, even the divine nature of Christ and this is the criticality of the problem, namely, that he wants to die to give men a chance of redemption (divine aspect of the problem and his mission on earth among men) but he must face it in the guise of a man, and in such a condition, he is forced to human molecularity through which he seems to express his desire to end his life.

From what has been argued, we can draw the following considerations:

1. Let's assume that is not here the place of the dispute if Christianity has been an effective historical event, the eruption of the eternal in the human history, or a large mythical narrative (Lyotard 1985). However, we take as a starting point the anthropological human nature of Christ.
2. To the extent that Christ was a man, in other words, he was a full synthesis of biology and culture, nature and uniqueness of experiences, biochemical roots and existence. So Christ, himself, experienced a radical human experience, including anxiety, until it overflowed in depression.

A point, this, interpreted with extraordinary clarity by Kierkegaard:

«If a human being were a beast or an angel, he could not be in anxiety. Because he is a synthesis, he can be in anxiety; and the more profoundly he is in anxiety, the greater is the man-yet not in the sense usually understood, in which anxiety is about something external, about something outside a person, but in the sense that he himself produces the anxiety. Only in this sense can the words be understood when it is said of Christ that he was anxious to death (Matthew 26, 38), as well as the words spoken by Christ to Judas:

“What you are going to do, do quickly” (John 13, 27). Not even the terrifying verse that made even Luther anxious when preaching on it-“My God, my God, why hast thou forsaken me?” (Matthew 27, 46), – not even these words express suffering so profoundly. For the latter signify a condition in which Christ finds himself. And the former signify the relation to the condition that is not». (Kierkegaard 1953)

3. From the reading of Kierkegaard's pace, with reference to our work on biological markers of depression, it appears that Christ:
 - A. He is distressed being, as inhabitant of the time and, therefore, of its three dimensions, past, present, future, and the anguish is "sentiment of the purest possible", waiting for the future as self-realization or as a threat. You understand, then, as Christ seeks to anticipate the future and not living in the anguish of waiting ("What you have do, do it quickly": John 13, 27). This is deeply human, think, for example, of the patient awaiting a medical report, when it is a question of life.
 - B. His anxiety overflows into the depression, in the sense of “being lost”, of the impossibility of being abandoned (Jaspers 2000; Binswanger 1960; Heidegger 1929; Minkowski 1933), “My God, my God, why hast thou forsaken me?” (Matthew 27, 46);
 - C. *«Then Jesus came with them to a small estate called Gethsemane; and he said to his disciples, stay here while I go over there to pray. He took Peter and the two sons of Zebedee with him. And sadness came over him, and great distress. Then he said to them, my soul is sorrowful to the point of death. Wait here and keep awake with me. And going on a little further he fell on his face and prayed. He came back to the disciples and found them sleeping, and he said to Peter, so you had not the strength to keep awake with me one hour? You should be awake, and praying not to be put to the test. The spirit is willing, but the flesh is weak. Again, a second time, he went away and prayed: My Father, he said, if this cup cannot pass by without my drinking it, your will be done! And he came again back and found them sleeping, their eyes were so heavy. Leaving them there, he went away again and prayed for the third time, repeating the same words. Then he came back to the disciples and said to them: you can sleep on now and take your rest. Now the hour has come when the Son of Man is to be betrayed into the hands of sinners. Get up! Let us go! My betrayer is already close at hand» (Matthew 26, 36-46; cfr Mc 14, 32-42; Lc 22, 39-46).*

The text of Matthew highlights (cf. the difference Gvn 12.23-28: Jesus in the Temple reacts to a momentary uneasiness with a resolute declaration of a structural inability to escape his saving mission) the concept of sadness to words death and the attempt to escape it. More interesting, however, the expression is contained in John *“What you have to do, do it quickly”* (13, 27): Christ seems to want to anticipate his fate of death to end the anguish that lacerates him (in Heideggerian terms we speak of an

inauthentic manipulation of death, which should not be understood in terms of suicide or expectation, but in terms of our most authentic possibility, that is "being for death": M. Heidegger's *Sein und Zeit* (1927, en. Tr. *Essere e Tempo*, Utet, Torino 1978). This may constitute a kind of deliberate anticipation of death, a sort of pre-suicidal form: it would seem to constitute the suicidal idea that connects bipolar and unipolar subjects, albeit in very particular form, the sign of the universal recognition of the tragic nature of existence "here and now" that connects the consciousness in all its levels (Figure 3) (Cocchi et al. 2012c) and if all the expressions (solidaristic empathy, where empathy, however, is not so much a simple evolutionary trait, but a complex experience of several levels (Boella 2006; Boella 2009).



Figure 3. Schematic representation of the ordinary levels of consciousness

- D.** It is obvious that for a Christian believer this attempt to reconstruct the molecular dynamics of the Christ-Man does not undermine at all the belief in the transcendence of the Christ-God, rooted in what we call mysteric level of consciousness or abyss of consciousness (Cocchi et al. 2009a). We are talking about the presence, in humans, of a *prophetic* intuition, of an abyss of consciousness that opens the way for intellectual freedom as liberation from the external limits ("obstacles" to overcome in pursuit of their projects) and internal (biological determinism or pan-biologism).

Conclusion

The authors are aware of the delicacy of the subject, however, the long path of study and research on the causes and molecular changes of consciousness, the awareness that, for the first time in years, the subjects with MD were distinguished, from the molecular point of view, from those with BD, makes one think of human figure of Christ and to the distress he has suffered in the final moments of his earthly life. If it were not, the Christ-Man would not have been able to give voice to the anguish and virtues of human beings. These hypotheses that derive from a profound path of meditation and reasoning are not free of great suffering.

References

- Binswanger L (1960) Melancholie und Manie. Phänomenologische Studien, It. tr. Melanconia e Mania. Studi Fenomenologici, Boringhieri, Torino 1971: p. 39.
- Boella L (2009) Empatia, in N. Vassallo, a cura di, Donna m'apparve, codice Edizioni, Torino: pp. 49-65.
- Boella L (2006) Sentire l'altro. Conoscere e praticare l'empatia, R. Cortina, Milano.
- Cocchi M, Tonello L, Gabrielli F (2009a). Quantum consciousness and a-quantum consciousness. *New Medicine*, XIII, 4: 114-115.
- Cocchi M, Sardi L, Tonello L, Martelli G (2009b) Do mood disorders play a role on pig welfare? *Ital. J. Anim. Sci.* 8, 691-704.
- Cocchi M, Tonello L (2010) Bio molecular considerations in Major Depression and Ischemic Cardiovascular Disease. *Central Nervous System Agents in Medicinal Chemistry*.10: 2, 97-107.
- Cocchi M, Gabrielli F, Tonello L, Pregolato M (2010) The Interactome Hypothesis of Depression. *NeuroQuantology*, 4: 603-613.
- Cocchi M, Gabrielli F, Tonello L, Pregolato M (2011a) Consciousness and Hallucinations: Molecular Considerations and Theoretical Questions. *NeuroQuantology*, 9: 182-189.
- Cocchi M, Tonello L, Gabrielli F, Pregolato M. & Pessa E. (2011b) Quantum Human & Animal Consciousness: A Concept Embracing Philosophy, *Quantitative Molecular Biology & Mathematics. Journal of Consciousness Exploration & Research*, 2: 547-574.
- Cocchi M, Tonello L, Gabrielli F, Pregolato M (2011c) Biological and Anthropological-Existential Hypothesis on Depression. *Quantum Biosystems*, 3: 12- 18.
- Cocchi M, Tonello L, Gabrielli F (2012a). *The animal side of "mood disorders"* Lambert Publishing.
- Cocchi M, Tonello L, Gabrielli F, Levi D, Pantaleoni G (2012b) Biological Plausibility of the Pace of Creation Written in the Genesis, *Scientific God Journal*, , 3: 1-19.
- Cocchi M, Gabrielli F, Tonello L (2012c) *Collection of scientific papers in memory of Paolo Sotgiu. The most important scientific publications in the triennium 2009-2011 by The "Paolo Sotgiu" Research Institute for Quantitative and Evolutionary Psychiatry and Cardiology*, Ludes University Press, Lugano.
- Cocchi M, Tonello L, Gabrielli F (2012d) Molecular Uniqueness of Major Depression: Biological Remarks and Theoretical Implications, 3, 4.
- Heidegger M (1929) Was Ist Metaphysik? It.Tr. Che Cos'è la Metafisica, in Segnavia, Adelphi Milano 1987: p.67.

Jaspers K. *Algemeine Psychopathologie* (1913 – 1959), It. tr. *Psicopatologia Generale*, il Pensiero Scientifico, Roma 2000: pp. 640 – 641.

Kierkegaard S (1953) *Il concetto dell'angoscia*, tr. it. C. Fabro, Sansoni, Firenze.

Liotard F (1985) *The Postmodern Condition*, tr. it. Feltrinelli, Milan.

Marche Region Project, Results (2012) Proceedings of the meeting “A long shadow over the soul, Discussion with Psychiatrists, Neuroquantology, in press.

Minkowski E (1933) *Le temps vécu. Études phénoménologiques et psychopathologiques*. It. tr. *Il tempo vissuto*, Einaudi Torino, 1971: p.17.

Weinberg S (1995) *The Quantum Theory of Fields*, Vol. 2. Chap 23, Cambridge University Press.