

Magic, science and morality in renaissance humanist medicine and psychiatry

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Abstract. This work has the main purpose to show Neoplatonist and magical-hermetic influences on the non-linear and complex pathway leading the nascent scientific psychiatry's philosophy and practice towards its more mature developments, throughout an excursus from Cardano et Fracastoro, passing by the breaking point represented by Paracelsus, to Van Helmont, Weyer and Vives. The emphasis is on the fruitful and not-contradictory link between magical and empirical world's vision and the beginning of some innovative good practices, during the Renaissance era, for a modern and ethical conception of Psychiatry. That's why, we will see how Renaissance scientific development, often inspired by Neoplatonist and hermetic philosophy, have allowed the development of a modern conception of the mental patients' conditions and the special care, both pharmacological and moral, that they need.

Key words: history of psychiatry, interpretation of madness, Cardano, treatment of the mentally ill, Fracastoro, Paracelsus

Introduction

The medicine's pathway between ideological conditioning, magic and philosophy

It is known that magic has had a great influence on the modern science's birth, especially with regards to medicine and psychiatry (1-4). The sapiential way, belonging to magic, hermetic and astrological conceptions is the origin of that subsequent and different model of reflection on the nature, owing to scientific cosmology.

In this thought development' process, 1400's and 1500's Neoplatonism had a fundamental role by re-thinking and re-proposing the classical sources (Plotinus, Proclus and Pseudo-Dionysius the Areopagite) in a synthesis with the hermetic, Kabbalistic and astrological tradition.

This philosophical tendency gave to magical-hermetic tradition the function of a radical renewing of the cognitive approach to the reality that founded the

nature's modern science and caused the Aristotelian Scholasticism metaphysical system's and its cosmology crisis (5-6).

The humanist-Renaissance thinking, based on the link between magic and science and on Greek philosophy's revival in a Neoplatonist perspective (with a significant preference for Hermeticism), develops some innovative theories on general medicine and psychiatry.

In early modern philosophy, the great success of the Corpus Hermeticum, the Chaldean Oracles and the Orphic hymns, either attributed to mythical (such as Hermes Trismegistus) or existing (such as Zoroaster and Orpheus) characters, contributed to the spread of these new approaches. One explanation of this naïve, even if widely accredited theory, has been attributed to a lacking philological/historical precision (7). However, this thesis seems partial and reductionist, because it does not consider that Neoplatonism's humanistic interpretation, of whom Marsilius Ficinus is an emblematic figure, is based on a classical Antiquity herit-

age's different interpretation compared to the Scholasticism's one.

In the interpretation of mental disease, the esoteric magical components have played an important role also for their intertwined link with philosophy (8-9). In fact, interest in moral issues has always been important in the history of Psychiatry, not only in the field of medical deontology which began with the Greek medicine, from Hippocrates to Galen, but also in close reference to the specificities of the mental disease compared to organic syndromes (10-14). The first fundamental historic mention of a close connection between psychiatry and morality can be found in the Christian thought that, in contrast to the classical tradition, offers a demonological interpretation of mental disease, strictly connected with the witches' concept of sin and evil (15). This interpretation of mental disease (whose traces are found already in Patristic sources), had the widest possible dissemination and success in humanistic heyday with the *Malleus maleficarum* which abandons the Scholasticism's tradition's multifactorial approach.

With Sprenger and Kramer we assist to the mental disorder's shifting from the medical pathology's field to the moral theology's theoretical framework, as a supernatural phenomenon (16). That turning point, marked by the intrusiveness of theological influences, explains Psychiatry's delay, not only compared to astronomy and physics, but also to biology and medicine, in the use of the experimental method and in the acquisition of a truly scientific structure. Anyway, the intrusion of sin's and guilt's concepts will affect Psychiatry also in later times, as in the romantic age (with Heihroth and Ideler and even with Kant in its *Pragmatic Anthropology*).

In fact, the *Malleus Maleficarum* differs from the concept expressed by St. Albertus Magnus and St. Thomas who, while giving credit to stars' and demons' influences, tended to identify a psychological-moral component in the mental disorder's outbreak. The oscillation between the Christian concept of soul's spirituality and those of Aristotelian *synol* and *entelechy* has a real, strong impact on this conciliation between natural and supernatural origin. Consequently, the mental disorder may be related to many factors: body's changes (with vegetative and psychic soul's involvement), pas-

sional excesses, astral influences, Evil's interventions. In this perspective astrology takes a more metaphysical-cosmological aspect rather than magical (17).

Before the *Malleus Maleficarum*, some other mental disease's interpretative theories referenced to Greek and Arab medicine, astrological beliefs, ethical concepts about the relationship passions-reason and, finally, but in a lesser extent, to demonology (18-20). This allows us to understand the clear distinction between medicine and psychiatry in relation to the progressive detachment from classical somatic and genetic explanation (expressed in Hippocrates essay on the sacred disease where epilepsy is due to a brain *noxa* and not to a diabolical possession), in favour to the ethical and theological explanation.

However, the *Malleus maleficarum* is not a return to Scholasticism, but an emphasis on theological issues, considered apart from their theoretical foundations. This rigid and dogmatic religious connotation explained the trials and the convictions against mental patients accused of witchcraft and satanic relationships, thus determining a persecutory involution and an inhuman treatment of madness.

Sprenger and Kramer show, however, some remarkable observations and descriptions skills of psychotic symptoms. The second part of the *Malleus Maleficarum* represents a unique model of psychiatric semiotics whose accuracy is not influenced, in its formal aspect, by symptoms' supernatural interpretation.

The *Malleus Maleficarum*, whose influence, for historical and political reasons, was enormous and endorsed by the ecclesiastical authority, promoted by the Bull of Innocent VIII, *Summis desiderantes affectibus* (21), was therefore an obligatory reference for the doctors-philosophers of the Renaissance who faced the problem of mental disease (16).

From conjunction to disjunction from esoteric magic-components: from Cardano to Fracastoro

In the pathway from magic to science, Girolamo Cardano has assumed an important role, sometimes underestimated (22-23).

The generic and exclusive attribution of this philosopher to the Plotinus-Proclus-Ficino magical tradition's line is quite reductive. This physician-philoso-

pher's thinking is not so oriented to magic's ontological bases, but to the acknowledgment of the esoteric and initiatory knowledge's primacy which makes a doctor a magician and a philosopher (24).

Cardano attributed to himself magical and supernatural powers as it believes that the practice of medicine, in its highest expression, is the exclusive privilege of those who own extraordinary tools for understanding and action. His brilliant career has certainly helped to confirm this conviction. It is true that Cardano had a good diagnostical and therapeutic ability on himself (as it appears in the *De vita propria liber*, 1576) and on his patients as well. His medical achievements are probably partially due to his strong persuasive and empathetic skill, in addition to a great capacity of taking the ill person in charge, which, in contemporary bioethics, is called "therapeutic alliance".

Cardano natural magic anticipates and prepares the way for the new science of nature, with a mix of scientific thought and superstition, already freed by the Scholasticism's philosophical and theological influences. Thus, magic takes, in his thought, a cathartic function against metaphysical intrusions and becomes a bridge towards the experimental observation's model of the scientific revolution.

It should also be pointed out that Cardano's supernatural is not a theological but an anthropological category, in the context of the reality's cosmological conception, freed by the classic medieval sources. He deals with Psychiatry, even if marginally, but his interest in psychic phenomena has a psychological angle rather than medical. Cardano analyses some developmental troubles, he notes (like Della Porta) the different characters with regards to their somatic correlations and addresses also, albeit in a summary way, mental hygiene problems (25).

He can be considered a physiognomy's precursor, discipline that will have significant developments thanks to Lavater, Goethe, Herder, Bell, Carus, Gall, Wundt, Darwin, Maan, Morselli. It is also worthy to mention his courageous defence of mental patients in the name of a strong ethical necessity. In fact, by claiming their human dignity, he harshly and unreservedly condemns the persecutions and the mistreatments mental patients were subjected, as well as social, ethical and religious stigma.

Cardano, telling the story of sixty young orphan girls, that "in one night gave signs of being possessed by the Evil" offers a naturalistic explanation by suspecting some fumes' influences of the place and the water that "mute humours", or the mutual suggestion within a closed community where dialogue lapses into monologue (22).

In his work *De rationali curandi ratione* (1562) he mentioned that even exorcisms could induce positive expectations and improve patients' conditions. In his thought emerges, then, a first rudimentary formulation of the placebo effect's concept (26).

The Girolamo Fracastoro position represents a tentative to go beyond the connection between magic and science (27). His thought, entirely freed from both the supernatural and hermetic-initiatory knowledge, is quite different from the view of Ficino, Pico della Mirandola, Agrippa Nettesheim Port and Cardano himself (28). The naturalistic approach of this philosopher is very close to the initial and first modern scientific medicine's phase. However, his philosophical and non-experimental conception of medicine does not allow us to consider him rightfully a "scientist".

In his essay *De sympathia et antipathia rerum* we can find the theoretical foundation of contagion's etiopathogenetic concept (in *De contagione et contagiosis morbis et curatione*) referring to the Democritus' and, especially, Empedocles' theories. He repurposes an atomistic cosmology that explains every natural event, even those concerning the living beings, through the mechanism of the contact and the attraction and repulsion categories, respectively for similar and dissimilar. This philosophical conception allows him to explain the origin of diseases like a contagion in the human body caused by the "*seminaria*" or "pathological seeds". Fracastoro distances himself from Galen's humoral theory, by proposing an aetiology, exogenous and non-endogenous, determined by dynamic agents and transmissible agents from things to man and from man to man.

Although the source of *seminaria* concept is mostly in Democritus works and maybe in Lucretius's ones, Fracastoro attributes to them more biological than physical characters, such as a certain vital activity and procreative function. His view may be an anticipation, albeit vague, of the modern microbiology, very

distant from Lucretius', Terentius Varro's and Hildegard of Bingen's thinking (27).

He takes this renewal way with few or no Neoplatonist influences by replacing, as philosophical basis of his medicine, a materialistic approach referring to Democritus and Lucretius (29).

The break with tradition: Paracelsus

Paracelsus gave a very significant contribution to medicine and psychiatry evolution (30-31). His magical and astrological beliefs are a symbolic representation of theoretical models of high critical value, which allow a strong and revolutionary beginning of an authentic scientist approach.

He has a philosophical and methodological way of thinking aiming to identify in a cosmological perspective the scientific research's foundation. That is a concept based on the link and unity between man and nature, in line with the *copula mundi* Ficino's concept, which anticipates intuitions that will be developed later by Mesmer and the romantic medicine (32). In this perspective should be precisely understood the meaning of *archeus*, vital force inherent in every natural entity whose it rules life and growth. *Archeus* concept has a double cosmological and medical significance: under the first aspect is a reality's organicist conception (which is the true meaning of natural magic); under the second aspect is a methodological tool that, starting by the uniqueness of living beings, helps to explain the specificity of diseases. Paracelsus, therefore, refers to Hippocrates and Hippocratic tradition which, in his view, had been misinterpreted by Galen and Avicenna (33).

Certainly, in this so singular author, relevant scientific and modern intuitions coexist with some esoteric components. Alchemy, that Paracelsus enthusiastically practises, is not, in his view, the legendary production of gold and silver from base metals, but the science of transformation from rough metals into different and useful products. In this perspective, there is no concession to superstition or supernatural and thaumaturgical factors, but the only recognition of nature's transformation faculty. One of magic's significations is the dynamic character of reality related to handling and pragmatic skills which are the highest expression of

human life. Of course, this implies the attribution of this special expertise to the wise-magician, in the line of initiatory tradition and, also, its translation into a symbolic language (32).

Paracelsus, then, conveyed new ideas within an old frame. Certainly, his undeniable genius, which gave fundamental contributions to medicine's progress, takes advantages, sometimes, of an excesses' predilection. But this does not justify, although it makes it understandable, the charlatanism's accusation and his thought's depreciation, expressed against him by Kepler, Bacon, Hoyle and Bayle: accusation and depreciation that have been inhibiting for a long time a balanced critical and historical judgement (34).

As a further confirmation of the compatibility between magic and science in Paracelsus and, even if to a lesser extent, in Cardano and Cornelius Agrippa (*De occulta philosophia*, 1510) as well, it should also be remembered that natural magic was an alternative to black magic and a weapon to counter the theological supernatural's intrusiveness (35-36). Agrippa 1913; Peterson, 2003). Natural magic played, therefore, a privileged role against superstition and obscurantism, in favour of the rising scientific perspective. Paracelsus, by rejecting the principle of authority (as well as Galen and Avicenna) and by proclaiming himself the true heir of Hippocrates, replaces the humoral theory by a medical model based on chemistry, both in the physiological-pathological and clinical-therapeutic aspects (37). The health or disease conditions do not depend, therefore, on crisis or dyscrasia situations, on temperance or imbalance due to body's humours' (blood, phlegm, yellow bile, black bile) excess or defect, but on a proportionate relationship in the human body, conceived as a chemical system, between mercury, sulphur and salt.

The contribution of Paracelsus represents a revolutionary turning point in medicine, following three fundamental perspectives.

The first is the organic and dynamic unity of man and nature, which implies between them a reciprocal and interactive interventions' exchange, not only limited to the astral influence on the human world. The second perspective is the rejection of traditional, classical-medieval theory on the four elements, constitutive of the material world (air, water, earth and

fire) and on their correlative qualities (cold, wet, dry, hot) referring to body substances' changing states and conditions such as salty and sour. The same primordial elements (salt, sulphur and mercury) are characterised by their inherent qualitative features of solidity, combustibility and fluidity.

The third perspective represents a significant turning point in the anthropological and cosmological field aimed to endorse a dynamic functionalism of qualities' combination and transformation, which contrasts with the substantialist ontology marked by the traditional medicine's strong static nature.

On this theoretical basis, Paracelsus, despite of what was prescribed by contemporary pharmacopoeia, uses mineral and non-organic drugs (both of animal and vegetable origin) for therapeutic purposes. His etiopathogenetic attributes an interactive character, inside the human body, to salt, sulphur and mercury; this interaction has different modes, levels and quantities, which determinate the diseases typology and their development. And that is precisely the origin of the thesis on the diseases' and their remedies' specificity.

Paracelsus believes that diseases' aetiology comes from external agents with their own ontological consistency. Unlike Fracastoro, he does not confer them a biological nature and that is why he cannot be considered a modern microbiology's precursor. He also makes a different assessment on these factors' aggressiveness; he thus hypothesises their partial synergy with environmental conditions. These agents' influence is neither unique nor isolated, nor it works one-way on a passive substrate. Their influence is combined with the astral plane's one, the environment and the endogenous reactions that interact with quantitative and qualitative ratios of sulphur, mercury and salt, and salt and acid. Therefore, this concept, even if very influenced by philosophical assumptions, is a modern medical pathology's precursor factor. The Paracelsus disinterest for anatomy reveals his dogmatic assumptions to the detriment of an experimental knowledge. Paracelsus did not take advantage of the anatomical studies' fundamental progress, already started, in his time, with Mondino, Alberto the Bajaj and Guy de Chauliac, with Leonardo, Marcantonio Della Torre, Paolo Antonio Benivieni, Alessandro Achillini, Alessandro Benedetti, Berengario da Carpi, Charles Esti-

enne and especially with Vesalius. Paracelsus justifies his anatomy' rejection, arguing that the knowledge of human body's organs, in both their physiological and pathological conditions, did not require direct observation by the autopsy, but only a cosmological approach including all the connections between macrocosm and microcosm and the astral influences.

Thus, we can see that in Paracelsus' thought coexist lights and shadows: on one side, he appears extraordinarily modern, on the other one, he is still closely conditioned by invasive and pervasive philosophical theories, trespassing their legitimate competence's area and by esoteric, initiatory suggestions. Anyway, it would be unfair to ignore his thought's incidence and fruitfulness in the modern science's birth, where Neoplatonism and Hermeticism played an extremely important role.

Furthermore, it is undeniable the outstanding Paracelsus contribution as the founder of iatrochemistry (opposed to iatromechanical, coming from Descartes, Borelli, Bellini, Baglivi and Malpighi mechanicism), which brilliantly anticipates, although mainly as intuitions, modern physiology and biochemistry.

Also, regarding the mental disease, the contribution of Paracelsus is relevant (38). First, he reiterates, its pathological nature and entrusts the doctor with the sole responsibility for diagnosis and therapy. Concerning the clinical frameworks, his observations are accurate, even if they reflect traditional psychopathological theories. His studies on clinical melancholy are quite interesting.

Paracelsus conceives the mental disease, which is not, in his vision, a demonic possession or a supernatural phenomenon, as a very peculiar disease, compared to organic syndromes. This disease, even in the context of a biochemical aetiology, entails troubles and *spiritus vitae* alterations, especially with regards to its main negative outcome: the loss or, rather, the subtraction of the reason. In fact, even though Paracelsus written texts on this matter are quite rare and ambiguous, it is still possible to suggest a holistic interpretation, especially if we consider that the *spiritus* (concept deduced, by a tortuous, exegetical path, from Erasistratus, Galen, Ficino, and Telesio) is a kind of mediator and intermediary factor between soma and psyche sensorial and cognitive functions. Paracelsus gives this concept

the same meaning as Ficino does, not without a strong and sometimes ambiguous oscillation between bodily and spiritual nature, with a certain predominance for the latter. Only with Descartes, in fact, the *spiritus* is conceived in neurophysiological terms, in the context of a mechanistic theory (which will be retaken later by Willis through his thesis on vital spirits' motion abnormality as psychopathological phenomena's cause). This conceptual-semantic change is thus one of the main reasons for the divide or, at least, the independence between psychiatry and neurology, which was typical of the sixteenth and seventeenth centuries and which will contribute to implicate a delay, on the side of the psychiatry if compared to medicine, in the choice of the biological model (39).

But, despite these uncertainties and obstacles resulting from philosophical presuppositions that prevent Paracelsus psychopathological theories to achieve an appropriate scientific maturity, we must acknowledge his merit of strongly fighting the demonological beliefs and implementing therapeutic interventions for mental patients. Besides, Paracelsus doesn't merely and generically proclaim that crazy people should be treated, but also specifies several therapeutic indications according with his convictions in the medical field. In the psychological and psychopathological fields, Paracelsus remarks, even if they are not expressed in a systematic and rigorous way, are however several and important, especially about developmental mental health; in fact, he truly understood, even not without some shadows, the opportunity of psychotherapeutic interventions not only to cure, but also to prevent mental disorders. Paracelsus was also an irreducible opponent of witches' persecution, so that he become a victim himself of his anti-demonological polemics.

The legacy of Paracelsus

Paracelsus iatrochemical orientation will be systematically developed by Van Helmont who, however, differs from Paracelsus whose he integrates the fundamental concepts by integrating them with others thesis from different sources (40). Also, in Helmont Platonic influence is present, although in its strictly cosmological and philosophical dimension, without any esoteric and hermetic subjects (41). There is no

doubt that *archeus* is a Paracelsus concept, which also refers to Ficino, whether it is intended as world soul (and therefore spiritual substance), or whether it refers to the *spiritus*, (material substance, although very thin and almost aeriform).

Van Helmont thought is quite ambiguous between these two meanings. Its categorical interpretation's oscillations may be due to two reasons: the first concerns an essentially monist conception of reality, inherited from some Neoplatonist sources; the second is connected to the importance of cosmological-anthropological category of *spiritus*, which has a long and complicated historic path from Erasistratus, Galen, Cardano, Ficino, Telesio, Bacon, and Descartes.

The most reliable hypothesis, to interpret Van Helmont thought in an historically and philological correct way, is the existence of a structural and irreversible oscillation between tradition and modernity and between his need of consistency with the early philosophical sources and an initial scientific vision of human nature.

Another convergence, even with a fundamental difference, with Paracelsus concerns the exogenous, etiopathogenetic theory. In Van Helmont thought, in fact, external agents are linked in a synergic way with the *archei* inside the different organs. This theory is therefore compatible with the multifactorial criterion, always in the only context of chemical processes.

Even if in iatrochemical line, Van Helmont differs from Paracelsus, not only for denying the absolute correspondence of macrocosm and microcosm constituent elements but also for imaging water (and not sulphur, mercury and salt) as the elementary substance and principle of everything formation and transformation.

About medical pathology, Van Helmont identifies diseases cause in the fermentation process and provides chemical drugs for certain pathological forms.

Contemporary and follower of Van Helmont was Sylvius, who practiced anatomical research and constant clinical activity, also encouraging drugs chemical preparation (42-43). Besides, he developed the concept of fermentation, extending it not only to the pathological phenomena, but also to all those that occur in nature. Even Willis, one of seventeenth century biggest medical and anatomic pathology doctor, adheres

to the iatrochemical orientation, as well as Sylvius, and attributes to fermentation a crucial role in biological field (44).

With G. E. Stahl iatrochemistry theory is proposed again within a systematic conception of medicine which recoups the philosophical category of the soul, as it appears in the classical, Platonic and Aristotelian tradition. In Stahl vision, in fact, the soul is body's unifying and regulatory principle and the condition of all physiological movements and their balance which cause diseases when compromised (45).

Is properly with Weyer, Agrippa's student, that a genuinely scientific Psychiatry may be born (46). His *De praestigiis dei* represents a strong refutation of the *Malleus Maleficarum*, through the systematic translation into psychotic symptoms of all those behaviours deemed as witches and demons' actions (47). Thus, a theological and supernatural-based perspective's radical overturning takes place, in favour of a medical vision, based on diagnostics in matter of pathology, limited to the field of purely natural events, and psychic anomalies and deviations.

Mental patient's defence and protection are no longer exclusively the competence of the ethical and social field, like in Vives, but they mainly concern the related medical issues. We may therefore affirm that the Weyer Psychiatry's vision is genuinely scientific since it is medical psychiatry. This seems indisputable, though his medical psychopathology's bases are still traditional, with some references to Galen humoral theory and a limited influence of Paracelsus iatrochemistry as well.

His most original contribution regards the clinical field and especially semiotics and nosology. Weyer really shows his knowledge on melancholy disorder, not only as we find it in Aretaeus of Cappadocia, Sorano of Ephesus and Galen descriptions, but also in Paracelsus etiological interpretations. He also deals with hallucinations and delirious ideas, by elaborating clinical patterns of organic mental disorders induced by psychoactive substances (belladonna, opium, hashish, etc.) and of paranoid disorders, by an expert analysis of nightmares, hysterical manifestations, psychic contagion.

Particularly interesting are his studies on some mental disorders' sexual origin; it is noteworthy that

he tackles the sexuality's issues from a medical point of view, without moralistic attitudes, but with a neutral, no-judgmental biological and naturalistic description.

Another fundamental aspect of his modernity is the critical caution in using a priori theoretical models and his predilection for the empirical observation. For these reasons Weyer stands out from Cardano, Agrippa and the hermetic-magical Renaissance tradition, to align himself in absolute coherence with the scientific revolution of Copernicus, Kepler and Galileo, whose he shares the paradigm.

Vives has a far more complex and articulated personality. He contributed through many sparkling ideas to Psychiatry's scientific development, even if some historians (notably Zilboorg) overestimated him, amplifying his ideas' speculative meaning and originality (48-49). Vives was not a radical innovator, as Paracelsus had been and Weyer will be. He did an intelligent compendium of the most advanced opinions circulating in Europe during the first half of the 16th century. He is opposed to Scholasticism as an abstract and academic knowledge, in the name of a strong necessity of concreteness, of culture divulgation, interest to the human world in the ethical-social-religious angle, as well as a high sensitivity for pedagogical and psychological issues.

Like Agrippa, also Vives refuses the misogyny of his time, mainly present in some theological environments and he deals with women education in a systematic way. The work that directly concerns mental disease's issues is the *De subventionem pauperum* (48). In the third chapter, he tackles the patients' conditions, unhappy dispossessed because of the with the treatment or non-treatment reserved for them by the society of the time. His perspective is not medical but ethical and social and is animated by an ardent, religious philanthropy. Vives, more than with disease, deals with sick people's physical and psychological suffering and, to soothe it, he lists several sanitary and moral precepts on nutrition, and hospitals' cleanliness and requirements (50-51).

Vives also takes care of mental patients, but not from a psychopathological point of view, but in a medical deontology perspective. He makes a list of some tutelary regulations on mental health such as the prompt diagnosis and prognosis at the time of the admission,

a dutiful compassion for the patients, the avoidance of mockery and provocative attitudes against them, as well as the respect for their human dignity.

Conclusions

From this historical path emerges the gradual process towards a genuinely scientific conception of medicine and psychiatry. This innovative process is however in continuity and not in opposition with philosophical, theological and, initially, even magical-hermetic issues. Therefore, this gradual emancipation from the parascientific influences may represent the fundamental premise to the development of a high-level critical approach towards all somatic and psychic disorders' issues, without quitting a marked, philosophical interpretative frame.

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