

The social act, the social action and the social interactions: a secure basis for social bonding

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Abstract: I consider it useful to compare George H. Mead’s conception of social act, Talcott Parsons’ conception of social action and Florian Znaniecki’s biographical method, from the perspective not only of sociology but, more generally, of cognitive sciences and John Bowlby’s attachment theory. Parsons, who took up some of the theoretical ideas of Vilfredo Pareto, Émile Durkheim and Max Weber, is certainly one of the most important classical authors for the sociological study of the structure of social action. Mead’s theoretical positions are compatible with current approaches to cognition (4E programme of empirical-pragmatic implementation) and the “pragmatic turn” in the cognitive sciences. As Charles W. Morris writes, Mead and Lev S. Vygotskij are the classic authors to refer to for the study of consciousness and the self, starting from the processes of interpersonal and social networks and communicative instruments (gestures and acts). Also starting from interpersonal and social networks and communicative tools (gestures and acts), with particular reference to the mother and child, Bowlby theorised an ethological behavioural psychology of attachment and the secure base. Florian Znaniecki, together with William Isaac Thomas, is considered the originator of the biographical method.

Index Terms – social act, social action, social interaction, biographical method, secure attachment basis, cognitive sciences.

1. INTRODUCTION

In the book «Mente, sé e società» («Mind, Self and Society», see Mead, 2018), drawn up and published posthumously in 1934 (by his pupil Charles W. Morris, the originator of semiotics), Mead, with a “more extensive and more appropriate behaviorism” and pragmatic-ethological manner, addresses the questions of mind, self-awareness/consciousness (the self) and society. The results of some of the research he cites are now outdated, yet the general framework of his work is still valid and rich in insights for making, as we shall see, connections with other very important works by influential authors. However, it must be pointed out that, as Baggio (2018) writes, many of the theses of the classical pragmatists (James, Dewey, Mead) are compatible with current approaches to cognition (4E program of empirical-pragmatic implementation). Consider, for example, what Menary (2016) writes or Baggio’s theoretical proposal that problematises the Deweyan notion of “experience” and replaces it with the Meadian notion of “act”. The act is «a “unit of existence” that expresses the reciprocal conditioning relationship between the various phases of the organism-environment transaction, it is at the origin of the organic cognitive process» (Baggio, 2018, p. 55); in it, perception and action are inextricably linked.

For Baggio (2018) the theory of perception in action of Mead (act theory, percept, habitual responses to familiar objects, first-person perspective and third-person perspective, *imagery* and patterns of action) is easily approachable to the cognitive theory enacted (one of the 4E of the empirical-pragmatic implementation program: the *enactivism* and its relations to Mead’s theories are rooted in Merleau-Ponty’s phenomenology of perception, see Rosenthal & Bourgeois, 1991; Merleau-Ponty, 1942), even though Noë (2004) denies any kind of representation (internal advance representation, pattern of action: problem of *imagery* and the dispute between representationalists and anti-representationalists; on the *Vision*, see Marr, 1982; Tabossi, 1998). For Mead as for Merleau-Ponty perceptual activity plays a central role in the development of human consciousness. In organic interaction, primarily for sense-motor stimulation, the mind comes to be constituted as a property of a particular field of interacting events (see Baggio, 2018, p. 48).

For a basic minimum starting update of the issues related to the researches results used by Mead, see in De Palma & Pareti (2015): John J. C. Smart, «Sensazioni e processi cerebrali» (Sensations and Brain Processes); David M. Armstrong, «La natura della mente» (The nature of mind); Hilary Putnam, «La natura degli stati mentali» (The nature of mental states); Donald H. Davidson, «Eventi mentali» (Mental events); Jaegwon Kim, «La sopravvenienza come concetto filosofico» (Supervenience as a philosophical concept); David H. Hubel, «Neurobiologia: una scienza bisognosa di un Copernico» (Neurobiology: a science in need of a Copernicus); Margaret S. Livingstone & David H. Hubel, «Separazione di forma, colore, movimento e profondità: anatomia, fisiologia e percezione» (Separation of form, motion, and depth: anatomy, physiology, and perception); Francis H. C. Crick & Christof Koch, «Verso una teoria neurobiologica della coscienza» (Toward a neurobiological theory of consciousness);

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Horace B. Barlow, «Singoli neuroni, scopi comunitari e coscienza» (Single neurons, community purpose and consciousness). See also Michael Tomasello, «Le origini culturali della cognizione umana» (The cultural origins of human cognition) (2005).

The Pragmatism (pragmatic-ethological manner of Mead) brought a new interpretation of mind and intelligence in line, biologically, psychologically and sociologically, with post-Darwinian currents of thought. This also made it possible to reconsider the problems and task of philosophy (see Morris, 2018, p. 8). The philosophy of mind, which is one of the cognitive sciences, has in fact begun to reflect on a type of naturalism whereby thinking man is embedded, immersed, in nature (environment). It thus avoided the traditional dualism between mind and matter, experience/act and nature, theory and practice (see Morris, 2018, p. 8). As Shaun Gallagher (2016) writes, the environment is both physical and social, it is “situation” in the sense that the human mind is always and in any case problematic interaction organism-environment, solvable with reorganizations realized through social behaviors (natural-artificial, physical-social tension). With words of Luigi Pareyson, the human being is an initiative initiated (*continuum*) in conditioned and problematic biological, social, biographical and historical situations (see Modica, 1980; see also Mills, 2014). Rather than of action and of interaction, as Baggio (see 2018, p. 50) suggests, one should speak of patterns of action resulting from *transactions* with the physical and social environment. The individual is not aware of the coordinated process (automatic processes). He becomes aware (conscious processes) of it when the agreement between the anticipatory performance and the act present in the process is inhibited by conflicting impulses, triggering a readjustment (see Baggio, 2018, p. 50; see also Kahneman, 2015). The Ethology (pragmatic-ethological manner of Mead) is one of the disciplines on which both behaviourist psychology of Mead (social psychology) both behaviourist sociology (sociological interactionism) are based, as well as attachment and secure-base theory.

Mead act theory (it is only by acting that we perceive and represent: *imagery*) can be regarded as a contribution to the “pragmatist turn” in the cognitive sciences (new approaches of cognitive science), that is as the increasing use of pragmatist theories and concepts for the study of cognition and human experience (experience understood as an act: act theory), for the following reasons (4E of the programme empirical implementation of pragmatism: *embodied, embedded, enactive, extended*): *embodied* approach (see Varela et al., 1991); *embedded* approach (see McClamrock, 1995); *enactive* approach (see Noë, 2004); *extended* approach (see Clark & Chalmers, 1998). This multiplicity of approaches to human cognition, which has provided an empirically reliable account of the nature and functioning of the experience/act, the cognition and the human mind (act theory, inextricably linked to sense-motor processes), has made it possible to overcome the initial cognitivist and computational paradigm of classical cognitive science (see the three-level model for explaining complex information processing systems proposed by Marr, 1982; see Tabossi, 1998) according to which the human mind is like an abstract brain programme guided by logical rules and cognition is disembodied, formal and cerebral. For all these approaches, it is the body that plays a central role, because it is the body and the environment that determine cognitive processes. Indeed, the mind is rooted in an organism in action, which is immersed in its environment (see Baggio, 2018, p. 42). The individual belongs to a social structure, to a social order. Mead’s starting point is human social experience, understood as an act (act theory) and observed from the perspective of communication, which is essential for the social order (see Mead, 2018, p. 39). The social order is structured essentially by communication in an environment (interaction/transaction), in which human beings are immersed (for the concept of a human being, see Pinello, 2021).

According to the positivist paradigm of biological evolution, already at the end of the 19th century the life of the mind as a whole were interpreted as evolutionary development, as change and interactivity between organism and environment. The mind resided in the sphere of conduct and human societies were as complex biological entities, to be studied using evolutionary categories (see Morris, 2018, p. 7-8). But then the orientation of those who wanted to establish sociology as a scientific discipline prevailed, cutting the bridges and links with biology and heredity (see Parsons, 1987). This approach is now largely overcome, despite the resistance of many nostalgics especially in Italy. In this changing context, it is increasingly difficult to draw a clear line between sociology, psychology, biology and cognitive sciences in general and between social and individual psychology (see Mead, 2018, p. 39), because the development of the individual self and self-awareness occurs in the context of social experience (understood as acts: act theory) and as a function of the social group to which one belongs. Mind (which can also become, I would add, a “well-made mind” or a “mind of quality”, see Morin, 2000, and Mills, 2014) and self are social products, they are social phenomena of human experience and underlying automatic physiological mechanisms (see Mead, 2018, p. 40).

Mead’s conception of the mind/brain relationship is not dualist but monist (on dualism and mind/brain monism, see Bechtel, 1992) and involves the question of private experiences, which belong to the individual self, and introspection (see Mead, 2018, p. 41). With respect to the enigma of subjective experience and the crisis of functionalism, it is appropriate to acquire a basic understanding of the issue. To this end, it is useful to read, in De Palma & Pareti (2015): Thomas Nagel, «La bisezione del cervello e l’unità della coscienza» (The bisection of the brain and the unity of consciousness); Thomas Nagel, «Com’è essere un pipistrello?» (What is it like to be a bat?); Frank Jackson, «Ciò che Mary non sapeva» (What Mary didn’t know); Daniel C. Dennet, «Quainare I qualia» (Quaining the qualia); David J. Chalmers, «Come affrontare il problema della coscienza» (How to deal with the problem of consciousness).

Mead’s problem is how the mind of the individual is constituted in its essential components, the consciousness and the self, the human mind not being an abstract entity that functions in the same way in all individuals. The starting point, integrating Mead’s theses with Bowlby’s, is the capacity of the individual mind to interact/transact (come to a transaction through physical and social interactions) in a healthy way and with secure attachment (secure base), through a gestural and symbolic communication system, in a physical and social environment (see Mead, 2018, p. IX-X). The central theme of my paper is residuals, *i.e.* the different conception of residuals in Parsons, in Mead, in Znaniecki and in Bowlby. This is because Mead, unlike Parsons, argues that mind and self are social emergences without residues and that the mechanism for their emergence is language, in the form of the gesture and of speech (see Morris, 2018, p. 12-13). In my opinion, however, it is appropriate to consider not only language and communication, but more social and cognitive constraints. After all, the purpose of Merleau-Ponty’s phenomenology of perception, to which, according to Baggio, Mead’s theory of the act can be juxtaposed, is precisely to

criticise reductionism of experimental physiology and psychology and to propose a non-reductionist, holistic naturalism (*see* Baggio, 2018, p. 48). Great and relevant is the distance between the theoretical position of Mead (closer to the new approaches of cognitive science) and those Parsons (closer, on the other hand, to the classic approach of cognitive science). Understanding why is sociologically very important.

The translations from Italian of the citations of the authors taken into consideration were made by me.

II. PARSONS: THE STRUCTURE OF SOCIAL ACTION & ZNANIECKI: THE STRUCTURE AND THE BIOGRAPHICAL METHOD

Parsons approaches the study of social action with the aim of moving from the analysis of the structure of social action to the structural-functional analysis of social systems, which in his view are ultimately systems of social action (*see* Parsons, 1987, p. 34). His critical targets are heredity and the environment and his aim is to establish sociology as an autonomous scientific discipline capable of standing on its own two feet. Parsonsian sociology severely criticises behaviourism, social Darwinism and biologism, as well as idealism. In his view, behaviourism takes to extremes the tendency to reduce the factors of human behaviour to biological terms, eliminating the analytical need for a subjective and voluntarist approach. Everything must be translated into general terms that apply indiscriminately to all biological organisms. This «makes the subjective factor “epiphenomenal”». Behaviourism draws the extreme consequences of this in its methodology; the subjective approach is not only superfluous, it is illegitimate, it is contrary to the canons of “objective” science [In the particular behaviourist sense that limits the data of science in general to facts expressible in the terms of the conceptual schemes of chemistry and physics. All other data are eliminated simply by denying their character as facts]» (Parsons, 1987, p. 158). Parson’s problem is «the identification of the minimal set of structural reference points» (normative and non-normative conditional factors: it is the tension between normative and non-normative conditional elements, in particular “Inheritance” and “Environment”, which he discards from his structural theoretical system of reference) «and to which basic relations between these a scientific theory of social action should refer» (Poggi, 1987, p. 13).

The American sociologist writes that his general theory of social action does not consist of a group of general concepts/notions and in their logical-deductive interrelationships (Euclidean system: «A scientific theory is not the result of idle “speculation”, it is not constructed by deriving its logical implications from initial hypotheses», Parsons, 1986, p. 37), but rather in the formulation of general statements (which constitute the “body of the theory” and which Parsons extracts from certain theses of Pareto, Durkheim and Weber), in the logical development of these general statements and in their empirical process of transformation, an empirical process that transforms the general theory itself. The development and transformation process are related to the discovery of new empirical facts. Parsons’ interest in the empirical fact is oriented by the logical structure of the general theoretical system used (the general structure of social action) and the importance of factual problems is inherent in the structure of the general system itself. Essential in fact is the concept of the “meaning” of the fact, which Parsons draws from Pareto: what counts is not the fact, but its meaning within the general theory. What counts is not the “sensible impressions” as such and in any concrete sense, but the “meaning” of the symbols (Parsons, 1986, p. 226). The general frame of reference (general theory of social action), therefore, not only states what we already know, but also says what we need to know, i.e. the factual and problematic questions we need to answer. It is in this sense that the general theory of social action refers to empirical data, to facts. It is always in this sense that it is a dependent and, at the same time, independent variable (in the development of science) and that it is an integrated “logical-empirical system”. If, due to new facts, due new empirical data (the empirical part of the logico-empirical: the concepts/notions refer to a reality external to the concepts themselves), the formulation of an important (or general) proposition of the system changes substantially, this entails logical consequences (the logical/integrated part of the logico-empirical fundamental/general propositions must stand together according to logical relations) for the formulation of the other important propositions of the same system (body of theory) and, consequently, for the general system itself (Parsons, 1987, p. 46-47).

As we shall see, the same problem of symbolic meaning and gesture without symbolic meaning is approached differently by both Mead and Bowlby. Parsons, in his understanding of the meaning of social action, depends heavily on Pareto and of Max Weber’s hermeneutics. Not so Mead and Bowlby. Well aware of the problems implied by abstraction and analysis, Parsons in fact believes he can start in the theorisation of the general structure of social action from Vilfredo Pareto, who, in turn, starts from the methodological scheme of logical-experimental science, *i.e.* from the logical elements by distinguishing them from the non-logical ones. This scheme can be described as follows: 1) examine the logical, or logico-empirical, structure of the theories; 2) check whether non-logical elements emerge from this examination, with respect to the structure of the theories; 3) check whether, because of these non-logical elements, the theories cannot fit into the standards of logical-experimental science (these standards then constitute the basic model for proceeding to the examination of the theories); 4) if the theories cannot be brought back to the standards, separate the constant elements of them from the relatively more variable ones; 5) following this procedural sequence, locate, identify and distinguish the residuals and derivations; 6) after distinguishing and classifying the residuals and derivations, identify the reciprocal relations between them. This is the methodological part that Parsons takes from Pareto. Considering it insufficient, however, he, also drawing on Durkheim, adds to this outline: 7) the distinction between normative and non-normative elements; 8) the distinction between “conditioning” elements susceptible to non-subjective formulation and “value” elements’ (*see* Parsons, 1987, p. 502). Taking these additional elements (classes) into account also means focusing attention on feelings, which manifest themselves in the residues. Thus: logical and non-logical elements, methodology of logical-experimental science, relatively constant and relatively variable elements, residuals and derivations, normative and non-normative elements, non-subjectively formulated “conditioning” elements and value elements. Parsons derives from Pareto’s writings a theorem that

he calls the “sociological theorem” on the basis of which society can only be considered a reality *sui generis*, insofar as it has properties that cannot be derived from those of the units that constitute it and that cannot be enunciated through processes of direct generalisation, *i.e.* generalising abstraction. It is for this reason that, according to Parsons, in the wake of Durkheim, individual social actions (of “concrete individuals”) cannot be considered in isolation, which Pareto does in part. According to Parsons, Durkheim arrives at essentially the same theorem. This theorem expresses a non-scientific derivation, at least in Durkheim’s and partly Pareto’s application of it (Parsons’ aim is to verify whether and under what conditions what is non-scientific can be brought back into science, in this case sociology), of a residue, a non-scientific derivation that in Durkheim is idealistic and metaphysical.

It should be emphasised that, according to Parsons, Pareto, due to certain peculiarities of the means-end logical scheme he theorised, *i.e.* due to his general logical theory (initially a positivistic means-end scheme, later transformed into a voluntaristic scheme of action), could not adequately distinguish between heredity and environment and between value elements in non-logical action (*see* Parsons, 1987, p. 510). Pareto’s voluntarist scheme of action implies an individual more or less integrated with other individuals, within a system characterised by common values (social element). The transformation of the positivistic scheme into the voluntaristic scheme, again according to Parsons, allowed Pareto, unlike Durkheim, to avoid a positivistic or idealistic configuration of the social element (*see* Parsons, 1987, p. 506). It is for this reason that Pareto’s work represents, for Parsons, the starting point for the elaboration of his general theory of social action. Durkheim was very clear about the distinction between hereditary and environmental elements in drawing the line between non-utilitarian “individual” and non-utilitarian “social” elements. Unlike Pareto, the distinction between hereditary and environmental elements for Durkheim was clear from the outset. His problem was rather to define the nature of the social element. The dividing line between the non-utilitarian “individual” and “social” elements was eventually identified with that between heredity and the environment on the one hand and the value elements on the other’ (*see* Parsons, 1987, pp. 510-511 Durkheim, for Parsons, in the last phase of his theoretical production, moved away from the voluntarist theory of action (positivistic voluntarism: “sociological positivism”) to place himself within an “idealistic sociology”.

Parsons’ starting point (formulation of general statements, which constitute the general “body of theory” of social action), through Pareto, is the scientific standards that must be taken into account in order to apply to the theories (of Pareto, Durkheim, Weber, utilitarianism, hereditary and environmental determinism, methodological empiricism) the scheme I have outlined above in points, in order to verify and establish whether they are scientific or not, and if they are not, why they are not and how and under what conditions they could become so. There are basically two reasons why a theory, relevant to the analysis of social action (not all of them are), may deviate from scientific standards: 1) because it is ascientific; 2) because it is non-scientific. Ascientific means that it implies ignorance and errors; non-scientific means that it implies «considerations that are completely outside the domain of science» (Parsons, 1987, p. 502). It can also be the case that a theory is non-scientific and ascientific at the same time. Refining this latter distinction further, Parsons specifies that within the category “non-scientific” two types of elements can be identified: 1) «the ultimate ends of the action and the non-experimental entities that are used to justify the pursuit of these ends» (along with the ultimate ends, from a teleological point of view, one must consider the intermediate ends); 2) «certain elements that serve as selective criteria in the choice of the still non-scientific means (those generally involved in ritual actions)» (Parsons, 1987, p. 502-503). Thus, with respect to the standards of logical-experimental science, consideration must also be given to ultimate ends (residuals), the entities used to justify the pursuit of these ends (derivations), and certain elements that serve as selective criteria in the choice of means that are not yet scientific. For Parsons, utilitarianism, as a theory of social action to be scrutinised as to its scientificity (standard and scheme), is more important than biological, hereditary and environmental determinism, another theory of social action to be scrutinised, because it contains within itself and uses the conceptual scheme, fundamental to its theorisation, of logical “means-end” action, a conceptual scheme proper to positivist methodologies (first and foremost the economic one) which the American sociologist compares to the “cause-effect” scheme of classical physics. Besides utilitarianism, he writes, the other theory to be examined, closely related to utilitarianism, «is methodological empiricism. Although a clear awareness is rare in this field, there is a widespread tendency to regard the analytical concepts of science as directly corresponding to concrete observable entities and to refer the classification of the social sciences to various concrete spheres of social life» (Parsons, 1987, p. 498). The distinction between causal relations (cause-effect) and sense-provided relations (means-end) constitutes a very precise methodology of the “cultural sciences” that has taken the name *Verstehen*, which is distinct from the analytical methodologies of the “natural sciences”. Weber’s merit, for Parsons, was to fill the concept of *Verstehen* with further content useful, in terms of critical reflection on the meaning of social actions, for the foundation, elaboration and development of his general theory of social action. *Verstehen*, *i.e.* to consider symbols and try to understand their meaning, because if ideas change, societies change too (*see* Weber, 1991).

It should be pointed out that sociological theorising, for Parsons, must deal not only with the means-end relationship, but also with «the incidence of criteria of self-determination of the actor other than maximising rationality - criteria such as the symbolic, non-instrumental adequacy, of certain means in relation to certain ends; or the absolute, self-justifying adequacy of expressive action, which is an end in itself» (Poggi, 1987, p. 13).

I now discuss the relationship between what I have argued so far, language and reality. We have seen that:

- Verifiable empirical knowledge of any kind - even common sense knowledge, in everyday life - implicitly (with implicit postulates: implicit general fundamental propositions) or explicitly (with explicit postulates: explicit general fundamental propositions) implies a systematic theory (general frame of reference), which may be ascientific, non-scientific or scientific.

- Parsons’ intention is to methodologically identify the general fundamental theoretical (epistemologically scientific) propositions of the general framework of social action.

- These are general fundamental propositions that do not require demonstration. However, they should not be regarded as merely intuitive and self-evident, «for their validity must be judged not by the arguments adduced in support of them [...], but by considering how [they] fit into the general structure and results» (Parsons, 1987, p. 46).

- General fundamental propositions are obtained by means of “logical processes of representation”.

- Such “logical processes of representation” use conceptual (mental) schemes to produce logical-rational representations (linguistic propositions).

- Applying such logical conceptual schemes, logical representations (propositions) are derived from the “representational processes”.

- The focus is therefore on the general structure (the general fundamental propositions), the “logical process of representation” (using the conceptual schemes of the general structure), the logical representations and the results of the empirical verification.

- The general fundamental propositions (logical representations), the logical conceptual schemes and the “logical processes of representation” serve to state empirical “facts”, which are (as statements) also logical representations.

- Underlying this are the problem of signs/symbols, the problem of the mind (the thought), the problem of the real referents of language (to gain a critical perspective on the topic, *see* Ogden & Richards, 1966), and the problem of the social construction of reality (to gain a critical perspective on the topic, *see* Berger & Luckmann, 2019). For Parsons, “conceptual schemata” are inherent in the structure of language and differ from one language to another. Being in language, they are not in the mind a priori, but are introduced into the mind through the different spoken and written languages, *i.e.* through socialisation.

It is useful, at this point, to clarify the Parsonian concept of order, because the author distinguishes two radically different levels of order. A first level is the “natural order”, that of the physical and mathematical sciences, which is nothing more than «a series of phenomena involving uniformity of behaviour, formulated in terms of “laws”. This does not imply any necessary relation to human ends. The struggle for existence or the war of all against all [Hobbes] can certainly constitute an order in this sense», because it is entirely determined by biological, hereditary, automatic environmental categories that are non-subjective, non-voluntaristic in contractual terms of the cognitive means-end scheme. «Its antithesis is a state in which events happen at random, *i.e.* are not subject to scientific analysis». A second level, on the other hand, as in Pareto, Durkheim and Max Weber, «implies not only uniformity in events» scientifically observed and observable, «but a control of human action» (logical actions, in terms of the means-end cognitive scheme, conscious, aware and voluntary) «with reference to certain norms of behaviour and ideal relations, *e.g.* “the establishment of the contract”, of a legal order» (1987, footnote 4 at p. 390). Thus: uniformity in the behaviour of physical, chemical and biological objects, represented through the cause-effect principle of classical physics, on the one hand, uniformity in the events and control of human action (logical actions), on the basis of the means-end “mechanism” (*Verstehen*), with reference to certain norms of behaviour and ideal relations (the institution of contract and other institutions and relations), on the other hand.

Parsons, in his book on the structure of social action (1987), analysing Pareto’s methodology, also distinguishes two abstract types of society: a society in which “sentiments” prevail (instincts, biology, the neural circuits of survival, the irrationality of human nature) and where choices are essentially irrational, automatic, even if thought is not lacking (but is conditioned by irrationality), and a society in which, instead, only logical-experimental reasoning operates (*see* Pinello, 2022). It is clear that human society «lies between the two types now noted» (Parsons, 1987, p. 265). The total realisation of the first type would be the Hobbesian “war of all against all”. The total realisation of the second type today would no longer be the purely neocortical society of the positivists (mere “pure” neocortical brain with total elimination of the reptilian brain and limbic brain), but would be the totally artificial, artificially intelligent and unsupervised society. Parsons links «“a society determined solely by reason” [...] to the ideals of the positivists» (Parsons, 1987, p. 268), human society nevertheless comes close to the second abstract type outlined and therefore the social sciences have to deal with it, leaving aside the studies and research on social Darwinism (and behaviourism and biology), *i.e.* leaving aside the tension towards the first abstract type of society, with the certainty, however, that «“a society determined solely by ‘reason’ does not and cannot exist” [...]. This is the fundamental non-logical aspect of Pareto’s action» (Parsons, 1987, p. 267). It is from this last postulate that Parsons derives the question of residuals and “residual categories” (one must be careful of the “empirical” – “categorical” dualism present in Parsons: logical-empirical method). Furthermore, it is worth noting that he, in addition to the oppositions “logical action” and “non-logical action”, “subjective category” and “non-subjective category”, makes extensive use of oppositions such as “logical social actions” and “non-social actions”, “subjective sociological categories” and “non-sociological categories”, etc. The need is to return to reflecting on the logicity or otherwise of social action and the subjectivity or otherwise of the sociological category. This is the operation undertaken by Pareto and, through him, by Parsons. One must not simply discuss “social action” or “sociological category”, but one must distinguish, within “social actions”, those that are “logical” from those that are “non-logical” and, within “sociological categories”, those that are “subjective” from those that are “non-subjective”.

The American sociologist explicitly addresses this question because the ultimate ends/values of action (the salvation of the soul, the kingdom of heaven, nirvana, collective happiness, general harmony, universal brotherhood, etc.), which are relatively latent, are for Durkheim responsible for solidarity and social cohesion, *i.e.* a moral community that makes use of social rituals and rites. It is the question of “collective consciousness” that costs Durkheim the accusation of metaphysical idealism.

Florian Znaniecki, like Parsons, rejects biopsychic methods and excludes the possibility of considering antagonism sociologically as a reactive automatic, physical or psychic state, behaviourally consequent to a stimulus. In delimiting the disciplinary fields, the Polish sociologist specifies epistemologically that, with reference to the bio-psychic individual, this is an issue typical of the natural sciences, which is also dominant in psychology (especially in behaviourism) and which in the sociological field is found in social psychology. With regard to purely sociological epistemological questions, he states that he wants to start from a critical re-reading of the sociological heritage produced up to the 1930s, from a particular perspective: the

criteria of scientific induction. Parsons, as we have seen, starts instead from Pareto, Durkheim and Weber, as well as from the most important 19th century theories. Znaniecki's critique does not only concern induction, but also focuses on deduction and the mixed method, inductive and deductive at the same time, mixed method of those who have based their sociological statements, as far as possible, on assumptions deduced from other disciplines (or, like Parsons, from well-established sociological theories) and then inductively traced a huge mass of facts to these theoretical assumptions, by way of demonstration, and generalised with them. Since not all induced facts can be accorded by generalisation to the assumed theoretical assumptions, the problem of contradictory facts arose, a problem that the most trite sociologists solved by omitting them altogether and the most scrupulous instead by treating them as exceptions to the assumed assumptions, i.e. not as fictitious but as real (ascientific, non-scientific, ascribable or not within a general scientific theory). This theme is present in Parsons, who uses Pareto's concepts of "non-logical", "residual" and "derivation", as well as the concept of "concreteness", for this reason.

Znaniecki's aim is to replace the biopsychic approach to the problem (also criticised by Parsons and which, as we shall see, is Mead's), the deductive approach (merely logical and also criticised by Parsons), the inductive approach (merely empirical and also criticised by Parsons) and the mixed approach, inductive and deductive at the same time (this is Parsons' method), «with another» (biographical experiential) «one in order to arrive at important conclusions in the whole area of its applicability» and to question «what is obvious for the biopsychic problem, namely the very existence of any property definable by the scholar as objective» (Znaniecki, 2008, p. 33). The point is that, given the impossibility, in modern societies, of establishing the highest degree of antagonism, the opposition between "our own" ("familiar") and "strangers" is no longer to be sought at the bio-psychic level, nor at the level of the group tout court (archaic defensive group antagonism) but, sociologically, with «reference to the experiences of those individuals (or collectivities) whose attitudes towards strangers we intend to study» (Znaniecki, 2008, p. 38). With regard to social contacts, in order to state «what role lack of contact plays in the distinction between our own and strangers, it is not enough to know the facts, conscious or unconscious (automatic), of the contact or lack of contact between certain persons; it is necessary to refer to the current experiences and activities of these persons [the concept of experience/act is fundamental, as we shall see, in Mead and in Bowlby], in order to establish who, when and why he considers certain individuals among those with whom he has had contact and among those with whom he has had no contact to be strangers» (Znaniecki, 2008, p. 43). «This means that the foreignness of an individual (or of a collectivity) is not a trait that can be attributed by an observer on the basis of this or that property considered objective (of a psycho-somatic or social kind such as belonging [to a group] and diversity) because it depends, yes, on contextual factors but above all on subjective [subjective non-objective and environment] factors. It is the same persons who notice in the same persons sometimes certain characteristics and sometimes others, depending on the circumstances, and judge the given individuals or groups as foreign or their own» (Znaniecki, 2008, p. 10). Hence, in contrast to Parsons' structural-functionalist approach, the biographical method (forerunner of symbolic interactionism and sociological constructionism) of Znaniecki and William Isaac Thomas.

And here Kaczyński (*see* Znaniecki, 2008), highlights an epistemological assumption, which is also present in Mead and in Bowlby: social research cannot consist of the direct observation of facts and in the observer's experience alone, but must also take into account the experience of social actors ("outsiders" are only those who, at a given time, in a given conditioned situation, in a given environment, are perceived as "outsiders" by the individual or group being analysed). Znaniecki, on the contrary (in some respects, for others, as we shall see, there is convergence) to Mead and Bowlby, argues that this does not mean that the internal point of view of the observed subject should be taken into account (Mead expresses himself in terms of private experience), because applying the "humanistic coefficient" (it is a coefficient of abstraction and generalisation, Mead expresses himself in terms of "universals") «it is obvious that individuals or groups who treat certain persons as strangers do not think they are doing so for subjective reasons but, consciously or unconsciously, rely on aspects that in their eyes have objective significance» (Znaniecki, 2008, p. 53). «From a sociological point of view, it is not what happens to the psyche of the persons studied that is important, but rather how they act in relation to other persons» (Znaniecki, 2008, p. 73).

A concept that allows me to relate Znaniecki and Parsons is that of structure, with the clarification however that, as I said before, the Polish sociologist criticises and does not accept the mixed method (inductive-deductive, logical-empirical) of the American sociologist. For Znaniecki, as for Parsons, «a scientist's discovery is an element of some structure of scientific truths», i.e. of a theory, of a general theoretical structure. «The same truth can be used in different philosophical or scientific systems and can also be linked to religious dogmas [...] In attempting to analyse a particular issue, the sociologist encounters several questions that force him to formulate a postulate of revision of fundamentals» (Znaniecki, p. 59-60 and footnote no. 34 on p. 61). However, the way in which the Polish sociologist and the American sociologist deal with the question of residuals is different. Znaniecki, as I have already mentioned, together with Thomas, devised the biographical method.

In the face of every empirical generalisation we should comparatively analyse facts converging and facts diverging with it, to replace statements such as 'the majority of S is P' not with the statement 'n% S is P', but with two or more statements such as: 'all S that are A, are P', 'all S that are B, are Q', 'all S that are C, are R' (or: if S is A, S is P, if S is B, S is Q, if S is C, it is R) and so on until all S variants are exhausted. Measurement and counting have their place only where the characteristic traits A, B, C...P, Q, R... are quantitatively changeable and measurable; thus they must serve the numerical identification not of the scope, but of the content of sociological concepts. This obviously requires a more specific approach than in the past, but it facilitates the testing of hypotheses (2008, p. 26-27).

Parsons distinguishes enunciated facts and residues from impulses and "feelings" understood in a merely biological, automatic and deterministic, non-subjective way. The latter can neither correspond nor not correspond to enunciable facts, because they are not propositions but phenomena or elements of phenomena, since they are automatic and do not pass through the human mind and meaning is given symbolically by ideal systems within the mind itself, through interpretations. It follows that for the problems posed by residues to make sense, the residue must also be a logical proposition endowed with meaning (*see* Parsons, 1987, p.

269), *i.e.* it must pass through the human mind. Residues that cannot be formulated by means of logical propositions (*i.e.* by means of logical derivations) must not be taken into account because they are meaningless, relative to the applied theory.

The concept of residual must be framed within the question of general categories, empirically identifiable variables and negative categories. Indeed, at whatever level one considers a theoretical system, it implies the positive definition of general categories and empirically identifiable variables. Positive definition means that «the very fact that they are defined implies that they are distinct from the others, and that the facts that constitute their empirical field of reference are consequently, at least in some respects, specifically differentiated from the others» (Parsons, 1987, p. 58). It happens, however, that «not all facts that are actually observable in a given field, or not all those that have been observed, can be made to fit into clearly and positively defined categories» (Parsons, 1987, p. 58). This implies the need to also use negative, or negatively defined, categories for «facts of which the existence is known, which are also more or less adequately described, but [which] are characterised theoretically by the impossibility of fitting them into the positively delimited categories of the system» (Parsons, 1987, p. 58). From a theoretical point of view, in these cases, Parsons writes, it is only possible to formulate and express negative statements, such as “they are not so and so”, and not also positive statements, such as “they are so and so”. From this, the American sociologist continues, it should not be inferred that negative categories and negative statements are unimportant. Only the most talented researchers and scholars, however, strive to make them as explicit as possible, to express and expound them with rational and logical rigour. This is because a form of progress in theoretical work consists precisely in deriving positively defined concepts from the residual categories in order to seek their verification in empirical research. The obviously unattainable goal, which one approaches asymptotically, is the elimination of all residual categories in favour of positively defined and empirically verifiable and verified concepts, *i.e.* the closed system. «The derivation of positive concepts from residual categories constitutes a process of reconstruction of theoretical systems» (Parsons, 1987, p. 59).

III. MEAD & BOWLBI:

SOCIAL INTERACTIONS, THE MIND, THE SELF, THE SECURE BASE AND ATTACHMENT

Mead, like Znaniecki, starts with the individual human being, the functioning of his mind, his biography, his social interactions, but unlike Znaniecki he also deals with the problem of his consciousness and self (social philosophy: pragmatism; social psychology). Like Parsons, he studies the behaviour of the human being, but not as a general theory of social action, as logical-empirical structure and functions, but as experience, gesture, symbolic act, ethology, biology, environment (organism - physical and social environment interaction), as a human mind (not as mind in general and in the abstract), as data, together and at the same time, biological, psychological, social and linguistic. Everything in the “world of science” begins with experience, with the act, experience and act having a genetic, hereditary, biological, physiological, anatomical basis (Parsons and Znaniecki, as we have seen, start instead directly from the analysis and critique of sociological theories and methodologies that precede their studies and research, discarding a priori the biological basis of human behaviour). The “physical thing”, although predating science, is an experiential social derivative. «The world of experience is conceived by Mead as a realm of natural events emerging through the sensibility of organisms, events that are no longer properties of the organism, but of the things observed». (Morris, 2018, p. 18). With Mead, mind and self are generated without residue in a social process, just as, with the biographical method of Znaniecki & Thomas, all individuals must be considered without residue. However, unlike Parsons and Znaniecki, for Mead sociology and psychology are united by a common biological basis. As his student Morris writes:

Mead’s attempt is to demonstrate that the mind and the self are social emergences without residue; and that language, in the form of speech gesture, provides the mechanism for their emergence. It is my belief that Mead has succeeded in this task, especially in isolating the mechanism of language by which the mind is socially constituted and through which the self-conscious self appears as object [...] Be that as it may, it seems to me that Mead has shown that the mind and the self, in the sense of these terms he introduced, are generated without residue in a social process, and that he has for the first time isolated the mechanism of this genesis [...] Mead gives an answer in biosocial terms. He does not disregard, like the traditional psychologist, the social process in which human development takes place; he does not disregard, like the traditional social scientist, the biological level of the social process by referring to a mentalistic and subjective conception of society [...] psychology and sociology are united on a common biological basis; social psychology is founded on a social behaviourism (Morris, 2018, p. 12-14).

Mead demonstrated that mind and self are generated without residue in a social process. There is a genetic, biological, anatomical, physiological basis, and it is from that basis that mind emerges, through social interactions (better said transactions), within an environment. This means that

we must be mindful of the human animal [...] as human animals we in fact observe in our attitudes, in our images, in our thoughts, in our emotions aspects of ourselves that we cannot observe as fully in others; and the fact is communicable [...] the mind was not to be reduced to non-mental behaviour, but was to be seen as a type of behaviour emerging genetically from non-mental types. Behaviourism [...] meant for Mead neither rejecting the private [the experience is private insofar as it is distinct from social experience] nor neglecting consciousness, but interpreting all experience in terms of conduct. [...] The transformation of the biological individual into the organism endowed with mind or the self is, according to Mead, effected through the work of language, which in turn presupposes the existence of a certain type of society and certain physiological capacities in the organisms of individuals [...] Mead, perhaps, did not make full use of his behaviourism as he did not arrive at a precise definition of the role of the private individual (Morris, 2018, p. 15-16 and p. 19).

It must be made clear that Mead distinguishes gesture (including mere vocal gesture) from act and communication from language (*see* Tabossi, 2002), because animals also communicate and gesture (gesture conversation), but only human beings in a conscious, logical-rational and creative way, do so by, using historical-natural languages and moving from impulse to rationality (meaningful symbol of language that has implicit in itself the social “mechanism” of role-taking, one’s own and of others, from

which consciousness and self are derived, self understood as a biological being who has become conscious of itself, in physical and social interactions, in an environment, as 'me' and 'I'; the 'I' in front of the 'me' is the recognition of the biological individual). This is because human beings are endowed with the necessary neurological apparatus for the meaningful linguistic symbol, a neurological apparatus that all other animals do not have (see the concept of the *cognitive revolution* in Harari, 2019, and the concept of the *cognitive Big Bang* in Pinello, 2020).

As I said before, in Znaniecki, along with the biographical method, which aims at zero residue, we have the "humanistic coefficient", in Mead we have the concept of the "generalised other" ("universality" and "impersonality"). The concept of the "generalised other" can be regarded as the equivalent of the concept of the "humanistic coefficient".

The universality or impersonality of thought and reason are, from the behaviourist point of view, the result of the process whereby the individual takes on the attitudes of others towards him and finally crystallises these particular attitudes into a single attitude or point of view that can be defined as that of the "generalised other" (Mead, 2018, p. 138). [Mead is interested not only in meanings (hermeneutics, comprehension theory, *Verstehen*), but also in "mechanisms"]. Through a social process, then, the biological individual attains a mind and a self. Through society, the impulsive animal becomes a rational animal [...] By virtue of the internalisation or import of the social process of communication, the individual acquires the mechanism of reflective thought [...] he acquires the capacity to live in a common moral and scientific world; he finally becomes a moral individual in whom impulsive ends are transformed into the conscious pursuit of definite ends. Following the appearance of this kind of individual, society is in turn transformed. It receives through the social function self the characteristic organisation of human society; instead of performing its social function through physiological differentiation (as in the case of the insect) or through the simple influence of gestures on others, the human individual regulates its part in the social act by means of the acquisition, within itself, of the roles of others involved in the common activity [...] The mind-body and soul-body problem is naturally explained in terms of the contrast between the biological individual and the self. Just as the previous levels of the social process remain even when higher levels have been reached, so the biological individual continues to exist even when it has organised itself into a self. Animal psychology reveals much about the failure to properly integrate these fundamental stages of personality (Morris, 2018, p. 26-27).

Mead writes that, in order to explain the psycho-social behaviour of a social group (a social group is also a group consisting of a mother and a child), one must not start from the behaviour of the individual member of the group (this is a theme we have also encountered in Durkheim and Parsons and which cost Durkheim the accusation of idealistic and metaphysical sociology), but from the complex interactions between the individuals of the group itself, in an environment (not from the mother or the child, in the case of a group consisting of a mother and a child, but from their complex interactions, made up first of gestures and then of meaningful symbols). As far as the mother and child are concerned, the interaction and internalisation of the "significant other" takes place through reciprocal gestures that elicit reciprocal responses, responses that become stimuli for a reciprocal readjustment of the interaction and for the performance of the social act. In the parent/child-form, for example, we can have: «the stimulating cry, the inquisitive tone on the part of the parent-form and the consequent change in the cry of the child-form. We have here, on one side of the two forms, a series of adaptations that produce a common act involved in the care of the child. We are therefore confronted [...] with a social process in which it is possible to isolate the gesture whose function lies in the social process itself and which can become an expression of emotion, or, later, an expression of meaning, *i.e.* of an idea» (Mead, 2018, p. 87), *i.e.* still of the mind and the self. The logical structure of meaning «is to be traced in the threefold relation» (relational triangle of the logical structure of meaning: this triangle can be related to that of Ogden & Richards, 1966, p. 37; see Marradi, 2007, p. 27-41) «of the gesture with the response and with the resultant of a given social act. The response, on the part of the second organism, represents the interpretation and reveals the meaning of that gesture insofar as it is indicative of the resultant of the social act initiated by it and in which both organisms are thus implicated. The threefold or triadic relationship between the gesture, the adaptive response, and the outcome of the social act initiated by the gesture is the basis of meaning» (Mead, 2018, p. 127). The Ogden and Richards triangle, on the other hand, is about the meaning of meaning (Ogden & Richards, 1966).

There is a passage in Mead's book that, in my view, makes the connection with attachment and secure base theory: «We see ourselves, more or less consciously, in the same way that others see us. Unconsciously we address ourselves as others address us [...] Of course these particular responses must already be present in our mechanism. We evoke in others something that we simultaneously evoke in ourselves, so that we unconsciously assume these attitudes. Without being aware of it we substitute ourselves for others and behave like them. [...] We continually evoke in ourselves, especially through the use of vocal gestures, the same responses that we evoke in other persons and thus assume their attitudes in our personal conduct» (Mead, 2018, p. 114).

As Jeremy Holmes writes, Bowlby, basing his behavioural psychoanalysis on ethology (an ethological approach and not simply a biographical one, as also in Mead) and taking Charles Darwin (1982) as a point of reference, argues that children who have a secure attachment and a secure base are able to tell their biography coherently and fluently, whereas children who do not have a secure attachment and a secure base have obvious difficulties (see Holmes, 2012, p. 9). There are many social and psychological conditioning situations that influence, positively or negatively, the development of the child's mind and self (see Bowlby, 2012, p. 1). Those who interact with and care for the child must in turn receive a great deal of assistance, from the individuals and institutions with which they interact (see Bowlby, 2012, p. 2).

According to Bowlby, the traditionally used term "dependency" (for the child's bond to its mother: the child is generally dependent on its mother for its survival) must be replaced by the terms "attachment" and "secure base". The child-mother bond, in fact, is «the result of a precise and partly pre-programmed system of behavioural patterns that in the normal environment develops during the first months of life and has the effect of keeping the child in more or less close proximity to the mother figure [attachment] [...] At the end of the first year of life, behaviour becomes organised in a cybernetic sense» (secure base in relation to attachment type), *i.e.* the child begins to explore its environment, but does so up to a certain point, until it feels the need to return to its secure base, *i.e.* its attachment figure, or to be able to rely on it. As time passes, explorations of the environment become longer and more autonomous, but the need for a secure base of attachment remains throughout the human being's life.

It is postulated that the biological function of this behaviour is protection, in particular protection from predators [...] attachment behaviour is not only limited to children [...] we can also observe it in adolescents and adults [...] whenever they are under stress or distressed [...] The activation of attachment behaviour [to a reference figure] in these circumstances is probably universal and should be considered the norm [...] One characteristic of attachment behaviour [...] is the intensity of the accompanying emotion, the kind of emotions depend [...] on the state of the relationship between the persons involved. If the relationship is good, there is joy and a sense of security. If it is threatened, there is jealousy, anguish and anger. If it has been disrupted [loss], there is grief and anguish [...] the pattern of attachment behaviour that an individual has structured depends on the kind of experiences they have had in their family of origin, or, if they are unlucky, outside of it. [...] This involves observing and describing the system of behavioural patterns characteristic of the parent's activity, the conditions that activate and terminate each behaviour, how the patterns change as the child grows, the various ways in which parental behaviour is organised in different individuals, and the myriad of experiences that influence how it develops in each person. Implicit in this approach is the assumption that parenting behaviour, like attachment behaviour, is partly predetermined and therefore ready to develop along certain lines when conditions allow. [...] This assumption, of course, does not imply that the appropriate behavioural pattern is fully manifested in every detail from the outset. Clearly this is not the case, neither for humans nor for other mammals [...] Human offspring [...], like the offspring of other species, are preprogrammed to develop in a socially cooperative manner, whether they do or not depends largely on how they are treated (Bowlby, 2012, p. 3-4 and 8).

Interactions, in fact, are not always secure, *i.e.* a parent, or anyone else who is significant as a parent, is not always able to provide a secure base for the growing child. This implies problems in attachment and reference to a secure base. Prolonged deprivation of care (deprivation: absence of something that is needed; privation: loss of something that used to be there, leak), especially maternal care, suffered by a child, can in fact cause prolonged and severe effects on his or her character, mind and self, in terms of vulnerability.

To conclude, I would add that it is on the “attachment behaviour system” that that of behaviour of attachment and attachment are based: «a photocopy or model of the world in which the self, significant others, and their interrelationships are represented and which encodes the particular attachment pattern exhibited by an individual» (Holmes, 2012, p. 72). The “operating models” of others and oneself, in fact, depend on the attachment relationship.

As Holmes (*see* 2012, p. 72-76) writes, an attachment relationship can be defined on the basis of the presence of three key characteristics: 1) the search for closeness to a preferred figure; 2) the “secure base” effect; and 3) protest at separation. The development of the attachment system can also be divided into three phases (*see* Holmes, 2012, p. 77-82): 1) 0-6 months: orientation and recognition pattern; 2) 6 months - 3 years: “set-goal” attachment; 3) from 3 years onwards (completion of the connectome): formation of a reciprocal relationship. One must also take into account the “internal operating models”:

“Thought shapes reality or runs parallel to it [...] the organism carries within its head a ‘small-scale model’ of external reality and its possible actions that enables it to react more fully, more confidently and more competently to the emergency situations it encounters” [...] The idea of an ‘operational model’ implies that of a practical mechanism [...] a structure that lends itself more readily to the planning and execution of empirical research (Holmes, 2012, p. 83).

Attachments can be distinguished into: secure attachments and insecure attachments and, within insecure attachments, it is possible to distinguish between insecure-avoidant attachments, insecure-ambivalent attachments and insecure-disorganised attachments (*see* Holmes, 2012, p. 84-85).

V. CONCLUSION

I agree with the historian of mathematics Morris Kline (1985) that mathematics has played and continues to play, like physics, a fundamental and foundational mediating function between human beings and nature and, consequently, between the world “inside” human beings (the internal environments) and the world “outside” (the external environments). Mathematics and physics, in fact, form an exceptionally strong bridge (as Kline writes) between us and the outside world. This bridge, however, although exceptionally strong, is as if it were without a foundation on dry land, because it is «not yet firmly anchored either to reality or to the human mind» (Kline, 1985, p. 362). Hence the need to address the question of “rooted on dry land” and anchored to both the human mind and physical reality.

The theses of the classical pragmatists (James, Dewey, Mead) are compatible with current approaches to cognition (4 E programme of empirical implementation of pragmatism). Mead's act theory can be seen as a contribution to the “pragmatist turn” in the cognitive sciences. For those who pursue a sociological approach aligned with the cognitive sciences, the Meadian notion of “act”, the notion of the *imagery* (it is only by acting that we perceive and represent: this is a useful addition to Harari's theory of imagination, 2019; *see* Pinello, 2021), the notions of *transactions* (patterns of action resulting from *transactions* with the physical and social environment instead of the notions of action and interaction) and environment, the Bowlbyan notions of attachment and secure base, become fundamental to the development of a new way of doing sociology and for the consequent, negative and positive, critique of the notions of social action, rest, derivation, hermeneutics, social interaction (not understood in Mead's manner) and the biographical method, notions proper to classical sociology.

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