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Social Action Explanation and Intentions in Sociology and Social Sciences

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Abstract

The relationship between actions and intentions has always been at the centre of an articulated debate within philosophy and social sciences. On the one hand, there is a growing trend to naturalize the concept of intention: this is based on wide empirical evidence, above all in the neuroscientific field, and suggests that human action mainly depends on cerebral and biological mechanisms. On the other hand, especially in the sociological field, there is a strong tradition linking intentions to social action explanation, bringing them back to reasoning and rationality in the broadest sense. Also, within the psychological field there is an interesting growing literature focusing on the importance of understanding the mental mechanisms underlying intentional action in describing and anticipating various cognitive errors till conspiracy theories. This paper aims to browse some of the contributions within this topic.

Keywords

Intentions, Social Action Explanation, Biological Explanation, Cognitive Biases, Conspiracy Theory

1. Introduction

Both among philosophers and social scientists, and among sociologists in particular, the role of intentions in relation to action has always been a lively and complex ground for reflection on which numerous different theoretical positions have been confronted, sometimes even in sharp contrast with each other. This theme underlies ideas such as, among others, those of will, action, consciousness, mental representation, rationality, intentionality. In what can be called an "intentionalist" approach, intentions are normally made to coincide with teleological (finalized) action, i.e. acting on a deliberate goal or project in relation to intentions. This refers to the theme relating to the nature of action which, ac-

cording to the position of those who support this vision, implies that this, the action, precisely, should not be explained by bringing it back to physical-natural causes, but rather moving from the intentions of the individual who acts: intentions constitute the reasons for the action, the goal sought. In short, it is not possible to perform an intentional action without reasons.

2. The Naturalization of Intentions

Let's consider the hypothesis according to which actions should be explained by bringing them back mainly to natural causes of a neurophysiological type. In its most radical form, this hypothesis translates into the idea that free will, the will and the intentions underlying an action are only an illusory perception and that they can be conceived, together with action, as phenomena that can be explained through physical-natural causes. Partially shifting attention to another area of reflection, we can remember that a large literature about moral judgments highlights how they are largely based on emotion, affectivity, intuition, and how mental processes that precede moral behaviour would be unconscious (Damasio, 1994; Haidt, 2001; Hauser, 2006; Koenigs et al., 2007): individuals would find themselves rationalizing a posteriori something that already happened at the brain level. It would essentially be legitimate to assume that human beings are naturally endowed with a moral sense. By subjecting the brain of individuals confronted with moral dilemmas to brain visualization techniques, some seminal studies have shown, for example, how the brain reacts differently to situations that involve a personal or impersonal dilemma because in front of different types of situations, different brain centres are activated, sometimes associated with analytical reasoning and sometimes with emotions. This highlights how there may be different emotional implications that influence the formulation of judgment and moral choice (Greene et al., 2001). These kinds of results show both that individual choices are dependent on immediate insights into behaviours, and that there is an important difference between an impersonal action and one in which subject's involvement is much more direct and personal. In "personal" dilemmas the areas of the brain most involved in moral decision making are those typically associated with emotions and reinforcement (dopaminergic reward system), while in impersonal dilemmas the brain areas most involved in moral decision are those that are typically associated with rationality and calculation (analytical, frontoparietal). What's more, individuals take very little time to condemn personal moral violations, and it takes much longer to disapprove of impersonal violations.

Clearly an explanation of moral judgments and behaviours from a neuroscientific perspective reduces, or even cancels, the role of rational evaluation in behaviour. This view is opposed by those rationalist approaches that focus on conscious reasoning as the foundation of moral judgment. However, the debate is very broad and goes beyond the boundary of moral judgments alone. In fact, there is a large experimental literature that has dealt with the role played

by intentions in action and that has focused on brain activation prior to voluntary and conscious movement. A pioneering experiment in this field was carried out to identify which was the first brain area activated in the preparation of nerve signals necessary for the flexion of a finger pressing a key, an action that the subject had to perform voluntarily (Kornhuber & Deecke, 1965): the results showed that a specific cerebral area was activated almost a second before the start of voluntary movements. Subsequently, in the early Eighties of the last century, the experiments of the neurophysiologist Benjamin Libet (Libet et al., 1983) were in line with these findings. With the aim of identifying the most precise relationships possible between conscious experience and the activation of specific brain areas, Libet's studies consisted in asking subjects sitting in front of a screen where they scrolled seconds to press a button when they wanted and to say at what precise moment they had decided to bend their finger. The electrophysiological examination showed that the subject is aware of his decision 350 milliseconds after his brain has begun to react (which is called "readiness potential"). On this basis, Libet assigned to intention a more reduced role than that traditionally recognized to it: however, he did not support the most reductionist interpretations that deny any role to conscious and intentional activity. According to Libet intention would not consist in the ability to initiate the action (predisposed, in a completely unconscious way, at the neuronal level), but in the possibility of deciding whether to give way to the action or whether to inhibit it in the moment of manifestation of conscious intention (Libet, 2004). In practice, although it would be natural to hypothesize that consciousness, will, intention, precede or accompany early motor preparation, these experiments suggest that it is the brain that activates and prepares the action before the subject has consciousness, will and intention to want it. Many similar studies have been conducted over time and seem to confirm even more clearly that intentions would not really be the cause of actions as intentions should be identified with the neural processes that precede them temporally (Soon et al., 2008). Free will would therefore not exist according to the most radical interpretations of these results: decisions should be attributed exclusively to the non-conscious activity of a physical-neural structure, the brain, and considering one's actions would be nothing more than a perception like many others.

It is evident that this kind of conclusion has fundamental philosophical and social implications. It is enough, for example, just to think of the issue of responsibility, imputability and antisocial behaviour. The neuroscientific study of the psychic and neural correlates of human behaviour and the possibility of self-determination allows an experimental approach that differs from traditional approaches to the study of these issues. This often justifies a rethinking of the concept of intentions in deviant behaviours especially considering hypotheses according to which some genes would determine alterations in brain structures and functions thus causing antisocial behaviour (Raine, 2008).

In contrast to the positions just mentioned, it can be objected that a human action is different from any physical-natural fact or from an unconscious or instinctive behaviour in that at its origin there is always an acting "subject". Now, moving on to more typically "social" approaches, it should be remembered that the concept of intention is assimilated by many to that of action, finality, and reasoning. Let's see better below.

3. Actions, Intentions, and Social Explanation

It is well known that considering individual actions as the "causes" of the social phenomena to be explained is the assumption on which the orientation of a central part of sociological approaches and theories of social explanation (to which many refer with the expression "methodological individualism") rests. Individual behaviour, although conditioned by the context in which it takes place, is considered the result of intentions (as well as preferences, beliefs, reasons of the subject) and not the result of deterministic pressures on the part of unconscious, collective or biological forces. In short, there is both a clear rejection of so-called "sociologism", that is, of that theoretical approach that considers individual behaviours as effects and not as causes by denying a role to intentions, and a negation of any determinism, be it social, cultural, historical, or natural. Among all sociologists it was undoubtedly Max Weber who pointed out very clearly that to explain a social phenomenon it is essential to reconstruct the logic of the individual actions underlying it (Weber, 1978). In this regard, it has been pointed out that Weber was the first to realize that there was no reason to leave the paradigm of action confined to economics alone, in which, from Adam Smith onwards, it has been widely accepted, but that instead it is essential to consider it applicable to all social sciences (Boudon, 1986). But what does it mean to "reconstruct the logic of individual actions"? For Weber it means "understanding" these actions by highlighting their reasons, meaning and intentions. The Weberian theory of comprehension is in fact a theory of the motivations that, in a specific situation, can induce one or more individuals to act in a certain way[1]. It therefore looks at the individual, at his action, at his reasoning, at his intentions, as a central element of social analysis. This is what Weber writes when he defines "understanding" or "interpretative" sociology emphasizing that it "[…] considers the individual and his action as the basic unit, as its "atom" (Gerth & Mills, 1991: p. 55)[2].

[1]In this regard, the piece of *Economy and Society* remains famous in which Weber clarifies what it is meant by "understanding" or, better, by "intended meaning": "Thus we understand the chopping of wood or aiming of a gun in terms of motive in addition to direct observation if we know that the woodchopper is working for a wage or is chopping a supply of firewood for his own use or possibly is doing it for recreation […]. Similarly, we understand the motive of a person aiming a gun if we know that he has been commanded to shoot as a member of a firing squad, that he is fighting against an enemy, or that he is doing it for revenge. […] Finally, we have a motivational understanding of the outburst of anger if we know that it has been provoked by jealousy, injured pride, or an insult. […] Thus, for a science which is concerned with the subjective meaning of action, explanation requires a grasp of the complex of meaning in which an actual course of understandable action thus interpreted belongs (Weber, 1978: pp. 8-9)."

Social explanation moving from intentional human actions gives an important place to the unintended consequences of such actions. This emerges from Weberian sociology in which the explanation of historical-social phenomena is closely connected to the identification and understanding of their causes, or precisely of those reasons that generate intentional individual behaviours that in a given space-time moment have contributed to generate such phenomena even unintentionally. Already in *The Fable of The Bees: or, Private Vices, Publick Benefits* (1714) the Dutch physician and philosopher Bernard de Mandeville had highlighted the existence of the unintended consequences of intentional human actions by telling a story about the uses and customs of a society of bees (referring implicitly to human societies) to highlight the importance of the role of microsocial (individual) components in the formation of unexpected macrosocial outcomes[3]. The idea of the importance of the unintended effects of intentional human actions, which was taken up and developed by Adam Smith in *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) with the metaphor of the "invisible hand", has been widely shared by many social scientists such as Carl Menger[4], exponent of the Austrian School of Economics, or Ludwig von Mises, also a famous member of the same school according to which the explanation of action revolves around the concept of intention: individual action is the first element from which to move in social analysis[5]. In particular, according to Mises, it is the only thing of which one can have direct knowledge (Mises, 2003). On the basis of such considerations, he emphasizes how important it is to distinguish between conscious behaviour and unconscious behaviour. He argues that human action coincides with a "purposeful behavior": action "[…] is will put into operation and transformed into an agency, is aimed at ends and goals, is the ego's meaningful response to stimuli and to the conditions of its environment, is a person's conscious adjustment to the state of the universe that deter-

[2]Weber rejects any substantialisation of collective concepts, he argues that "[…] for the subjective interpretation of action in sociological work these collectivities must be treated as *solely* the resultants and modes of organization of the particular acts of individual persons, since these alone can be treated as agents in a course of subjectively understandable action (Weber, 1978: p. 13)." It has also been pointed out that Weber's criticism of the reification of collective concepts to things coincides with the essence of the so-called "Scheler's theorem" (named after the German philosopher theorist Max Scheler): that is, they attribute to "dispositions" the exclusive responsibility for actions that are thus reduced to mere instinctive behaviour, or make collective dispositions occult forces that constitute the sole cause of individual behaviour (Boudon, 1986).

[3]He imagined a hive populated by immoral bees and bilges of all vices which, by adopting corrupt and dissolute behaviour, instead of jeopardizing the well-being and development of the hive as a whole, paradoxically and unintentionally "contributed to public happiness".

[4]His famous example remains concerning the origin of money that arose spontaneously and independently in numerous civil centres as individuals became aware of the fact that, by exchanging less saleable goods for more saleable ones, their economic interest was greatly advantaged. Among many peoples of the world the goods considered most saleable according to the characteristic conditions of each era has been intentionally used as a form of money.

[5]In this regard, he stresses: "First we must realize that all actions are performed by individuals. A collective operates always through the intermediary of one or several individuals whose actions are related to the collective as the secondary source. It is the meaning which the acting individuals and all those who are touched by their action attribute to an action, that determines its character. […] For a social collective has no existence and reality outside of the individual members' actions (Von Mises, 1998: p. 42)."

mines his life (Von Mises, 1998: p. 11)." This is in clear contrast to unconscious behaviour, that is, to the involuntary reflexes and responses of the body's cells and nerves to stimuli. And again: "Human action is conscious behavior on the part of a human being (Von Mises, 2003: p. 24)." In practice, every action must be considered as a conscious adaptation of a person to the state of the universe that determines his life, his tendency to goals and ends is the significant response of the *ego* to the stimuli and conditions of its environment.[6] Precisely "voluntariness" is one of the constitutive dimensions of the model of human action proposed by Mises: it consists in the preference that an individual gives to one state of affairs rather than another, a preference that necessarily influences the choice of behaviour to be implemented in view of achieving the end that this individual wishes to achieve.

In the field of contemporary sociology, one cannot fail to recall Raymond Boudon's central contribution to the study of the concepts of intention. He spoke of "aggregation", "emergent", "composition" or "unintended" effects (Boudon, 1977) that arise from the transition from the individual to the collective level. Sometimes aggregation effects take the simple form of the "sum" of multiple preferences and individual behaviours. But other times the composition effects are more complex. In fact, they often assume an "emergent" character, that is, at the collective level they translate into the spontaneous constitution of phenomena not sought by individuals and not intentional, that is, different from individual intentions. In particular, making an analogy between systems of interdependence and systems theory, we often speak of a "critical threshold", i.e., a level beyond which the aggregation of individual intentional actions gives rise to "perverse effects"[7]. This is the essence of the principle of methodological individualism. To explain a social phenomenon is to make it the consequence of individual actions even if it escapes the intentions of the individuals who carry out these actions. Of course, the actions of individuals are influenced by social constraints, but this is not the same as espousing "holism" according to which indi-

[6]Mises distinguishes praxeology from psychology. Specifying that the first looks at action as such, while the second is interested in the psychological states that induce an individual to action: "The theme of psychology is the internal events that result or can result in a definite action. The theme of praxeology is action as such" (Op. cit., p. 12. For a more in-depth analysis of Mises' praxeology, see: (Rothbard, 2011)). To this it should be added that, again according to the Austrian economist, psychology and psychoanalysis must be placed on the same level as both are interested in the study of the forces and factors that push individuals to act in a certain way. Therefore, whether a human action has its origin in distant memories, or in repressed feelings, the original motivation does not in any way affect the nature of the action itself, which is always an expression of the individual will.

[7]The expression "perverse effect" simply means an effect "not sought" by the actors, i.e., a disturbance, a reversal that intervenes between the intentions of the actors and the effects of their actions (Boudon & Bourricaud, 1989). Boudon points out that this notion is more general than that of "unexpected effect" or "unintended effect" because on the one hand these types of effects are often perfectly predictable and on the other hand, they are effects that are often triggered voluntarily, considered positively by those who produce them. At the same time, the expression perverse effect has its limit in that it evokes the notion of "undesirable effect", but, as has been pointed out by many authors such as Mandeville and Smith, actors often cause effects that they do not seek but that are desirable. That is why when we talk about perverse effects, we must attribute the same value to them as "composition effects", "aggregation effects", "emergent effects" or "system effects".

viduals are the product of social structures and, as such, must be considered irrelevant or marginal for the purposes of social explanation. In reality, from the perspective of action theory, social structures or constraints only make sense in relation to the notions of action, project and intention (Boudon & Bourricaud, 1989).

Boudon insisted on the fact that it is possible to identify three interdependent postulates able to guarantee scientific social knowledge, that is, to contribute to the formulation of theoretical models that highlight the abstract "logic", the "generative mechanisms" of the analysed process (Boudon, 1979). An "individualism postulate" assuming that every social phenomenon is the result of the combination of individual actions, beliefs, or opinions. One of the essential moments of any sociological analysis is therefore also for Boudon the "understanding" of the "why" of the actions, intentions, beliefs, or individual opinions responsible for the phenomenon that we are trying to explain. According to the "understanding postulate" (for Boudon closely connected to that of individualism), "understanding" the actions, reasons, beliefs, and opinions of the individual actor means reconstructing the meaning they have for him, which, at least in principle, is always possible to do. The action is thus considered based on a system of reasons that individual perceives as valid, and this implies that it becomes for example possible to understand how individuals convince themselves of the truth of false beliefs (Boudon, 1997; Bronner, 2006). The French sociologist then identifies the "rationality postulate" which presupposes that the actor shares a belief or that he undertakes an action because they make sense to him; that is, that the main cause of the actions, beliefs, etc., of the subject lies in the sense that he attributes to them, or, more precisely, in the reasons he has for adopting them[8,9]. This last postulate excludes, for example, the possibility of explaining magical beliefs by resorting to the concepts of "primitive mentality", "wild thinking" or "symbolic violence", namely summary explanations from an irrational perspective "*à la* Lévy-Bruhl"[10], assuming that individuals are endowed with prelogical and limited thinking. These notions refer to mechanisms that

[8]According to Boudon, it is important to refer to "ordinary rationality", as to say if X is a value, and end, a representation, a preference, a belief, we can say that X can be explained by ordinary rationality if X is in the eyes of the subject who endorses X the consequence of a system of reasons whose all the elements are acceptable and if there does not exist within sight an incontestably preferable system of reasons which would lead him to endorse X' rather than X (Boudon, 2010).

[9]This combination of postulates encapsulates the essence of Boudon's contribution to the definition of a theory of social explanation: an individualistic methodological approach that is inseparable from causal explanations based on "social mechanisms". Each macrosocial phenomena must be explained as the result of individual behaviours in turn outcomes of individual reasons and motivations understandable only in reference to the social situation of departure of the actors. Through this methodological proposal it is a question of responding to the age-old theme of the "contradictions" between individual actions and the collective outcomes that arise from them, or to the so-called micro-macro problem in relation to the theme of social complexity ((Alexander et al., 1987; Coleman, 1990): in particular, purposive action is a main point in Coleman's theory of action and marks the distinction between methodological individualism and holism).

[10]As is known, Lucien Lévy-Bruhl believed that the thought of savage peoples obeyed "prelogical" rules, typical of a primitive mentality. He explained that the "primitive mentality" would be characterized precisely by an aversion to reasoning, where reasons have no causal influence on beliefs (Lévy-Bruhl, 2019). This way of approaching primitive thought is very different from that adopted by Emile Durkheim in some passages of *The Elementary Forms of the Religious Life* in which adherence to the beliefs of the "primitives" is explained on the basis of the understanding of the "meaning" that they can have for them. Already at the beginning of his work, Durkheim writes: "The most bizarre or barbarous rites and the strangest myths translate some human need and some aspect of life, whether social or individual. The reasons the faithful settle for in justifying those rites and myths may be mistaken, and most often are; but the true reasons exist nonetheless, and it is the business of science to uncover them (Durkheim, 1995: p. 2)."

operate without the subject's knowledge, as if chemical processes manifested themselves in him. These postulates do not imply, however, that the subject is clearly aware of the meaning of his actions and beliefs. Nor does this imply that the reasons of the actors do not depend on causes, such as the cognitive resources of the individual or other variables characteristic of his situation, in the broad sense of the term, and of the context in which he finds himself. It is only a matter of reiterating the fact that at the base of the action there is always an intention, although this does not necessarily translate into the goal pursued: it is indeed fundamental to recognize that not all social phenomena and their changes are the result of intentional plans.

This last point is particularly important. Popper (2020) argued that the tendency to believe that behind every social phenomenon there is a project, a plan, was due to the positions of "constructivism" widely criticized also because it is closely connected to the "conspiracy theory of society", that is the belief that if all social events and phenomena are outcomes of intentional plans, then even negative events and phenomena must be considered outcomes of projects, intentions, conspiracies. As is well known, Popper linked constructivism to the theme of human fallibility in the matter of knowledge: it is the limits of human knowledge that leave room for the onset of the unexpected which is not admitted from any constructivist position. According to Popper, constructivists claim that there always is someone possessing limitless and infallible knowledge capable of planning the entire life of society, but such idea has resulted in regimes of atrocious totalitarianism at an economic and political level.

4. Intentionality Bias and Conspiracy

Several authors have highlighted the gap between intentions and decisions and decisions and their effects (see for example: (Elster, 2000)). This can be explained by opposing reason to passion, or, for example, as a large literature on the subject shows, in relation to a time factor: the passage of time implies a change in the preferences of individuals (the so-called "hyperbolic discounting"). This is the tendency to choose rewards close in time (which support impulsivity and instant gratification) compared to rewards that will come, even when these rewards close in time are minor, which highlights how preferences are unstable with respect to the passage of time.

Other explanatory hypotheses of the inconsistency between intentions and actions are those that revolve around the concepts of "weakness of will" (caused for example by impatience, emotions, etc.) and "regret"[11]. The weakness of will is explained by the fact that we do not project ourselves into the future. Before the action you have certain intentions and motivations and then you act differently

[11]The study of action in relation to "regret" is central to the literature on "paradox of choice" (Schwartz, 2004). The desire to make the best choice in the face of a series of alternatives, clashes with the mental mechanism of regret: one could reasonably hypothesize that a wider range of alternatives is synonymous with greater well-being, in reality the greater the number of alternatives to choose from, the greater the probability of regret and the consequent difficulty in making choices (Iyengar & Lepper, 2000).

even if you do not want to and, immediately after acting, you feel responsible and you return to the initial position regretting what you have done. This is different from changing opinion or intention; it is that there are often for example situations in which the immediate desire is stronger than a rational choice. One can anticipate and recognize weakness of will and know that one will find oneself in contradiction (Elster, 2000). Just think of the famous example of Ulysses and the sirens. During his navigation in the Mediterranean, Ulysses anticipates that if he does not let his companions tie himself to the mainmast of the boat, when he hears the song of the sirens, he will want to get closer and closer to the place of origin of this irresistible melody and his ship will crash against the rocks. In more general terms, this example helps us to understand how at first moment (t1) an individual (Ulysses) rationally and correctly anticipates the future knowing that in a later moment (t2) he could behave irrationally (following the melody of the sirens until he hurls himself on the rocks). Man is in fact often apparently irrational in that he shows "weakness of will". However, even when he is not perfectly rational, he may be able to recognize it and protect himself from irrationality by anticipating it (by being tied up).

An interesting and current perspective on intention in the contemporary social sciences that is partly linked to what has just been said comes from social psychology and cognitive psychology. It is well known that the study of biases, i.e., those systematic errors that are often committed in the formulation of evaluations and decision-making, especially if in conditions of risk, constitutes a very developed field of research starting from what were the pioneering studies of Tversky & Kahneman (1974). A large number of studies, especially in the field of cognitive psychology, have highlighted many systematic violations of the normative models of decision making and have advanced the hypothesis that, in our daily lives, we are guided by "heuristics", strategies or mental shortcuts that, applied in appropriate situations, allow us to make quick choices with minimal cognitive effort. Availability heuristics, for example, helps us assess the probability of the occurrence of a given event based on the ease with which we remember similar circumstances without having to carry out the operations that allow us to remember these circumstances or to make a real probabilistic calculation. Heuristics cover many aspects of daily life and are based on practical experiences, direct or indirect, that work in many cases. Our brain most of the time does not evaluate options like a rational computer but, especially in complex decision-making contexts, resorts to "fast and frugal heuristics" (Gigerenzer, 2008, 2020); and, although our choices are often effective, sometimes we fall into systematic errors, the so-called "biases" or logical traps. Thus, for example, it has been highlighted that, precisely on the basis of the mechanism of availability, most of us tend to overestimate rare but dramatic, sensational and catastrophic events (accidents, murders, etc.) that perhaps cause a large number of victims at the same time (natural disasters, nuclear accidents, etc.) compared to those very common but less striking (death from diabetes, emphysema, heart attack, etc.), and this is because we often judge the frequency or probability of the occurrence

of an event based on similar events and circumstances that we remember best and not on the basis of frequency or objective probability (Tversky & Kahneman, 1973).

Among the different cognitive errors that individuals can make, one particularly interesting is the so-called "intentionality bias". It consists in preferring explanations based on intentions: the phenomena that occur in our environment are in fact traced by us to two types of causes, the intentional ones, and the non-intentional ones (unintentional in fact). However, we have a sort of reflex to rationally consider that the former prevails over the latter and that even in the presence of other types of explanations we orient ourselves on those based on presumed intentions: for example, it has been experimentally highlighted that individuals are more likely to attribute events (such as an accident, a fire, an epidemic) to intentional causes rather than to unintentional causes (Rosset, 2008).[12] This type of mental mechanism acts as "reassurance" in the face of situations of uncertainty that can create anxiety or be managed with difficulty[13].

Intentionality bias has much in common with the "fundamental attribution error" i.e., the tendency to attribute apparently freely chosen behaviours to character or personality elements and behaviours caused by chance to situational factors beyond individual control (Jones & Harris, 1967). One of the most appropriate examples concerns the case in which a victim is accused of not having adequately protected himself from a negative event (behaving in a certain way or not doing what is necessary to avoid the event). This bias shows us how the attributions that individuals continually make to account for why others behave in certain ways often turn away from reality.

Returning to intentionality bias, it underlies the tendency to attribute intentions to all sorts of abstractions that we use to describe collective phenomena, such as crowds, markets, fashion, society, etc. It is therefore easy to understand how this cognitive bias can lead to inevitable relapses in terms of conspiracy as often the tendency of our mind to seek intentional explanations tends to identify an intention or a planning even behind negative phenomena or to support conspiracy theories: as a matter of fact, rather than analysing a situation in its complexity, it is often easier to trace it back to the belief that those who benefit from some event are the ones who caused it (Taguieff, 2021). And the essence of conspiracy theory consists precisely in believing that everything that occurs (politi-

[12]A now classic study has highlighted how normal is the human tendency to attribute intentions to phenomena: called to describe geometric figures in motion (circles, triangles, etc.), the subjects participating in the experiment spoke of it in most cases attributing to these figures an intention ("the triangle exceeds the circle", etc.) (Heider & Simmel, 1944).

[13]Similar mental mechanisms aimed at reducing uncertainty and associated discomfort can be identified in "confirmation bias" and in the reduction of "cognitive dissonance". In the first case, it is the widespread tendency to seek or interpret information in ways that confirm one's preconceptions rather than questioning one's positions in the face of contrary evidence. In the second case, reference is made to the more general attempt to reduce or eliminate the "cognitive dissonance" (and the consequent psychological discomfort) caused by attitudes, opinions, knowledge, beliefs that are in contrast with each other or with our behaviors, an attempt that translates into the change of behaviors or attitudes or in the trivialization of the condition of dissonance (Festinger, 1957).

cal, economic, religious, criminal, health events, etc.) has been intentionally desired by some invisible power to which it must be attributed. It has been pointed out that the conspiracy narrative can be traced back to five fundamental principles: nothing occurs randomly, everything that happens is the result of hidden intentions or wills, nothing is as it seems to be, everything is connected even if in a hidden way, everything that is officially considered true must be subjected to a critical examination (Taguieff, 2021: pp. 76-78).

It is therefore always important to know the limits and cognitive biases of our reasoning to understand that even the most unpleasant events may not necessarily be the consequence of an intentional project, of a programmed coordination, but are on the contrary the unintentional outcome of actions and phenomena oriented most of the time to a completely different end.

5. Concluding Remarks

We have seen how the issue of intentions of behaviour is at centre of an articulated debate. A first aspect concerns the contrast between an explanation based on reasons (intentions) and one that refers to intuition, to emotion. The tendency to naturalize the concept of intention rests on empirical evidence that, especially in the field of social neuroscience, supports the hypothesis of an explanation in cerebral (and therefore natural) terms of the action. It is a vision very distant from that shared by a good part of the social sciences that places reasoning, reasons, intentions, and in general cognitive mechanisms at the centre of the social explanation of action. The analysis of cognitive processes allows to account for the explanation of the action itself and of the broader social phenomena. It is particularly important in relation to the explanation of cognitive errors that revolve around the concept of intention.

The human system of thought can be divided into "system 1" and "system 2": the former is intuitive, fast, emotional, while the latter is rational, slow, calculating (Kahneman, 2011). The action is therefore the result of an analytical reasoning in the second case, while it is rapid and almost automatic in the first. An evolutionary reading allows us to interpret the purpose of system 1 in terms of survival of the species: responding immediately to environmental challenges can sometimes be useful because it is not always possible to have the time necessary to develop a complete analysis of the situation in which one may find himself. In practice, it would be a sort of innate defense mechanism that helps to orient and protect oneself, to make sense of the surrounding reality. Likewise, it can be remembered that similar reflections are for example central within a literature that hypothesizes the existence of a link between physical and moral disgust (Chapman et al., 2009): receiving an indecent proposal would cause a grimace as in the case of the ingestion of spoiled food. The sense of human disgust would have innate origins and would protect against poisons and diseases, but also from indecent and dishonest situations. In this case, the idea is that morality is based on an ancient mental reflex: disgust influences behavior. To demonstrate

this, the similarities between the grimaces of those who physically feel disgusted and those who react to a dishonest proposal were studied. It would seem that the reaction has always been the same whether you are in front of a bad drink, whether you observe a disgusting image or you have confronted with the injustice of an unfair proposal: an activation of the upper labial muscle (result of the activation of a brain area associated precisely with the feeling of disgust), that is to say a curl of the nose and upper lip classic grimace of disgust. In evolutionary terms, the superior labial muscle would activate to prevent disgusting odors or toxic foods from reaching the nostrils and mouth. Thus, the sophisticated human moral sense of right and false may have developed from our innate ability to distinguish what is good from what is disgusting and what is potentially nourishing from what is poisoned. In a similar way, therefore, some biases, such as that of intentionality, can be explained because of utility in evolutionary terms. To this, it must be added that these biases underlie a mental mechanism like the one at the basis of adherence to false beliefs thus, the understanding of these cognitive mechanisms and an analysis of the system of reasons that an individual perceives as valid can help to a better understanding of intentions' role in social action explanation.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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