

publicidad de sí mismo. Han, ya para acabar, llamará a una «revolución temporal»: a un tiempo totalmente distinto; a redescubrir otro tiempo (el *tiempo del otro*). Brillante y profunda aclaración final de Han: «La actual crisis temporal no es la aceleración, sino la totalización del *tiempo del yo*» (126). «A diferencia del tiempo del yo, que nos aísla y nos individualiza, el tiempo del otro crea una *comunidad*» (127).

Así pues, con su estilo particular, escribiendo al estilo de lo que me gusta llamar «videoclips» o «instantáneas», Han desmonta con cada una de sus palabras nuestro sentir, nuestra sociedad y nuestro tiempo. La finalidad de Han y de sus libros (o al menos, para mí) es mostrarnos que no somos como queremos ser; sino que somos como *quieren* que seamos; y lo más importante: que hay alternativas. Me gustaría decir para acabar que, coger un libro de Han e intentar resumirlo puede resultar en una tarea un

tanto difícil (aunque eso sí, no imposible), ya que sus ideas van y vienen a lo largo de sus libros, aparecen ahora para desaparecer o reaparecer luego, complementándose o hilándolas de una forma que sólo Han puede hacer. Por eso, como ya he dicho, sólo con la lectura de uno solo de los libros de Han no vamos a poder profundizar tal y como se merece en todo su pensamiento. Pero eso sí: nos ayudará a acercarnos a él. Un *acercamiento* que nos producirá miedo, un miedo provocado por lo distinto y que nos llevará al asombro; un asombro que, para Han, infunde vida al espíritu. Y es que eso es Han para mí: ese *otro* que reclama, eso *distinto* que nos llama a la puerta y que no podemos *expulsar*. Porque ser es ser con otros; y sin otros no podemos ser. En definitiva, un libro necesario. Como todos los libros de Byung-Chul Han.

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GLENNAN, Stuart (2017): *The New Mechanical Philosophy*. Oxford: Oxford University Press.

Stuart Glennan is one of the most relevant philosophers of the new mechanical philosophy. The new mechanical philosophy, which emerged between the last 1980s and the early 1990s, is a group of philosophers who have underlined the importance of mechanisms in science. Other authors related to it are Peter Machamer, Carl Craver, Lindley Darden, and William Bechtel. Since the mid-1990s, when his influential “Mechanisms and the Nature of Causation” (1996) was published, Glennan has made several contributions to the contemporary debate about mechanisms. The aim of *The New Mechanical Philosophy* (2017), which

is his most recent book, is to compile his ideas about mechanisms and address several philosophical topics from the new mechanical approach. Glennan considers that the new mechanical philosophy is both a philosophy of science and a philosophy of nature. Not only is it suitable for analysing science, but also for inquiring the constitution of the natural world.

The book could be divided into two parts. In the first part, which includes chapters 1 to 5, Glennan develops his notion of mechanism. He also characterizes the models that represent mechanisms. In the second part, which includes chapters

6 to 8, he takes the notion of mechanism as the starting point for addressing several philosophical issues. He proposes a mechanistic account of causation and characterizes scientific explanations.

After introducing the topic (ch. 1), Glennan proposes a minimal characterization of mechanisms, which includes what all mechanisms have in common (ch. 2). He is interested in mechanisms across the sciences, not in a particular kind of mechanisms (e.g. neurobiological mechanisms). This interest is influenced by the work by Phyllis M. Illari and Jon Williamson. In “What is a mechanism? Thinking about mechanisms *across* the sciences” (2012), Illari and Williamson underlined the convenience of thinking about mechanisms in general terms. They claimed that this approach is needed in order to address some relevant methodological issues (e.g. causal explanation, metaphysics of causality...).

Glennan defines a mechanism as follows: “A mechanism for a phenomenon consists of entities (or parts) whose activities and interactions are organized so as to be responsible for the phenomenon” (Glennan, 2017, 18). He considers that all mechanisms are mechanisms for some phenomenon. A mechanism could not even be identified without making reference to a phenomenon. Mechanisms are composed of entities and activities. Entities are things with stable boundaries and properties, while activities are processes that produce changes through time. Entities engage in activities, and activities that involve more than one entity are called interactions. Examples of mechanisms would be a modern toilet, a circulatory system, a market, a computer... This characterization of mechanisms is the third version of Glennan’s proposal. Glennan’s basic considerations about mechanisms have remain stable through

time. He has always considered that mechanisms are compounds that are part of the real world. Nevertheless, some aspects of his proposal have changed. For example, his idea of how mechanisms’ component entities interact has varied. Initially, when “Mechanisms and the Nature of Causation” was published, he considered that those interactions were according to direct causal laws. This was problematic because laws are often considered exceptionless and parts’ interactions do not instantiate exceptionless generalizations. Later, when he published “Rethinking Mechanistic Explanation” (2002), he claimed that interactions among mechanisms’ parts were characterized by direct, invariant, and change-relating generalizations. Glennan appealed to the notion of invariance developed by James Woodward in “Explanation and Invariance in the Special Sciences” (2000). Woodward considers that a change-relating generalization describing a relationship between the variable X and the variable Y is invariant if it would continue to hold under at least some intervention on such variables. In *The New Mechanical Philosophy*, Glennan characterizes interactions just as activities that involve more than one entity. Other aspect of Glennan’s proposal that has changed through time is how component entities’ stability is characterized.

Glennan asserts that mechanisms, which are real entities in the world, are represented by models, which are often abstract entities (ch. 3). He understands models in a broad sense and defines them simply as “a whole range of devices scientists use to represent aspects of the world” (Glennan, 2017, 60). He considers that a model will successfully represent a target if it resembles the target in some relevant degrees and respects. Which degrees and respects are relevant depends on modeller’s purposes. Mechanistic models

(i.e. models that represent mechanisms) must have two parts: a model of the phenomenon and a model of the mechanism that is responsible for it.

Mechanisms can be classified into kinds. Regarding this classification, Glennan proposes the models-first approach. He considers that two particular mechanisms belong to the same kind if they are representable by the same model (ch. 4). It is a pluralistic and cross-classifying approach. One mechanism could be an instance of several kinds. Concerning kind's ontological status, Glennan supports a weak realism. He considers that there are natural classifications that are mind-independent, non-arbitrary and independent of human interests. Mechanisms' kinds can be identified by focusing on several aspects of mechanisms (ch. 5). These aspects are: (i) kinds of produced phenomena, (ii) kinds of component entities, (iii) kinds of component activities, (iv) kinds of components' organizations, and (v) kinds of etiologies. For instance, regarding kinds of produced phenomena, it is possible to distinguish among mechanisms that produce outputs as a result of inputs (e.g. a Coke machine), mechanisms that produce outputs independently of inputs (e.g. a watch), and mechanisms that maintain stable outputs in the light of varying inputs (e.g. mechanisms that maintain near constant body temperature in warm-blooded animals).

Having laid his notion of mechanism, Glennan utilizes it for addressing several philosophical issues. Regarding causality, he supports a mechanistic account (chs. 6-7). He considers that causes and effects must be connected by mechanisms. The statement "event *c* causes event *e*" will be true just in case there exists a mechanism by which *c* contributes to the production of *e*. He understands causal claims as

existential claims about mechanisms. Glennan's approach is ontological. Truth of causal claims depends on features of the world. It is also singularist (i.e. it does not reduce singular causal relations to instantiations of causal generalizations or laws) and intrinsic (i.e. causal relation is considered an intrinsic relation that depends on intrinsic properties of cause and effect). Glennan is aware that his approach is conceptually non-reductive. It does not conceptually eliminate causes, since the notion of mechanism is itself causal. However, he considers that it is informative, because it shows the relationships between several types of causal concepts.

Secondly, Glennan addresses scientific explanation (ch. 8). He asserts that mechanistic ontology is compatible with an explanatory pluralism. Glennan considers that explanation is a matter of representing by means of models. A model is explanative if it shows dependence between the explanans and the explanandum. Given the fact that there are non-causal sorts of dependence, non-causal explanations are possible. Glennan thinks that unification is a desirable value for explanations, although he regrets it as a necessary condition. Explanatory models unify when they show that two or more things are similar in what they depend upon or in what depends upon them.

Glennan considers that there are three main kinds of explanations: bare causal explanations, mechanistic explanations, and non-causal explanations. Bare causal explanations identify events, properties or states of affairs that are causally relevant for the explanandum phenomenon. They note the cause of the phenomenon, but they do not identify the mechanism that connects it with the phenomenon. Mechanistic explanations are how explanations. They

show how the explanandum phenomenon depends upon mechanisms. Bare causal explanations and mechanistic explanations are causal explanations, because they show causal dependences. Non-causal explanations are explanations that show varieties of dependence that are not causal (e.g. equilibrium explanations).

I would like to note that, despite its interest and novelty, Glennan's proposal has some problematic aspects. He makes several considerations about the new mechanical philosophy as a whole (e.g. he claims that it is both a philosophy of nature and a philosophy of science), but his concept of it is too narrow. For instance, it excludes epistemic approaches to mechanisms (i.e. approaches that consider that mechanisms are abstract entities). On the other hand, although his characterization of mechanisms suits a great variety of mechanisms, it is not

concrete enough. It is not clear what the difference between mechanisms and other compound objects would be. He increases the scope of his notion of mechanism in exchange for reducing its content.

In conclusion, *The New Mechanical Philosophy* is one of the most relevant books about mechanisms since the early 2000s. Glennan shows his compromise with the recently proposed idea that mechanisms should be thought across the sciences and presents a new version of his influential definition of mechanism. He also addresses the main issues related to mechanisms: causation and explanation. The structure and style of the book make it highly recommendable both for experts in the field and for other philosophers interested in the topic.

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SÁNCHEZ MADRID, Nuria (ed.) (2016): *Hannah Arendt y la literatura*, Barcelona: Edicions Bellaterra, pp. 194.

Homero, Gotthold Ephraim Lessing, Franz Kafka, Marcel Proust, Bertolt Brecht, Hermann Broch e Isak Dinesen: con la obra de todos ellos estableció Hannah Arendt un diálogo más o menos intenso y sostenido en el tiempo. La nómina, así lo muestra el volumen que reseñamos, deja entrever la importancia que la literatura tuvo para la autora y nos recuerda un aspecto, el de la reflexión estética, tan crucial para el proyecto arendtiano como insuficientemente tratado. Recordemos cómo el lugar en que se inserta el análisis de esta problemática en *La condición humana*, obra clave de la autora y del pensamiento del siglo XX, expresa con elocuencia la pertinencia de su estudio.

Como producto material fabricado por la mano del hombre, las páginas dedicadas a la obra de arte constituyen la última sección del capítulo que aborda temáticamente el trabajo, pero son también, y no de modo arbitrario, aquellas que preceden al desarrollo expositivo de la naturaleza de la acción humana. La obra artística se sitúa, por tanto, en un espacio liminar entre los objetos que fabricamos y nos rodean, constituyendo una sede estable frente al incesante cambio de lo biológico, y aquello que, inestable y frágil,

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