Problems and Pseudo-Problems in Althusserian Science

Knox Peden

Abstract: This article looks at Louis Althusser’s unpublished criticism of Jean-Toussaint Desanti’s writings on epistemology in the 1960s and uses it as an inroad to discuss Althusser’s ambivalent relationship to science in his own work and Marxism more generally. Confusions abound, but in the end one comes away with a fuller understanding of Althusser’s polemical attitude to idealism and his partisan conception of philosophy.

Keywords: epistemology, Marxism, ideology, philosophy of science, Althusser, Desanti

In 1965, Jean-Toussaint Desanti published a two-part article titled “Qu’est-ce qu’un problème épistemologique?” – “What is an Epistemological Problem?” – in the magazine Porisme, a short-lived journal produced in the 1960s by the centre nationale des jeunes scientifiques.1

Cognizant that the French word épistémologie had long been an imprecise translation of the German Erkenntnistheorie, Desanti set himself the task of getting beyond the tautological loop of defining “epistemology” as a “theory of knowledge” or a “theory of science.” Toward this end, he identified three types of problems scientists face in their professional activity, in the hopes of identifying the problem that might properly be described as “epistemological.” Problems of the first type were those that could be solved by tools internal to the given theoretical task. Those of the second type required recourse to some external, though still properly “scientific,” solution, and a scientific rethinking of the problem. The problems of the third type, however, were the real epistemological problems because they called upon philosophical presuppositions extrinsic to the scientific discourse at hand. More important, these presuppositions could not be demonstrably justified – or justifiably demonstrated – by the scientific activity itself. Desanti’s chief example of this tripartite phenomenon was the development of axiomatic set theory in the first decade of the twentieth century. Through a fortuitous historical-heuristic coincidence, the three tasks that the mathematician Ernst Zermelo set for himself in his efforts to axiomatize Georg Cantor’s “naïve” set theory mapped on to Desanti’s three types of problems: 1) to demonstrate that any set can be well-ordered – this demonstration was achieved with the tools Cantor himself provided; hence, problem of the first type; 2) to resolve Russell’s paradoxes, concerning the set of all sets who are not members of themselves. Desanti argued that though these paradoxes arise from the “interior of the already theoretically constructed edifice,” in this case, naïve set

1 Reprinted in Desanti 1975, 110-132.
theory, their resolution requires rethinking the structure of that edifice. Forcing mathematicians to rethink mathematically the concept of what it means to be "well-defined," these are problems of the second type. Problems of the third type, however, only arose in this context with the controversies surrounding the "axiom of choice." The decision whether or not to "accept" this axiom pitted formalists against intuitionists. Whether or not one accepted the "axiom of choice" was contingent on one's view of the ontological status of mathematical entities. Now, Desanti's point is precisely that mathematicians did not speak or think in the language of "ontological status" but that they inadvertently called upon philosophical stakes extrinsic to the scientific problem before them to justify their own position within that problem. For a formalist, analysis itself was sufficient to demonstrate the irrefutable "existence" of a set. For an intuitionist, the assuredness of "existence" was not a result of analytical demonstration but of an intuitive grasp. As Kurt Gödel would show later, the tools inherent to axiomatic set theory were themselves insufficient for deciding this opposition. This, Desanti suggests, is truly an "epistemological problem."

On the face of it, there's nothing particularly controversial about these arguments. The title is rather innocuous compared to Desanti's earlier contributions to *La Nouvelle Critique*, the official journal of the French Communist Party. These included such gems as "Stalin: a new kind of scientist" and "Science bourgeoisie, science prolétarienne." But at least one reader found Desanti's claims worthy of critique, and a stri-

---

2 The latter is reprinted in Desanti 2008, 105-133.
3 Althusser, 1990, pp. 69-165.
5 Althusser, 1967. "Sur Desanti et les pseudo "problèmes de troisième espèce", ALT2- A12-02/01/02/03

---

300 Problems and Pseudo-Problems in Althusserian Science

---

301 Problems and Pseudo-Problems in Althusserian Science
wind against itself to go in the opposite direction.\footnote{Ibid., pp. 302-03.}

So what’s Althusser’s problem with Desanti’s account? Desanti’s error, Althusser argues, is that he does not recognize that what he calls an “epistemological problem,” that is, the intrusion of philosophy into science, is in fact not a rarity but a permanent situation – this is the irony after all of Althusser’s concept of “spontaneous philosophy,” that it is not at all spontaneous in the sense of intermittent or surprising, but omnipresent. Desanti is naïve to think that there is ever such a thing as science operating independently of its philosophical presuppositions. Desanti for his part never published a response to Althusser’s critique of his position but he did express his exasperation with Althusser in a Tel Quel interview with Julia Kristeva in 1974. Aware of Althusser’s reproach that there is no such thing as a problem of the third type, Desanti averred that he found Althusser’s hostility to his position to be founded on such a degree of nonsense as to not even merit a response. All he would say was that he found Althusser’s own efforts to determine – philosophically – the “scienticity” of Marx to be a perfect example of a problem of the third type, namely the intervention of philosophy to determine an intrinsic scienticity that said science is unable to legislate for itself.\footnote{Desanti, 1975, pp. 223-24.}

If it’s clear that there is some real hostility here, it’s also the case that the crux of the dispute between Althusser and Desanti is perplexing, given the extensive agreement between them on some core philosophical matters. Both thinkers possess a strong distrust of the phenomenological search for the fixed point with which philosophy can begin. They’re equally contemptuous of the concept of origins and its correlate, the \textit{telos}. In fact, Desanti’s major work \textit{Les Idéalités mathématiques}, published in 1968, was dedicated, among other things, to exploding the teleological framework presumed to exist of all places most naturally in the history of mathematics. Yet the main clue to Althusser’s philosophical case against Desanti is located there in the title of the latter’s major work: Mathematical \textit{idéalities}.\footnote{Desanti, 1968.} Althusser could not accept the way that Desanti granted “reality,” or even a kind of autonomy, to mathematical “idealities.” Desanti had begun that work with the observation that, since mathematical entities come from neither the heavens nor the earth, it is impossible to physically locate them, materially, even as we can be certain of their existence as idealities. Idealities were the practical stuff of mathematics, or, we might say, of mathematical praxis. What’s curious is that Althusser understood ideology too to be neither material, nor purely ideal, but rather the domain of activity, of a praxis. And we know that for Althusser, ideology “exists” and also possesses a measure of autonomy. So again here there seems to be more agreement than discord between Althusser and Desanti.

My point in focusing on Althusser’s unpublished reaction to Desanti – and I think it’s significant that it’s unpublished – is to gain some further insight into Althusser’s discomfort with the status of science in his own work. Althusser’s relationship to science was ambivalent, deeply tied to his conviction that what Marxist theory yielded was true knowledge about the capitalist mode of production and the place of class struggle within it. But Althusser was wary of treating the “Theory of theoretical practice” or “Marxist philosophy” as a metaphilosophical stance. To do so would be to fall captive to a broadly phenomenological conception of philosophy that thought it could unify and disclose the terms of a scientific problematic from without. His hostility to Desanti is symptomatic in this regard because we can see in his reactions evidence of Althusser’s struggle to develop an account of his own practice that would break decisively with phenomenology. In the lectures comprising \textit{Philosophy and the Spontaneous Philosophy of theScientists}, Althusser is adamant that he is not in the business of providing philosophical guarantees for scientific practice. But this raises the question of what he’s doing in the first place. The series of books recently edited in France by G.M. Goshgarian, chief among them \textit{Initiation à la philosophie pour les non-philosophes} and \textit{Être marxiste en philosophie}, give us further insight into Althusser’s effort in the 1970s to articulate his own position on philosophy. But it behooves us to go back to this extraordinarily fecund theoretical moment between 1965 and 1968 when Althusser was keen to distinguish between problems and pseudo-problems emergent from the relationship between science and philosophy.

Before looking further at the specifics of Althusser’s critique of Desanti’s pseudo-problems, some comments on the broader frame are in order. In \textit{Spinoza Contra Phenomenology}, I argue for Desanti’s significance in the history of recent French Spinozism largely because of the negative role he played in Althusser’s formation, both as a philosopher and a Communist.\footnote{Peden 2014, pp. 95-126.} Central to my claims in that book is a historical thesis concerning the conflictual relationship between Spinozism and phenomenology in France stemming from Jean Cavaillé’s critical response to Husserl’s work in the interwar years. I suggest that Desanti occupies an important role in this history to the extent that the conflict between these tendencies remained a live issue throughout his philosophical career. In a word, Cavaillé saw in Husserl’s project the same solipsistic errors...
that marred Kantianism, and could be traced back to Cartesianism. Chief among them was a mistaken construal of the transcendental subject as a *deus ex machina* solution to a problem it fails to address, namely the simultaneous consistency and unpredictable novelty of thought, specifically scientific thought. Cavaillon’s critique was Spinozist insofar as he marshaled Spinoza’s axiom “man thinks” against Descartes’ “I think, therefore I am,” in order to avoid the hamstringing effects of the grounding ego. In other words, Cavaillon took his inspiration from the methodological principle to be found in Spinoza’s *Treatise on the Emendation of the Intellect*, which conceives of rational thought as “the idea of the idea.” The key point is that the content of the nominally first idea is immaterial to the process. What is given is that there is an idea, not that there is a subject who is having it. Desanti imbued much of this brand of rationalism from Cavaillon, his first serious teacher, so much that he embarrassed himself in a formal exchange on the subject of the “immediate” with Merleau-Ponty, his other major influence. Aping Spinoza, Desanti had concluded, “As I think myself as *Deus quatenus* I coincide with the connection and intrinsic productivity of ideas in me,” [to which apparently] Merleau-Ponty raised his eyebrows in astonishment. “Desanti,” he said, “it seems impossible to me that you could seriously grant any sense whatsoever to this phrase you’ve just said. For my part, I can’t make out anything that I could possibly think as I’m hearing it.”

Desanti understood his own intellectual itinerary from then on to be marked by this polar tension between Cavaillon’s Spinozist rationalism and Merleau-Ponty’s phenomenological distrust of *mathesis*. The result, in Desanti’s own words, was not so much a philosophy of the concept, which had been Cavaillon’s rallying cry, but a philosophy of access to the concept. The Spinozist line in Desanti’s thought is manifested most clearly as a hearty distrust of the “zero point” and the framework of transcendental structures. And yet, Desanti’s methods were more evidently phenomenological in the sense that he deemed it his task to excavate the experience of “sense” per se, and to question any concept – such as *Deus quatenus*, or its correlate, *Deus, sive Natura* – whose content could not be adequately conceived, or “accessed,” in the mind. Desanti’s oeuvre is in fact maddeningly elusive because of this tension in his work (It’s also excruciatingly technical – *Les Idéalités mathématiques* has virtually no audience. The math is advanced, and the phenomenological language is completely esoteric to the mathematician.)

Nonetheless, Desanti was a conduit for the Cavaillon’s version of Spinozism in French thought. In the later 1940s, Desanti ran a series of unofficial seminars at the ENS to reacclimatize those students whose educations had been interrupted by the Second World War. Althusser was among his students. In Althusser’s archive we have his 1948 notes from Desanti’s lectures on Spinoza. In addition to Spinoza’s materialist tendencies, we see the contours of a Spinoza whose rationalism is devoid of origins or goals, and is in essence a rationalism of the concept, a redress for all sorts of problems, epistemological or ideological.12

So if Desanti was an important influence on Althusser why is he so derided in Althusser’s memoirs? Here the history becomes both personal and political. Desanti, along with his wife Dominique, had become a member of the PCF during the Second World War at the peak of his Resistance activities. In the postwar years, the Desantis were among the most vociferous advocates of a hardline Stalinism in the French context. Of all of the official Party intellectuals, Desanti clearly had the most viable philosophical credentials. In the late 1940s, he, along with Jean Kanapa and Laurent Casanova, played a role in recruiting Althusser into the Party – this is not to deny the validity of Althusser’s own narrative of these events, which emphasizes his wartime experiences, and the friendship of Jacques Martin, but only to point out the practicalities of the situation. Desanti brought Althusser into the fold. There is also some complicated personal history here, surrounding the Desantis’ efforts on Althusser’s behalf to secure his partner Helene Legotien’s readmittance to the Party and their failure to achieve this end.

The family dramas of the PCF are not our concern. More important, though still in its way personal, is the role of philosophy. Whenever Althusser takes Desanti to task in his memoirs, it is usually coupled with some lamentation of Desanti’s commitments to Husserl. For example: “[Tran Duc] Thao and Desanti carried the hopes of our generation, as did Desanti later. Husserl was to blame for the fact that they did not fulfill them.”13 In some private notes on Desanti’s *Phénoménologie et praxis* – a primer on what Communists need to know about phenomenology published in 1963, drawn from Desanti’s course on Husserl’s *Cartesian Meditations* – Althusser wrote: “what’s ridiculous about Touki [Desanti] is that he still believes in the possibility of Husserl’s project. And that all he charges him with is being unable to keep his promises, as if his only vice were one of weakness!”14 Here we approach the heart of the matter. Well before Althusser criticized Hegel, or Hegelianian Marxism, in the name of Marx, Althusser recognized that phenomenology was unacceptable as

12 Althusser 1948.
14 Althusser [1963?].
philosophy because its foundations were intrinsically solipsistic. Phenomenology was in error precisely because of the rampant subjectivism it countenanced, a subjectivism insured by the well-nigh enshrinement of the ego, however mediated, as the source of knowledge. Desanti himself seemed to recognize this error of Husserl’s project. For Desanti, no less than Cavaillé, in the end phenomenological foundations could not be justified without a kind of leap into the irrational. But he maintained that aspects of the method were salvageable, shorn of their ontological ambition. Althusser would have none of it. His intransigence once he began his project in earnest of recuperating Marxism was rooted in a philosophico-conviction with broader scope, namely the urgency of recuperating science as such from the denigration it suffered in the hands of phenomenologists and Stalinists.\textsuperscript{15}

For Desanti was not only a Stalinist in his politics, he also produced some of the most egregious propaganda to come from the pen of a normalien. I’ve already referred to his piece “science bourgeoisie, science proletarian,” which was a contorted defense of Lysenkoism, itself the “scientific” source of the Soviet Union’s disastrous agricultural policies. In the introduction to For Marx, Althusser refers to the recent history of French communism, “summed up in a caricature by a single phrase, a banner flapping in the void: ‘bourgeois science, proletarian science’.”\textsuperscript{16} The reference here is to Desanti and the travesty of the “two sciences.” In Althusser’s view, the human cost of Stalinism was plainly evident. What needed to be thought was this manipulation of science, which gave the operation its veneer of necessity. Science, this feat of human activity, had become a “caricature” under Stalinism; a caricature whose essence was the manipulation of so-called “science” in the name of ideological ends. The fact that it was Desanti who most visibly defended this vision of science in the French context was not unrelated to Desanti’s phenomenological proclivities, in Althusser’s view. For Althusser, phenomenology, with whatever proper name you want to attach to it, from Feuerbach to Husserl, signaled the ultimate squandering of the rationalist, impersonal potential of science in the name of a blinkered ideological, or “spontaneously philosophical” agenda.

But the story does not end here, with Althusser the victorious celebrant of science declaring against the ideological Desanti. For Desanti did ultimately leave the Party in the late 1950s, and his break was unequivocal. He returned to the “epistemological” concerns of his youth, and the article “what is an epistemological problem?” was one of the first forays in his “second” post-Stalinist career, over the course of which he consistently challenged philosophers for their recourse to science as an alibi for philosophical concerns. Wittingly or not, philosophy looks to science for its foundations, even as it evinces its superiority. But in its borrowing of scientific foundations, philosophy changes the content of those very foundations, imputing to them an ontological grounding function not warranted by the science itself. This is why Desanti wants to preserve a notion of science as possessing an autonomy that works better without the static interference of philosophy. When “philosophy” starts intervening, this means the science itself needs to back up, reconsider itself, and renew its energies. It needs, in a key phrase of Desanti’s to be, “remis en chantier,” which we could plausibly translate as going “back to square one or the drawing board,” but literally means returned to the state of a work site. In any event, the best the epistemologist or philosopher can do is to designate these sites of tension when they arise and initiate the “remis en chantier.” Above all, it is not his task to short circuit science itself, by deciding its problems for it “philosophically.”

This, in Desanti’s view, was the ultimate sin of Althusserianism, arrogating for its own philosophical mission the aura of a sciencity that was dubious in the first place. Ultimately, then, the tables turn and Althusser becomes a target of Desanti’s charges of manipulating science just as Althusser had charged Desanti of the same duplicity before. As ever in philosophy, what you have are antagonists accusing each other with the same charge. For what it’s worth, Rancière treats Althusser’s take on Desanti as a “strange reading,” with Althusser imputing to Desanti a view about philosophy’s relationship to science that wasn’t his. Regarding scientific crises, Rancière writes, “neither the concept nor its problematic is to be found in Desanti. Althusser had to put them there to be able to chase them out while arguing that sciences so dishonestly exploited were in need of a vigilant assistant?”\textsuperscript{17} (Althusser’s Lesson). It’s clear that Desanti did not keep abreast of the finer points of Althusser’s development on this issue. But it’s also undeniable that Althusser’s reading of Desanti is tendentious at best. This should be indicative for us; it invites to consider further what’s motivating Althusser in this case. With this in mind, let’s return now to Althusser’s argument that what Desanti thinks are problems are in fact pseudo-problems.

Recapitulating Desanti’s tripartite distinction, Althusser says problems of the first type are problems of “theoretical production” and those of the second are problems of “theoretical revolution.” In the first case, the resolution of the problem takes place entirely within the terms

\textsuperscript{15} Peden 2014, pp. 127-148.

\textsuperscript{16} Althusser 1969, p. 22.

\textsuperscript{17} Rancière 2011, p. 66.
of a given theory. The theory itself is in no way reworked. Problems of the second type require revision of the theory itself; a classic case in point is the revision of physics by Newtonian theory. Problems of the third type are those that arise when a science is in “crisis” – this is Desanti’s term. And the only way they can be resolved, as I noted before, is by the introduction of semantically foreign concepts. Desanti’s two examples are the question of the “existence” of mathematical objects in set theory and the problem of “indeterminism” in post-Einsteinian physics. In both cases, philosophical concepts are imported to adjudicate scientific problems. Desanti thinks such a move is unwarranted; the science should strive in all instances to avoid philosophical recourse and the seductions of semantic closure.

Desanti’s agenda of protecting science from philosophical decision should, it seems, appeal to Althusser. So his reaction creates something of a puzzle. Why does Althusser think that these problems of the third type do not really exist? Why does he term them pseudo-problems? He’s categorical. He writes: “there are no ‘problems of the third type’. There is no ‘scientific crisis’. There are only little philosophical crises among scientists on the occasion of certain difficulties.” He thinks that Desanti, like most traditional philosophers, seizes upon the idea of scientific crisis and inflates it for philosophical ends. In Althusser’s vision, Desanti remains very close to Husserl in that he treats the sphere of scientific thought as an ideal domain in which certain epistemological problems arise. The tendency toward discursive, theoretical idealization is what Althusser is attacking here. In conclusion, he writes:

*Philosophy is an organic part of the conditions of the process of production of scientific knowledges.* In order to find philosophy in the sciences, we must go look for it *there where it is*: not in the “philosophical crises” of the scientists, but in *the conditions of the process of production of scientific knowledges*. If scientists refuse to look for it, there where it is, *in this precise place*, if they think that what they “see” in their scientific practice constitutes the last word on the conditions of the process of production of scientific knowledges, *they are wrong*. The philosophers who align themselves with this view share the error of the scientists. In his article, Desanti is in this camp.  

These charges acquire added pathos when we consider Althusser’s treatment of Desanti as emblematic of Lysenkoism and the Stalinist manipulation of science. By returning to a focus on the materialist conditions of knowledge production, Althusser seems to be veering back on to this shaky ground himself. If all scientific problems are conditioned in the last instance by the material conditions of their production, this brings us back to the idea that science has a class character. So the burden is on Althusser is to articulate what distinguishes his materialist conception of science from an argument for the “two sciences,” one proletarian and one bourgeois.

Here a key document is Althusser’s introduction to Dominique Lecourt’s analysis of the Lysenko affair. In this polemical text, penned in 1976, at roughly the same time that Althusser was drafting the texts recently edited by Goshgarian, as well as the *Soutenance d’Amiens*, which stands as the main statement of his views in this period, Althusser comes back to the set of issues emergent from his response to Desanti. Reflecting on the nature of error and the failure of the Soviets to deal adequately with their error by giving it a properly Marxist analysis, he writes, “It is in the class struggle that the proletariat comes to disentangle and confront the relations of forces in which it is enmeshed, and succeeds in defining the ‘line’ of its struggle. None of this resembles the clarity of a case in which a pure consciousness confronts the pure clarity of a situation.” This latter is the conceit of phenomenology, which imagines scientific crises to take such a form. The correction of error in this staging requires the fiction of an objective or somehow ontologically prior truth that could be clarified with recourse to the structures of an objectively conceived subjective consciousness. Alternatively, Althusser, following Lenin, calls for the paradoxical situation in which the Marxist confronts “error without truth and deviation without a norm.” To persist in this paradox is to refuse concession to any notion of ontological ground on which such matters could be adjudicated. “The dominant version of dialectical materialism,” Althusser writes, “transforms materialism into an ontology of matter whose ‘laws’ are supposed to be stated by the dialectic.” This is a “version which refuses to recognize that the whole virtue of materialism and of dialectics lies in the fact that they state not ‘laws’ but *theses*.” These claims help us understand better Althusser’s charges.
against Desanti. In working with the concept of scientific crisis that he does, Desanti operates in an idealist version of the earlier ontological materialism in which he himself was complicit. In other words, he has returned to and made explicit the idealist commitments that were already the compromising elements in a dialectical materialism that remained, in a word, idealist. This gives us a sense of what Althusser means by pseudo-problems. Pseudo-problems are those that are treated as capable of resolution by idealist gestures. They are problems that are conceived as being of a scientific nature yet capable of philosophical resolution. Desanti had grievances against such a position, but he treated it as a viable or extant position nevertheless, in the sense that it was something that actually took place in the history of sciences. Althusser cedes nothing in this regard. In _Être marxiste en philosophie_ he writes, "If one wants to be initiated into philosophy, one must know above all that _philosophy is not a science_, thus that philosophy does not pose problems like the sciences and nor does it discover their solutions, which are knowledges, like the sciences – but that philosophy is instead a _wholly other practice_ which poses questions and gives them responses, without these responses being knowledges as in the case of scientific knowledges."24 (84). Philosophy has no object. Thus there is no object for it to know. "Everyone will admit that science has an object. But that each science has a limited object is a proposition that is much less recognized. And yet it is totally essential to the intelligibility of the sciences and their history."25

Breaking with Lenin’s pronouncement on this score, Althusser will eventually come to insist on the limited domain of Marxist science – it is not all powerful, but pertinent only to a specific object, history conceived as class struggle.26 This is what it means, ironically, to be a Marxist in philosophy. It is to break with any notion, which is dear to phenomenological idealism however ramified, as in the case of Desanti, that thinks one can escape a partisan – and hence inevitably partial – stance on a discursive or practical field. In his unpublished piece on Desanti, Althusser writes: "[the term] 'problem' designates by its name a precise reality unique to a scientific practice."27 One is reminded here of Marx’s remark that humans only set themselves tasks they have the capacity to solve. Such problems are only solvable in practice and with an awareness of the limited domain in which they obtain – which means solving problems raised by class exploitation cannot be achieved by means that fail to address this antagonism directly. But it follows too that solving these problems means that other problems – other injustices – will remain. To think otherwise is not simply to offer pseudo-problems, but pseudo-solutions.