

teorema

Vol. 4?, pp. 4?

Kant's Antinomy of Reflective Judgment: A Re-evaluation*

Alix A. Cohen

Kant describes organisms as the beings “which first give objective reality to the concept of a *purpose* that is a purpose of *nature* rather than a practical one, and which hence give natural science the basis for a teleology” [Kant (1987), §65, p. 255 (375-6)].¹ But the problem that arises from this claim is that even though organisms are the basis for teleology, they should still be accounted for in terms of mechanical causality since it is the only way to reach the level of scientific knowledge: “Without mechanism we cannot gain insight into the nature of things” [Kant, *C. J.*, §78, p. 295 (410)]. Yet it seems difficult to coordinate mechanism and teleology in a single theory. Kant expresses the tension between the two in the form of an antinomy.

The antinomy consists in the fact that the concept of organism seems to question the universality of the principle of causality developed in the first *Critique*. This questioning is carried out in the antithesis of the antinomy of judgement, which has two formulations:

[Antinomy [1] – Reflective]

The first maxim of judgement is this *thesis*: All production of material things and their forms must be judged to be possible in terms of merely mechanical laws.

The second maxim is this *antithesis*: Some products of material nature cannot be judged to be possible in terms of merely mechanical laws. (Judging them requires a quite different causal law – viz., that of final causes) [Kant, *C. J.*, §70, p. 267 (387)].

[Antinomy [2] – Constitutive]

Thesis: All production of material things is possible in terms of merely mechanical laws.

Antithesis: Some production of material things is not possible in terms of merely mechanical laws [Kant, *C. J.* §70, p. 267 (387)].

A tradition among certain Kant scholars, namely Ernst Cassirer, W. H. Walsh and A. C. Ewing, endorses the claim that antinomy [2] is genuinely contradictory, but that antinomy [1] is the resolution of this contradiction. In other words, these commentators believe that the contradiction is unravelled once the thesis and the antithesis are in the form of reflective judgement (antinomy [1]) as opposed to determinant judgement (antinomy [2]).² Other

commentators, H. W. Cassirer, W. Ernst and Robert Butts amongst others, have underlined the fact that this resolution threatens the coherence of Kant's critical philosophy. They argue that converting the propositions of antinomy [2] from the form of determinant judgement into the form of reflective judgement requires Kant to renounce the universality of causality demonstrated in the first *Critique*. That is to say, they believe that the antinomy of reflective judgement forces Kant to alter the status of mechanical causality from an a priori law (universal and necessary) to an a posteriori reflective judgement (hermeneutic and contingent).

I intend to endorse the claim that there is a genuine difficulty in Kant's argument regarding the connection between mechanism and teleology. But this difficulty is not the one these commentators think it is. Far from consisting in a contradiction between the first and the third *Critique*, I will argue that the genuine difficulty is intrinsic to antinomy [1]: rather than having any hope of resolving anything, antinomy [1] consists in an inescapable conflict.

In order to support my claim, I will show in the first section why converting the thesis about mechanism into reflective judgement (i.e. affirming that mechanism is a reflective principle) does not require renunciation of the universality of causality demonstrated in the first *Critique*. The key to the problem will be clearly to distinguish between mechanism and causality.

In the second section, I will suggest that the actual difficulty with Kant's argument is that there is a genuine conflict inherent in antinomy [1]. Even though converted into the form of reflective judgement, the thesis and the antithesis remain conflicting. To support this claim, I will show that the antinomy of reflective judgement is quite unique in the Kantian corpus, and that its uniqueness makes it uniquely troubling.

In the third section, I will conclude that the Kantian resolution of the conflict between mechanism and teleology is unsatisfactory. The only way Kant can account for the possibility of their reconciliation is by appealing to the supersensible. Ultimately, the antinomy can only be resolved by a two worlds view. Yet, even though this solution allows us to believe that in the noumenal world the two principles are reconcilable, I will argue that in the empirical world they can only conflict.

THE *CRITIQUE OF PURE REASON* VS. THE *CRITIQUE OF JUDGMENT*: THE DISTINCTION BETWEEN CAUSALITY AND MECHANISM

Some commentators, namely H. W. Cassirer, W. Ernst and Robert Butts, claim that the difficulty caused by the antinomy of reflective judgement is that it contradicts the constitutive principle of causality thought to be demonstrated in the first *Critique*. They believe that the argument developed in the *Critique of Judgment* is problematic since there are convincing textual

reasons for not viewing causality as regulative—but as constitutive—in the *Critique of Pure Reason*.

H. W. Cassirer asks the following question: “How can Kant treat the mechanical and teleological principles as reflective principles? Such an assertion is obviously contrary to the fundamental principles of his philosophy” [Cassirer (1938), p. 345]. Robert Butts goes much further in claiming that the third *Critique* provides the basis for a new interpretation of the first *Critique* itself. His “discovery [is] that in the first *Critique* Kant introduces mechanism as itself a regulative principle” [Butts (1984), pp. 271-3]. And W. Ernst agrees when he writes that “the tendency of the concept of causality to sink down from its originally constitutive, categorical dignity to a regulative principle is then brought to its conclusion in the doctrine of the antinomy of the *Critique of Judgment*” [Ernst (1909), p. 64].

I believe that these commentators misidentify the difficulty. Contrary to their statements, I intend to show that there is no inconsistency within Kant's system. Kant can consistently hold that mechanism is a reflective principle without questioning the universality of the determinant law of causality demonstrated in the *Critique of Pure Reason*. In order to support my claim, I will account for a specific difference between mechanism and causality that allows mechanism to be merely regulative for investigation while causality remains constitutive of experience. This difference will consist in distinct conceptions of the relation between parts and whole.¹

Kant defines the mechanical explanation of the connection between parts and whole in the following terms:

When we consider a material whole as being, in terms of its form, a product of its parts and of their forces and powers for combining on their own (to which we must add other matter that the parts supply to one another), then our presentation is of a whole produced mechanically [Kant, *C. J.*, §77, p. 293 (408)].

Mechanical production amounts to a set of parts connected to produce a whole. In this sense, the whole is thought of as the product of its parts. Kant illustrates this claim with the example of a machine: it can be decomposed into its parts and then recomposed without being destroyed (i.e. it can be analysed in order to establish its internal constitution). The consequence of this conception of mechanism is that the whole cannot have a causal influence on

¹ For a distinction that goes along similar lines, see McLaughlin (1989) 363-sq. However, I disagree with his account of the antinomy of reflective judgment for reasons that will become clearer in the next section – in particular when he claims that “the antinomy proper subsists not between a mechanistic principle and a teleological one; but rather between the two different maxims about *mechanism*” (366). In contrast, I will show that the antinomy consists in the fact that the teleological model of explanation questions the universal validity of the mechanical model of explanation.

its parts. As mentioned in the first introduction of the *Critique of Judgment*, mechanical causality excludes a priori the possibility of a cause that would be both condition of possibility and product of its effects.

It is quite contrary to the nature of physical-mechanical causes that the whole should be the cause that makes possible the causality of the parts; rather, here the parts must be given [us] first in order for us to grasp from them the possibility of a whole [Kant, *C. J.*, First Introduction, p. 425 (236)].

Kant accounts for mechanical explanation (i.e. the only form in which we can have knowledge about the world) by saying that the parts determine the whole, but the possibility of the parts cannot depend on the whole. But perhaps a better way of formulating the point at issue would be to say that mechanism requires the reduction of the whole to the properties that its parts have independently of the whole. The causal powers of the parts are exactly the same had they been outside the whole. And according to Kant, this requirement is due to the character of our understanding: We, “*given the character of our understanding*, can regard a real whole of nature *only* as the joint effect of the motive forces of the parts” [Kant, *C. J.*, §77, p. 292 (407), emphasis added].

By contrast, it does not follow from the concept of efficient cause accounted for in the first *Critique* that the whole cannot affect its parts. It only follows that a process is causal when each of its components is determined by another component that precedes it in time. In proving the necessity of efficient causality, the *Critique of Pure Reason* demonstrates that what is not causally determined does not appear, that is to say all material things are completely causally determined. There is thus now no reason why the parts should be conceived as causally prior to the whole. The type of determination defined by the principle of efficient causality does not imply any restriction concerning the relation between parts and whole, apart from the fact that the cause (whichever it is) should be prior to its effect.

Therefore, contrary to H. W. Cassirer, W. Ernst and Robert Butts who identify mechanism and causality, mechanism should be understood as a subcategory of causality. As I just showed, if the antinomy of reflective judgement raises a difficulty, it does not consist in a contradiction between the first and the third *Critique*. I now intend to show that the actual difficulty consists in a conflict intrinsic to antinomy [1]. Contrary to the interpretation represented by Ernst Cassirer, I will support the claim that antinomy [1], far from being the resolution of antinomy [2], is made up of conflicting propositions.

THE CONFLICT INTRINSIC TO ANTINOMY [1]

The three commentators who argue that antinomy [1] unravels the contradiction intrinsic to antinomy [2], namely E. Cassirer, W. H. Walsh and A. C. Ewing, base their respective conclusions on a similar claim: the contradiction between mechanism and teleology disappears as soon as you acknowledge that both the thesis and the antithesis are reflective principles as opposed to determinant ones. In other words, they believe that being heuristic methods of inquiry in the phenomenal world, these principles cannot in fact conflict. One just has to choose to follow one method or the other for the appropriate objects.

For instance, Ernst Cassirer claims that “the antinomy between the concept of purpose and the concept of cause thus disappears as soon as we think of both as two different modes of ordering, by which we attempt to bring unity into the manifold of phenomena” [Cassirer (1921), p. 369]. W. H. Walsh is even more explicit when he writes that Kant’s answer “is to treat *both* the mechanical and teleological principles as belonging to reflective judgement: to say that there is no real clash between them because they are both no more than heuristic maxims elaborated to further the understanding of the given” [Walsh (1947), p. 233]. Finally, A. C. Ewing endorses a similar conclusion: “the antinomy between mechanism and teleology is [...] solved by declaring both principles regulative” [Ewing (1938), p. 260].

If these commentators were right, the contradiction would simply lie in a slip from the logical (i.e. judgement) to the ontological (i.e. the world) and, in this sense, it could be quickly removed. There would indeed be a genuine contradiction at the level of determinant principles (antinomy [2]), but its resolution would consist in reaffirming the reflective nature of the principles (antinomy [1]). From the point of view of reflective judgement, the thesis would simply cohabit with the antithesis, both of them being subjective maxims. This interpretation seems to be supported by Kant’s remark:

Hence all semblance of an antinomy between the maxims of strictly physical (mechanical) and teleological (technical) explanation rests on our confusing the *autonomy* of reflective judgement (which holds merely subjectively for our use of reason regarding the particular empirical laws) with the *heteronomy* of determinative judgement, which must conform to the laws (universal or particular) that are given by understanding [Kant, *C. J.*, §71, p. 270 (389)].

Independently of the rest of the *Dialectic of Teleological Judgment*, this passage seems to provide good evidence for our three commentators. But in the light of the whole chapter, it does raise some difficulties. Can the contradiction be so easily resolved, or, more precisely, dissolved?

I believe that antinomy [1], far from resolving the contradiction, is intrinsically conflicting if not contradictory, and that furthermore, it is the only antinomy of the Kantian corpus to be genuinely conflicting due to its unique structure. In order to have a better grasp of the differences between antinomy [1] and antinomy [2], let us put them in a logical form:

Given S, the production of material things,
 Given P, mechanical laws,
 Given Q, teleological causes,

[Antinomy [1] - Reflective]

Thesis (1): All S must be judged to be possible in terms of P.

Antithesis (1): Some S cannot be judged to be possible in terms of P (viz. judging these S requires Q).

[Antinomy [2] - Constitutive]

Thesis (2): All S are possible in terms of P.

Antithesis (2): Some S are not possible in terms of P.

These formulations call for two remarks. Firstly, antinomy [2] consists in a genuine contradiction (it opposes a universal proposition and a particular one which denies the universality of the first), whereas antinomy [1] opposes a universal methodological principle and a proposition which denies the possibility of its application to all objects. Therefore, antinomy [2] expresses a contradiction about the world (i.e. an ontological conflict), whereas antinomy [1] expresses a conflict within judgement (i.e. an epistemic-methodological conflict). More precisely, it opposes distinct models of explanation: thesis (1) claims that the only possible model of understanding is mechanical, and antithesis (1) not only denies the possibility of its application to all objects (first clause), but also puts forward a “quite different” understanding, namely a teleological one (second clause). Secondly, a reconciliation between the propositions of antinomy [1] would have been possible only if Kant had opposed the following claims:

[Antinomy 3]

Thesis (3): All S must be judged to be possible in terms of P.

Antithesis (3): Some S cannot be judged to be possible *only* in terms of P.

Comparing antinomy [1] and antinomy [3] illustrates that the crucial questioning of the thesis is in fact carried out by the remark in brackets in antithesis (1). Without this remark, we would not have a conflict but a mere re-

striction of the applicability of the thesis.² The antinomy would then amount to stating the insufficiency of mechanism for the explanation of organisms and requiring teleology as a necessary complement to mechanism. But the point is precisely that in the form of antinomy [1], they do not seem to be complementary: they are directly conflicting. This interpretation is supported by Kant's remark about antinomy [2]: "The two propositions [...] contradict each other, so that one of them [has] to be false". There is a direct contradiction between the propositions of antinomy [2], and converting them into reflective judgements does not seem to remove the conflict between them. It simply amounts to displacing it from the world (antinomy [2] —which is a logical contradiction) to the mind (antinomy [1] —which is an epistemological conflict), or from a description to a prescription: the thesis recommends proceeding as if everything could be explained mechanically, whereas the antithesis recommends proceeding as if organisms could only be explained teleologically. Hence, it seems that only a schizophrenic scientist could follow the two maxims without facing a methodological conflict. There is thus a genuine conflict between the thesis and the antithesis of antinomy [1]: the teleological model of explanation questions the universal validity of the mechanical model of explanation.

Therefore, contrary to the other antinomies, the antinomy of reflective judgement is the only genuinely conflicting antinomy of the Kantian corpus. In Kant's usual method, the thesis and the antithesis never reach the level of pure logical conflict, but are situated either above or below this level. They amount to contrary or sub-contrary propositions which can be both false or both true. My claim is that the antinomy of reflective judgement is unique since it cannot be so reduced.

The mathematical and the dynamic antinomies of the *Critique of Pure Reason* are made of contrary propositions for the former (i.e. antinomy [i] about the world and antinomy [ii] about the substance) and sub-contrary propositions for the latter (i.e. antinomy [iii] about freedom and antinomy [iv] about God). In the case of the mathematical antinomies, the necessity of the dilemma is dissolved by providing a proof for each thesis and antithesis, and then, showing that they assume the opposite of what they seek to prove. In this sense, the theses and the antitheses are both false and we are led to a third possibility. This method of resolution cannot be applied to the antinomy of reflective judgement simply because, as far as I know, it is the only an-

² This is in fact what McLaughlin claims to be the case when he writes: "the antinomy proper subsists not between a mechanistic principle and a teleological one; but rather between the two different maxims about *mechanism*" (McLaughlin (1989) 366). In contrast, I believe that the antinomy consists in the fact that the teleological model of explanation questions the universal validity of the mechanical model of explanation.

tinomy where the propositions that constitute the thesis and the antithesis are not supported by proofs.³ In the case of dynamic antinomies, the propositions are not in fact in contradiction. They can be true at the same time since they do not have the same object: one is applied to the phenomenal world whereas the other concerns the noumenal world. But the propositions of the antinomy of reflective judgement have the same object (i.e. mechanical laws in the phenomenal world). Consequently, the antinomy of the third *Critique* cannot be resolved in such a manner.³

Therefore, the antinomy of reflective judgement, and more precisely antinomy [1], presents a quite unique structure compared with the other antinomies of the Kantian corpus. And I have tried to show that this uniqueness is the cause of its unavoidably conflicting nature. In this sense, contrary to E. Cassirer, W. H. Walsh and A. C. Ewing, antinomy [1] is genuinely conflicting. Underlying the fact that its propositions are reflective judgements as opposed to determinant ones does not solve their opposition. The epistemological conflict between mechanism and teleology remains and it is radical: the representation of a structure in which the whole causes the possibility of its parts is contradictory for our conception of mechanical explanation.

Hence, we are left with the following problem: Kant's legitimisation of the conflict between mechanism and teleology is so well grounded that it seems hard to conceive how he can finally resolve it. I intend to support the claim that, as feared, Kant's solution to the conflict between mechanism and teleology is not fully satisfactory.

THE UNSATISFACTORY RESOLUTION OF THE CONFLICT BETWEEN MECHANISM AND TELEOLOGY

Since the conflict opposing mechanical and teleological explanations of organisms relies on distinct conceptions of the connection between a whole and its parts, let us formalise the Kantian account of their connection.⁴

Given x: a part,
Given y: an organic whole,

³ Note here that I restrict my comparison to Kant's antinomies of pure reason insofar as they have to do with our theoretical judgements about the world. The antinomies of aesthetic and practical judgement are another matter – they would call for a different type of analysis which, due to space restrictions, cannot take place in this paper.

⁴ Since I wrote this paper, Hannah Ginsborg published her paper 'Two Kinds of Mechanical Inexplicability in Kant and Aristotle' (Ginsborg (2004) *Journal of the History of Philosophy*, 42 (1)). Unfortunately, I cannot discuss it here and have to leave this task for another paper.

- (1) x is a part of y
- (2) x is the cause of y
- (3) y determines x.

The difficulty seems to be in how to understand (3): what does Kant mean when he claims that the whole “determine[s] the form and combination of all the parts”? [Kant, *C. J.*, §65, p. 252 (373)].⁴

According to Kant, there are two ways in which the determination of the parts by the whole can be construed. There is “that of efficient causes (*nexus effectivus*)” and “that of final causes (*nexus finalis*). Perhaps it would be more appropriate to call the former causal connection that of real causes, the latter that of ideal causes, since these terms would make it clear at the same time that there cannot be more than these two kinds of causality” [Kant, *C. J.*, §65, pp. 251-52 (372-3)]. In other words, the whole can be either the real or the ideal cause of its parts.

When Kant writes that in organisms, “the idea of the whole should conversely (reciprocally) determine the form and combination of all the parts” [Kant, *C. J.*, §65, p. 252 (373)] he seems to favour the latter alternative. If the representation of the end is the determinant principle of the organisation of the whole, the connection between parts and whole amounts to the following relation:

[Teleological / Ideal Model of Explanation]
 Given R: a representation,
 Given a: parts,
 Given b: an organic whole,
 $R(b) \Rightarrow a \rightarrow b$.⁵

Yet the second kind of relationship is modelled on the form of intentional action. The structure of organisms is conceived through an analogy with technical causality, and consequently, it requires a superior understanding as its cause. It is thus a deficient account of organism. For, as Kant puts it, this analogy omits the fact that “nature organises itself” [Kant, *C. J.*, §65, p. 254 (374)], that is to say it ignores the self-organising feature of organisms in defining it merely as a work of art.

But on the other hand, if one considers the whole as the real cause of the possibility of its parts and of their organisation, the following relation results:

[Mechanical / Real Model of Explanation]
 Given a: parts,
 Given b: an organic whole,
 $b \rightarrow a \rightarrow b$.

This structure is not analogous to intentional action, which is consistent with Kant's claim that you miss what is specific to organisms when you call them an "*analogue of art*" [Kant, *C. J.*, §65, p. 254 (374)]. Yet it raises a serious difficulty. Even though we can formulate and formalise such a mechanical model of explanation, Kant believes we cannot conceive its possibility.

Let us suppose, then, that we try to present [...] the possibility of the parts [...] as dependant on the whole, so that we would be following the standard set by intuitive (archetypal) understanding. [...] *We cannot do it* by having the whole contain the basis that makes the connection of the parts possible (since in the discursive kind of cognition this would be a contradiction) [Kant, *C. J.*, §77, p. 292 (407-8), emphasis added].

In other words, the alternative model of explanation of organisms ($b \rightarrow a \rightarrow b$) indicates the conception an intuitive understanding would have. But according to Kant, this conception is a contradiction for our discursive kind of cognition, which is precisely what is meant by the antithesis of antinomy [1]: *we* "cannot [...] judge [organisms] to be possible in terms of merely mechanical laws" [Kant, *C. J.*, §70, p. 267 (387)]. The only way *we* can conceive the possibility of the parts as dependent on the whole is in the form of the teleological model of explanation ($R(b) \Rightarrow a \rightarrow b$), that is to say "by having the *presentation* of [the] whole contain the basis that makes possible the form of that whole as well as the connection of the parts required to [make] this [form possible]" [Kant, *C. J.*, §77, p. 292 (408)]. Consequently, even though the teleological model of explanation of organisms is deficient, it is the only one we can make use of.

We are far from satisfied in natural science if we can explain the products of nature through a causality in terms of purposes: the reason for this is that all we demand in such an explanation is that natural production be judged in a way commensurate with our ability for judging such production, i.e. in a way commensurate with reflective judgement, rather than with the things themselves and for the sake of determinative judgement [Kant, *C. J.*, §77, p. 292 (408)].

Therefore, Kant's contrast between our understanding (which is discursive) and an intuitive understanding (which does not resort to either the distinction between mechanism and teleology, or the concept of natural purpose, to grasp the distinctive feature of organisms) plays a fundamental role in the argument: it enables us to identify the distinctive features of our cognitive powers and the characteristics of our way of representing the world. Thus, as established in the first section, the distinction between causality (a determinant principle) and mechanism (a reflective maxim), which preserves the consistency of Kant's critical philosophy, is accounted for by the peculiar nature of our understanding —the former belongs to the understanding whereas

the latter belongs to judgement. And as elucidated in the third section, the conflicting nature of the antinomy (i.e. the general necessity and the occasional impossibility of mechanical explanation) is the expression of the necessity stemming from the nature of our judgement to think of a whole as the product of its parts.

Yet the distinction between a discursive and an intuitive understanding preserves the conflicting nature of mechanism and teleology. If, so far, Kant has proved that the conflict between mechanism and teleology is natural to our cognitive powers (i.e. he has legitimated the existence of the conflict), the conflict itself remains. That is the reason why, in order to reconcile the conflicting principles, Kant has to appeal to the supersensible world which allows us to believe that they are compatible.

We are assured that it is at least possible that objectively, too, both these principles might be reconcilable in one principle (since they concern appearances, which presuppose a supersensible basis) [Kant, *C. J.*, §78, p. 298 (413)].

We —endowed with a discursive understanding— cannot conceive the possibility of reconciling teleological and mechanical accounts within one single theory since for us, they conflict. Thus, when we want to acquire knowledge about an organism, we have to choose between the one and the other: “For the two kinds of explanation exclude each other, even on the supposition that objectively both these bases for the possibility of such a product rested [in turn] on a single one” [Kant, *C. J.*, §78, p. 297 (412)]. In this sense, the necessity of the appeal to the supersensible amounts to saying that the nature of reflective judgement is intrinsically dialectic since at the end of the day, “we still cannot reconcile the two principles *in an explanation* of the same natural product” [Kant, *C. J.*, §78, p. 298 (413)].

Therefore, I believe Kant’s solution to the antinomy of reflective judgement is not fully satisfactory with regard to the methodology one should follow in investigating nature and organisms in particular. Even though the supersensible ground allows us not to be “troubled by the seeming conflict that arises between the two principles for judging [organised] products” [Kant, *C. J.*, §78, p. 298 (413)], this conflict remains.

CONCLUSION

I set out to show that the introduction of the concept of organism in Kant’s third *Critique* creates a fundamental difficulty. But this difficulty is not what it is usually thought to be. A tradition amongst certain Kant’s scholars, a tradition best represented by Robert Butts, believes that the threat generated by the concept of organism consists in the necessity for Kant to

renounce the universality of the principle of causality demonstrated in the *Critique of Pure Reason*. Through the distinction between mechanism and causality, I have argued that this is not in fact the case.

Then, I suggested that one should not take for granted the apparent resolution of the antinomy of judgement as a result of the conversion of its propositions from constitutive to reflective principles. Thus, against the interpretation put forward by Ernst Cassirer, I have supported the claim that the antinomy of reflective judgement is quite unique in the Kantian corpus, and that moreover, its uniqueness is the cause of its uniquely troubling nature: it is the only antinomy of the Kantian corpus that remains conflicting after its resolution. Albeit Kant resolves it by resorting to the supersensible ground, the conflict between mechanical and teleological explanations remains *for us*. Even though we should believe in the possibility of their reconciliation in the supersensible, we cannot reconcile these two types of explanation in one single theory.

In this sense, I believe that Kant's solution to the antinomy of reflective judgement is unsatisfactory. It is resolved in the supersensible; but in the empirical world, *we* are left with a conflict we cannot go beyond. Thus, one could regret Kant does not fully assume the existence of this conflict and recognise the essentially dialectic nature of reflective judgement, a nature that is due to the finite constitution of our understanding. He only goes as far as saying that "the principles, though *disparate*, might well still be reconcilable" [Kant, *C. J.*, §72, p. 272 (391)], that is reconcilable in the supersensible ground, a ground that is to remain unreachable for us. But in recognising that our judgement cannot in fact be grounded on one single principle, Kant leaves an open door for Hegel who goes further in affirming the dialectic nature of reality and the coincidence of conflicting principles in the absolute.

Newnham College
Sidgwick Avenue
CB3 9DF Cambridge, UK
ac352@cam.ac.uk

NOTES

* A shorter version of this paper was presented at the Joint Session in Glasgow in July 2002. I would like to thank all the participants for their helpful comments. I would also like to thank Nick Jardine, Marina Frasca-Spada, Tim Lewens, Edward Craig, Simon Blackburn, Cain Todd and Richard Gray for their advice and support. I also want to note that since I wrote this paper for my MPhil in Cambridge, my views have slightly changed on these issues.

¹ *Critique of Judgment*, translation W. S. Pluhar, Indianapolis, Hackett Publishing Company, (hereafter cited as *C. J.*). The pagination in brackets refers to the *Akademie* edition.

² Reflective judgements are judgements in which the particular alone is given. The universal has to be found. It is opposed to determinant judgements in which the universal is given and the particular is subsumed under it. "If the universal (the rule, principal, law) is given, then judgement, which subsumes the particular under it, is *determinative* (even though [in its role] as transcendental judgement it states a priori the conditions that must be met for subsumption under that universal to be possible). But if only the particular is given and judgement has to find the universal for it, then this power is merely *reflective*" [Kant, *C. J.*, Second Introduction, pp. 18-9 (179)].

³ Effectively, Kant does not provide a demonstration of the necessity of the antithesis. But after all, it is not surprising since such a proof could only be apagogic, that is to say it would amount to demonstrating the absurdity of the thesis. Yet Kant makes it clear that we cannot do so since "reason must continue [...] to regard such technic [the production of organisms] as possible by mere mechanism" [Kant, *C. J.*, §78, p. 296 (411)].

⁴ Effectively, (2) does not seem to be problematic. Kant is no doubt talking about the parts as being efficient causes of the whole.

⁵ There would be a mechanical causality (\rightarrow) between a and b, and a teleological causality (\Rightarrow) between R (b) and a.

REFERENCES

- ALLISON, H. E. (1991), "Kant's Antinomy of Teleological Judgment", in *The Southern Journal of Philosophy*, vol. XXX, Supplement, pp. 25-42.
- AQUILA, R. E. (1991), "Unity of Organism, Unity of Thought, and the Unity of the *Critique of Judgment*", in *The Southern Journal of Philosophy*, vol. XXX, Supplement, pp. 139-56.
- BUTTS, R. E. (1984), *Kant and the Double Government Methodology*, Dordrecht/Boston/Lancaster, D. Reidel Publishing.
- (1990), "Teleology and Scientific Method in Kant's *Critique of Judgment*", in *Noûs*, vol. 24, pp. 1-16, also in *Immanuel Kant. Critical Assessments*, (1992), ed. R. F. Chadwick et C. Cazeaux, London, Routledge.
- CASSIRER, E. (1921), *Kants Leben und Lehre*, Berlin, Bruno Cassirer.
- CASSIRER, H. W. (1938), *A commentary on Kant's Critique of Judgment*, New-York, Barnes & Noble.
- DEBRU, C. (1980), "L'introduction du concept d'organisme dans la philosophie kantienne: 1790-1803", in *Archives de philosophie*, vol. 43, pp. 487-514.
- ERNST, W. (1909), *Der Zweckbegriff bei Kant und sein Verhältnis zu den Kategorien*, Strasbourg.
- EWING A. C. (1938), *A Short Commentary of Kant's Critique of Pure Reason*, London.
- FRICKE, C. (1990), "Explaining the Inexplicable. The Hypotheses of the Faculty of Reflective Judgement in Kant's Third Critique", in *Noûs*, vol. 24, pp. 45-62.

- GUYER, P. (1990), "Teleology and Scientific Method in Kant's Critique of Judgment", in *Noûs*, vol. 24, pp. 17-43.
- (1991), "Natural Ends and the End of Nature: Reply to Richard Aquila" in *The Southern Journal of Philosophy*, vol. XXX, Supplement, pp. 157-65.
- HOFFMANN, W. M. (1975), "An Interpretation of Kant's Solution to the Third Antinomy", in *The Southern Journal of Philosophy*, vol. 13, pp. 173-85.
- KAEHLER, K. E. (1991), "Comment on Henry E. Allison: Kant's Antinomy of Teleological Judgment", in *The Southern Journal of Philosophy*, vol. XXX, Supplement, pp. 43-8.
- KANT, I. (1987), *Critique of Judgment*, translation W. S. Pluhar, Indianapolis, Hackett Publishing.
- (1996), *Critique of Pure Reason*, translation W. S. Pluhar, Indianapolis, Hackett Publishing.
- KOLB, D. (1992), "Kant, Teleology, and Evolution", in *Synthese*, vol. 91, pp. 9-28.
- KOPPER, J. (1990), "Quelques remarques sur la composition de la 'Dialectique de la faculté de juger téléologique'", in *Revue internationale de philosophie*, vol. 175, pp. 604-20.
- KRAEMER, E. R. (1984), "Teleology and the Organism-Body Problem", in *Metaphilosophy*, vol. 15, pp. 45-54.
- KRAFT, M. (1982), "Kant's Theory of Teleology", in *International Philosophical Quarterly*, vol. 22, pp. 41-9, also in *Immanuel Kant. Critical Assessments* (1992), ed. R. F. Chadwick et C. Cazeaux, London, Routledge.
- LEBRUN, G. (1970), *Kant et la fin de la métaphysique. Essai sur la 'Critique de la faculté de juger'*, Paris, Armand Colin.
- MAC FARLAND, J. D. (1970), *Kant's Concept of Teleology*, Edinburgh, Edinburgh University Press.
- MAKKREEL, R. A. (1990), *Imagination and Interpretation in Kant. The Hermeneutical Import of the Critique of Judgment*, Chicago and London, The University of Chicago Press.
- (1991), "Regulative and Reflective Uses of Purposiveness in Kant", in *The Southern Journal of Philosophy*, Supplement, vol. XXX, pp. 49-64.
- MCLAUGHLIN, P. (1989), "What is an Antinomy of Judgment?", in *Proceedings of the Sixth International Kant Congress*, vol. ii/2, Washington, Center for Advanced Research in Phenomenology & University Press of America, pp. 357-68.
- (1990), *Kant's Critique of Teleology in Biological Explanation*, Lewiston, NY, The Edwin Mellen Press.
- PHILONENKO, A. (1977), "L'antinomie du jugement téléologique chez Kant", in *Revue de Métaphysique et de Morale*, vol. 82, pp. 13-37.
- (1982), "Kant et la philosophie biologique", in *L'héritage de Kant - Mélanges philosophiques offerts au P. Marcel Régner, Directeur des Archives de Philosophie*, Paris, Beauchesnes, pp. 63-79.
- RENAUT, A. (1997), *Kant aujourd'hui*, Paris, Flammarion.
- RIESE, W. (1965), "Sur les théories de l'organisme dans l'Opus Postumum de Kant", in *Revue philosophique de la France et de l'étranger*, vol. 90, pp. 327-33.
- ROBINSON, H. (ed.), (1992), *Spindel Conference, 10/91, Memphis, Tenn. : System and Teleology in Kant's Critique of Judgment*, Memphis, Memphis State University Press.

- SCHRADER, G. (1953-54), "The Status of Teleological Judgement in the Critical Philosophy", in *Kantstudien*, vol. 45, pp. 204-35.
- SIEVERT, D. J. (1974), "Kant's Dialectic of Teleological Judgment", in *Akten des Xten Internationalen Kant-Kongresses*, Mainz, Teil II, 1, pp. 452-60.
- SOURIAU, M. (1925), *La fonction pratique de la finalité*, Paris, Alcan.
- (1926), *Le jugement réfléchissant dans la philosophie critique de Kant*, Paris, Alcan.
- VAN DE PITTE, F. T. (1975), "The Role of Teleology in Kant's Work", ed. W. WERKMEISTER, in *Reflections on Kant's Philosophy* (Gainesville), pp. 135-47.
- WALSH, W. H. (1947), *Reason and Experience*, Oxford, Oxford university Press.
- WEIL, E. (1990), *Problèmes kantians*, Paris, Vrin.
- ZANETTI, V. (1990), "Nomologie et anomie: Lecture de deux antinomies", in *Revue Internationale de Philosophie*, vol. 175, pp. 581-603.
- (1994), *La nature a-t-elle une fin? Le problème de la téléologie chez Kant*, Bruxelles, Ousia.
- ZUMBACH, C. (1984), *The Transcendent Science. Kant's Conception of Biological Methodology*, The Hague/Boston/Lancaster, Nijhoff.