LEA YPI

THE ARCHITECTONIC OF REASON

Purposiveness and Systematic Unity in Kant's Critique of Pure Reason

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List of Abbreviations of Kant's Works

ApH *Anthropologie in pragmatischer Hinsicht*, Ak 7 (1798)
Anthropology from a pragmatic point of view

Bew *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes*, Ak 2 (1763)
The only possible argument in support of a demonstration of the existence of God

B *Briefwechsel*, Ak 10 (1747–1788)
Correspondence

BBM *Bestimmung des Begriffs einer Menschenrasse*, Ak 8 (1785)
Determination of the concept of a human race

DR *Danziger Rationaltheologie* in *Vorlesungen über Metaphysik und Rationaltheologie*, Ak 28 (1783/1784)

EaD *Das Ende aller Dinge*, Ak 8 (1794)
The End of All Things

FM *Welches sind die wirklichen Fortschritte, die die Metaphysik seit Leibnitzens und Wolf's Zeiten in Deutschland gemacht hat?* Ak 23 (1793/1804)
What real progress has metaphysics made in Germany since the time of Leibniz and Wolff?

GTP *Über den Gemeinspruch: Das mag in der Theorie richtig sein, taugt aber nicht für die Praxis*, Ak 8 (1793)
On the common saying: This may be correct in theory, but it is of no use in practice

IaG *Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht*, Ak 8 (1784)
Idea for a universal history with a cosmopolitan aim

KrV *Kritik der reinen Vernunft*, Ak 3 (1781, 1787)
Critique of pure reason

KpV *Kritik der praktischen Vernunft*, Ak 5 (1788)
Critique of practical reason

KUEE *Erste Einleitung in die Kritik der Urteilskraft*, Ak 20 (1789)
First Introduction to the Critique of the Power of Judgement

KU *Kritik der Urteilskraft*, Ak 5 (1790)
Critique of the Power of Judgement

LM	*Vorlesungen über die Metaphysik*, Ak 28 (1760–1790) Lectures on Metaphysics
LD	*Logik Dohna-Wundlacken*, Ak 24 (1790) Logic Dohna-Wundlacken
LJ	*Jäsche Logik*, Ak 9 (1800) Jäsche Logic
MAM	*Mutmaßlicher Anfang der Menschengeschichte*, Ak 8 (1786) Conjectural beginning of human history
MdS	*Metaphysik der Sitten*, Ak 6 (1797) Metaphysics of morals
MM	*Metaphysik Mrongovius*, Ak 29 (1782–1783) Metaphysics Mrongovius
Nachlass	Reflexionen aus dem Nachlaß, Ak 14–23 Notes and fragments, unpublished remains
nevT	*Von einem neuerdings erhobenen vornehmen Ton in der Philosophie*, Ak 8 (1796) On a Recently Prominent Tone of Superiority in Philosophy
Ped	*Immanuel Kant über Pädagogik*, Ak 9 (1803) Lectures on pedagogy
RP	*Religionslehre Pölitz*, *Ak 28* (1817) Lectures on the philosophical doctrine of religion
Rel	*Religion innerhalb der Grenzen der bloßen Vernunft*, Ak 6 (1793) Religion within the boundaries of mere reason
SdF	*Der Streit der Facultäten*, Ak 7 (1798) The conflict of the faculties
TPP	*Uber den Gebrauch teleologischer Prinzipien in der Philosophie*, Ak 8 (1788) On the use of teleological principles in philosophy
VA	*Vorlesungen über Anthropologie*, Ak 25 Lectures on anthropology
VRM	*Von den verschiedenen Rassen der Menschen*, Ak 2 (1775, 1777) Of the different races of human beings
WiA	*Beantwortung der Frage: Was ist Aufklärung?* Ak 8 (1784) An answer to the question: What is enlightenment?

WhDO	Was heißt: Sich im Denken orientiren? Ak 8 (1786) What does it mean to orient oneself in thinking?
WL	*Wiener Logik*, Ak 24 (1780) Vienna Logic
ZeF	*Zum ewigen Frieden: Ein philosophischer Entwurf*, Ak 8 (1795) Toward perpetual peace: A philosophical sketch

These references are to Kant's *Gesammelte Schriften.* Ausgabe der Preußischen (later Deutschen) Akademie der Wissenschaften (Berlin Georg Reimer, later Walter de Gruyter, 1902–)

Unless otherwise noted, all translations follow those in *The Cambridge Edition of the Works of Immanuel Kant*, edited by Paul Guyer and Allen W. Wood (New York: Cambridge University Press, 1992–). Slightly amended translations are signalled in the respective footnotes.

Acknowledgements

I started working on this book a very long time ago, more than 20 years. I was in the middle of my Philosophy degree at the University of Rome 'La Sapienza' and, after a couple of years studying formal logic, I turned to the history of philosophy. I was fascinated by German idealism and, for a series of personal and political reasons, I was also interested in Marx, and in Marx's critique of religion. Yet when I started researching Marx, I realized that to understand him properly, I had to master Hegel. And when I turned to Hegel, I thought his texts were prohibitively difficult to grasp, unless you understood what Kant had been up to, especially in his *Critique of Judgment* which was widely thought to offer the 'solution' to the problem of the relation between nature and freedom. I therefore decided to write my dissertation on systematic unity in Kant's third Critique. But in the process of analysing the development of Kant's theory of judgment and its relation to the rest of Kant's writings, I stumbled on the only early pages in which Kant discusses explicitly the problem of the unity of the system: *The Architectonic of Pure Reason*. This seemed like an important, deep, and complicated section of the first Critique, and the fact that it was so obscure and that there was so little written on it (even less when I started than there is now) meant that the project of understanding what Kant tried to do in the *Architectonic* took on a life of its own.

My thoughts and my relationship to Kant have developed along the way, but I think it is fair to say that everything I believe, about philosophy, science, morality, history, and politics and about the relation between these, has its roots in the *Architectonic* and in my interpretation of what Kant tried to do in it. None of these thoughts would be what they are without the inspiring conversations, challenging discussions, and intelligent commentary of my friends and mentors in Rome, and I am especially grateful to Renato Caputo, Filippo Gonnelli, Mario Reale, and Paola Rodano. This project owes them more than I can say.

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Introduction

Constructing Reason

This book is about the unity of reason in the *Critique of Pure Reason*. It tries to explain why the unity of reason is necessary, how Kant defends it, and why the project fails. Its main argument is that the unity of reason is grounded on a transcendental principle of purposiveness that is essential to the systematic integration of reason's theoretical and practical uses, but also a threat to the separation of critique from metaphysics that motivates Kant's project. Authors who worry about the role of the unity of reason in the first *Critique* focus either on the contribution of purposiveness to the systematic unity of theoretical cognitions or on its contribution to the realization of the practical ends of reason. They hardly reflect on how the first informs the second, but also depends on it, and on what the two taken together tell us about the fate of the critical project as a whole.

This is not surprising. The *only* part of the *Critique of Pure Reason* in which Kant examines the organic integration of the different uses of reason is *The Architectonic of Pure Reason*. This also happens to be one of the densest, obscure, and at times outright impenetrable texts in Kant's entire body of published work. On reading it, it is difficult not to feel sympathy for the majority of commentators whose frustration with the text seems to have historically led to a massive call to boycott it. The result is that after hundreds of thousands of pages written on Kant's systematic project and almost 250 years from the publication of the first *Critique*, those engaging explicitly with the *Architectonic* are only a handful, and those who do so in a charitable way are even fewer.

In exploring the role of the principle of purposiveness for Kant's analysis of the unity of reason, this book offers an interpretation of the *Architectonic of Pure Reason* that restores its centrality to Kant's philosophical project. It argues that the *Architectonic* is a significant and unique text for understanding why the unity of reason is necessary, what role the principle of purposiveness plays in integrating the theoretical and practical uses of reason, and

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how engaging with Kant's challenge may be relevant to reflect on the problem of systematic unity in philosophy more generally. Even though Kant's defence of the unity of reason in the first *Critique* fails because it threatens Kant's own separation of critique from metaphysics, that failure is productive. Unlike the vast majority of commentators, who have dismissed the *Architectonic* outright, I try to show that its focus on unified reason is crucial to shed light on the development of some of Kant's most important ideas. These include but are not limited to: the passage from the system of nature to that of freedom; the relation between faith and knowledge; the philosophical defence of progress in history; and the role of religion.

As is well known, these questions have significantly shaped the subsequent German philosophical tradition, from the initial reactions of Jacobi, Reinhold, Schulze, and Maimon, to the partial assimilation of their analyses in the idealism of Fichte or Hegel, to Marx's *Critique of Hegel's Philosophy of Right*.[1] At the heart of their concerns is always the same problem: where does the authority of reason come from? In what relationship does it stand to nature? How does reason order the different inferences it makes about the world? They all boil down to an effort not only to explain the relationship between different philosophical claims in the realms of science, morality, politics, and religion, but also how to understand their purpose, the values they promote. Kant presents his defence of the unity of reason in the *Architectonic* as a further elaboration of three fundamental questions: 'What can I know? What should I do? What may I hope?' (*KrV*, A 805, B 833; 677). Together they converge on a fourth one, which, as Kant argues, animates philosophy as a whole: 'was ist der Mensch?' (LM, 28: 533–534; 301; *LJ*, 25; 538).

What is the human being? This book suggests that Kant's answer to this question is tied to a particular account of reason, one that stresses its purposive character. But as the following pages go on to show, the concept of purposiveness that Kant endorses in the first *Critique* is a notion of purposiveness as design, quite different from the notion of purposiveness as normativity that will become central to his later works. In the first case, purposiveness as design, the relationship between reason and nature, is anchored to the idea of God. In the second case, purposiveness as normativity, it is anchored to the concept of reflexive judgment, and grounded on

[1] For a discussion of this legacy, see Beiser, Frederick C., *The Fate of Reason: German Philosophy from Kant to Fichte* (Cambridge, MA: Harvard University Press, 1987). I have discussed the comparison with Hegel and Marx in Ypi, Lea, 'On Revolution in Kant and Marx', *Political Theory*, vol. 42 (3) (2014), 262–287.

transcendental freedom. God remains part of the system but plays an increasingly marginal role; one that paves the way for successive authors, such as Hegel and Marx, to turn to a philosophy of history which eliminates the need for it altogether.

In *The Architectonic of Reason*, the principle of purposiveness, which is connected to the defence of the ideas of reason, plays a central role in the project of unification. But as I also try to show, only an account of purposiveness rooted in transcendental freedom can remain compatible with the critical commitments laid out in the earlier parts of Kant's work. Since in the first *Critique* that account of freedom is not available, Kant's justification of purposiveness remains difficult to isolate from the previous metaphysical tradition. In particular, Kant finds it impossible to come up with a notion of purposiveness that departs sharply from the way in which his seventeenth- and eighteenth-century predecessors grounded considerations about the order of nature on assumptions of intelligent design. This leaves Kant with a problem. Either the project of integrating the different uses of reason is condemned to failure, or one sketches an alternative defence of purposiveness, which is free from dogmatic assumptions about the presence of order in nature. Understanding this transition has important implications both for Kant's later work, and for its reception in the subsequent German philosophical tradition. After Kant's reflexive endorsement of the principle of purposiveness, the philosophical theories of history that defined the nineteenth century could only share Kant's critical commitments. If they returned to metaphysics, it was the critical metaphysics that Kant had hoped to ground.

The *Architectonic of Pure Reason* deserves to be taken seriously because it is the only part of the first *Critique* to explicitly engage with the unity of reason, and through which we understand the centrality of a transcendental principle of purposiveness for that project. But it also helps us understand better the only form that assumptions about the order of nature need to take so as to escape the fate of dogmatic metaphysics. Although the project in the end fails, that failure is instructive. *The Architectonic of Pure Reason* contains both the solution and the riddle to the problem of the unity of reason. Engaging with this section by integrating its findings in Kant's larger philosophical system helps us illustrate the evolution of the principle of purposiveness, and understand the revolutionary implications of its separation from the idea of intelligent design which characterizes Kant's later work.

* * *

To see the relevance of Kant's architectonic project, we must begin at the beginning, with the pages of the *Critique of Pure Reason* which highlight the importance of the unity of reason for our understanding of Kant's overall project. This is first brought out through a curious, if unsurprising, metaphor. The sum of reason's theoretical cognitions are compared to the material necessary for the construction of a building, whose type, solidity and height Kant claims to have assessed in the first part of this work. Even though reason initially aspired to build a majestic tower reaching the sky, the material discovered, Kant argues, was only enough for a house, sufficient for the satisfaction of human needs. The remaining task of the *Critique*, that of its *Doctrine of Method*, is to delineate the plan according to which that construction should be completed (*KrV*, A 707, B 735; 627).

Kant's methodological guidelines are introduced here through an implicit but clear reference to the myth of the tower of Babel. He compares his own enterprise with earlier accounts of reason whose ambitions exceeded the cognitive material at their disposal, failing, as a result, to place philosophy on solid grounds. Taking stock of their failures must be a warning sign for all philosophical projects which end up overcoming human cognitive capacities. Yet, since a unitary account of reason is also necessary for the satisfaction of its distinctive *needs*, the challenge must be taken up in the rest of the first *Critique*. Or so Kant explains.

The use of metaphors related to construction in introducing issues of philosophical method was very common for philosophers writing in the seventeenth and eighteenth centuries. To mention but the most prominent example, one of the opening chapters of Descartes' *Discourse on the Method* adopts the metaphor of the building to explain how the author felt the need to depart from the scholastic method of enquiry and replaced it with a more radical assessment of the first principles of human knowledge. The method of the philosopher, Descartes argues, is similar to that of the architect. An architect aiming to build a house on solid ground must explore the soil, assess the terrain, and discard any material that obstructs the construction. In a similar way, the scholar that wants to place reasoning on new and secure grounds must start by ensuring that the territory in which she is about to venture has been checked beforehand, that all superfluous material has been discarded and that obstacles have been removed prior to laying its foundations.[2]

[2] Descartes, René, 'Discourse on the Method' (1644), in *The Philosophical Writings of Descartes*, transl. by J. Cottingham, R. Stoothof, and D. Murdoch (Cambridge: Cambridge University Press) 1984, vol. 1, 111–176, at 116 ff.

Admittedly, Descartes insists, this is not the kind of enterprise with which either philosophers or architects would frequently associate themselves. Even if they did, their activity rarely would take the form of a radical destruction of what has previously been achieved. Yet, we occasionally do witness efforts to replace individual constructions with more appropriate buildings when the foundations are weak or the houses run the risk of falling apart. Thus, even if it might sound unreasonable to destroy a whole system so as to build it again from scratch, it may still make sense for a philosopher, as a matter of personal ethics, to suspend judgment on speculative matters and try to re-examine the beliefs that are being held.[3]

Kant's endorsement of the construction metaphor to explain the relevance of methodological considerations in the critique of reason is continuous with this tradition, in particular as mediated through the writings of Leibniz and Wolff. The former emphasizes how the work of a philosopher who wants to justify the connection of different elements within a coherent system of cognitions is similar to that of a constructor. Faced with the demand to construct a building in territory made of unreliable, dusty material, that constructor ought to dig deeper until a more solid foundation is found, Leibniz argues.[4] Likewise, Wolff compares the methodological task of the philosopher to that of an architect who uses parts of plans from previous and existing buildings to construct his own one in conformity with the principle of sufficient reason.[5]

Yet in the *Doctrine of Method* and elsewhere, Kant's redeployment of the architectonic metaphor revisits the previous metaphysical tradition in a way that is also profoundly innovative. To see this innovation, it is important to refer to the unique nature of the defence of reason in the first *Critique*,

[3] Ibid. 117.

[4] 'Quemadmodum in loco sabuloso edificium molienti continuanda fossio est, donec solidam rupem firmave fundamenta offendat […] ita ad humanae scientiae Elementa constituenda desideratur punctum aliquod fixum, cui tutò inniti atque unde secure progredi possimus.' See Leibniz, Gottfried Wilhelm, *Opuscules et fragments inédits de Leibniz. Extraits des manuscrits de la Bibliothèque royale de Hannovre*, edited by L. Coutourat (Paris: Alcane, 1903), 401. The influence of Leibniz is missed by Paula Manchester in her otherwise excellent reconstruction of the historical roots of Kant's construction analogy in the *Doctrine of Method*, see Manchester, Paula, 'Kant's Conception of Architectonic in Its Historical Context', *Journal of the History of Philosophy*, vol. 41 (2) (2003), 187–207.

[5] See Wolff, Christian, *Vernünftige Gedanken von Gott, der Welt, und der Seele der Menschen, auch allen Dingen überhaupt, zu besserem Verstande und bequemerem Gebrauch derselben* (Frankfurt am Main: Andrea Verlag, 1724), 246–251 and for a further discussion Manchester, 'Kant's Conception of Architectonic in Its Historical Context', cit. 199.

engaged in a twofold struggle: against dogmatism and against scepticism.[6] Unlike Descartes and others, Kant's defence of reason and his own discourse on the method do not precede the collection of the materials necessary to the critical enterprise; they follow it. Moreover, while the constructive task is for Descartes a solitary one, necessary to the philosopher's individual engagement with his own beliefs and errors, in Kant it is the result of a collective and cumulative effort.[7] Finally, but importantly, when it comes to providing practical rules, Descartes promises to simply accept and comply with existing norms and conventions. The development of a moral theory is not even contemplated in his *Discourse on the Method*. In the case of Kant, the ends of reason are crucial to the direction (and the plan) that should be taken by the whole critical enterprise.

These important differences, together with Kant's vindication of reason and the relevance of method to the accomplishment of that task, are widely recognized and celebrated.[8] Kant's own *discours de la méthode*, it is often said, points towards the construction of a process rather than the establishment of a firm product. The *Critique of Pure Reason* neither proves the eternal validity of any metaphysical proposition nor concedes to the relativist that everything is therefore uncertain. On the contrary, the authority of reason is asserted by placing it at the heart of a constructive project which is recursive and public in character. The coherence of its principles is established by going back and forth in the process of assessing human knowledge and confronting its cumulative results with an ongoing conversation based on rules that everyone can in principle endorse.[9] The unity of reason is

[6] See for an influential discussion, O'Neill, Onora, *Constructions of Reason* (Cambridge: Cambridge University Press, 1989), 3–27 and 'Vindicating Reason', in *The Cambridge Companion to Kant*, edited by P. Guyer (Cambridge: Cambridge University Press, 1992), 280–308.

[7] See on this point also O'Neill, *Constructions of Reason*, cit. and Yovel, Yirmiyahu, *Kant and the Philosophy of History* (Princeton, NJ: Princeton University Press, 1980).

[8] See for book-length treatments Ferrarin, Alfredo, *The Powers of Pure Reason: Kant and The Idea of Cosmic Philosophy* (Chicago, IL: University of Chicago Press, 2015); Fugate, Courtney, *The Teleology of Reason: A Study of the Structure of Kant's Critical Philosophy* (Berlin: De Gruyter, 2014); Konhardt, Klaus, *Die Einheit der Vernunft. Zum Verhältnis von theoretischer und praktischer Vernunft in der Philosophie Immanuel Kants* (Königstein: Forum Academicum, 1979); Neiman, Susan, *The Unity of Reason: Re-Reading Kant*, (New York: Oxford University Press, 1994); and Nuzzo, Angelica, *Kant and the Unity of Reason* (West Lafayette, IN: Purdue University Press, 2004).

[9] See especially O'Neill, *Constructions of Reason*, 4–15 and O'Neill, Onora, 'The Public Use of Reason', *Political Theory*, vol. 14 (4) (1986), 523–551. See also for a discussion Deligiorgi, Katerina 'Universalisability, Publicity, and Communication: Kant's Conception of Reason', *European Journal of Philosophy*, vol. 10 (2) (2002), 143–159.

therefore considered founded on moral or even political grounds.[10] Once we understand the project in those terms, we can see what enables Kant to complete the critical project of foundation of metaphysics as a science in the first *Critique*.

The virtue of recent constructivist interpretations of the first *Critique* has been to direct its analysis away from the interest in the purely theoretical dimensions of critical philosophy into an integrated account of the unity of reason, which incorporates its practical interests. But those interpretations often read the first *Critique* backwards, in the light of what we know about the nature of practical reason based on Kant's successive works, rather than on the basis of what the *Critique* itself has to say about the systematic unity of knowledge and the role of the practical interests of reason. This, in itself, is no major flaw: the aims of these interpretations are often reconstructive rather than exegetical, more narrowly applied to meta-ethics, and reluctant to endorse Kant's metaphysics.[11] My hope, however, is to show that an interest in the development of Kant's architectonic, and a contextualized analysis of the principle of purposiveness that lies at its basis, helps us develop an account of reason that is not only compatible with the aims of several constructivist reinterpretations but also potentially useful to illuminate the contribution of a properly reformulated Kantian metaphysics to (at least some versions of) their project.[12] While my method here is clearly more textual than that of many constructivist interpreters, our shared interest is in Kant's vindication of reason and its ability to address the twin charges of dogmatism and scepticism. But for that vindication to succeed, it is instructive to engage with Kant's trajectory, his faux pas, his hesitations and his breakthroughs. And while the *Doctrine of Method* is an essential starting point, it is important to understand why Kant appeared dissatisfied with

[10] See the discussion of this issue in Wood, Allen, 'Constructions of Reason: Explorations of Kant's Practical Philosophy', *The Philosophical Review*, vol. 101 (1992), 647–650, at 648.

[11] For some of the most influential accounts, see, for example, Rawls, John, 'Kantian Constructivism in Moral Theory', *The Journal of Philosophy*, vol. 77 (9) (Sep. 1980), 515–572; O'Neill, *Constructions of Reason*, cit. and O'Neill, Onora, 'Constructivisms in Ethics', *Proceedings of the Aristotelian Society*, vol. 89 (1) (1989), 1–17; Hill, Thomas E., *Dignity and Practical Reason in Kant's Moral Theory* (Ithaca, NY: Cornell University Press, 1992); Herman, Barbara, *The Practice of Moral Judgment* (Cambridge, MA: Harvard University Press, 1993); Korsgaard, Christine M., *Creating the Kingdom of Ends* (Cambridge: Cambridge University Press, 1996); and Reath, Andrews, *Agency and Autonomy in Kant's Moral Theory* (Oxford: Clarendon Press, 2006).

[12] For a discussion of the difficulties in developing constructivist norms that avoid 'obscure and panicky metaphysics', see O'Neill, Onora, 'Constructivisms in Ethics', cit. 7. As I hope to show, if the role of the principle of purposiveness for the project of the unity of reason is properly understood, there is no need to panic.

the results of his architectonic enterprise following his first *Critique*'s publication.

That there was some kind of reassessment of *The Doctrine of Method* is obvious if we reflect on the fate of Kant's architectonic plans in the work that immediately followed the first edition of the first *Critique*: the *Prolegomena to All Future Metaphysics that will be Able to come forward as Science*. Here Kant seems very unkeen on constructive activities. 'High towers and the metaphysically-great men who resemble them', he simply writes in a footnote, 'are not for me' (*Prol*., AA IV: 373; 161).

One might think that this statement merely summarizes the position of the first half of the *Critique of Pure Reason* without adding anything to it. But that interpretation would be partial. As already emphasized, Kant's cautious statements in the first part of the first *Critique* are complemented by the more ambitious ones that appear in the *Doctrine of Method* and onwards. Yet in the *Prolegomena* Kant seems to have abandoned those constructive ambitions. In the latter work we struggle to find hints to even a more modest type of activity that develops the findings of the *Critique* in the direction of the foundation of metaphysics as a science. Here, rather than the aspiration to demolish a certain kind of building in order to replace it with one that appears more adequate, in continuity with Wolff's methodological prescriptions, the task of critical philosophy is to merely offer a survey of the foundation work. There is no hint of a 'new plan': the constructive enthusiasm of reason is restrained by an appeal to limit the project to its critical part.

To consolidate the sceptical interpretation, Kant's caution towards all efforts directed at the foundation of metaphysics as a science is complemented by high praise for the work of David Hume, and an unmistakeable acknowledgement of its influence on his own thought.[13] The *Prolegomena* is very clear on the priorities of a critique that needs to be complete in all its systematic parts, before metaphysics can even begin to become 'a distant hope' (*Prol*. 261; 58). This makes it difficult to avoid the objections of those who interpret the task of the critique as distinct from the mission of transforming metaphysics into science. If Kant had a passing interest in that transformation, sceptics argue, he rather quickly gave it up.[14]

[13] Here, for example, we find the famous confession that 'David Hume was the very thing that many years ago first interrupted my dogmatic slumber' (*Prol*., 260; 57).

[14] The evidence concerning Hume's influence on the *Prolegomena* has shaped the views of generations of sceptically inclined readers of Kant's first *Critique*. It was at the centre of a heated dispute among early Kant scholars between the end of the nineteenth and the beginning

How are we then to resist the force of sceptical interpretations of the critical task?[15] One answer is to consider the successive development of Kant's system, suggesting that the unity of reason remains an unfinished systematic project that occupies Kant until the *Critique of Judgment*, where the purposive principle of reflective judgment eventually enables a unified account of the relation between the theoretical and practical use of reason.[16] The problem, on the one hand, is that apart from presenting a slightly stylized version of the three critiques (whereby *The Critique of Pure Reason* is about the conditions of possibility of theoretical knowledge, *The Critique of Practical Reason* is about the conditions of possibility of practical action, and *The Critique of the Power of Judgment* is about the relation between these two), the argument fails to do justice to the numerous references to

of the twentieth century (see amongst others Paulsen, *Immanuel Kant, Sein Leben und seine Lehre* (Stuttgart: Frommans, 1899); Erdmann, Benno, *Kants Prolegomena herausgegeben und historisch erklärt* (Leipzig: Leopold Voβ, 1878), LXXIX ff.; Fischer, Kuno, *Geschichte der neueren Philosophie*, vol IV, *Immanuel Kant und seine Lehre* (Heidelberg: Friedrich Bassermann, 1898), vol. 1, 217 ff. and 290 ff.; Vaihinger, Hans, *Commentar zu Kants Kritik der reinen Vernuft*, I (Stuttgart: Speman, 1881), 47 ff. and 340–348; and Riehl, Alois, *Der philosophische Kritizismus*, vol. 1 (Leipzig: Wilhelm Engelmahn, 1924), 308 ff. For a detailed reconstruction of the debate and its influence, see Gawlick, Günter, and Kreimendahl, Lothar, *Hume in der Deutschen Aufklärung. Umrisse einer Rezeptionsgeschichte* (Stuttgart-Bad Cannstatt: Frommann Holzboog, 1987), 189 ff.

[15] For a discussion of Hume's influence on the *Doctrine of Method* and on later writings, see already Bauch, Bruno, 'Parallelstellen bei Hume und Kant', *Kant-Studien*, vol. 19 (1914), 521–524; and later Löwisch, Dieter-Jürgen, 'Kants Kritik der reinen Vernunft und Humes Dialogues concerning natural Religion', *Kant-Studien*, vol. 56 (1965), 170–207. As far as the *Prolegomena* are concerned, an early commentator like Friedrich Paulsen already remarked that if it were not for the passages cited above, the influence of Hume on this work could be considered as marginal here as in the early Sixties. However, as Paulsen emphasizes, Kant's debt to Hume in these passages is expressed in no ambiguous terms and 'cannot be removed', raising the question of whether there had been a return to Hume at the time of the *Prolegomena*. See Paulsen, Friedrich, *Immanuel Kant, Sein Leben und seine Lehre* (Stuttgart: Frommans, 1899), 98 and 101 ff. More recent scholarship has emphasized that despite the superficial evidence, the period of Hume's clear influence on the thought of Kant should be dated at the beginning of the Sixties, as the Logik Blomberg also indicates. This is much earlier than the drafting of the *Prolegomena* and undermines interpretations that attribute to Kant a complete return to scepticism *after* the completion of the first *Critique*; more likely Kant was unsatisfied with certain aspects of it, including on questions of method, which are central to my interpretation. See on this issue the detailed study of Kreimendahl, Lothar, *Kant. Der Durchbruch von 1769* (Köln: Dinter, 1990) 83 ff., and also chapter 2 (*Zur Forschungslage*), 15–82. See also for a thorough discussion the review in Brandt, Reinhard, 'L. Kreimendahl, *Kant. Der Durchbruch von 1769*', *Kant Studien*, vol. 83 (1992), 100–111.

[16] See for readings to this effect, Allison, Henry 'The Gulf Between Nature and Freedom and Nature's Guarantee of Perpetual Peace', in *Proceedings of the Eighth International Kant Congress*, edited by Hoke Robinson (Milwaukee, WI: Marquette University Press, 1995), 37–49, at 37–38; Guyer, Paul, 'The Unity of Reason: Pure Reason as Practical Reason in Kant's Early Conception of the Transcendental Dialectic', *The Monist*, vol. 72 (1989), 139–167; and Nuzzo, Angelica, *Kant and the Unity of Reason*, cit. See also Freudiger, Jürg, 'Kants Schlußstein: Wie die Teleologie die Einheit der Vernunft stiftet,' *Kant-Studien*, vol. 87 (4) (1996), 423–435.

the unity of reason found in several earlier works.[17] On the other hand, those few authors who resist this interpretation and suggest that Kant's unified theory of reason is already present in earlier works, have been criticized for merely pointing out the functional analogies between theoretical and practical reason as parts of the same philosophical system but without really showing how an organic integration of these two uses has been achieved.[18] But if we assume that Kant's theory of the unity of reason was already complete by the time of the first *Critique*, why did he also refer to the unifying task as a project for the future rather than something that had already completed?[19]

To see the ambiguous status of the unity of reason in *The Critique of Pure Reason*, we need to turn to the description of metaphysics in its introductory pages. The fate of metaphysics is described here both in thoroughly negative and in surprisingly optimistic terms. On the one hand, the gloomy tone of Kant's remarks about the inevitability of defeat whenever reason tries to make progress on metaphysical questions makes it hard to see how it might be possible to resurrect that defunct science, without falling into the errors of predecessors. On the other hand, the *Critique of Pure Reason* sets itself the task of transforming the 'battlefield of these endless controversies' (*KrV*, A VIII; 99) that is now called metaphysics into a secure path in which reason can advance without fearing either dogmatic despotism or anarchical scepticism. The need for metaphysics, Kant emphasizes also in the *Prolegomena*, is linked to the 'interest of human reason in general' for which it is necessary to admit that 'a complete reform or rather rebirth of metaphysics, *according to a plan completely unknown before now*, is inevitably approaching' (*Prol*, 257; 54).[20]

In analysing these remarks, several interpretations of the first *Critique* insist on the role of the practical interest of reason, and on how, as Kant explains, the apparent restriction to the speculative use of reason brings with it an important extension in its 'absolutely necessary practical use' (*KrV*, B XXV; 114). Without such a restriction, Kant emphasizes, practical

[17] This has been pointed out in Kleingeld, Pauline, 'Kant on the Unity of Theoretical and Practical Reason', *The Review of Metaphysics*, vol. 52 (2) (1998), 311–339, who in turn argues that the unity of reason should be understood as a regulative ideal. See also Timmermann, Jens, 'The Unity of Reason—Kantian Perspectives', in *Spheres of Reason*, edited by Simon Robertson (Oxford: Oxford University Press, 2009), 183–198.

[18] See for this critique Guyer, Paul, 'The Unity of Reason: Rereading Kant.' Review of Kant and the Unity of Reason by S. Neiman, *The Philosophical Review*, vol. 106 (2) (1997), 291–295.

[19] Kleingeld, 'Kant on the Unity of Theoretical and Practical Reason', cit.

[20] Emphasis mine (italics).

reason could not venture outside the boundaries of sensibility without encountering the obstacles of speculative reason and without falling into contradiction with itself (*KrV*, B XXV; 114–115). But what form does the justification of the legitimacy of the practical use of reason take in the first *Critique*? How does the claim about the unity of reason help clarify the relation between critique and metaphysics? What concepts enable the achievement of systematic unity? And where does Kant find the philosophical resources to make his account of the unity of the system immune to the objections encountered by his metaphysical predecessors?

Recent literature has insisted on the importance of the 'unity of reason' for Kant's critical project, drawing attention to the systematic role of the ideas of reason. Many authors have argued that the purposive nature of ideas and the importance of realizing the highest good help us understand how Kant's critical mission could be understood as both 'negative' and 'positive'. On the one hand, the practical use of reason limits the wrongful extension of speculative to objects which are not given in sensible experience. On the other hand, it shows how understanding correctly the pure practical use of reason can ground belief in metaphysical concepts such as God, freedom, and the immortality of the soul.[21]

The aim of this book is to question this interpretation. My argument is that even though in the *Critique of Pure Reason* the unity of reason is achieved through the purposive function of the ideas of reason, the project ultimately fails to meet Kant's own critical standards. It fails because, as I hope to show, in the first *Critique* practical reason has no distinctive *domain* for its own legislation, and no necessary connection to *transcendental* freedom: this is something that only begins to appear in the *Groundwork*, is developed further in the *Critique of Practical Reason*, and informs Kant's analysis of purposiveness in the *Critique of Judgment*. It also fails because in the absence of that connection, Kant continues to relate the principle of purposiveness to the idea of intelligent design rather than to reason's distinctive practical normativity. Kant's return to the status of purposiveness, understood as normativity, in the context of the *Critique of the Power of Judgment* must be assessed in light of the problems that purposiveness as design faced in the first *Critique*.

[21] For a review and critique of constructivist interpretations that is different from mine, see Kinnaman, Ted, 'Problems in Kant's Vindication of Pure Reason', *Journal of the History of Philosophy*, vol. 39 (4) (2001), 559–580.

None of this should be surprising. When Kant was working on the *Critique of Pure Reason*, he did not anticipate writing a separate *Critique of Practical Reason* and another *Critique of the Power of Judgment*.[22] On the contrary, as he announced in the famous letter to Markus Herz dating back to February 1772, 'as far as my essential purpose is concerned, I have succeeded' and 'now I am in a position to bring out a critique of pure reason that will deal with the nature of theoretical as well as practical knowledge' (*Briefwechsel*, 132; 135). As the introduction to the first edition of the *Critique of Pure Reason* also emphasizes, Kant clearly thought at that point that there was 'not a single metaphysical problem' that had remained unsolved (*KrV*, A XIII; 101). The part of the first *Critique* where this project is brought to completion is the *Architectonic of Pure Reason*. The *Architectonic* is the only section of the book where reason in its complexity is analysed from the point of view of the organic connection between its theoretical and practical use. The explicit aim of the section is to illustrate in what way the practical and theoretical use of ideas are not only functionally analogous, but integrated through a principle of purposive unity that helps in the transition from nature to freedom.

Analysing how the project of the unity of reason develops in the first *Critique*, exploring the demands that trigger it and understanding the constraints it encounters, help us shed light on the radically new direction the project takes in Kant's later work. The pages of the *Architectonic of Pure Reason* are essential to see how the project of the unity of reason is executed in the first *Critique* but also to explain why Kant was later dissatisfied with it. This matters if we are interested in the evolution of Kant's thoughts, but it is also key to clear some ambiguities on the relationship between purposiveness and the idea of God, that shaped subsequent critiques of

[22] Not only does the first *Critique* lack any references to a new, forthcoming critique of practical reason but the *Groundwork of the Metaphysics of Morals*, published in 1785, explicitly rules out the need for one. As far as Kant was concerned, the task of clarifying the practical use of reason and the foundation of metaphysics as a science was all contained in the pages of the first *Critique* discussing the *Canon of Pure Reason*. For an instructive discussion of the genealogy of the *Critique of Practical Reason*, see Gonnelli, Filippo, *Guida alla lettura della Critica della ragion pratica di Kant* (Rome and Bari: Laterza, 1999), 3–24. As far as the *Critique of Judgment* is concerned, the work was only announced to Reinhold in 1787 under the title of a *Critique of Taste*. Here too the different title from the final edition and the division of the latter in *Critique of the faculty of aesthetic judgment* and *Critique of the faculty of teleological judgment* show that the problems Kant envisaged were rather different from the ones examined in the first *Critique*. See for a useful discussion of the genealogy of the work the editor's introduction in Kant, Immanuel, *Critique of the Power of Judgment* (Cambridge: Cambridge University Press, 2000), xiii–xxii.

Kant's work, and defined the German philosophical tradition that was informed by it.

* * *

This book can be divided into three parts. The first part, devoted to the general problem of the unity of reason, examines existing interpretations of the question and defends the relevance of the *Architectonic* to explain the relation between the theoretical and practical uses of reason. The first chapter highlights the centrality of the principle of purposiveness for the project of unification and places Kant's remarks on the architectonic in historical context, reflecting in particular on the relation between Kant and the architectonic projects of Leibniz, Baumgarten, Wolff, and Lambert. It shows how Kant appropriates existing historical sources to advance his own project of the foundation of metaphysics as a science and to reflect on a unified vision of philosophy which includes a *scholastic* and *cosmic/cosmopolitan* perspective. With this distinction, Kant emphasizes the importance of systematicity and purposiveness as features of human reason and appeals to the need for a purposive architectonic principle to integrate reason's speculative cognitions with its practical interest. This concept of purposiveness which orients the *Doctrine of Method*, the chapter argues, has been overlooked in many interpretations, but is helpful to restore the centrality of the *Architectonic of Pure Reason* in Kant's overall critical system.

The next chapter examines the opening paragraphs of the *Architectonic of Pure Reason* and compares Kant's understanding of the architectonic as 'the art of the system' to the projects of some of his predecessors, including Leibniz, Wolff, Baumgarten, and especially Lambert. Analysing the analogies and differences between Kant's conception of architectonic and those of his historical interlocutors helps illuminate the relation between 'ideas' and 'ends of reason' to which Kant appeals in this section and in the *Logic* lectures of the same period. The chapter concludes by suggesting that to better understand the problem and systematic implications of the principle of purposiveness in the first *Critique*, we must examine how the *Architectonic* integrates and completes Kant's account of the theoretical and practical use of ideas that we find in earlier parts of this work.

The second part of the book is devoted to the analysis of the unity of reason from a theoretical perspective. Chapter 3 offers an interpretation of the relation between 'ideas' and 'ends of reason' rooted in the analogy between 'system' and 'organism' that Kant invokes in the *Architectonic*. By identifying some continuities and discontinuities between Kant's position here and the

one we find in the introduction to the *Critique of Judgment*, we are better able to see the difference between Kant's justification of the notion of purposivenesss in the two works. By focusing in particular on Kant's theory of the 'germs' (*Keime*) to explain the development of organic beings, we are able to see the links between the first *Critique* and Kant's early philosophy of biology, particularly in the writings on the determination of the concept of human race. The chapter shows how the function of the principle of purposiveness at this point of the *Critique* is still connected to an idea of purposiveness as design, and derived from a preformist theory of development inspired by Leibniz and Bonnet. The same account is present throughout other writings of the same period, especially in Kant's essay on universal history, and the comparison is particularly useful to link Kant's remarks on the importance of a purposive conception of history to his requirements of systematic unity in the *Architectonic*.

Chapter 4 seeks to develop a further understanding of the transcendental principle of purposiveness at the heart of the *Architectonic* by exploring its roots in the function and use of *ideas* in the first *Critique*. Despite the absence of a systematic proof showing the legitimacy of purposive principles (i.e. a *deduction* in Kant's terminology) it is possible to connect Kant's remarks on schematism in the *Architectonic* to his observations on the legitimate use of ideas in the *Appendix to the Transcendental Dialectic*. The chapter explores the link by analysing the function of ideas and their relation to the concepts of the understanding, and by connecting Kant's remarks on the hypothetical use of ideas to their logical function, and to the relation between logical and transcendental principles. I suggest that the *Appendix* is best read as an (aborted) attempt to offer the same sort of deduction of the principle of purposiveness that we also find at the heart of the unification project of the third *Critique*. But I also try to show that the difficulties with identifying the exact nature of the relation between a principle of purposiveness and the assumption of a purposive order in nature threatens to explode the distinction between critique and metaphysics on which the first *Critique* is seemingly founded.

Chapter 5 continues the analysis of the ideas of reason in relation to the problem of systematicity and purposiveness central to the *Architectonic of Pure Reason*. It distinguishes more explicitly between purposiveness as design and purposiveness as normativity, and examines the transcendental deduction of ideas in its relation to the assumption of a purposive order of nature and the implications of the latter for the physico-theological proof of the existence of God. The chapter focuses on Kant's arguments on this issue

in the *Dialectic of Pure Reason* but also in the various lectures on the philosophy of religion held around the same period. It concentrates especially, on the one hand, on Kant's assessment of Hume's aversion to purposiveness, and on the other hand, on his position on Wolff's attempt to revive Leibnizian theodicy. The chapter concludes that although Kant criticizes the validity of the physico-theological proof, his remarks on it remain ambiguous given Kant's references to a 'law of reason' which imposes the necessity to admit more than just the abstract possibility of a systematic unity of the ends of nature. The nature of that necessity is not only speculative but also practical, related to the moral destination of human beings, a point that the third part of the book analyses in greater detail.

The third part of the book explains how Kant's claims about the unity of the system in the *Architectonic* help us better understand the relation between the theoretical use of ideas in the *Appendix* and their practical use in the *Canon of Pure Reason*. In particular, Chapter 6 investigates the practical use of ideas in light of the *Architectonic*'s remarks on the unity of the systems of nature and freedom. As already emphasized, Kant here insists on the relevance of a 'schematic' relation between theoretical cognitions and the practical interests of reason, but to properly understand this emphasis on 'the practical' it is important to turn to the relationship between the concept of purposiveness and the ideas of reason in the *Canon of Pure Reason*. The chapter examines that relation with particular emphasis on Kant's concept of freedom. It argues that although Kant insists here that the practical use of ideas can satisfy the demand for systematic unity central to the *Architectonic of Pure Reason*, the fact that Kant does not distinguish between practical and transcendental freedom, that practical freedom is equated with the *liberum arbitrium* and that reason in its practical use has no domain of its own (unlike in the third *Critique*), complicates his argument in favour of the purposive foundation of the system based on reason's normativity.

Chapter 7 continues the investigation of the status of systematic unity on which the *Architectonic* relies and explores further Kant's claim that systematic unity can be found in the practical use of reason, despite the absent justification of a transcendental concept of freedom. It is argued that to understand Kant's claim here we need to turn to the relation between 'ideas' and the Platonic understanding of the 'good' to which Kant draws attention in explaining the practical causality of the pure concepts of reason (as opposed to the understanding). The experience of the 'good', Kant argues, is only made possible by ideas, and it is on this experience of the good as it is

reflected in humans' construction of social and political institutions, that the possibility of unity in the system can ultimately be shown. The reasons for this claim, however, are not to be found in the openness and flexibility of Kant's system and the fact that it is compatible with a vindication of reason as a project of construction, as many interpretations of the first *Critique* typically insist. It is rather to be found in Kant's analysis of the highest good as the synthesis of virtue and happiness, and on the assumption of purposiveness as design on which the idea of nature as a system of ends is grounded.

The plausibility of the interpretation advanced in the final part of the book is further illustrated by examining Kant's endorsement of the link between the analysis of nature as a system of ends and the physico-theological proof of the existence of God with which Kant concludes the *Canon of Pure Reason*. Comparing Kant's remarks on the system of nature and freedom to Leibniz's theory of the *regnum gratiae* to which the *Canon* refers, helps explain the implications for the critical system of Kant's explicit endorsement of transcendental theology at the end of the *Canon of Pure Reason*. The idea of physico-theology that Kant had already examined with relation to the speculative use of ideas, resurfaces here as a result of the demand for systematic unity from the point of view of the necessity to promote the highest good in the world. Kant argues that the demands of reason in its practical use prove the possibility of a purposive order of nature without the existence of which reason could not promote and realize its essential ends in the natural world. The architectonic unity of the system is thus given by our knowledge of the final end of practical reason that, as Kant argues in the *Architectonic*, guarantees a passage from the realm of nature to that of freedom.

I conclude the book by arguing that the cost of this unification, the price to pay for the architectonic unity of the initially separate systems of nature and freedom, is a transcendental theology which implicitly commits reason to metaphysical assumptions about the order of nature which its critical part has explicitly ruled out. This explains why Kant continued to be disturbed by Hume immediately after the publication of the first *Critique*, and why transcendental freedom became the main preoccupation of the *Critique of Practical Reason*. It also explains why Kant retracted the defence of physico-theology and converted it to ethical theology in the *Critique of the Power of Judgment*, a text where the problem of purposiveness is carefully distinguished from the use of ideas, and where we find a separate faculty responsible for the use of purposive principles: the faculty of judgment. Of

course, Kant does not explicitly withdraw any part of the first *Critique* later on; his revisions affect mainly the *Transcendental Analytic*, and the clarifications or complements offered in the second edition seem broadly in line with the framework of the first. But Kant was aware of the tensions in the work, and sought to address them by continuing to develop his account of purposiveness and by returning to the project of unifying reason. Understanding the demand for systematic unity and its execution in the *Architectonic of Pure Reason* is crucial to make sense both of how that project developed in the first *Critique* and of the need to return to a reconfiguration of the system in subsequent works. Without such reconfiguration, the unity of reason discovered at the end of the *Architectonic* would have turned Kant's allegedly most critical work into the most sophisticated defence of dogmatic metaphysics.

1
Scholastic and Cosmic Philosophy

1. Interpreting the Architectonic of Pure Reason

The section dedicated to *The Architectonic of Pure Reason* has been until recently among the least read parts of Kant's first *Critique*. Traditionally, those few authors who thought it worth commenting on these pages seem to have all agreed with Schopenhauer's early judgment that its presence in the *Critique of Pure Reason* is rather due to Kant's '*Liebe für architektonische Symmetrie*' than adding anything worth exploring to the rest of this major work.[1] As one of the early commentators of the *Critique of Pure Reason* has it, the *Architectonic* is only of 'slight scientific importance' and merely satisfies an interest for 'the personality of Kant'.[2]

More recently, readers of the *Doctrine of Method* have not been as harsh on Kant's architectonic project.[3] But while emphasizing the importance of this text for a proper appraisal of the systematic ambitions of the first *Critique*, very few have explicitly analysed the contribution it makes to

[1] Schopenhauer, Arthur, 'Kritik der kantischen Philosophie. Anhang', in *Sämtliche Werke*, vol. 4, edited by P. Deussen (Munich: R. Piper, 1924), 610–625.

[2] Kemp Smith, Norman, *A Commentary to Kant's Critique of Pure Reason* (New York: Humanities Press, 1962), 579–582.

[3] The majority of sympathetic treatments are in German. See Heimsoeth, Heinz, *Transzendentale Dialektik. Ein Komentar zu Kants Kritik der reinen Vernunft, Vierter Teil, Die Methodenlehre* (Berlin: Walter de Gruyter, 1971); Höffe, Otfried, 'Architektonik und Geschichte', in *Immanuel Kant: Kritik der reinen Vernunft*, edited by Georg Mohr and Marcus Willaschek (Berlin: Akademie Verlag, 1998), 616–645; Fulda, Hans Friedrich and Jürgen Stolzenberg (eds.), *Architektonik und System in der Philosophie Kants* (Hamburg: Felix Meiner Verlag, 2001); Goy, Ina, *Architektonik oder die Kunst der Systeme* (Paderborn: Mentis, 2007). See also Di Donato, Francesca, 'Conoscenza e pubblicità del sapere. Le condizioni della repubblica scientifica a partire dall'Architettonica della ragion pura di Kant', *Bollettino telematico di filosofia politica* (2005). For discussions in English, see Manchester, Paula, 'Kant's Conception of Architectonic in Its Historical Context', cit. and Manchester, Paula, 'Kant's Conception of Architectonic in its Philosophical Context', *Kant Studien*, vol. 99 (2) (2008), 132–151; Tonelli, Giorgio, *Kant's Critique of Pure Reason within the Tradition of Modern Logic* (Zurich: Olms, 1994), Gava, Gabriele, 'Kant's Definition of Science in the Architectonic of Pure Reason and the Essential Ends of Reason', *Kant-Studien*, vol. 105 (3) (2014), 372–393.

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addressing the problem of the unity of reason which, as I will argue in what follows, is where the real interest of those systematic ambitions lies.[4]

The neglect of this part of the first *Critique* is difficult to justify. Kant defines the *Architectonic* as 'the art of constructing a system' and argues that since it is only systematic unity that turns ordinary cognition into science, architectonic is the 'doctrine of that which is scientific in our cognition in general' (*KrV*, A 832, B 860; 691). Yet, this concern for the scientific character of knowledge in general has often been dismissed as the imposition of a structure with 'baroque' character which, as one influential commentator put it, 'though it may cause us unnecessary trouble and give us irrelevant pleasure, we can in the end discount without anxiety'.[5] But to content oneself with this interpretation is to display a surprising lack of engagement with what Kant perceived as one of the driving forces of the entire critical project: understanding the nature of reason, the legitimate use of its principles, and their contribution to articulating the conditions of possibility of both theoretical and practical experience.

The philosophical interest of the *Architectonic* lies in its contribution to the construction of a unitary system of reason which realizes the mission of the *Transcendental Doctrine of Method*. The metaphor of the building with which Kant compares the work of reason is crucial to the perspective of the critical project, engaged in a dual struggle against scepticism and against dogmatism. That project, as Kant underlines, ought to rely on sufficiently solid materials, and on the combination of the materials in conformity with a plan adequate for human needs. At a superficial reading, the reference to the needs and interests of reason suggests that practical considerations are all that motivate Kant from the *Doctrine of Method* onwards. But on closer inspection, we soon realize that the task of the *Doctrine of Method* is not just

[4] Graham Bird's otherwise excellent *The Revolutionary Kant: A Commentary on the Critique of Pure Reason* (Chicago, IL: Open Court, 2005) barely mentions the *Architectonic* and seems to agree with Smith's judgment that the role of the *Architectonic* is merely to provide a summary of Kant's findings in earlier parts of the *Critique*. For more hostility to Kant's architectonic, see Weldon, Thomas Dewar, *Kant's Critique of Pure Reason*, 2nd ed. (Oxford: Clarendon Press, 1958); Wolff, Robert Paul, *Kant's Mental Activity: A Commentary to the Transcendental Analytic of the Critique of Pure Reason* (Oxford: Oxford University Press, 1963); Bennett, Jonathan, *Kant's Dialectic* (Cambridge: Cambridge University Press, 1974).

[5] See Strawson, Peter, *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason* (London: Routledge 1966), 23–40. Strawson reflects on this issue in the context of criticizing the intricate system of partitions and connections that Kant imports from traditional logic, observing that '[o]ver and over again the same pattern of divisions, distinctions and connections is reproduced in different departments of the work. The artificial and elaborate symmetry of this imposed structure has a character which, if anything in philosophy deserves the title of baroque, deserves that title.'

to promote the practical ends of reason. Its goal, as Kant puts it, is the 'determination of the formal conditions of a complete system of pure reason' (KrV, A 707–708, B 735–736; 627).

This definition of the task of the *Doctrine of Method* as the construction of a 'complete system of pure reason' opens two interesting lines of enquiry. The first is that a system of pure reason is not achievable with a cumulative method that simply piles up the 'materials' required for human cognition. What we need further is a rational plan necessary to the execution of the unification task. A *Doctrine of Method*, argues Kant, is indispensable to distribute the materials of reason compatibly with its needs, covering not just the transcendental conditions of possibility of experience but also the particular circumstances, interests and ends of the experiencing subject.

The second interesting aspect is the nature of the plan that the *Doctrine of Method* needs for the execution of the unitary project. While that plan ought to be in harmony with reason's practical interest, it is clearly not reducible to it. The task of the *Doctrine of Method* is to analyse the conceptual tools through which the system of reason can be considered as a *unitary whole*, specifying the relationship between its material body of knowledge and the ends that these materials ultimately serve. The interest in systematic unity is therefore theoretical *and* practical at the same time.

Such remarks on the rational plan necessary to the complete system of pure reason place the project of the *Doctrine of Method* in direct continuity with the remarks on the transformation of metaphysics to science that we find in the early pages of the *Critique*. There Kant explained what reason strives for, and how it can aspire to achieve it. The challenge that the *Doctrine of Method* puts forward is how to combine the different elements of the *Transcendental Aesthetic*, *Analytic* and *Dialectic* with the analysis of the nature of reason and the drive to systematic unity with which Kant begins the critical project. But while the *Doctrine of Method* refers to the metaphor of the building characteristic of previous seventeenth- and eighteenth-century philosophy to discuss the relation between the critical conception of experience, on the one hand, and the subjective demands of the experiencing subject, on the other hand, it does not really supply a positive account of their integration.

That positive account is given in the *Architectonic of Pure Reason*. To understand how Kant in these pages moves beyond the generic repetition of statements like the ones we find in the early pages of the first *Critique* (i.e. about both the modesty and grandeur of reason), it is important to analyse how the *Architectonic* reflects on the nature of philosophy taken as a holistic

enterprise. The very title of *Architectonic* given to the section explicitly refers to the constructive mission of the *Doctrine of Method*, to the importance of an architectonic plan organizing the materials of the building work and orienting the whole structure of reason. But to clarify what is unique to the way in which the *Architectonic* seeks to execute this task, Kant offers his own re-interpretation of an old dispute concerning the nature and role of philosophical enquiry, based on two different ways of understanding the mission of philosophy in the system of sciences: a scholastic and a cosmic one.

2. The Unity of the System in the Scholastic Definition of Philosophy

In the *Architectonic of Pure Reason*, Kant provides two definitions of philosophy, both of which are crucial to understanding the relationship between the practical interest of reason and the demand for unity in the system. The first is what he calls the 'scholastic' definition. According to this definition, philosophy constitutes 'the system of all philosophical cognition' and aims to achieve the logical perfection of knowledge (KrV, A 838, B 866; 694).[6] In addition to the *Critique of Pure Reason*, some of the most important references to this definition of philosophy can be found, among others, in the *First Introduction to the Critique of the Power of Judgment* (*KUEE* 20: 195; 3), in the *Critique of the Power of Judgment* (*KU*, 5: 171; 59), and in the essay *What real progress has metaphysics made in Germany since the time of Leibniz and Wolff* (*FM*, 261; 354–355). The goal of philosophy under this scholastic definition is to provide scientific foundation to the concept of a system of cognitions with no other aim but to search for its unity (*KrV*, A 838, B 866; 694). In order to reach this goal, philosophy needs a sufficiently rich amount of rational cognitions and a correct connection of those within a system. This ability is also at the heart of what Kant calls, the 'theoretical' use of reason', i.e. the cognition a priori as necessary that 'something is' (*KrV*, A 633, B 661; 585), and which becomes 'speculative' if it 'pertains to an object or concepts of an object to which one cannot attain in any experience' (*KrV*, A 634, B 662; 585). As Kant clarifies in the *Architectonic*, a

[6] 'Now all rational cognition is either cognition from concepts or cognition from the construction of concepts; the former is called philosophical, the latter mathematical' (KrV, A837, B865; 693).

system is nothing else but the 'unity of several cognitions according to an idea' (*WL*, 798; 258–259, see also *LJ*, 24; 537 and *KrV*, A 832, B 860; 691).

The question at the heart of philosophy in its scholastic definition is a purely taxonomic one, concerning the organization of cognitions within a science and of various sciences within a system. Kant identifies in the 'idea' the crucial conceptual tool through which it is possible to confer unity to a multiplicity of cognitions, and distinguishes between two different ways of organizing cognitions: as an aggregate and as a system. For Kant, it is precisely this distinction that enables a proper understanding of the contrast between *common sense knowledge* and *science*, a contrast which is in turn structured around the analysis of the relation between the whole of a body of knowledge and its parts. In the first case, that of common-sense knowledge, we are in the presence of an aggregate where the parts exist with no coherence and internal homogeneity. In the second case, that which we call science, we are in the presence of systematic integration rather than a contingent aggregation of a given body of knowledge. Only systematic unity, Kant clarifies, is able to turn common-sense knowledge (*Wissen*) into science (*Wissenschaft*), by bringing an aggregate of elements to take the coherent form of a system. Such a system in turn reflects the idea of a whole which precedes its parts, unlike common-sense knowledge where the parts precede the whole (*KrV*, A 832, B 860; 691).

The scientific idea of the whole of knowledge is not the same as the contingent aggregation of the sum total of the elements that constitute it. Cumulative knowledge where cognitions are arbitrarily brought together without an understanding of the role of each of them in the system and without a proper understanding of their place in relationship to the whole, is not the same as science. In the case of aggregative knowledge every new feature is added to what is already available without the idea of the whole; in the case of systematic knowledge we have a series of principles and consequences where the parts are called members because each of them can only be properly conceived in relationship to the others (see also *MM*, 747; 109). A 'science' deserving of that name is therefore for Kant not reducible to the availability of a series of cognitions, be they rational or sensible, a priori or empirical, but requires a principle of their organic relation and functional systematization.

Taken at face value, Kant's observations here add very little to the eighteenth-century methodological debate that the first *Critique* inherited from the well-known works of Wolff, Crusius, Baumgarten, and Lambert.[7]

[7] For detailed early studies of Lambert's influence on Kant, see Baensch, Otto, *Johann Heinrich Lamberts Philosophie und seine Stellung zu Kant* (Tübingen: Mohr, 1902) and Riehl,

For all these philosophers, it was clear that any rational cognition could not be merely added to an existing body of knowledge, but had to acquire its place in relationship to the whole system of sciences. It was necessary to start with the system, with the idea of the whole in order to assign to every new fragment its role in any given science.[8] As this passage from the Alethiology in Lambert's *Neues Organon* clarifies:

> We consider here the entire system of all the *concepts*, *propositions* and *relationships* that are always possible, as already connected, and we consider all that we already know about it as parts and individual fragments of this system, because in this way, every time that we find new fragments and we want to connect them with those that have already been found, we have in front of us the map of the entire system and we can then examine each single fragment.[9]

It seems fair to say that as far as the scholastic definition of philosophy is concerned, the *Critique of Pure Reason* makes no original contribution to the question of method as Kant inherits it from his rationalist predecessors. The *Critique of Pure Reason* owes to Lambert the very term of 'architectonic'[10] and to the philosophy of Wolff and the Wolffian school the

Alois, *Der philosophische Kritizismus, vol. 1* (Leipzig: Wilhelm Engelmahn, 1924). For a recent discussion of the relation between Kant and Baumgarten on the *Architectonic*, see Switzer, Adrian 'The Traditional Form of a Complete Science: Baumgarten's Metaphysica in Kant's "Architectonic of Pure Reason"', *Philosophica*, vol. 44 (2014), 149–164. For Kant and Crusius, see Gava, Gabriele 'Kant and Crusius on Belief and Practical Justification', *Kantian Review*, vol. 24 (1) (2019), 53–75. For Kant and Wolff, see De Boer, Karin, 'Transformations of Transcendental Philosophy: Wolff, Kant, and Hegel', *Hegel Bulletin*, vol. 32, (1–2) (2011), 50–79 and Gava, Gabriele 'Kant, Wolff and the Method of Philosophy', *Oxford Studies in Early Modern Philosophy*, vol. 8 (2018), 271–303. For an excellent recent monograph sketching the links betweeen Kant's project and the metaphysics of his predecessors, see De Boer, Karin, *Kant's Reform of Metaphysics: The Critique of Pure Reason Reconsidered* (Cambridge: Cambridge University Press, 2020).

[8] For the presentation of his *Architektonik* to Kant, see Lambert's letter from 13 November 1765, in *Briefwechsel*, 52; 77–80.

[9] 'Wir betrachten demnach hier das ganze System aller Begriffe, Sätze und Verhältnisse, die nur immer möglich sind, als bereits in seiner Verbindung und Zusammenhange, und sehen das, so wir etwann bereits davon wissen, als Theile und einzelne Stücke dieses Systems an, weil wir auf diese Art, so oft wir neue Stücke finden und mit den bereits gefundedenenzusammenhängen wollen, den Grundriß des ganzen Gebäudes vor Augen haben, und jede einzelne Stücke darnach prüfen können.' See Lambert, Johann, *Neues Organon* (Leipzig: Wendler, 1764), vol. 1, 538, my translation.

[10] In the preface to his *Anlage zur Architektonik*, Lambert describes this as 'durchaus aufs neue vorgenommen Untersuchung der metaphysischen Grundlehren'. See Lambert, Johann Heinrich, *Anlage zur Architektonik*, in *Philosophische Schriften*, vol. III, edited by H.W. Arndt (Darmstadt, 1965), III. However, as Arndt argues in the introduction to Lambert's writings, the term was used before also by Wolff and Baumgarten, who already spoke of '*scientia*

attention to the systematic and methodological aspects of human knowledge.[11] Kant has no trouble acknowledging this debt. Those who reject Wolff's method, he argues in the first *Critique*, also reject the 'procedure of the critique of pure reason' and cannot possibly aim at anything other than 'to throw off the fetters of science altogether, and to transform work into play, certainty in opinion, and philosophy into philodoxy' (*KrV*, B XXXVII; 120). Methodological rigour, the relevance of a systematic analysis of experience and the separation and reunification of the elements that constitute theoretical cognition, are all features that the first *Critique* inherits from its predecessors.

However, while emphasizing Kant's debt to the metaphysical tradition he inherited, it is important not to lose sight of the differences. As Ernst Cassirer explains, Kant, like many authors in the eighteenth century, tried to replace the 'esprit de système', characteristic of much previous philosophical thought, with an '*esprit systématique*' which sought to analyse reality without having to make recourse to dogmatic metaphysics. The philosophical science of the Enlightenment, Cassirer shows, ceases to compete with Descartes and Malebranche, with Wolff and Spinoza 'for the prize of systematic rigour and completeness'.[12] Reason is neither the territory of eternal truths, available to both human beings and to the supreme creator, nor a complex of innate ideas given before any sensible experience and reflecting the true essence of objects.

This complex relation to the preceding philosophical tradition brings new tensions to the fore. Can one both emphasize the contradictions and

architectonica' as a synonym for 'ontology'; see his remarks in Lambert, *Anlage zur Architektonik*, *Einleitung*, cit. XIII–XXVI. For a detailed study of Lambert's influence on Kant, see Baensch, Otto, *Johann Heinrich Lamberts Philosophie und seine Stellung zu Kant* (Tübingen: Mohr, 1902) and Riehl, Alois, *Der philosophische Kritizismus, vol. 1* (Leipzig: Wilhelm Engelmahn, 1924).

[11] See *KrV*, B XXXVI; 119–120: 'In someday carrying out the plan that criticism prescribes, i.e., in the future system of metaphysics, we will have to follow the strict method of the famous Wolff, the greatest among all dogmatic philosophers, who gave us the first example (an example by which he became the author of a spirit of well-groundedness in Germany that is still not extinguished) of the way in which the secure course of a science is to be taken […] for these reasons he had the skills for moving a science such as metaphysics into this condition, if only it had occurred to him to prepare the field for it by a critique of the organ, namely pure reason itself: a lack that is to be charged not so much to him as to the dogmatic way of thinking prevalent in his age; and for this the philosophers of his as of all previous times have nothing for which to reproach themselves.' See for an early discussion of the relationship between Wolff and Kant, A. Riehl, *Der philosophische Kritizismus*, cit. 206–216. See also Gava, 'Kant, Wolff and the Method of Philosophy', cit.

[12] Cassirer, Ernst, *The Philosophy of the Enlightenment* (Princeton, NJ: Princeton University Press 1979), 7.

fallibility of reason and celebrate the coherence of its system of knowledge? Can reason both advocate the necessity of transcendental principles and decry the chimeras of metaphysics? How can reason be at the same time a prisoner of self-generated illusions and a source of self-liberation? The opening pages of the second edition of the *Critique of Pure Reason* reflect precisely on these dilemmas. Kant argues here that the coherence of the system, its organic nature and its capacity for self-correction, are not the result of 'self-conceit' but guaranteed from its own method of proceeding. The certainty of the results, he suggests, is given through a reflexive process in which reason moves backwards and forwards, from the parts to the whole and from the whole to the parts. This 'whole' is in turn 'given in itself through the final intention of pure reason in the practical (*durch die Endabsicht derselben im Praktischen gegeben*)'. The coherence of the project is preserved because 'the attempt to alter even the smallest part directly introduces contradictions not merely into the system, but into universal human reason' (*KrV*, B XXXVIII; 120).

The idea of the whole necessary to the unity of the system is therefore guaranteed by the presence of the final intention (*Endabsicht*) of reason in its practical use. Such an assertion is hard to square with interpretations of the requirement of systematic unity as something that has a bearing on Kant's philosophy only because of his interest in the practical use of reason.[13] The point Kant makes in this passage is not limited to analysing the idea of the whole as it bears on reason's practical interest. He is interested in how the idea of the whole to which *we gain access* through the practical use of reason guarantees the systematicity of knowledge *in general*. What we find in these lines is not a mere confirmation of Kant's interest for the logical perfection of knowledge *complemented by* an appeal to the moral attitude of reason. The problem is wider and deeper, both for the context in which it emerges and for the peculiarity of Kant's reasoning. We are in the presence of a justification of the *Critique*'s entire method of proceeding, both from an analytical and from a synthetic perspective. On the one hand, the possibility of referring to the logical perfection of knowledge is guaranteed by the unity of parts in the idea of the whole. On the other hand, it is only possible to systematically integrate the idea of the whole in so far as we know that it is 'given' to us in the final end of reason, through its practical

[13] See for a defence of this interpretation, Gava, Gabriele, 'Kant's Definition of Science in the Architectonic of Pure Reason and the Essential Ends of Reason', *Kant-Studien*, vol. 105 (3) (2014), 372–393.

use. But how can the practical use of reason bring to completion an operation which only relates to the issue of the complete unity of cognitions from a theoretical perspective? To answer these questions, it is important to analyse the cosmic definition of philosophy, which complements the scholastic one.

3. The Unity of the System in the Cosmic Definition of Philosophy

According to its cosmic definition, philosophy is:

> The science of the relation of all cognition and of all use of reason to the ultimate end (*Endzweck*) of human reason, to which, as the highest, all other ends are subordinated, and in which they must all unite.
>
> (*KrV*, A 839, B 867; 694–695; *LJ*, 25; 538)

With the reference to the ultimate end of human reason, understood as the highest end in relationship to which any other end is understood, we are already beyond the merely scholastic definition of philosophy. Kant is here interested especially in reason's practical dimension. However, this practical interest of reason is not extrinsic to Kant's theoretical demand for systematic unity but contributes to the acquisition of scientific status when reason's cognitions are taken as a whole. How does Kant make the transition?

The question of the unity of reason already emerges, as we saw, in the *Introduction* to the first *Critique*. Here Kant mentions the concept of *Endabsicht* to highlight how the practical interest of reason enables us to think about the idea of the whole necessary to the scholastic rigour of philosophy. The distinction between *Endabsicht* and *Endzweck* (where the latter has stronger practical connotations) is crucial to explain the relationship between the idea of the whole and the guarantee of systematic unity. That same distinction also shapes Kant's articulation of the three fundamental questions, around which both the speculative and the practical interest of reason is centred: 'What can I know? What should I do? What may I hope?' (*KrV*, A 805, B 833; 677). Although Kant does not explicitly mention the 'final end' of reason in relationship to these questions, the practical interest of reason is clearly brought out in the lectures on metaphysics and logic that Kant was holding around the same time. Here the three questions mentioned above are supplemented by a fourth one, considered as the most

important: 'was ist der Mensch?' (LM, 28: 533–534; 301; *LJ*, 25; 538). Such a question, Kant argues, is asked by philosophical anthropology and stands at the heart of all previous ones. It summarizes the demands of metaphysics, morality, and religion, and constitutes the 'field' to which philosophy as a complete system refers.[14]

What matters to Kant in his cosmopolitan definition of philosophy is how the latter both integrates and completes the discipline's scholastic aspirations. Kant introduces the cosmopolitan meaning of philosophy as a 'doctrine of wisdom' (*Lehre der Weisheit*), a discipline which raises different, though related, questions from philosophy in its scholastic understanding. In the *Jäsche Logic*, we find the cosmopolitan concept used almost as a synonym of the cosmic one (*Weltbegriff*) but the fact that Kant treats 'cosmopolitan' and 'cosmic' as synonyms is a departure from the tradition. It shows that although in the *Critique of Pure Reason* and in the lectures on logic held during the same years only the cosmic definition of philosophy is mentioned, Kant was already working with an understanding of philosophy that was slightly different from the logical and metaphysical tradition that inspired his reflections on the *Architectonic*. It was an analysis of the mission of philosophers open to considering the distinctive contribution of their moral and political endeavours to the systematicity of human knowledge.

To see why, consider how Kant revised the definition of philosophy provided by Georg Meier in his *Auszug aus der Vernunftlehre*, a text that, as is well-known, Kant regularly used as reference manual for his lectures on logic. According to Meier, 'cosmic wisdom (*Philosophia*) is a science of the universal character of things in so far as they can be known without belief' (*Nachlaß*, 51).[15] In the *Blomberg Logic*, Kant makes the following remark on Meier's definition:

[14] See in the *Lectures on Metaphysics* published by Pölitz: 'The field of philosophy in the cosmopolitan concept sense *<in sensu cosmopolitico> can be brought down to the following questions: 1) What can I know? Metaphysics* shows that. 2) What should I *do? Moral philosophy* shows that. 3) What may I *hope? Religion* teaches that. 4) What is *man? Anthropology* teaches that.' (LM, 28: 533–4; 301). The original German reads: 'Das Feld der Philosophie *in sensu cosmopolitico* läßt sich auf folgende Fragen zurückbringen: 1) Was kann ich wissen? Das zeigt die Metaphysik. 2) Was soll ich thun? Das zeigt die Moral. 3) Was darf ich hoffen? Das lehrt die Religion. 4) Was ist der Mensch? Das lehrt die Anthropologie'. The text in the *Lectures on Logic* differs so little from that in the *Lectures on Metaphysics* that it has led some authors to consider it to be a note from the same text, copied by Pölitz in two different places. See on this issue the *Introduction* to *Kant's Lectures on Metaphysics* in *The Cambridge Edition of the Works of Immanuel Kant*, edited by K. Ameriks and J.M. Young (New York: Cambridge University Press, 1997), XXX–XXXI.

[15] My translation: 'Weltweisheit ist eine Wissenschaft der allgemeinen Beschaffenheiten der Dinge, in so ferne sie ohne Glauben erkannt werden.'

> Our author's definition, which he gives for philosophy, is the following: philosophy, he says, is a science of the universal characters of things, insofar as they are known without belief. It is also customary to say: *philosophia est scientia, quae circa rerum rationes versatu*; but because philosophy occupies itself not only with the grounds of things but also frequently simply with their characters, one easily sees that this definition is incorrect. Philosophy involves a higher use of reason [;] but it is hard to determine where philosophy begins and where it ends, just as it is hard to determine the boundary, e.g., between poverty and wealth. (LB, 30; 18)

Philosophy, Kant argues much later in the *Dohna-Wundlacken Logic*, is a doctrine of wisdom. Wisdom is 'agreement with the final ends of all things. All other cognitions have their value only as means—only philosophy leads to the ultimate final end—wisdom (*letzten Endzweck*). (The doctrine of the highest good.)' (LD, 698; 436).

Analysing the various notes in the lectures on logic, what emerges very clearly is that while Kant followed Meier's terminology as far as the definition of philosophy as 'Weltweisheit' was concerned, he also modified it profoundly. The difference between philosophy in its cosmic sense and philosophy in its scholastic sense is that the latter is in fact merely a 'doctrine of ability' (*Lehre der Geschicklichkeit*) (*WL*, 798; 17, *LJ*, 24; 20). The mathematician, the naturalist or even the logician, Kant argues, might well take part in this *Lehre der Geschicklichkeit*. But for all the progress of the former in rational cognition and for all the innovations of the latter in philosophical knowledge they will always remain mere artists of reason (*Vernunftkünstler*) (*KrV*, A 839, B 867; 694–695). What they fail to incorporate in their understanding of philosophy is a 'purposeful connection' (*zweckmäßige Verbindung*), which can give unity to speculative cognitions by referring to the supreme ends of human reason (*LJ*, 25; 538).

The representatives of scholastic philosophy, the artists of reason (*Vernunftkünstler*), Kant clarifies, have no other ambition but to obtain theoretical knowledge, without considering how this knowledge contributes to the last ends (*letzten Zwecke*) of human reason. Although they also have to rely on rational cognitions with the help of which one can develop a doctrine of method, and although those cognitions contribute to formulate rules for the use of reason in an instrumental way, the artist of reason (*Vernunftkünstler*) is not yet a philosopher. Following Socrates, a more appropriate label is that of 'philodox' (*Philodox*), a lover of doxa, or opinion, rather than wisdom (*LJ*, 24; 537). A philodox is related to a philosopher in

the same way in which 'the businessman is related to the legislator' (*WL*, 799; 260). Or, to put it in the jurisprudential language on which Kant was so keen: the philosopher is the '*legis peritus* in the highest laws of reason', whereas the legislators, the '*leguleei* in the highest laws of reason' are the 'sophists and the dialecticians, who provide themselves with a certain illusion of wisdom, and with this seek to accomplish certain ends by force' (*WL*, 800; 260).[16]

When the philosopher abandons the appeal to a systematic unity of cognitions which integrates its essential ends, when the final end of reason is neglected, philosophy abandons its cosmic dimension, and reason fails in its own tribunal. Philosophy ceases to be distinguished by sophistry and becomes a mere doctrine of ability, a complex construction of syllogisms with no systematic aspiration. Even historical knowledge, the *Wiener Logik* clarifies, is only helpful in so far as our reason can make use of them in conformity with ends (*WL*, 799; 259). But the intrinsic quality of this use is determined only by 'the connection that this cognition has with the final ends' (*WL*, 799; 259).

Science, Kant also clarifies, is useful above all as an organon of wisdom (*Organ der Weisheit*) (*LJ*, 26; 538–539). If the questions concerning what we can know, what we ought to do and what we can hope are intrinsically related as parts of the same systematic project, it is only because, of all sciences, philosophy is the only one to be able to 'close the circle' and see how 'all cognitions fit together in an edifice, in rule-governed ways, for such ends as are suited to humanity' (*WL*, 800; 260–261, *LJ*, 26; 539). Through this '*teleologia rationis humanae*', the philosopher is not a mere 'artist of reason' but deserves to be called a 'wise human' (*KrV*, A 839, B 867; 694–695). Relatedly, philosophy is not only 'science of the final end of human reason' but also of 'all the ends' since these 'form a system in our cognitive faculties' (*Nachlaß*, 1668).[17]

These definitions bring to light three important components of Kant's analysis of the unity of reason: the idea of a system, the concept of a final end, and the concept of subordinate ends. Together they help explain how philosophy in its cosmic definition aims to resolve the problem of

[16] For an excellent recent study of the role of juridical metaphors in Kant's critical system, see Møller, Sofie, *Kant's Tribunal of Reason: Legal Metaphor and Normativity in the Critique of Pure Reason* (Cambridge: Cambridge University Press, 2020).

[17] My translation. The original reads: 'Philosophie ist die Wissenschaft von Endzwecke der menschlichen Vernunft und hiermit aller Zwecke, so fern sie in unserm Erkentnisvermögen ein System ausmachen.'

systematic unity *in general* by integrating the sum total of theoretical cognitions with the practical interest of reason. The systematic unity necessary to the organization of scientific knowledge can be articulated with the help of an idea which is at the same time an end of reason and which can orient the entire 'field' of philosophy. The scholastic definition of philosophy is therefore subsumed under its cosmic definition and extends the jurisdiction of the discipline over the entire dominion of old metaphysics (knowledge, morality, religion) by asking the question of 'what is the human being'. In other words, the scholastic definition of philosophy is no longer developed separately from the cosmopolitan one but becomes one of its constitutive parts. Only within this new definition of philosophy, is it possible to understand both the order and connection of all sciences and the 'relation of all cognition to the essential ends of human reason' (*KrV*, A 839, B 867; 694–695), argues Kant.

Yet this reinterpretation of the point and purpose of philosophy is also slightly perplexing. How can the defence of the unity of the system *in general* depend on practical reason's attitude to promote practical ends? Kant's argument is the following. Philosophy in its cosmic definition constitutes a discipline able to orient reason in the application of its maxims, where by maxim we understand 'the inner principium of the choice of various ends' (*WL*, 799; 259, *LJ*, 25; 538). Philosophy is therefore a 'science of the highest maxims of the use of our reason' (*WL*, 799; 259), able to give order and establish priorities in the various disciplines to which reason is applied. However, this distinctive capacity of philosophy is not derived from reason's ability to pose ends in general, and to act in conformity with them. These ends ought to be in accordance with 'supreme ends', able to confer 'absolute value' to philosophy in its cosmic understanding.[18] Therefore, more than on reason's ability to rely on systematic principles in the development of links between different rational cognitions, it is important to insist on the 'supreme end' that orients the practical actions of human beings.

The emphasis on the 'supreme end' of reason to which all other ends are subordinated clarifies the centrality of purposiveness in relationship to the

[18] The relationship between the 'final end' of reason, its 'supreme end' and the 'ultimate aim' of nature will be clarified in the following chapters. Here, it is enough to emphasize that terms such as 'supreme end', 'essential ends', or 'ultimate aims', to which Kant refers in the *Lectures on Logic* and the *Lectures on Metaphysics*, appear, as we shall see in the third part of this work, also in the *Canon of Pure Reason* in the context of an important analysis of the link between the final aim of reason and the determination of the will from a practical standpoint.

practical use of reason. Yet what is not so obvious is why Kant thinks there is an intrinsic link between the problem that philosophy faces in its scholastic definition (giving systematic unity to all rational cognitions) and the demands of philosophy in its 'cosmic' dimension, oriented towards the realization of reason's essential ends. The cosmic definition of philosophy becomes so important as to fill the gaps left open by philosophy in its scholastic understanding. But what is the guarantee that it can succeed in the task of conferring systematic unity?

4. Purposiveness and Systematic Unity

With the exception of the brief remarks on the purposive character of human reason, Kant does not explicitly develop the argument about the teleological structure of the system in the writings we are examining. However, the emphasis on reason's purposive character is extremely relevant to understand two issues we face when trying to understand the problem of the unity of the system. First, there is the relationship between the theoretical demand for systematic unity and the coherent pursuit of practical ends: why are the two linked? Second, there is the problem of the link between the final end of speculative reason and its supreme practical ends: why do we need a transition from one to the other and back again?

That there must be a link between these different uses of reason is obvious from the *Introduction* to the first *Critique*. Kant thinks that the guarantee of systematic unity and organic integration of the different sciences lies in the 'experiment showing that the result effected is the same whether we proceed from the smallest elements to the whole of pure reason or return from the whole to every part (for this whole too is given in itself through the final intention of pure reason in the practical) […]' (*KrV*, B XXXVIII; 120). But how?

The pages of the *Transcendental Dialectic* clarify how the final end of reason is directed to three fundamental questions: God, freedom, and the immortality of the soul. However, these questions, Kant says in the *Canon of Pure Reason*, have a further, more remote end, which aims to understand 'what is to be done if the will is free, if there is a God, and if there is a future world' (*KrV*, A 800, B 828; 675). And since this end is related to our practical behaviour with regard to the supreme ends of reason, 'the ultimate aim

of nature which provides for us wisely in the disposition of reason is properly directed only to what is moral' (*KrV*, A 800–801, B 828–829; 675).[19]

Notice the transition from the speculative question of the final end of reason to the practical question of 'what needs to be done'. Kant's argument is based on three crucial, and yet undefended assumptions: 1) that identifying the final end (*Endabsicht*) of nature on the basis of the supreme end that human beings display in their practical actions is *possible*; 2) that such 'final end' consists in the moral destination of humankind; and 3) that in this constitution of reason nature has proved itself to be both 'provident' (*versorgende*) and 'wise' (*weislich*). All these assumptions are in turn grounded on a further, more problematic assertion: that it is possible to mediate between concepts of nature and concepts of freedom and conceive of them as part of the same unitary, purposive system. The first and second propositions assume that it is possible to shift from humans' ability to pose practical ends to the identification of the subject of a natural purposiveness. With the third point Kant goes even further and takes for granted the entire purposive structure of nature, which culminates in moral purposiveness.

But this is problematic. Just because we need the idea of God and of a moral order to make sense of our practical commitments, it does not mean that we are entitled to assume that the moral order and the natural order have the same unitary basis. What justifies the transition from 'the final end of the use of our reason' with which the paragraph starts to the question of the 'final end of nature' with which it concludes? In his subsequent writings, Kant is fully aware of where the problems lie, and makes a great deal of effort to keep the purposiveness of nature subordinate to the purposiveness of reason with the help of the reflexive principle of judgment. In the *Critique of Teleological Judgment*, he insists on how the two ideas of purposiveness must be considered separately when addressing the question of whether it is possible to know the final end of nature. He is also sceptical of the possibility that the transition from the purposive structure of reason to the purposive structure of nature can be given. Here, Kant concedes that the human being, 'as the sole being on earth who has reason, and thus a capacity to set

[19] Here is what Kant says exactly: 'Die ganze Zurüstung also der Vernunft in der Bearbeitung, die man reine Philosophie nennen kann, ist in der That nur auf die drei gedachten Probleme gerichtet. Diese selber aber haben wiederum ihre entferntere Absicht, nämlich was zu thun sei, wenn der Wille frei, wenn ein Gott und eine künftige Welt ist. Da dieses nun unser Verhalten in Beziehung auf den höchsten Zweck betrifft, so ist die letzte Absicht der weislich uns versorgenden Natur bei der Einrichtung unserer Vernunft eigentlich nur aufs Moralische gestellt' (*KrV*, A 800–801, B 828–9; 493; 674–675 in the English edition).

voluntary ends for himself' might well be considered the 'titular lord of nature'; and, '*if nature is regarded as a teleological system*, then it is his vocation to be the ultimate end of nature'. But notice the conditional: if. Nature is not necessarily, as such, a teleological system. It can only be considered such subject to the condition that the human being 'has the understanding and the will to give to nature and to himself a relation to an end that can be sufficient for itself independently of nature' (*KU*, 5: 431; 298).[20]

It is important to emphasize the qualified nature of this argument: *if* nature could be considered a purposive system, then the human being would be its final end. This is rather different from the unqualified assertions one finds in the *Critique of Pure Reason*. In the third *Critique*, Kant does not consider at all obvious the fact that nature might be a purposive system; there is no unconditional guarantee that the gap between nature and freedom will ever be filled. Human beings can make that transition only *if* they have the 'understanding and the will' to reflect on the conformity of ends in nature with reference to 'an end that can be sufficient for itself and independently of nature'. The speculative and practical unity of the system is guaranteed only if human beings take seriously their nature as moral self-legislating agents and the rational order they are able to create on the basis of the free development of their moral ends. Far from being guaranteed by nature, and settled once and for all, systematic unity is a work of continuous construction.

5. Nature and Freedom

Analysing the role of the principle of purposiveness in the transition from nature to freedom in the *Critique of Judgment* lies outside the scope of this work. My main focus is on a related theme: the problem of systematic unity in *the Architectonic of Pure Reason*. However, references to the third *Critique* are useful to better understand the evolution of Kant's views on natural purposiveness and to explain how it relates to the problem of the unity of reason. As already emphasized, the first *Critique*, exactly like the third, is interested in systematic unity in order to explain how the practical use of reason can ultimately be related to its theoretical use in a way that is beneficial to both. From a theoretical perspective, Kant argues that philosophy

[20] Italics mine.

can be considered a system of all sciences when reason is able to order and structure all its cognitions in a way that is not merely aggregative but systematic. Reason's theoretical use lies in cognizing appearances in a systematic way up to the highest principles in accordance with the mission of philosophy from a scholastic perspective. From a practical perspective, in both *Critiques*, Kant is interested in the conditions under which we can articulate a passage from the system of nature to that of freedom so as to enable the realization of the essential ends of reason. To return to the scholastic and cosmic definitions of philosophy with which we started, the systematic problem is not reducible to an epistemic question which starts with the 'facts' of science and seeks to identify the conditions of possibility of experience in general. The possibility of experience in general is guaranteed by the application of the categories of the understanding to sensible intuitions and embedded in Kant's general discussion of transcendental idealism. The further question at this stage concerns the unity of particular empirical laws and their organization in a coherent system where the cognitions of different faculties do not simply avoid contradicting each other but are harmoniously integrated. If such an integration turned out to be impossible, the theoretical and practical uses of reason would remain isolated from each other, and this isolation would have negative repercussions for the use of both, and for Kant's critical project as a whole. In the absence of systematic unity, the theoretical use of reason would lack the transcendental foundation necessary to the logical postulate of a systematic unity of all cognitions. On the other hand, the practical use of reason would lack the guarantee in the possibility of realizing the norms that it prescribes in the empirical world. If the project of systematic unity turned out to be a chimera, Kant's project of turning metaphysics into science with the help of the critical method would collapse. Overall, we would be left with knowledge that has no scientific status, and actions that lack normative character.

For Kant it is essential to think of reason as a unitary systematic whole in which the 'gulf' between natural necessity and moral freedom is filled with the help of the principle of purposiveness. The idea of a moral whole to which we have access through the practical use of reason is helpful to provide a transcendental foundation to the assumption of systematic unity necessary to connect general principles with particular manifestations of natural regularities. But that idea of a moral whole in turn seems to rest on the assumption that nature is somehow receptive to the development of moral ends. If the natural world were to undermine the moral destination of reason by making it impossible to promote its essential ends, our efforts

to act compatibly with the final end of reason could not be coordinated with those of others in a way that is continuous across time and space. The problem here is neither to do with moral motivation nor with psychological limitations in willing ends that cannot be realized. The problem rather is one of rational consistency: it would be irrational to pursue ends the success of which is assumed to be impossible.[21] As we shall see in what follows, systematic moral unity is essential to complete the idea of systematic unity from a theoretical perspective, yet entirely dependent on the status of the principle of purposiveness to integrate the separate uses of reason. This is why Kant thought of the issue of the final end of nature as one that interests philosophy not only in its practical meaning but also in its theoretical one. Our interest in promoting the final ends of reason complements our rational demand for systematicity and leads us to the necessity of reflecting on the transition from legislation according to concepts of nature to a legislation according to practical principles.[22]

It is well established that in the third *Critique*, the articulation of such difficult passage is made through the discovery of the principle of purposiveness (*Zweckmässigkeit*) a principle that belongs to the capacity of reflective judgment (*reflektierende Urteilskraft*). Such a principle helps us conceive of experience as a systematic unitary whole. On the one hand, human beings *subjectively* consider themselves as the last end (*letzter Zweck*) of a possible natural purposiveness. On the other hand, they *objectively* constitute the 'final end' of moral purposiveness. The functions of the understanding and of reason are integrated thanks to the capacity of judgment, which enables human beings to systematically explore the territory of experience thanks to the principle of purposiveness.

Systematicity and purposiveness are important features of human reason also in the first *Critique*, as shown by the definition of philosophy according to scholastic concepts and according to cosmic ones. At the heart of these definitions is the question of the unity of the system from both a theoretical perspective and from a practical one. The theoretical and practical uses of reason are reciprocally linked; combined they help reveal the way in which

[21] I return to this problem in Chapter 7.

[22] In the *Anthropology from a pragmatic point of view*, Kant also mentions the cosmic definition of philosophy and reflects on the character of the philosopher as a 'wise' human being. He underlines that the philosopher represents a 'mere idea of a person who takes the final end of all knowledge as his object, practically and (for the purposes of the practical) theoretically too' (*Anthr.*, 280; 180). Notice how here, as in the third *Critique* but differently from the first, the idea of a 'final end' is articulated exclusively as a practical object, not a theoretical one.

Kant thought he had solved the problem of the transition from nature to freedom at the end of the first *Critique*. Philosophy, Kant says here, is the idea of this 'legislation of human reason', which has two 'objects (*Gegenstände*), nature and freedom, and thus contains the natural law (*Naturgesetz*) as well as the moral law (*Sittengesetz*), initially in two separate systems but ultimately in a single philosophical system' (*KrV*, A 840, B 868; 695). But if the *Critique* of *Pure Reason* already solved the problem of the systematic unity of reason, why did Kant return to the issue in the third *Critique*?

The question of the legislation of human reason, and of its objects, nature and freedom, is at the heart of the analysis of systematic unity in both the *Critique of Pure Reason* and in the *Critique of the Power of Judgment*. In both works, the issue of the systematic organization of knowledge is raised in relationship to the conformity to laws of the understanding, and to the final end of reason. In both works, the search for systematic unity can only succeed if it is possible to identify a principle able to guarantee the possibility of integrating the realm of nature and the realm of human ends, without transcending the limits posed by sensible experience. In the first *Critique*, Kant devotes the entire section of the *Architectonic of Pure Reason* to explaining how this 'unique philosophical system' works. But what kind of principle can guarantee the harmonious integration of the theoretical and practical uses of reason so as to justify its systematic unity? The next chapter explores this question, and highlights some of the difficulties raised by Kant's analysis of it in the first *Critique*.

2

Systematic Unity in *The Architectonic of Pure Reason*

1. The Architectonic of Reason in Historic Context

The problem of clarifying the principle on the basis of which the theoretical and practical use of reason could be reconciled under one unitary philosophical system had been one of Kant's main preoccupations from the initial stages of preparation of the first *Critique*. Likewise, the relevance of the *Architectonic of Pure Reason* to the project of the unity of reason was clear from the start. The term 'architectonic' occurs for the first time in an important letter to Marcus Herz dated 24 November 1776 where Kant announces the systematic plan and division into parts of the work that would shortly appear under the name of *The Critique of Pure Reason*. As Kant puts it,

> it must be possible to survey the field (*Boden*) of pure reason, that is, of judgments that are independent of all empirical principles, since this lies a priori in ourselves and need not await any exposure from our experience. What we need in order to indicate the divisions, limits, and the whole content of that field, according to secure principles, and to lay the road marks so that in the future one can know for sure whether one stands on the floor of true reason or on that of sophistry—for this we need a critique, a discipline, a canon, and an architectonic of pure reason, a formal science, therefore, that can require nothing of those sciences already at hand and that needs for its foundations an entirely unique technical vocabulary.
>
> (*Briefwechsel*, 199; 160)

Given the centrality of the *Architectonic* to the *Critique of Pure Reason* since the early stages of development of the project, it is not surprising to find mentions of its role for the unity of reason in all of Kant's major works. In the *Critique of Practical Reason*, for example, highlighting the importance of a thorough and accurate investigation of the sources, content and

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limits of each human faculty, Kant draws attention to something 'which is more philosophic and *architectonic*'. It is the effort to 'grasp correctly the idea of the whole and from this idea to see all those parts in their mutual relation by means of their derivation from the concept of that whole in a pure rational faculty' (*KpV*, 5: 10, 144). In the *Critique of Judgment* too, references to the necessity of architectonic principles come with renewed emphasis on the distinction between an aggregate and a system and a return to the building metaphor that we find in the *Doctrine of Method*. Indeed, as Kant puts it here, 'Every science is of itself a system; and it is not enough that in it we build in accordance with principles and thus proceed technically; rather, in it, as a freestanding building, we must also work architectonically, and treat it not like an addition and as a part of another building, but as a whole by itself, although afterwards we can construct a transition from this building to the other or vice versa' (*KU*: 381, 252–253).[1] The *architectonic* mind, Kant observes also in *The Anthropology from a pragmatic point of view* is a kind of genius which 'methodically examines the connection of all the sciences and how they support one another' (*Anthr*: 226, 122).[2]

These references to notions of systematic adequacy, idea of the whole, reciprocal relation between parts, clearly confirm Kant's continuous involvement with the themes of the *Architectonic of Pure Reason* even after the publication of the first *Critique*. However, until recently those few scholars who have managed to comment on Kant's *Architectonic* without sneering at it, have interpreted the problem of the systematic unity of reason as a mere return to the problem of classification of the sciences. This had been at the centre of the various logic manuals circulating in the seventeenth and eighteenth century and clearly informed much of what Kant had to say on the topic.[3] Such an interpretation, while obviously more plausible than the

[1] Notice, however, how Kant mentions here not one but several buildings, an indication perhaps of how his reflections on systematic unity had changed by the time he came to reflect on the issue in the third *Critique*.

[2] Interestingly Kant also emphasizes here that the architectonic mind is a subordinate type of genius to the universal mind which has an 'intense greatness' and is 'epoch-making in everything it undertakes' (ApH, 226, 122). By 'universal mind' Kant seems to refer to Newton and Leibniz; it would be fascinating to investigate whether the architectonic mind applies to Wolff and other Wolffians.

[3] For a reconstruction of Kant's debt to eighteenth-century logic, especially Georg Friedrich Meier, whose *Auszug aus der Vernunftlehre* Kant adopted for the logic lectures he taught for 40 years, see Pozzo, Riccardo, 'Prejudices and Horizons: G.F. Meier's Vernunftlehre and its Relation to Kant', *Journal of the History of Philosophy*, vol. 43 (2) (2005), 185–202, see also Lu-Adler, Huaping, *Kant and the Science of Logic: A Historical and Philosophical Reconstruction* (Oxford: Oxford University Press, 2018), especially ch. 4.

one linking the *Architectonic* to Kant's curious personality, is also partial. As I will argue in what follows, the systematic interest that is at the heart of the *Architectonic* is crucial to understand the novelty of the project of the unity of reason well beyond the issue of the systematic integration of particular scientific cognitions.[4] It is also indispensable to examine the evolution of Kant's reflections on this issue in all his subsequent major works, and to explain both how Kant believed to have solved the problem of the relation between the theoretical and the practical use of reason in one unitary system, and why he later found that solution problematic.

The question of the unity of reason that is at the centre of these pages of the first *Critique* is closely connected to the discussion of systematicity in Kant's various lectures on logic.[5] The division of the first *Critique* into a *Doctrine of the Elements* and a *Doctrine of Method* reproduces the distinction between *General* and *Special* Logic found in various logical handbooks circulating in the early eighteenth century.[6] Here the very term *architectonic* appeared as a technical term going back to scholastic logic and adapting, somewhat confusingly, Aristotle's remarks in the *Posterior Analytics* and in the *Nicomachean Ethics* on the importance of a hierarchy of sciences based on their ends.[7]

Kant's terminology and description in the *Architectonic* merge two separate understandings of the term. The first goes back to Baumgarten's and Wolff's accounts where it refers to the structure of metaphysical knowledge: *scientia architectonica* here stands for 'the science of the predicates of being in general'.[8] The second refers to a more modern tendency, influenced by Humanist and Renaissance culture which thought of architectonic science in analogy with '*architectura*': the discipline of presiding over the construction of buildings according to a particular plan or design. This latter meaning of architectonic is particularly strong in Lambert's methodological approach to philosophy as set out in his *Anlage zur Architectonic* (written

[4] For a reading that focuses mostly on this latter aspect, see Sturm, Thomas, *Kant und die Wissenschaften Vom Menschen* (Paderborn: Mentis, 2009), ch. 3.

[5] See Conrad, Elfriede, *Kants Logikvorlesungen als neuer Schlüssel zur Architektonik der reinen Vernunft*, Stuttgart-Bad Cannstatt: Frommann-Holzboog 1994, esp. 12–14, 24 ff.

[6] See Tonelli, *Kant's Critique of Pure Reason within the Tradition of Modern Logic*, 189.

[7] For Aristotle's account of architectonic, see the discussion in Johnson, Monte, 'Aristotle's Architectonic Sciences' in *Theory and Practice in Aristotle's Natural Science*, edited by David Ebrey (Cambridge: Cambridge University Press, 2015), 163–186.

[8] See the excellent discussion in Manchester 'Kant's Conception of Architectonic in Its Historical Context', cit. 196.

1764, published in 1771) and of undoubted influence on Kant.[9] As Lambert explains in the introductory pages of the work, although he has taken the term from Baumgarten's metaphysics, what he means by it is 'an abstraction from architecture' (*ein Abstractum von der Baukunſt*). Lambert's approach to method thus identifies old metaphysics with a new constructivist method of thinking about the relationship between the sciences. Architectonic science shares with architecture the ambition to preside over 'the construction of human knowledge' (*das Gebäude der menſchlichen Erkenntniß*) and the ordering of the different parts so as to turn it into a 'purposeful whole' (*zweckmäßiges Ganzes*).[10]

The question of how to order scientific knowledge is at the heart of the distinction between a 'rhapsody' and a 'system' of knowledge that, as we shall shortly see, shapes the *Architectonic of Pure Reason*. As with the previous analysis, such a distinction is also present in the logic lectures of the same period where we also see Kant emphasize the need for *architectonic* unity for the purpose of rigorous scientific knowledge, and a comparison of the existing state of metaphysics to that of a 'rhapsody' (*Vienna Logic*, 891, 337; *Jäsche Logik* 48–49: 556–557). As Kant puts it, if 'in striving to expand his cognitions, one does not look to their connection, then extensive knowledge amounts to nothing more than a mere rhapsody'. Scientific completeness requires a 'well ordered and purposive plan' at the service of the connection of cognitions among themselves.

I shall return to the elements of this purposive plan in the next few pages. For now, it is important to understand that although the distinction between 'rhapsody' and 'knowledge' is central to a significant body of eighteenth-century philosophical work reflecting on the classification of the sciences, continuity with tradition is not the only explanation for Kant's *Liebe für architektonische Symmetrie*. It would be reductive to read these pages as merely paying a tribute to Kant's philosophical predecessors or as displaying an interest in the classification of sciences. As we saw in the previous

[9] See the history of the evolution of the term in Kaulbach, Friedrich, 'Architektonik, architektonisch', in *Historisches Wörterbuch der Philosophie*, edited by J. Ritter (Darmstadt: Wissenschaftliche Buchgesellschaft, 1971), 503–504.

[10] My translation. The original is: 'Ueber den Titel des Werkes habe ich nur das zu bemerken, daß ich das Wort Architectonic aus Baumgartens Metaphyſic genommen. Es iſt in ſo fern ein Abſtractum von der Baukunſt, und hat in Abſicht auf das Gebäude der menſchlichen Erkenntniß eine ganz ähnliche Bedeutung, zumal, wenn es auf die erſten Fundamente, auf die erſte Anlage, auf die Materialien und ihre Zubereitung und Anordnung überhaupt, und ſo bezogen wird, daß man ſich vorſetzt daraus ein zweckmäßiges Ganzes zu machen.' Lambert, Johann Heinrich, *Anlage zur Architectonic oder Theorie des Einfachen und des Ersten*, vol. 1 (Riga: Hartnoch, 1771), xxxiii–xxiv.

chapter, Kant found insufficient a perspective on the role of philosophy that focused only on the technical unity of knowledge; he repeatedly emphasizes the relevance of the field also from a 'cosmic' (later 'cosmopolitan') perspective. The passing mention of the 'interests' of humanity that we find in the Vienna lectures is a further reflection of a perspective that is irreducible to questions of scientific taxonomy. Kant's remarks on the difference between rhapsody and system in *The Architectonic of Pure Reason* can be seen as a further elaboration of the idea that the role of the architectonic is not only to offer a perspective on the classification of sciences, but to continue the task set out in the introduction to the *Doctrine of Method*: that of offering a plan on the basis of which reason's cognitions are systematically integrated with each other and fit to human purposes.[11] It is with that aim in mind, I suggest, that we should read Kant's statement that, 'reason cannot permit our knowledge to remain in an unconnected and rhapsodic state, but requires that the sum of our cognitions should constitute a system' (*KrV*, A 832, B 860; 691).

Notice, however, that the rationale Kant gives for the requirement of systematic unity is not only motivated by the theoretical demand for systematicity but also by practical interests. Only through architectonic unity, he insists, 'it is possible to promote the essential ends (*wesentliche Zwecke*) of reason' (*KrV*, A 832, B 860; 691).[12] This is not the kind of requirement that his philosophical predecessors influenced by the technical conception of philosophy would have endorsed. For Kant, it is the duty to promote such essential ends of human reason that explains the demand to reflect systematically on the relationship between the idea of the whole necessary to the systematicity of human cognitions (urged by the scholastic understanding of philosophy) and the final end of human reason (central to its cosmic perspective).

All this implies that the central task of the *Architectonic* is not exhausted in establishing a transcendental foundation for the systematic application of the rules of the understanding to particular empirical phenomena in nature.

[11] For a brief (unfortunately) analysis of the *Architectonic* that is sympathetic to the claim made here, see Gava, Gabriele, and Marcus Willaschek, 'The Transcendental Doctrine of Method of the Critique of Pure Reason', in *The Kantian Mind*, edited by Sorin Baiasu and Mark Timmons (London: Routledge, 2020).

[12] This perspective on the *Architectonic* is absent in the literature that emphasizes the continuities between Kant's logical corpus and the first *Critique*; see especially the contributions of Conrad and Tonelli cited above. It is also underappreciated in the literature which highlights the continuities between Kant's architectonic ambitions and the problem of overall classification in the sciences; see Sturm, *Kant und die Wissenschaften Vom Menschen*, cit. ch. 3.

Far from involving merely the conditions of possibility for the theoretical use of reason, the crucial question here relates to the possibility of a *unitary* and *comprehensive* system in which the practical use of reason can be linked to its theoretical use thanks to a particular principle, the principle of purposiveness, whose status remains to be clarified. Kant's analysis of systematicity encompasses both the sphere in which reason ought to attempt to realize its moral ends, the realm of freedom, broadly speaking, and the sphere in which we seek to organize all available cognitions compatibly with reason's theoretical use.[13] The challenge of systematicity lies in the attempt to defend the scientific status of the entirety of our cognitions by anchoring it to an analysis of the practical use of reason, and to the assumptions about the order of nature relative to that use.

2. Systematic Unity and the Role of Ideas

Analysing *The Architectonic of Pure Reason* means exploring the way in which sensitive and rational human beings comprehend *as a whole* a reality that relies on the understanding for its epistemic conditions of possibility and on reason for its ability to transform the world according to essential ends. Kant does not merely intend to prove that the rules grounding the use of understanding do not contradict the practical function of reason, as it has so often been suggested.[14] Nor does he merely want to illustrate the specific role of the use of either understanding or reason within the economy of human faculties. The aim of the architectonic is different and much more ambitious: what Kant tries to do here is identify a principle on the basis of which concepts of nature and freedom could be thought of as part of the

[13] This issue is absent in hermeneutic readings of the *Architectonic* chapter, see for one example, Nuyen, A.T., 'On Interpreting Kant's Architectonic in Terms of the Hermeneutical Model', *Kant-Studien*, vol. 84 (2) (1993), 155–166.

[14] This suggestion has been made even in sophisticated studies of the relation between the *Architectonic* and the *Introduction* to the *Critique of Judgment*, see for one example Weil, Eric, *Sens et fait* in Problèmes kantiens (Paris: Vrin, 1970), 57–107. Weil tends to emphasize that up to the *Critique of Practical Reason*, Kant sought to assert systematic unity as a mere idea, demonstrating that nature and freedom were not in contradiction with each other and that only with the third *Critique* does the problem become one of transition from nature to freedom. But although Kant in the introduction to the third *Critique* tends to summarize the findings of the *Critique of Pure Reason* in those terms, this is not how he perceived the issue at the point of writing. What the hesitation suggests is that Kant had no confidence in the result of his first attempts to think about the harmony between the systems of nature and freedom, not that no attempt had been made.

same system. And he also argues that this principle can be justified with reference to the necessity to 'support and promote' (*unterstützen und befördern*) reason's moral ends.

Yet this emphasis on the need for systematic unity in the theoretical and practical use of reason shows that it is not only from the point of view of the *conditions of possibility of knowledge* but from that of the *consequences* of practical agency that Kant intends to explore the issue of the system. As we shall see in the final part of this work, Kant is not only interested in the abstract possibility of moral agency but the assumptions we make about the order of nature when we think about its effective realization in the sensible world. Human beings must pose their moral ends in the phenomenal world expecting that the possibility of a harmonic unity between such ends and the laws of nature is given. Without postulating such guarantee, it would be rationally inconsistent to demand of moral agents that they strive to realize their ends in the empirical world. This is a question that it is possible to find, *mutatis mutandis*, in all of Kant's moral and political writings, when assessing the question of natural teleology and of the possibility of progress for the human species. In these writings, Kant wrestles with the need to show that reason has a rationally plausible possibility of achieving its moral ends, that its continuous attempts to realize the categorical imperative throughout human history are not vain, and, later, that the realization of a political and moral order through which the freedom of each can coexist with that of every other is possible to obtain (IaG 27–28; 116–117; ZeF 360–363 ff; 330ff;). It is in harmony with these efforts that, I suggest, we should also interpret the systematic aim of the *Architectonic of Pure Reason*. But where does Kant find evidence of the possibility of harmonizing nature and freedom in these pages? And how does the *Architectonic* provide conceptual tools for resolving the issue of the coherent mediation between the theoretical and the practical use of reason and to integrate the philosophical presuppositions associated with each?

The best way to answer these questions is by returning to Kant's emphasis on the centrality of a 'well-ordered and purposive plan' on the basis of which it might be possible to think of reason as bringing into one unitary system the multiplicity of cognitions. The issue of how to understand and execute this plan is, as we have seen, the central task of the *Doctrine of Method*. The *Lectures on Logic* illuminate the discussion by explaining that it is essential to the systematic character of knowledge to obtain guidance from the architectonic which is, Kant says, '*a system in accordance with ideas*' (*ein System nach Ideen*) where '*the sciences are considered in regard to*

their kinship and systematic connection in a whole of cognition that interests humanity' (LJ 49; 557).

This announcement of the overall role of the *Architectonic* for the unity of reason is remarkable for two reasons. First, because it implicitly returns to the difference between the 'scholastic' and the 'cosmic' conceptions of philosophy that Kant mentions both in the *Architectonic of Pure Reason* and in his logic lectures. But it is also interesting because it introduces one crucial element on which Kant's attempt to reflect on the unity of reason in the first *Critique* relies: the role of *ideas* as the guiding element of the architectonic plan necessary to unite the practical interest in promoting the essential ends of human reason with the epistemological need to distinguish between rhapsody and system.

Kant first mentions ideas with reference to architectonic unity in the pages on *Transcendental Dialectic* in the first *Critique*. Here, discussing the role of Plato's conception of the idea in bridging the gap between theoretical and practical knowledge, he emphasizes that 'this ascent from the ectypal mode of regarding the physical world to the architectonic connection of it according to ends, that is, ideas, is an effort which deserves imitation and claims respect' (*KrV* A318/B375; 397–398).Therefore the term 'ideas' is deployed almost as a synonym for 'ends', implying a similarity of function between the two. And yet the difference between them is important, especially in the light of Kant's later reflections on the topic. *Ideas* are strongly connected to the theoretical use of reason; *ends* are clearly related to its practical use. Kant's attempt to relate the two concepts is interesting because it reveals not only how he managed to accomplish the project of the unity of reason in these pages of the first *Critique* but also the further problems he raised in doing so.

One important problem is that there is no mention in Kant's first *Critique* either of a separate faculty based on a specific principle of purposiveness (like the faculty of judgment in the third *Critique*) or of the merely reflective status of such principles in supporting a purposive understanding of nature that serves reason's essential aims. The principle of purposiveness necessary to the unity of the system is an expression of the specific function of the ideas of reason, required to confer systematic unity on the multiplicity of its cognitions. Hence, while on the one hand, the *Zweck* refers to the *Idee* as something that contains its potential development, on the other hand, the idea of the system becomes concrete only as a result of the development of ends. Experience can be unified in one systematic whole only by reference to an end which reason recognizes as its own, an end different from others

that are only instrumentally related to it, and without which its essentially purposive nature would be compromised.

Here, a number of questions arise. On the one hand, the architectonic project of reason and the necessity of thinking about experience as a systematic whole are inherently linked to the interest in the realization of the essential ends of reason. Reflecting on cognitions that are systematically organized is an intrinsic demand of reason but also unavoidable if we are interested in the possibility of realizing its ends. Without that, the architectonic plan at the heart of the whole *Doctrine of Method* would collapse. On the other hand, Kant argues, it is only possible to execute the idea of a system with reference to 'a schema, that is, a content and an arrangement of parts determined a priori by the principle which the aim of the system prescribes'. Why does Kant invoke schematism here? What role does schematism play in the unity of reason? How does it relate to the principle of purposiveness?

3. The Schematism of Reason

To answer these questions, we must turn to Kant's explanation that 'a schema which is not projected in accordance with an idea, that is, from the standpoint of the highest aim of reason, but merely empirically, in accordance with accidental aims and purposes (the number of which cannot be predetermined), can give us nothing more than technical unity'. But the schema which is 'originated from an idea (in which case reason presents us with aims a priori, and does not look for them to experience), forms the basis of architectonical unity' (*KrV* A833/B861; 691–692).

The appeal to a 'schema' to clarify the relationship between the principle of conformity to ends and the architectonic idea of a unitary system of cognitions is very curious. The discussion of schematism is clearly different from the one we find in the famous pages of the *Transcendental Analytic*, yet it is not the first time that the hypothesis of a schematism of reason (besides that of the understanding) appears in the first *Critique*.[15] Kant also employs

[15] The discussion of schematism here differs from Ernst Cassirer's thesis that the problem of schematism is at the heart only of Kant's theoretical philosophy, see Cassirer, Ernst, 'Kant und das Problem der Metaphysik', *Kant-Studien*, vol. 36 (1931), 1–26, esp. 18 ff. For a discussion of the relation between schematism and transcendental imagination and the centrality of the latter to distinguish between phenomena and noumena, time and freedom, see also the seminal contribution by Heidegger, Martin, *Kant und das Problem der Metaphysik* (Cohen: Bonn,

it in the *Appendix to the Transcendental Dialectic* while reflecting on the relation between multiple empirical laws and the need to postulate a purposive order of nature which grounds the possibility of the systematic use of the understanding.[16] As Kant puts it here: 'it cannot be seen how there could be a logical principle of rational unity among rules, unless a transcendental principle is presupposed through which such a systematic unity, as pertaining to the object itself, is assumed a priori as necessary' (*KrV*, A651/B679; 594–595).

A more detailed analysis of the role of schematism in the *Transcendental Analytic* in relation to the *Architectonic* will be developed in the following pages.[17] Here it is important to explain that in both sections of the first *Critique* the issue of schematism arises from the need to mediate between two different faculties (understanding and reason) and an attempt to integrate their respective principles and use in the service of systematic unity. Just as in the case of the *Analytic*, Kant appeals to the 'schema' to explain the uniformity between the materials of sensation and the understanding, from the *Transcendental Dialectic* onwards the issue becomes that of reflecting on the links between the spheres of application of understanding and reason. If Kant had merely sought to show that the demands of reason and those of the understanding do not contradict each other, he would not be looking

1929) which pioneered a range of works on the same issue. The difference between Cassirer's and Heidegger's interpretation was at the heart of their famous Davos debate. Without entering into the details of the controversy, let me emphasize that my interpretation of schematism is more in line with Cassirer's overall analysis of reason in Kant, an analysis that I believe rightly highlights how the Heideggerian interpretation of schematism undermines the Kantian conception of moral agency. On the Davos debate, I have consulted Cassirer, Ernst, and Martin Heidegger, *Disputa sull'eredità Kantiana. Due documenti (1928 e 1931)*, edited by R. Lazzari (Milan: Unicopli, 1990).

[16] For a discussion of the relation between the problems raised here and the question of symbolic schematism and the use of analogy in the third *Critique*, see Lehmann, Gerhard, *Zur Problemanalyse von Kants Nachlasswerk* in *Kants Tugenden: Neue Beiträge zur Geschichte und Interpretation der Philosophie Kants* (Berlin: De Gruyter, 1980), 96–140 and Lehmann, Gerhard, 'System und Geschichte in Kants Philosophie', *Il pensiero*, vol. 1 (1958), 14–34. For an interpretation that refers to Lehmann's account and the development of the problem of schematism in relation to Kant's philosophy of history, see Salvucci, Pasquale, *L'uomo di Kant* (Urbino: Argalia, 1975), 93–274. On the relation between the use of analogy in the first *Critique* and its development in Kant's subsequent work see the interpretation of Marty, François, *La naissance de la métaphysique chez Kant. Une étude sur la notion kantienne de l'analogie*, (Paris: Beauchesne, 1980). For an opposite interpretation to Marty, sympathetic to a sceptical reading, see Lebrun, Gérard, *Kant et la fin de la métaphysique. Essai sur la 'Critique de la faculté de juger'* (Paris: Colin, 1970), esp. 68–262.

[17] For a more detailed account of the schematism of ideas, in the context of a wider discussion of the problem of schematism, with particular attention to the *Opus Postumum*, see Daval, Roger, *La métaphysique de Kant* (Paris: Presses Universitaires de France, 1951), esp. 179–243.

for a way of unifying their use. And yet, this is precisely what schematism does by appealing to the unifying features of a function that Kant thought had the virtue of integrating apparently heterogeneous elements. Just as in the *Transcendental Analytic* schematism serves to render coherent the functions of the sensibility and the understanding, here it is invoked to solve the problem of the coherent use of the understanding and reason.

Kant's account of schematism fits into an analysis of systematic unification, as on the one hand, an activity which helps us structure the relation between the parts of a system subject to new input and, on the other hand, that which must be presupposed if we strive toward the unification of disparate principles. Such an analysis is often interpreted as evidence of the dynamic character of methodological enquiry, even of Kant's affinities with a fallibilistic method of scientific enquiry.[18] But there are reasons to be cautious with such claims. Kant's arguments on how exactly to conceive of the function schematism plays to enable the unifying task in the *Architectonic* take us further than fallibilism in the presupposition of systematic unity. We are told, yes, that the idea of a unitary system must be presupposed given the purposive nature of our cognitive activities and that presupposition grounds our efforts to find a coherent relation between disparate principles and cognitions (*KrV* A 833, B 861; 692). This is a logical requirement of unification and a rather straightforward one at that. But we are also told, much more problematically, that the idea of the whole of the system can be *exhibited* through the essential ends of reason following a schematic model of representation similar to the one that applies to the relation between sensibility and the concepts of the understanding in the first part of the *Critique* (*KrV* A 834, B 862; 692). Indeed, Kant even suggests that it is precisely the relation between the essential ends of reason and the idea of the whole that is at the basis of the system that renders the ideal of unity intelligible according to a 'schema' which contains both the 'outline (*Umriß*) (*monogramma*)' and 'the division of the whole into members' (*KrV*, A 833, B 861–862; 692).

This use of the term monogram as synonymous to schema in the context of the *Architectonic of Pure Reason* challenges interpretations of systematic unity that seek to isolate the logical requirement of unity from the transcendental one.[19] To see why, consider that the only two other places in the

[18] Gava, Gabriele, 'The Fallibilism of Kant's Architectonic', in *Pragmatism, Kant and Transcendental Philosophy*, edited by G. Gava and R. Stern (London, Routledge 2015), 46–66.

[19] I will return to this problem in the second part of this work.

Critique of Pure Reason where the term schema receives an explicit mention are the *Transcendental Analytic* and the *Transcendental Dialectic*. In the first case, the term appears in the context of a clarification of the idea of schematism in general. Here Kant explains the difference between an image, a schema of empirical concepts and a schema of intelligible concepts to show the role of imagination in unifying disparate elements of knowledge. Although an image is in all cases a product of the empirical faculty of productive imagination, there is a difference between schema of sensible concepts and schema of the pure concepts of the understanding. The first, Kant suggests, using the example of figures in space, 'is a product and as it were a monogram of pure *a priori* imagination, through which and in accordance with which the images first become possible, but which must be connected with the concept, to which they are in themselves never fully congruent, always only by means of the schema that they designate'. By contrast, the schema of a pure concept of the understanding is something 'that can never be brought to an image at all, but is rather only the pure synthesis, in accord with a rule of unity according to concepts in general' (*KrV*, A 141–142, B 181; 274).

In the *Transcendental Dialectic*, Kant introduces the term 'monogram' with reference to the ideal of pure reason and to distinguish it from those 'creatures of the imagination' which are similar to 'monograms'. This is because they appear more like 'individual traits' that are not determined through any 'assignable rule' and form part of a 'wavering sketch' which 'mediates between various appearances' and is not 'a determinate image' (*KrV*, A 570, B 598; 552). To further explain the logical function of this ideal of complete unity, Kant also evokes here the term 'outline' (*Umriß*) to show how we should understand the concept of a supreme intelligent being at the basis of the unity of nature. This idea, he suggests, can only be articulated if we think of it 'through the fragile outline of an abstract concept, if we represent all possible perfection united in it as a single substance'. Such a concept, Kant further argues, is 'beneficial to the extension of the use of our reason within experience, through the guidance such an idea gives to order and purposiveness' (*KrV*, A 623, B 651; 579).

These passages indicate that the only two other places where the term monogram appears in the first *Critique* suggest a very different use from the one in the *Architectonic* where the term appears to explain how the idea of the whole of a system is exhibited through the essential ends of reason. Moreover, in light of its previous uses, it is clear that to employ the term monogram (*Monogramma*) as synonymous to outline (*Umriß*) and with

reference to the schematism of reason is highly problematic. Kant here seems to collapse two concepts that have been carefully distinguished everywhere else: the logical postulate of the ideal of the whole for purposes of our cognition, and the transcendental postulate of the unity of nature as inherent to it in a rule-bounded fashion. The question is: why does he do so? Why does the *Architectonic of Pure Reason* equate the terms *outline* and *monogram* in reflecting on the idea of the whole that is necessary to the systematic unity of our cognitions?

The appeal to schematism to explain the relationship between the idea of the whole and the ends of reason is, on the surface, rather confusing. The term 'schema' is a technical term Kant deploys to explain how we can bring unity to heterogeneous elements of reason. But here schematism is invoked to explain the relation between the principle of purposiveness and the architectonic idea necessary to ground the unity of the system. Kant, however, does not explain *why* we need a schema here, nor does the curious definition of a schema as 'an essential manifoldness and order of the parts determined *a priori* from the principle of the end' (KrV A 833/B 861; 691) seem to help very much.

First, it is not clear what 'manifoldness' means in this context, nor why it is of an essential kind. Second, it is not clear how we should understand the principle of purposiveness that is required to provide unity to it. The mere reference to the idea of schematism is not enough.[20] Indeed, if we compare the use of schematism in the *Transcendental Analytic* with that of the *Architectonic* we will see that in the *Transcendental Analytic*, schematism is introduced only after a deduction of the pure concepts of the understanding

[20] In the vast scholarship on the first *Critique* in general, and on the question of schematism in particular, the issue of schematism in the *Architectonic* is amongst the least studied. Martin Heidegger's *Kant and the Problem of Metaphysics* is an exemplary case in point. On the one hand, schematism is central to Heidegger's interpretation of Kant, as is the emphasis that 'human reason is by nature architectonic' and 'considers all cognitions as belonging to a possible system'. On the other hand, Heidegger takes the role of schematism in the *Architectonic* to be instrumental to his overall interpretation about the centrality of transcendental imagination (see Heidegger, *Kant and the Problem of Metaphysics*, 136). But this ignores how schematism in the *Architectonic* poses a new problem compared to the *Transcendental Analytic*: that of the mediating function it plays in the relationship between the idea of the whole and the practical ends of reason. It is therefore difficult not to object, as Gerhard Krüger does, that to reduce reason to transcendental imagination entails mistaking morality for passion, therefore losing sight of the realm of ends, of the Highest Good, and of practical action (see Krüger, *Critique et morale chez Kant*, cit. 93–95). A detailed analysis of Heidegger's *Kant and the Problem of Metaphysics* in light of the definition of schema contained in the Architectonic ('an essential manifoldness and order of the parts determined a priori from the principle of the end') with reference to practical reason would probably undermine his interpretation, but that is not my aim in this work.

has been provided. Its use in the *Analytic* is to explain how categories can apply to sensible intuitions in general yet Kant never takes for granted the need to show why the use of the pure concepts of the understanding is legitimate: this is why deduction precedes schematism.

In the *Architectonic* there is no deduction of the pure concepts of reason preceding the use of schematism, not even an attempt at a deduction. The analysis is limited to listing the elements that make possible the schematic execution of an idea and to emphasizing the importance of the ends that reason confers a priori and without expecting them empirically. This is very surprising and also a surprisingly neglected problem.[21] Given Kant's usual method of proceeding, why does the *Architectonic of Pure Reason* contain no deduction of the validity of the architectonic principle at the basis of the system of reason? Why does it provide no further explanation of its relation to both practical ends and to the idea of the whole by which it is guided? Even if we accept that the concept of schematism explains the link between the idea of reason and the principle of conformity to ends, it is not clear what warrants its use and how schematism performs its role in the process of systematic unification.[22] What legitimizes the appeal to a schematic link between the idea of reason and its essential ends? And how does the *Architectonic of Pure Reason* establish such a link? In what way do Kant's remarks here connect to his emphasis on the need to rely on a unitary philosophical system that includes both nature and freedom?

Kant does not answer these questions in the *Architectonic* itself. To explain why we find here a schematism of reason, in addition to the schematism of the understanding, we ought to return to the relation between the general analysis of ideas in previous pages of the *Critique* and the narrower role of the *Architectonic* in illustrating the function of the idea of the system (understood as a condition of possibility of the parts) in the purposive constitution of reason. Kant argues in the *Architectonic* that the idea of the whole is exhibited in a schematic function through the essential ends of reason. Yet the function of the relation between ideas and ends of reason is not at all clear, nor is it easy to reconstruct it on the basis of Kant's earlier

[21] The neglect extends even to studies that are usually considered wide-ranging reconstructions of the problem of the schematism in Kant's thought such as Daval's monograph, *La metaphysique de Kant*, cit. 179–243 or to the few influential commentaries on the second part of the first *Critique* such as Heimsoeth, *Transzendentale Dialektik. Ein Kommentar zu Kants Kritik der reinen Vernunft*, cit. 648 ff.

[22] As I try to show in Chapters 4 and 5, the *Appendix to the Transcendental Dialectics* does try to offer a deduction, albeit one defined by Kant himself as problematic.

remarks. Appeals to what Kant has to say in his general account of ideas in the earlier pages of the *Critique* seem, at first, disconnected from their teleological analysis in the concluding pages of the book. Indeed, Kant's focus on the issue of the unity of the system, and his references to schematism in that context, raise problems of fit with how the notion of ideas has been previously discussed. Let me explain.

The idea of the whole that is not only presupposed but exhibited as a schema to legitimize the sum total of cognitions as part of a system of reason is just that: an idea. Sceptical readings have traditionally interpreted ideas as 'theoretically fallacious' concepts, arguing that the only place in the *Critique* where Kant finds a constructive role for their use is the *Canon of Pure Reason* in which their application to the practical domain legitimizes their unifying function. We shall return to this problem in the following chapters. For now, it is important to understand that what motivates this reading is an analysis of the role of ideas as merely bringing to completion the critique of metaphysics that was initiated in the first part of the *Critique of Pure Reason*. When contrasting two different interpretations of Kant's analysis of ideas, one sceptical and focused especially on the *Antinomies of Pure Reason* and the other more positive and prominent in the *Appendix to the Transcendental Dialectic* and in the *Doctrine of Method*, Norman Kemp Smith, for example, sides with the former and suggests that although ideas are 'false' from a theoretical point of view, they are both 'legitimate and indispensable' from a practical standpoint.[23] His analysis is far from unusual even amongst contemporary Kant scholars. Indeed, it has also been endorsed by less sceptically inclined authors defending a constructivist interpretation of Kant's thoughts on method and arguing for the primacy of practical reason within Kant's philosophy.[24]

But such interpretations neglect the methodological contribution of ideas to the architectonic concerns of the first *Critique* not only from a practical but also from a theoretical point of view. Here the issue is not just the practical use of reason but the relation between that and reason's theoretical use, and indeed the systematic connection between the two as part of an attempt to justify the method of philosophy, and the role that systematization plays in it. Indeed, what practically-oriented readings of the first *Critique* often seem to miss is that here we have no reference to a practical, autonomous domain of the ideas of reason—this is something that Kant

[23] Smith, *A Commentary to Kant's Critique of Pure Reason*, cit., 428.
[24] See, for example, O'Neill, 'Vindicating Reason', cit. 280–308.

articulates much later and, in any case, not rigorously until the publication of the *Critique of Practical Reason* and the *Critique of Judgment*. What we find instead are two distinctive uses (theoretical and practical) of the same ideas of reason and an attempt to explain how they fit together.[25] This is not easy to achieve.

But if both traditional sceptical readings and more recent ones tend to miss the crucial target of the architectonic, the implications of their limitations are far-reaching. For one, it is difficult to see how reason could necessarily admit from the point of view of its practical use a concept that has been shown to be 'theoretically false', as Norman Kemp Smith has it. Sceptical readings of the first *Critique* have to concede at least the theoretical indeterminacy (not falsity) of ideas. Moreover, the reduction of ideas to mere schemes that the understanding deploys in aiming at the highest degree of unity and completeness, misses how the drive towards the unconditional as that which more properly represents the idea of the systematic unity of cognitions is a property not of the understanding but of reason, in its most appropriate use. What we need, therefore, is an explanation of why the principle of purposiveness is necessary to the architectonic unity of the system and how it is given to us through the schema of an idea that reason poses with reference to its final end.[26] This is difficult because, on the one hand, and as we shall see in the third part of this work, the first *Critique* leaves no room for a distinctive domain where the concepts of practical reason legislate autonomously. On the other hand, such purposive function of ideas is for Kant the cornerstone of the systematic character of knowledge in general. Indeed, it is only through the schematization of practical rational ends that we can grasp the idea of the whole in virtue of which the body of theoretical and practical cognitions obtains its scientific character.

4. Systematic Unity and Practical Purposiveness

The upshot of the analysis of the previous section is that there is an analogy between the activity of an archetypal intellect that brings unity to the entire

[25] See on this Gueroult, Martial, 'Canon de la raison pure et critique de la raison pratique', *Revue Internationale de Philosophie*, vol. 8 (1954), 331–357.

[26] For a rare discussion of this problem, with an explicit analysis of schematism and references to the third *Critique*, but which fails to pay attention to the different path taken by Kant in his later work, see McRae, Robert, 'Kant's Conception of the Unity of the Sciences', *Philosophy and Phenomenological Research*, vol. 18 (1) (1957), 1–17.

system of ends, both theoretical and practical, and reason's activity of systematization of its cognitions with reference to the idea of the whole. But there is also an important difference: the architectonic idea can contribute to the unity of the whole only if it is schematized.[27] How exactly is this schema made?[28] To understand the problem, we need to turn to the practical interest of reason with which we began.

In the *Architectonic of Pure Reason*, while discussing the way in which the idea of the whole is represented in a 'schema', Kant repeats some of the remarks made with regard to schematism in the *Appendix to the Transcendental Dialectic* but with a further interesting addition. He emphasizes that 'a schema that is not outlined in accordance with an idea, i.e. from the chief end of reason' (*aus dem Hauptzwecke der Vernunft*), but rather 'empirically, in accordance with aims occurring contingently' only produces 'technical unity' (*KrV* A833/B861; 691–692). Here, he warns against a mere scholastic understanding of philosophy according to which what matters is the logical perfection of cognitions regardless of the ends that reason furthers by means of it. Only the schema that is executed according to an idea 'where reason provides the ends a priori and does not await them empirically', Kant emphasizes, grounds architectonic unity (KrV, A833/B861; 691–692).

But what is the difference between the empirical determination of reason's ends and their architectonic disposition? Kant insists on the distinction between the two because only a priori ends support the correct schematic representation of the idea of the whole. The architectonic schema must in fact mediate between the manifold of particular empirical cognitions and an idea of the whole given a priori as universal and necessary by means of reason's essential ends. Precisely those ends constitute the intermediate concepts according to which reason's particular cognitions are ordered in accordance with the supra-sensible idea of a whole that grounds the systematic unity of reason and contains its 'supreme and internal end'.

The 'supreme and internal end of reason' is explicitly mentioned by Kant when he emphasizes that what we call science should not be understood

[27] I discuss this problem in the second part of this work, when analysing the speculative use of ideas in the *Appendix to the Transcendental Dialectic*. See also Daval, *La métaphysique de Kant*, cit. 179–180.

[28] Daval, *La métaphysique de Kant*, cit. 179–180 analyses extensively the problem of the schematic use of ideas, but does not focus in detail on the problem of schematism within the *Architectonic of Pure Reason*, limiting his discussion to the *Appendix* and therefore missing the contribution of the practical use of reason.

technically, 'from the similarity of the manifold or the contingent use of cognitions *in concreto* for all sorts of arbitrary and external ends'. It must arise 'architectonically'. As Kant explains, architectonic order here entails the affinity with and 'derivation from a supreme and inner end (*einigen obersten und inneren Zwecke*) which first makes possible the whole (*der das Ganze allererst möglich macht*)' (*KrV*, A833/B861; 691–692). But why is it that only the 'supreme' and 'internal' end of reason may ground architectonic unity? How does reason transform a rough aggregate of elements into a coherent, systematic whole?

It is important here to emphasize the difference between the *obersten und inneren Zwecke* (which, Kant believes, ground systematic experience) and those *wesentliche Zwecke* that reason gives a priori to make possible their comprehension. Kant does not clarify the distinction between them here. He does however rely on it a few paragraphs after, in one of the most mysterious passages of the entire first *Critique*. As he emphasizes, essential ends (*wesentliche Zwecke*) 'are not yet the highest' (*die höchsten*). Of these, he claims, in the systematic unity of reason, 'there can be only a single one'. They thus constitute either the 'final end' (*Endzweck*) or 'subalternate ends' (*subalterne Zwecke*), which necessarily belong to the former as means. Furthermore, the final end, he clarifies, is nothing other than the 'entire vocation of human beings, and the philosophy of it is called moral philosophy' (*KrV* A840/B868; 695).

The reasons for which the moral destination of human beings constitutes a final end of nature are clarified in the *Canon of Pure Reason*, to which I will return in the third part of this work. 'The idea of a kingdom of ends', Kant argues there, inevitably leads to a 'purposive order of nature guaranteed by the assumption of an idea, that of God, without which it is impossible to think of the physical and moral world as finding systematic unity and causal efficiency' (*KrV*, A816/B844; 682–683). What is interesting to notice in the *Architectonic* and its analysis of systematic unity is that Kant repeats here the findings of the *Canon of Pure Reason*, but is far from linking the possibility of knowing the *Endzweck* of nature only to the moral nature of human beings. On the contrary, he defines it as one of the most important ends that are given a priori to reason, ground the possibility of reflecting upon experience in a systematic way and provide schematic access to its 'supreme' and 'internal' end. Such a purposive principle determines the possibility of knowing the constitution of the whole system of experience according to an 'idea' which is both cause and effect of its own. The *Endzweck* of reason thus acts as *the ratio cognoscendi* of natural

purposiveness, whilst natural purposiveness constitutes the *ratio essendi* as well as the guarantee of moral purposiveness in the phenomenal world.

The purposive constitution of reason, Kant emphasizes here, proves the existence of a purposive order of nature without which reason could not promote and realize its essential ends in the empirical world. The final end of practical reason enables the architectonic unity of the system, according to both the scholastic and the cosmic definitions of philosophy, guaranteeing the integration of the theoretical with the practical use of reason, and explaining why nature and freedom which initially form 'two separate' systems, are ultimately joined in one 'single philosophical system' (*KrV* A840/B868; 695).[29] The purposiveness of reason reveals the purposiveness of nature, a purposiveness exhibited schematically through the idea of an intelligent and wise being that grounds the totality of conditions and provides the unifying idea of the system.

The solution of the *Architectonic* to the question of the *Übergang* from the system of nature to that of freedom anticipates some relevant themes of the *Critique of the Power of Judgment* but is also significantly different. The distinction between 'essential' (*wesentliche Zwecke*) and 'highest' ends (*höchste Zwecke*) of reason returns in this latter work too, but the uncritical identification of the moral destination of human beings with the final end (*Endzweck*) of nature is problematized and ultimately dissolved. The third *Critique* defines *Endzweck* as that which does not require any other as its condition of possibility ('*Endzweck ist derjenige Zweck, der keines andern als Bedingung seiner Möglichkeit bedarf*') and identifies it with the 'supreme objective end of the existence of a world' (*KU*: 434; 301). However, Kant clarifies that the final end of nature can never be known as such by human beings considered as participants of a natural order; it may only be related to the essential ends of reason and to humanity's moral destination. Thus, the moral agent continues to be at the centre of a purposive system, but the causality of this system does not rely on the postulate of an intelligent author of the world. What has changed?

In the *Architectonic of Pure Reason*, the solution to the problem of systematic unity rests on the idea of the whole at the basis of an analysis of nature as a system of ends. To explain this major shift and why it ultimately

[29] For a further discussion of this problem see also the comparison of Kant with Hegel in Düsing, Klaus, 'Naturteleologie und Metaphysik bei Kant und Hegel', in *Hegel und die 'Kritik der Urteilskraft'*, edited by H.F. Fulda and R.P. Horstmann (Stuttgart: Klett Cotta, 1990), 139–146.

risked undermining the entire critical project, we need to return to the *Architectonic's* analysis of the use of ideas from both a speculative and practical perspective. As we shall see in the next chapter, the integration between the speculative and the practical use of reason through the justification of the principle of purposiveness is crucial to understand Kant's teleological solution to the problem of the unity of reason. But it is also crucial to highlight why this particular teleological solution, as laid out in the first *Critique*, is ultimately unsatisfactory for Kant. To explain why, we must turn to the organic character of Kant's theory of reason, and his distinctive interpretation of the method of philosophy. This is the task of the following chapter.

3
Reason as Organism

1. The Analogy Between System and Organism

Nobody, Kant argues, 'attempts to establish a science without grounding it on an idea' (*KrV*, A 834, B 862; 692). Although the argument might, at first sight, appear as a dry formalistic, and by now outdated, remark in favour of the methodological unity of sciences, its relevance becomes clear once we turn to its implications for the kind of enquiry that the *Critique of Pure Reason* seeks to advance: the unity of reason and the question of method in its construction. For Kant, philosophy is not a discipline that operates in isolation from others. It is a highly rigorous science that ought to integrate the findings of all others and complement them with a reflection on the proper use of their tools, their respective methods of enquiry, and their relation to our cognitive faculties and practical attitudes. But philosophy can aspire to all this only because it relies on reason alone, without appeal to external authorities, and by refining its own methodological criteria in dialogue with other sciences. Philosophy only presupposes the self-explication, self-correction, and self-understanding of reason. It is impossible to prove the validity of its tools *more geometrico*, by presupposing certain premises and definitions and by equating its method to that of physics or mathematics (as Descartes or Spinoza maintained). The legitimacy and appropriate use of every principle depends on its organic relation with others and on the ability of all of them to show the coherence of experience in its complexity. Therefore, philosophy, like every other science, needs to be conceived with reference to the 'viewpoint of a certain general interest', not in accordance with 'the description given to it by its founder' but 'rather in accordance with the idea, grounded in reason itself, of the natural unity of the parts that have been brought together' (*KrV*, A 834, B 862; 692).

As already emphasized earlier, this presupposition of the unity of parts rests on a transcendental principle of purposiveness whose status in the first *Critique* is never fully clarified. Kant argues that the unity of scientific knowledge and the purposive character of the idea of the whole that lies at

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its basis provide the cornerstone for the 'scientificity of knowledge in general'. Furthermore, he explains that this idea of the whole is given to us through a schema that reason poses with reference to its 'final end'. Talk of final ends, however, is dangerously close to dogmatic metaphysics, unless we refer to the practical sphere of legislation of ideas, an autonomous domain where the concepts of practical reason legislate autonomously. Yet, as we shall see in the third part of this work, the *Critique of Pure Reason* makes no mention of such an autonomous domain of legislation by practical principles. If the assumption of architectonic unity is a mere logical presupposition of reason, should we conclude that its final end is also a mere presupposition? Kant seems to want to argue for a stronger thesis. He wants to argue that since reason's drive towards the systematic unity of knowledge coincides with an interest revealed by the pursuit of essential practical ends, such an end could also provide the medium through which the idea of the whole is schematized also from a theoretical perspective. How can that be done?

To better understand the teleological foundation of the unity of reason in the pages of the *Architectonic*, it is useful to return to Kant's methodological remarks in the *Preface* to the *Critique of Pure Reason*. As Kant puts it here, reason contains 'a truly articulated structure of members in which each thing is an organ'. This means, he suggests, that 'everything is for the sake of each member, and each individual member is for the sake of all, so that the least frailty, whether it be a mistake (an error) or a lack, must inevitably betray itself in its use' (KrV, B XXXVII–XXXVIII; 120). As Kant also explains in the *Preface* to the *Prolegomena*, since pure reason must be self-sufficient in its authority, 'there is nothing outside of it that could correct our judgment within it, the validity and use of each part depends on the relation in which it stands to the others within reason itself, and, as with the structure of an organized body, the purpose of any member can be derived only from the complete concept of the whole' (*Prol*: 263; 59).[1]

[1] This passage is important not only for the analogy between an organic body and the system of reason but also because Kant stresses again the relevance of systematic unity to address *all* the problems raised in the first *Critique*. The complete passage reads as follows: 'But pure reason is such an isolated domain, within itself so thoroughly connected, that no part of it can be encroached upon without disturbing all the rest, nor adjusted without having previously determined for each part its place and its influence on the others; for, since there is nothing outside of it that could correct our judgment within it, the validity and use of each part depends on the relation in which it stands to the others within reason itself, and, as with the structure of an organized body, the purpose of any member can be derived only from the complete concept of the whole. That is why it can be said of such a critique, that it is never trustworthy unless it is

This metaphor of reason as organism is crucial to understand the kind of methodological principle on the basis of which the unity of reason is founded in the first *Critique*.[2] Systematic unity is essential to reason's ability to be internally self-correcting and for the adequate use of its more specific concepts, both in their theoretical and in their practical use.[3] Kant signals the importance of this problem by appealing to the organic metaphor of reason not only in the opening pages of the first *Critique* but also when he has reached the end of his work, in the final pages of the *Architectonic*.[4] Here too Kant tries to clarify how one might proceed architectonically so as to unite the scholastic definition of philosophy (interested in the systematic unity of knowledge) and the cosmic one (interested in the relation of all knowledge to the final end of human reason). On the one hand, Kant is concerned to identify a principle that allows us to distinguish clearly between aggregate and system. On the other hand, this very principle is supposed to explain the integration between the theoretical use of reason and its practical use necessary to advance reason's essential ends. As already emphasized, at the end of the first *Critique* Kant assumes that this transition has been completed: the systems of nature and freedom, which were at first separated, he argues, are finally united in one philosophical system (*KrV*, A 840, B 868; 695).

As already emphasized, the distinction between aggregate and system that Kant highlights at various points of the *Architectonic* overlaps with a distinction between complete and partial science and is essential to understand how this unitary philosophical system is justified. Complete science requires incorporating the 'form of a whole, in so far as the conception

entirely complete down to the least elements of pure reason, and that in the domain of this faculty one must determine and settle either all or nothing.'

[2] For a discussion of this claim, see also Breitenbach, Angela, *Die Analogie von Vernunft und Natur: Ansatz zu einer Umweltphilosophie nach Kant* (Berlin: De Gruyter, 2009), esp. ch. 4.

[3] Several commentators of the past century have stressed the theoretical relevance of such a metaphor for a correct interpretation of the Kantian notion of system. However, most recent studies on the issue focus on the analysis of the *Critique of the Power of Judgment*, mostly neglecting the parts of the first *Critique* that are at the heart of this book. See for example Krohn, Wolfgang, 'Die natürlichen Ursachen der Zwecke. Kants Ansätze zu einer Theorie der Selbstorganisation', *Jahrbuch für Komplexität in den Natur, Sozial und Geisteswissenschaften*, vol. 3 (1992), 31–50 and Rang, Bernhard, 'Zweckmässigkeit, Zweckursachlichkeit und Ganzheitlichkeit in der organischen Natur. Zum Problem einer teleologischen Naturauffassung in Kants "Kritik der Urteilskraft"', *Philosophisches Jahrbuch der Görresgesellschaft*, vol. 100 (1993), 39–71 and, for a more detailed critical reconstruction of the issue, see Marques, Antonio, *Organismo e sistema em Kant. Ensaio sobre o sistema kantiano* (Lisbon: Editorial Presença, 1987).

[4] See on this issue also Jaspers' discussion on Kant in Jaspers, Karl, *Die grossen Philosophen*, vol. I (Munich: R. Piper, 1957), 397–616.

determines a priori not only the limits of its content, but the place which each of its parts is to occupy'. The very definition of a system as 'the unity of various cognitions under one idea' (*KrV* A832/B860; 691) entails a rational re-description of the idea of the whole as both anticipating a priori the role of each part of the system and constituting a concrete unity to which the parts tend. As Kant emphasizes, the scientific 'idea' of a system contains 'the end and the form of the whole which is in accordance with that end' (KrV A832/B860; 691).

The unity of reason is therefore grounded on an idea of the whole which can contain a multiplicity of cognitions in their constant development, a development whose possibility is in fact also presupposed. The way Kant proceeds here brings to mind an analogy with the Leibnizian conception of monads. For Leibniz, the monad was conceived as a 'primitive force' or 'originary activity' which also contained the conditions of possibility for its own development. By expanding and revisiting the Aristotelian concept of *entelecheia*, Leibniz sought to show how this primitive force was at the basis of an account of the development of organic bodies and their distinction from inanimate objects.[5]

Interestingly, like Leibniz's, Kant's conception of systematicity also relies on the notion of purposiveness. Moreover, Kant follows Leibniz in reflecting on the activity of organic beings to explain the characteristics of the idea of the whole on which the architectonic-systematic structure of reason is grounded. The whole, Kant argues, is in this case

> articulated (*articulatio*) and not heaped together (*coacervatio*); it can, to be sure, grow internally (*per intus susceptionem*) not externally (*per appositionem*), like an animal body, whose growth does not add a limb but rather makes each limb stronger and fitter for its end without any alteration of proportion. (*KrV*, A 833, B 861; 691)

The analogy with an animal body and the explicit reference to the way in which organic beings develop is very important to understand the purposive character of the principle on which the unity of reason relies. Kant seems to have shifted here from the metaphor of construction anticipated in previous pages of the *Doctrine of Method* to that of organic beings. For some

[5] On the relation between Leibniz's conception of monad and Kant's account of purposiveness, see Chiereghin, Franco, 'Finalità e idea della vita. La recezione hegeliana della filosofia di Kant', *Verifiche*, vol. 19 (1990), 127–229.

commentators, this shift is puzzling.[6] But, as explained in one of our early chapters, in Kant the construction metaphor is inspired by architecture, a form of *art* where the principle of purposiveness is also essential in thinking about the connection between the whole and the parts. Indeed, in the third *Critique*, the two examples with reference to which Kant articulates the notion of purposiveness are artistic products and organic beings. In light of those examples, the shift from one kind of metaphor (artistic creation) to the other (the nature of organisms) is not only easy to explain but in fact characteristically coherent. What does raise questions, however, is the justification of the principle of purposiveness in this part of Kant's work, its relationship to the assumption of order in nature, and the mysterious schematization of the idea of the whole as the foundation of a unitary system. To explain what Kant's argument is in the first *Critique* and why it differs from his more mature work, the next section focuses on his analysis of organic beings, the role that the principle of purposiveness plays in explaining their causality, and the foundations of that principle in the third *Critique*, contrasted to the first.

2. Reason and Nature as a System of Ends

To understand why Kant invokes an organic metaphor to explain the purposive character of reason in the first *Critique*, it is useful to read the *Architectonic* in light of Kant's remarks on the principle of purposiveness in the only work that is entirely dedicated to its analysis: *The Critique of the Power of Judgment*. As Kant argues here, in the case of organized beings everything is reciprocally means and end (*KU*, 376; 247–248). It is difficult to explain the development of organic beings by reference to mechanical causes, guaranteed by the application of the concepts of the understanding to objects of experience. Instead, Kant argues, we ought to analyse them as 'ends of nature' (*Naturzwecke*) (*KU*, 372–374; 244–246) by presupposing a particular type of causality, 'the idea of an effect as the very condition of possibility of that effect' (*KU*, 367; 239–240). To unpack this idea, it is worth recalling Kant's repeated remarks that although we think about organic beings as ends of nature, the more appropriate ground for the ascription of purposive causality is our own capacity for reflective judgment. As Kant

[6] See for a discussion, Paula Manchester, also citing Tonelli in 'Kant's Conception of Architectonic in its Historical Context', cit. 187–188.

explains, the hypothesis of final causes cannot be formulated by invoking the principles of the understanding; the concept of an 'end' can only be thought of in relation to practical reason and the determination of the will compatibly with a moral law.[7]

We begin to see here how in the third *Critique* Kant relates the principle of purposiveness to the distinctive practical causality of reason, a causality that acts as the basis for the determination of the will. This is a conception of purposiveness which takes for granted the reality of transcendental freedom, and which we might call 'purposiveness as normativity'. We appeal to this peculiar type of causality when we need to judge products of art or the workings of natural organic phenomena in analogy with our own action oriented to moral ends. As Kant explains, the causal relation established by the principles of the understanding can only help us illuminate the link between efficient causes (*nexus effectivus*) which relates causes to effects, but not the other way round. Attempts to reflect on the causality of organic beings rely on a nexus established in accordance with a concept of reason (ends), which, as Kant emphasizes 'if considered as a series, would carry with it descending as well as ascending dependency, in which the thing which is on the one hand designated as an effect nevertheless deserves, in ascent, the name of a cause of the same thing of which it is the effect' (*KU*, 372; 244). Such a nexus, he clarifies further, is established when: (i) the parts are only possible due to their relation to the whole; and (ii) the parts are combined into the whole by being reciprocally both cause and effect of their form. Only then, Kant argues, can we say that the idea of the whole determines the form and combination of all the parts as 'a ground for the cognition of the systematic unity of the form and the combination of all of the manifold that is contained in the given material for someone who judges it' (*KU*, 372; 245).

The principle that therefore helps to explain the development of organic beings is the principle of the 'internal purposiveness of nature' (*innern*

[7] Indeed, in the first version of the introduction to the third *Critique* Kant uses the term *Zweckmäßigkeit* to explain both the specific principle of purposiveness at the basis of reflective judgment and the concept of practical conformity to ends. He clarifies how the latter is a kind of 'Zweckmäßigkeit, die zugleich Gesetz ist', a form of purposiveness that is at the same time also law (*EE*, 245, 133). The fact that Kant uses the same term for both suggests that it is hard to distinguish the concept of conformity to ends from the practical domain. It is only in the second introduction to the third *Critique* that Kant distinguishes the term *Zweckmäßigkeit*, reserved to the capacity for reflective judgment, from the *Gesetzmäßigkeit* of the understanding and the *Endzweck* of reason. See on the use of these terms in the first and second introductions, Menegoni, Francesca, 'Finalità e scopo finale nelle introduzioni alla kantiana "Critica del Giudizio"', *Verifiche*, vol. 17 (1988), 327–351.

Zweckmäßigkeit der Natur) (*KU*, 376–378; 433–437; 247–249, 300–303), a principle that belongs to the capacity for reflective judgment, that is transcendental and regulative, that differs from all other principles of the understanding and that can be considered in affinity with the principles of reason. This principle in turn relies on an 'idea', the idea of the whole of nature as a regulated system of ends (*die Idee der gesammten Natur aus eines System nach der Regel der Zwecke*) (*KU*, 379; 250–251). Yet this idea, Kant explains in the third *Critique*, does not expand knowledge beyond the limits of experience and we cannot infer from it anything on the existence of a potential 'architect' of such system. Purposiveness as normativity serves as a rule to the faculty of judgment in reflecting on the multiplicity of the laws of nature there where it can no longer be assisted by the principles of the understanding.

Kant's analysis of purposiveness in the *Critique of Judgment* helps us understand better why Kant deploys the analogy with architectural and organic beings to explain the foundation of reason's systematic unity in the first *Critique*. But in the third *Critique*, we can only ascribe purposes to organic beings by relying on a principle of internal purposiveness, grounded on an idea of nature as a system of ends, and which is in turn based on the principle of reflective judgment. Does the analogy work to also explain the nature of the systematic principle at the basis of the architectonic unity of reason? What kind of purposiveness is at stake in the organic arrangement of the different cognitions of reason for the sake of systematic unification?

Kant's suggestions that the rational scientific concept of a system contains the 'end and the form of the whole that is congruent with it' indicates that in the first *Critique* too, the principle of purposiveness is crucial to understand the systematic relation between different cognitions.[8] The pure concept of reason (*Vernunftbegriff*) connects the idea of the whole required to conceive of a unitary system with the concept of an end (*Zweck*) which explains the principle of internal coordination of the parts within it.[9] The unity of an end, Kant argues, 'to which all parts are related and in the idea of which they also relate to each other, allows the absence of any part to be noticed in our knowledge of the rest'. Here, he insists, 'there can be no

[8] 'Der scientifische Vernunftbegriff enthält also den Zweck und die Form des Ganzen, das mit demselben congruirt.'

[9] See on the importance of the idea of the whole for the Kantian system, also with reference to the *Architectonic of Pure Reason*, Driesch, Hans, 'Kant und das Ganze', *Kant Studien*, vol. 29 (1924), 365–376.

contingent addition or undetermined magnitude of perfection that does not have its boundaries determined a priori' (*KrV*, A 832, B 860; 691).

It is worth noticing that not only does Kant distance himself from adherence to the mechanical explanations typical of the Newtonian school, but he in fact tries to articulate a diametrically opposite solution to the problem.[10] He explains that if we are to avoid an aggregate of cognitions in which knowledge builds up in a contingent way, and without an idea of the reciprocal connections of all elements in the whole, we must think of the relation between the whole and the parts as regulated by a principle like that regulating the development of organic beings, i.e. a principle of purposiveness. Just as in the case of animal bodies we would be hard-pressed to explain their development without reference to such principles, in the case of the organic system of reason we would struggle to understand the architectonic unity of its cognitions without assuming the plausibility of a principle of purposiveness On the one hand, such a principle is introduced in the *Architectonic of Pure Reason* as the principle of possibility of systematic experience, the foundation of our logical assumptions for the unity of law-like empirical generalizations. On the other hand, Kant also emphasizes that such a principle is already contained in the idea of the whole of knowledge before its complete execution. The relationship is here a functional one: the emerging idea of the sum total of cognitions already presupposes and determines the order of the parts in the present.[11] This does not mean that the correspondence is flawless; indeed, the 'schema' or 'definition of science', Kant argues, only rarely corresponds fully to its idea. Yet such an idea of the whole is contained in reason 'like a seed, all of whose parts still lie very involuted and are hardly recognizable even under microscopic observation' (*KrV*, A 834, B 862; 692).

But how do we justify this principle in the first *Critique*? Not with reference to reflexive judgment which is in turn connected to the causality of reason according to moral ends. In the *Critique of Pure Reason* there is no concept of reflexive judgment, no reference to a causality of transcendental freedom, and the concept of purposiveness as normativity is not available

[10] The thesis is advanced by Philonenko, Alexis, 'L'antinomie du jugement téléologique chez Kant', *Revue de métaphysique et de morale*, vol. 82 (1977), 12–37. However, Philonenko's main thesis, that Kant never managed to free himself from the analytical logic of the understanding, seems to neglect that the problem here is, rather, the systematic function and theoretical presuppositions of ideas, as specific concepts of reason.

[11] See for more on this functional explanation of Kantian teleology, Breitenbach, Angela, 'Teleology in Biology: A Kantian Perspective', *Kant Yearbook*, vol. 1 (2009), 31–56.

yet. Instead, Kant helps himself to an idea of purposiveness as design which he shares with the previous metaphysical tradition. To illuminate what is at stake in the analogy, it is useful to return to Kant's historical sources, to the debates on the nature of organisms that surround the *Critique of Pure Reason* and on which Kant's conception of the architectonic relies.

3. The Sources of Kant's Analysis of Germs and Predispositions

Just as the system is, in the pages of the *Architectonic*, compared to a living being, so the idea of unity that lies at its basis is compared to a 'germ' in accordance with which the organism develops. Systems, Kant clarifies, appear to be formed 'like maggots' by a 'generatio equivoca from the mere confluence of aggregated concepts, garbled at first but complete in time, although they all had their schema, as the original germ (*ursprünglichen Keim*) in the mere self-development of reason' (*KrV*, A 835, B 863; 692).

Kant's conception of germs, their purposive character, and his earlier thoughts on their status must be situated in the context of a familiar eighteenth-century debate about the unity of the species and the modality of transmission of character traits from one generation of organisms to the next. To better understand their relevance to the idea of natural purposiveness one should focus on the trilogy of essays in which the natural history of human beings is explicitly discussed: *Of the different races of human beings* (1775), *Determination of the concept of a human race* (1785), and *On the use of teleological principles in philosophy* (1788). In all these essays, reflecting on the reasons for the origin of different races, Kant offers roughly the following explanation:

> the grounds of a determinate unfolding which are lying in the nature of an organic body (plant or animal) are called *germs* (*Keime*), if this unfolding concerns particular parts; if however it concerns only the size or the relation of parts to one another, then I call them *natural predispositions*. [. . .] This care of Nature to equip her creature through hidden inner provisions for all kinds of future circumstances, so that it may preserve itself and be suited to the difference of the climate or the soil, is admirable. [. . .] Chance or the universal mechanical laws could not produce such agreements. Therefore, we must consider such occasional unfoldings as *preformed*.
>
> (VRM 2:435; 89–90)

Kant's remarks on germs and predispositions should be analysed in the context of a longstanding eighteenth-century scientific debate among defenders of epigenetic theories of natural development versus preformist accounts. The former, revived in the eighteenth century in the defence of 'mechanistic' epigenesis, offered by G.L.L. Buffon's *Histoire naturelle générale et particulière* that appeared in 1749, explained organic development by referring to the action of a *moule intérieure*, a kind of vital force understood in analogy with the Newtonian microforces, which organized the interaction of the various *molécules organiques* of which living matter was composed.[12] Here, the production of new organisms was illustrated with reference to a capacity inherent in matter to transform itself and generate new organic forms. Preformist accounts, on the other hand, developed in a climate of scepticism about epigenetic theories.[13] They gained particular prominence in Germany through the work of Albrecht von Haller, later also reinforced by the analysis and microscopic observations of the Swiss naturalist Charles Bonnet.[14] Both Haller and Bonnet refined existing accounts of preformation drawing on Malebranche and Leibniz by referring to the existence of preformed germs, which were thought to be present in every natural being, and that contained the seeds for their future development. Germs were therefore thought to pre-exist the fully formed organism, not in the sense that all the properties of a fully formed organism could be interpreted as already developed in the germs, but as seeds which required an ordering cause to facilitate their growth. Preformist theorists like Haller and Bonnet were thus able to respond to both biological and theological disputes about the relation of God to living matter, reconciling the natural development of

[12] For an excellent review of the thought of different authors involved in such controversies, see Zammito, John H., 'Kant's Persistent Ambivalence towards Epigenesis, 1764–1790', in *Understanding Purpose: Kant and the Philosophy of Biology*, edited by Philippe Huneman (Rochester, NY: University of Rochester Press, 2007), 51–74 and Sloan, Phillip R., 'Performing the Categories: Eighteenth-Century Generation Theory and the Biological Roots of Kant's A Priori', *Journal of the History of Philosophy*, vol. 40 (2) (2002), 229–253. For a recent book-length study of Kant's relation to the epigenetic tradition, see Mensch, Jennifer, *Kant's Organicism: Epigenesis and the Development of Critical Philosophy* (Chicago, IL: University of Chicago Press, 2013); see also Goy, Ina, 'Epigenetische Theorien. Caspar Friedrich Wolff und Immanuel Kant', in *Kant's Theory of Biology*, edited by Ina Goy and Eric Watkins (Berlin: De Gruyter, 2014), 25–41.

[13] See for references to some of the debates, Correira, Clara Pinto, *The Ovary of Eve. Egg, Sperm, and Preformation* (Chicago, IL: University of Chicago Press, 1997).

[14] For useful discussions and overviews of the debates, see Roe, Shirley A., *Matter, Life, and Generation. Eighteenth-Century Embryology and the Haller-Wolff Debate* (Cambridge: Cambridge University Press, 1981), see also Huneman, Philippe, *Métaphysique et biologie. Kant et la constitution du concept d'organisme* (Kimé: Paris, 2008).

organic parts with the defence of a purposeful intervention in the way natural forces with innate teleological direction could organize and develop.

It is not difficult to spot the philosophical roots of preformist accounts in Leibniz's thought and the application of his theory of monads to the phenomena of organic life. For Leibniz, as for his successors, the need for explanations based on purposes emerged as a result of the difficulties of the Cartesian model to explain the diversity of organic species through purely mechanical laws. To that effect, he clarified that the persistence of distinctive properties in different living beings could be explained as a purposive development of features that were present from the start but could only reach their mature form at the end of the process and subject to different natural environments. Here the Aristotelian theory of *entelecheia* was adapted to new scientific conditions in a way that did not rule out mechanical explanations. Indeed, as Leibniz insisted in his criticism of Stahl's animism and Cudworth and More's theory of 'plastick nature', the principles central to preformism should not be understood as alternatives to mechanical explanations but as complements to them.[15] Leibniz's way of reconciling mechanical explanations with teleological ones was crucial to the successive development of the study of organisms, and its influence on Kant cannot be overstated. Leibniz was one of the first philosophers to interpret organic development dynamically, as incremental growth subject to circumstances and not merely, as with previous essentialist thinking, as a static unfolding of immanent potentialities always present in the nature of things. He understood that phenomena such as the extinction of certain organisms posed serious issues for essentialist solutions, although of course he did not go as far as explaining the emergence of new species in terms of descent, as modern evolutionary biology does.[16]

Kant's analysis of the development of organic beings and its relation to the problem of the unity of reason should therefore be approached in the context of eighteenth-century disputes between epigenetic and preformist theories of biological development. As many interpreters have pointed out, Kant's general position towards epigenesis is complex.[17] Although in the

[15] Leibniz, Gottfried Wilhelm, 'Considerations on the Principle of Life and on Plastic Natures; by the Author of the System of Preestablished Harmony', in *The Philosophical Works of Leibniz* (New Haven, CT: Tuttle, Morehouse and Taylor, 1890), 163–169. See also Cassirer, Ernst, *Cartesio e Leibniz*, transl. by G.A. De Toni (Bari: Laterza,1986), esp. 294–309.

[16] See for a discussion of these issues Mayr, Ernst, *The Growth of Biological Thought: Diversity, Evolution, and Inheritance* (Cambridge, MA: Belknap Press, 1982), esp. 319–328.

[17] See Zammito, 'Kant's Persistent Ambivalence', cit. and Mensch, *Kant's Organicism*, cit.

first *Critique* he went as far as calling the entire system 'an epigenesis of pure reason' (*KrV* B167; 264–265), his commitment to a version of preformation is consistently clear in his early writings, particularly in his essays on race. In the writings on race, Kant notes that germs and dispositions should be understood as purposive conditions for the development of natural beings that specify their capacity to adapt and survive in particular environmental and atmospheric conditions. They represent innate structures, independent of mechanical causes, which precede the empirical development of organisms yet contain the seeds for their future growth and allow them to adapt in different environments (VRM 2:435; 89–90).

As Kant puts it, 'the human being was destined for all climates and for every soil' and 'consequently various germs and natural predispositions had to lie ready in him to be on occasion either unfolded or restrained, so that he would become suited to his place in the world and over the course of the generations would appear to be as it were native to and made for that place' (VRM 2:435; 89–90). Faced with the usual difficulties of invoking mechanical laws to analyse the unity of a species and explain how the characteristics of a particular organism could be preserved and transmitted to the next generation, a version of 'preformist' theories is endorsed to account for the evolution of human traits that are already contained in it as germs and predispositions. Yet, while predispositions refer to certain conditions of development with regard to the size and relation of parts (organs) in a living being, germs are conditions for the development of new features. This then allows Kant to explain the unity and the diversity of the human species as well as its capacity to adapt to different external circumstances. Different races develop as a result of different germs coming into contact with different environments. Predispositions, on the other hand, provide the structural conditions under which the development of certain germs could be occasioned. They are therefore the same for the whole human species.

3.1 Reason, Nature, and History

The historical debates on the development of organic beings are crucial for understanding Kant's teleological analysis of the historical development of the human species and the distinctive characteristics human beings develop

in the course of adapting to different environments.[18] Kant explains how germs account for the different characteristics inherited by every race within the same human species, but also emphasizes how the influence of a particular environment, the character of the soil, or certain atmospheric conditions establish differences in human traits. What is even more important for my interpretation, however, is Kant's underlying thought that the purposive character of an organism is taken to be the general reason (*allgemeine Grund*) from which we can 'infer a natural disposition to this end that has been set by nature, and from which we conclude to innate germs' (*BBM*, 155–157; 98). Let me explain.

Kant's biological theory of germs is essential to his defence of the transition from the purposeful constitution of organisms to an organization in accordance with purposes of nature itself. But the problematic nature of these assertions only becomes obvious when we abstract from natural teleology and turn to the status of germs in human history. Understanding dispositions as triggered by nature is not limited to the mere explanation of natural phenomena but also concerns the analysis of the adaptation of human capacities in the course of human history. Indeed, the argument is also applied to our very cognitive functions and to reason as the faculty that develops them further. Kant hints at this different application of the theory of the germs already towards the end of the *Review of Moscati's* work arguing that we find in human beings a '"germ of reason" (*ein Keim von Vernunft*) which, if it develops makes them destined to sociability' (*RM*, 425; 80–81). But why should nature itself encourage such development in the form of a germ contained in reason? Or better, how can nature be both the origin and cause of the progress of rational beings in addition to being the cause of their biological evolution?

This same question about what accounts for the organic development of reason is at the heart of the 1784 essay on the *Idea for universal history from a cosmopolitan viewpoint*. Here Kant asks whether in the absurd unfolding of human events it might be possible to discover '"an end of nature" (*Naturabsicht*)', which enables one to interpret apparently inexplicable developments of the human species according to a history that follows 'a plan of nature' (*IaG*, 18; 109). The basis for such a plan is, in this case too, an 'idea' that allows us to detect the guiding thread (*Leitfaden*) thanks to which

[18] See also Ypi, Lea, 'Commerce and Colonialism in Kant's Philosophy of History', in *Kant and Colonialism: Historical and Contemporary Perspectives*, edited by K. Flikschuh and L. Ypi (Oxford: Oxford University Press, 2014), 99–126.

we can think of human history not as a disorganized series of events without a purpose but as the progressive realization of an end which is contained like a germ in human nature.[19] The rationality of human beings is in this case understood as a kind of disposition to develop in conformity to purposes, a disposition which in turn mirrors nature's own disposition to develop according to purposes. The lack of development of such a disposition would be similar to that of an organism that does not grow to fulfil its purpose; it would be 'a contradiction to the teleological doctrine of nature' (*IaG*, 18; 109). Reason develops its potential in a way analogous to how organic beings develop their nature compatibly with the germs inherent in them. It is these germs and their development throughout entire generations that contribute to the progress that, with time, brings humanity to the 'degree of development that makes its perfectly adequate to reach its end' (*IaG*, 19; 110).

When it comes to philosophical method then, the purposeful orientation of reason at the heart of systematic unity is only a narrower instance of the general orientation to purposes inherent in nature. Human history is seen as the process of realization of predispositions and germs that are innately present in natural organisms, and can only be explained in the light of this assumption of natural purposiveness. But how can purposiveness in nature help us explain the meaningful course of human history without somehow undermining the capacity of human beings to freely pose their autonomous ends, including the ends of scientific enquiry? Kant's theory of germs and predispositions seeks to solve the difficult problem of the relationship between natural and human purposiveness by introducing the idea of natural conditions for development able to account for both immutability and change in the course of human history. Yet, as we saw, such assumptions are also linked to long-standing debates on the possibility to infer the existence of an order inherent in nature from the assumption of an idea of unity required for the purpose of the systematization of reason's different uses. This assumption casts doubt on the contingency condition that Kant also sometimes ascribes to the status of the transcendental principle of purposiveness in nature. Even more problematically, if natural purposiveness is to be understood as the condition of possibility for the development of

[19] For a discussion of the relation between the idea of universal history and Kant's architectonic idea, but without focusing on the implications of Kant's theory of germs, see Kleingeld, Pauline, 'Kant on Historiography and the Use of Regulative Ideas', *Studies in History and Philosophy of Science Part A*, vol. 39 (4) (2008), 523–528; see also Kleingeld, Pauline, *Fortschritt und Vernunft: Zur Geschichtsphilosophie Kants* (Wuerzburg: Koenigshausen, 1995), esp. ch. 7.

preformed predispositions, the space for the moral pursuit of essential purposes ends up being significantly restricted.

These clarifications are useful to highlight the difficulties of the account of the unity of reason and its underlying purposive structure in the *Critique of Pure Reason*. Here the idea of the whole is necessary to understand the system of reason (and related history of philosophy) as a set of cognitions and ends displaying connections linked to each other in non-accidental ways. But given the analogy of reason with an organic being, it is also a reflection of a unitary structure somehow presupposed in nature. Kant tries to address this problem by assigning to *germs* a dual purposive function, a function crucial to explaining the transition from natural science to the history of reason. The history of reason is nothing else than a series of discovery of patterns of explanation that are only necessarily connected to each other if we ascribe to nature an immanent end that confers organic unity on the integration of different (speculative and practical) cognitions. One advantage of Kant's philosophy of history read in the light of the hypothesis of a purposive theory of organic development in the first *Critique* is that it explains why the idea of the whole acts as a systematic point of convergence of both the theoretical and the practical use of reason. By applying his theory of germs to the phenomena of natural organic life and to the quasi-historical conditions in which human rationality develops, Kant tries to find an answer to the difficult question of the relation between natural and practical teleology, between natural purposes and moral ones, an answer which he associates with the function of the *ideas* of reason understood at the same time as *ends*.

However, later on Kant did not seem satisfied with the answer he had identified at this point. In the writings following the *Idea of a universal history*, he reviews his theory of organic beings and progressively isolates the explanation of purposes in history from the theory of germs. Indeed, as he explains in the *Review of J.G. Herder's Ideas for the philosophy of the history of humanity*, the self-regenerating capacity of organic beings should not be explained with reference to 'primordially implanted machines and buds that unfold themselves only when occasioned', but as 'mere limitations, not further explicable, of a self-forming faculty, which latter we can just as little explain or make comprehensible' (*RH*, 62–63; 140). In the essay *On the uses of teleological principles in philosophy*, he emphasizes that the 'ground of determination' (*Bestimmungsgrund*) of such organic forces can be observed 'only in ourselves', that is, 'in our understanding and will as a cause of the possibility of certain products that are arranged entirely according to ends,

namely that of works of art' (*TTP*, 181; 216). Finally, in the *Critique of the Power of Judgment*, Kant makes it unambiguously clear that the self-forming capacity typical of the constitution of living beings could not be reduced solely to mechanical explanations but also did not rely on an unconditional assumption of purposiveness in nature. Here Kant clarifies that it is possible to speak of an 'end of nature' present in organisms not as a fact that can be asserted on the basis of the empirical observation of such beings, but on the basis of a determination of their behaviour, in analogy with the ends human beings display in art and in their practical actions (*KU*; 5: 373–376; 5: 427–433; 244–248; 295–301).

Why did Kant later on change his mind on the relation between the assumption of purposiveness in nature and purposiveness in history? The answer is that while the dual characterization of germs as subject to both natural and historical development contributes to framing Kant's distinctive take on how to understand nature and the relation of human beings to it, it also raises difficult questions for the justification of the philosophical method conducive to the unity of reason in the *Architectonic* of the first Critique. It is to this problem that I shall now turn.

3.2 The Link Between the Idea for Universal History and the Systematic Idea of the Architectonic of Reason

In the essay on universal history, Kant argues that the universal idea which allows one to understand the development of human dispositions is based on a principle of natural purposiveness. Here too, Kant insists on the distinction between an aggregate and a system of knowledge (in this case historical knowledge) so as to understand the development of human dispositions in a non-accidental way. Here too, he reflects on the importance of systematicity, applied not just to reason's theoretical and scientific cognitions but also to actions and events that humans produce as a result of their relation to one another. However, the 1784 essay on history contains no further explanation of the function and justification of the philosophical idea required to reflect on reason and history in a systematic way, except for the highly ambiguous references to the concept of 'germ' as the kind of seed that nature has implanted in humans to allow them to develop essential purposes.

The justification of the systematic role of ideas that is missing in the essay on history is provided in a highly sophisticated way in the *Architectonic of*

Pure Reason. The latter illuminates the transcendental presuppositions of the ideas of reason and clarifies their status within the structure of Kant's critical system. The solution to the question of the conditions of possibility of an idea that contains the guiding thread to a systematic understanding of universal history is internal to the solution of the problem of the architectonic unity of reason. The justification of its validity, and the principle that enables it, is the same as the justification of the architectonic idea of the system present in the first *Critique*.

The analogy between the idea for universal history and the idea that is at the basis of the systematic account of the architectonic of reason is clear in the descriptions that Kant provides of each, and where he emphasizes the role of 'germs' in reason's organic development.[20] In both cases, Kant emphasizes the difference between an aggregative and a systematic account of experience and highlights the need for a 'plan' constructed in accordance with reason's theoretical and practical ambitions. In both cases Kant also stresses how such a plan needs to be constructed in accordance with an idea which is already contained as a germ within human reason.[21] We can reflect about the role played by such a germ if we turn our attention not only to the development of particular systems and distinctive fields of scientific knowledge, but to the development of philosophical enquiry as a complete discipline. It is not just that each science is articulated in accordance with an idea of how it should develop but rather all are in turn 'purposively united with each other as members of a whole in a system of human cognition, and allow an architectonic to all human knowledge, which at the present time, since so much material has already been collected or can be taken from the ruins of collapsed older edifices, would not merely be possible but would not even be very difficult' (*KrV*, A 835, B 863; 692–693).

[20] For a discussion of this problem see also Lehmann, Gerhard, *Zur Problemanalyse von Kants Nachlasswerk* in *Kants Tugenden: Neue Beiträge zur Geschichte und Interpretation der Philosophie Kants* (Berlin: De Gruyter, 1980), 96–140, also discussed in Lehmann, Gerhard, 'System und Geschichte in Kants Philosophie', *Il pensiero*, vol. 1 (1958), cit. See also Salvucci, Pasquale, *L'uomo di Kant* (Urbino: Argalia, 1975), cit.

[21] The concept of 'germ' (*Keim*) in the *Prolegomena* is associated with a metaphysical disposition in human beings connected to the order of ends in nature. But here Kant writes about 'transcendental ideas', which 'cannot be avoided' and yet 'will never be realized'; they 'serve not only actually to show us the boundaries of reason's pure use, but also to show us the way to determine such boundaries; and that too is the end and use of this natural predisposition of our reason, which bore metaphysics as its favorite child, whose procreation (as with any other in the world) is to be ascribed not to chance accident but to an original seed that is wisely organized toward great ends' (Prol. 4: 353; 143) (Translation slightly modified, the English translation uses the term 'seed').

These passages confirm Kant's interest in a conception of philosophy articulated in line with the scholastic and cosmic demands of the *Architectonic of Pure Reason* and perceived as a culmination of the demand for systematicity and classification in all the sciences, which integrates the theoretical and the practical use of reason. Philosophy is a systematic discipline that cannot be considered fully formed already from the start; it develops in accordance with particular dispositions and follows the historical evolution of the human species. Reason does not always contain what it needs to achieve the unity of such a system but acquires it in the course of shaping its own history, following a process of reflection, clarification of its own purposes, and self-correction. Philosophy is here the 'mere idea of a possible science', 'nowhere given *in concreto*, but which one seeks to approach in various ways until the only footpath, much overgrown by sensibility, is discovered and the hitherto unsuccessful ectype, so far as it has been granted to humans, is made equal to the archetype' (*KrV*, A 838, B 866; 694).

Notice, however, that this mere idea of a possible science is not a chimera. The efforts of those involved with particular sciences to find their place within an ideal of complete knowledge are not a hopeless attempt to achieve the kind of metaphysical insight prohibited by the critique of reason, and required by its practical use. Whoever commits to doing philosophy, Kant argues also in the *Jäsche Logic*, 'builds his own work, so to speak, on someone else's ruins, but no work has ever come to be that was to be lasting in all its parts' (*LJ*, 25; 538).

The history of philosophy consists of a series of efforts on the basis of which one can eventually come to see a path that was initially unclear or unknown to humans. Reason begins by following this path in a way that is disoriented, without being prescribed any predefined or conclusive purposes.[22] It proceeds chaotically at the start. But its construction finds more stability when the architectonic key is discovered in the form of a principle of purposiveness that gives systematic unity to the theoretical and practical use of reason. By virtue of this principle a researcher can organize scientific cognitions in a systematic way, and see the theoretical interests of

[22] Yirminiahu Yovel argues that this conception of the history of philosophy, which appears most clearly in the *Architectonic of Pure Reason*, has brought Kant to not only anticipate Hegel in the historicization of the Platonic concept of love for knowledge, but also to precede the Hegelian and then Marxian conception of the end of philosophy in favour of its enactment. I shall return to this suggestion in the chapters on the practical use of ideas, but see Yovel, Yirminiahu, *Kant and the Philosophy of History* (Princeton, NJ: Princeton University Press, 1980), 233–245.

reason as integrated with its essential purposes (including practical ones). Kant explains this point by arguing that it is 'too bad that it is first possible for us to glimpse the idea in a clearer light and to outline a whole architectonically, in accordance with the ends of reason, only after we have long collected relevant cognitions haphazardly like building materials and through them technically with only a hint from an idea lying hidden within us'. Approaching the philosophical knowledge we have accumulated from a historical perspective that enables us to observe how reason learns from its past mistakes is essential. But a purely aggregative historical outlook is not enough. Identifying both reason's present limitations and its orientation to future purposes is crucial to deliver what a purely historical outlook would be missing: a philosophical perspective on reason's own history.

4. Conclusion

The organic theory of reason that we find in the first *Critique* suggests that for Kant philosophy is a discipline interested in both the speculative and the practical use of reason, and that the principle of purposiveness is crucial to the systematic integration of cognitions relevant to both spheres. Every particular body of knowledge occupies a specific place in the history of philosophy. In the course of the cultural development of the human species, a body of knowledge that was once considered coherent and plausible but became subsequently irrelevant is similar to an archeological repository from which one can learn about the past so as to better plan for the future. Kant thinks of his own critique not only as a philosophical synthesis of the work of his predecessors but also as a tool for the discovery of a clearer and more comprehensive systematization of reason's cognitions, starting from an appropriate account of the relation between its different uses and ending with the justification of their role within a unitary system of reason. This, he claims, can be achieved, because of the emergence 'in a clearer light' of an idea that has guided reason at first haphazardly and almost in a hidden way and has now finally been discovered as the basis for its architectonic system (*KrV*, A 839–840, B 867–868; 695).[23]

[23] Alexandre Kojève, in his (posthumous) work on Kant, focused on the proto-Hegelian character of this original Kantian reading of philosophical development, underlining in particular the systematic link between the *Architectonic of Pure Reason* and its history and emphasizing how the latter presents 'a very Hegelian conception of the history of philosophy'. Indeed, a careful reading of these pages reveals close affinities with prominent Hegelian themes, and

In one of the crucial passages of the *Architectonic of Pure Reason* to which we have already drawn attention, Kant argues that the idea of an architectonic system coincides with the legislation of philosophy understood not merely as a scholastic doctrine but in a cosmic sense, as an idea of the totality of cognitions schematized in accordance with its essential purposes. The ambition is therefore one which sees the unifying efforts of reason as efforts in which theoretical and practical uses of reason mutually support each other in a unique coherent system. Yet, as we have already emphasized, when taken seriously, this account of the architectonic unity of reason runs into peculiar difficulties. The historicization of the idea of systematic unity at the basis of the entire philosophical system requires overcoming a conception of history as mere *cognitio ex datis* (*KrV*, A 836, B 864) and opens up to a philosophical account of it on the basis of an idea for a purposeful history of knowledge. This *philosophical* history in turn rests on a transcendental principle of purposiveness which relates the idea of the whole necessary to reason's essential ends. But what is the status of this principle? Why is it given to us through an idea of reason? How does it succeed in integrating theoretical and practical uses of reason?

Kant's answer, as we have seen in the previous chapter, is to invoke the concept of schematism to explain how the idea of systematic unity is necessary and accessible to us from the perspective of the practical needs of reason. On the one hand, this is a merely subjective aspiration, tailored to the peculiarities of human reason. Yet Kant also invites us to think of such an idea in analogy with an original 'germ' always present in reason but that can only grow and develop further in appropriate circumstances of enquiry, sensitive to distinctive methodological constraints. This implies that the possibility of the harmonization of particular cognitions into a whole that is purposefully oriented is in some ways always contained in the nature of reason, even if the full development of such an idea depends on contingent scientific and social occurrences. Just as in the case of organic beings, environmental conditions are crucial to the full development of innate germs and dispositions, in the case of the idea of reason, historical circumstances play an analogous role. The evolution of the system is a dynamic process through which reason disciplines and limits itself, seeking order and

Kojève's analysis, at least as far as the *Transcendental doctrine of method* is concerned, is very close to Kant's texts. However, his conclusion that for Kant, as for Hegel, 'the system of knowledge could also be exposed as a history of philosophy' seems to go too far. See Kojève, Alexandre, *Kant* (Paris: Éditions Gallimard, 1973), 59–61.

creating unity as it discards unnecessary elements found along the way. Each stage in the development of this process is a step towards the process of reaching further maturity.

But we should be cautious in reading Kant's methodological stance here as a pragmatic-fallibilist one, placing all the emphasis on the regulative status of the idea of the whole necessary to the unity of the system. Recall that the different elements that contribute to the unity of the system are not merely connected to each other but also to the idea of the whole that is at the basis of their development, an idea that, Kant insists, uncovers a unity that is already there. It is as if this idea of the whole always preceded the coming together of the unity of its different elements; the whole is understood as a determining ground of the parts. The explanation bears many resemblances to Leibniz: the order of nature is already there and human reason merely uncovers its necessary regularities, notwithstanding the mistakes made along the way. Kant's appeal to the concept of germs and their status within Kant's philosophy of biology, as well as his puzzling remarks about the need to provide a sensible schema of the idea of the whole suggest that by the end of the first *Critique* the possibility of jumping from the regulative use of ideas to an objective view of nature as containing a purposeful arrangement of empirical laws cannot be easily ruled out. Without a conception of purposiveness as normativity, all we are left with is the traditional metaphysical account of purposiveness as intelligent design.

One objection to this interpretation is that although Kant invokes the order of nature in explaining the necessity of systematic unity, his account presupposes the explanation of the regulative role of ideas offered in the *Appendix to the Transcendental Dialectic*. In this part of the first *Critique*, so the objection goes, Kant has shown the implausibility of interpretations that presuppose a purposive order of nature, and he has distinguished between a logical and a transcendental principle of the systematic unity of knowledge. Indeed, Kant's analysis in the *Appendix*, our critic might argue, is not only no different from the one Kant offers in the *Critique of the Power of Judgment*, but quite close to it in its endorsement of the regulative status of the assumption of systematic unity of nature.

The next two chapters try to answer this objection. As I go on to show, reading the regulative status of ideas in the *Appendix* as a condensed version of the use of reflective judgment in the third *Critique* fails to take into account the peculiar status of ideas in the first *Critique* and gives a mistaken impression of their relationship to the principle of purposiveness in general. To see how and why the demand for unity grounded in the regulative role of

ideas progressively gives way to the concept of reflexive judgment as satisfying the same demand for systematic unity, we need to show how reason has a moral causality of its own, and how the discovery of this practical autonomy in turn paves the way to an account of systematic unity grounded on an idea of purposiveness as normativity as opposed to purposiveness as design. Justifying this transition, which originates in the metaphysical debates preceding Kant's intervention, and that shapes the entire subsequent German philosophical tradition, is the challenge of the first *Critique*. It is a challenge that, as we shall see in what follows, Kant's *Architectonic* confronts but fails to overcome.

4
Theoretical Reason and the Role of Ideas

1. The Unity of the Laws of Nature

Recent scholarship on the role of the ideas of reason has been increasingly interested in Kant's arguments on the systematic unity of cognitions to vindicate an account of scientific explanation centred on the unifying power of laws.[1] At the heart of this interpretation is an attempt to reflect on the importance of systematicity for understanding the character of laws as regularities reduced to a limited set of patterns balancing explanatory strength and simplicity. While traditionally associated with a rigid defence of a priori statements in tension with the fallibilistic commitments of modern scientific theories, more charitable readings have paved the way to a different, pragmatic interpretation of Kant's reflections on scientific method.[2] Kant's argument about systematic unity, so the interpretation goes, is relevant to contemporary accounts of laws understood either as 'best systems' for the classification of regular empirical occurrences, or as necessary rules according to which empirical phenomena behave as in so-called 'necessitation' accounts.[3] Common to all these readings is an attempt to capture relations of dependency amongst natural kinds while vindicating the distinctiveness and necessary character of laws vis-à-vis contingent regularities.

[1] See for a recent state of the art, Massimi, Michela, and Angela Breitenbach (eds.), *Kant and the Laws of Nature* (Cambridge: Cambridge University Press, 2017).

[2] Gava, Gabriele, and Robert Stern, *Pragmatism, Kant, and Transcendental Philosophy* (New York: Routledge, 2015).

[3] For an account of laws as 'best systems' see Buchdahl, Gerd, *Kant and the Dynamics of Reason. Essays on the Structure of Kant's Philosophy* (Oxford: Blackwell, 1992); Friedman, Michael, *Kant and the Exact Sciences* (Cambridge, MA: Harvard University Press, 1992) and Kitcher, Philip, 'Projecting the Order of Nature', in *Kant's Philosophy of Physical Science: Die metaphysische Anfangsgründe der Naturwissenschaft, 1786–1986*, edited by Robert E. Butts (Dordrecht: Reidel, 1986), 201–238. For a defence of the necessitation account see most recently Messina, James, 'Kant's Necessitation Account of Laws and the Nature of Natures' in *Kant and the Laws of Nature*, cit. 131–49.

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This chapter addresses the relation between two interconnected claims that we find throughout Kant's analysis of ideas in relation to the question of unification of the laws of nature. The first is an epistemic claim about the heuristic role of systematic unity for the purpose of constructing stringent generalizations with causal explanatory power and that satisfy criteria of necessity. This claim is relatively uncontroversial. Its advantages to our understanding of laws as best systems for explaining the non-contingent connection between phenomena have already been extensively explored in the literature. They relate to the relevance of constructing explanatory patterns in a way that combines the greatest degree of unity while accounting for the highest level of internal differentiation.

The second claim refers to a more controversial, ontological, debate about the character of the regularities that laws are supposed to capture, and whether such regularities can be seen as inherent to nature. For, as one author puts it, 'how could we be *justified* in adopting explanatory patterns from considerations of unification, if unity of causes, laws and powers was not intrinsic to nature'? Without a further, ontological commitment, the logical demand would seem driven by 'an obsessive phantasy that might in no way match the order of natural phenomena'.[4]

While some authors dismiss the ontological claim as unnecessary to the epistemic one, others take seriously its implications for a Kantian contribution to the analysis of scientific laws. They argue that Kant's claims about the unity of nature are grounded on a transcendental principle of purposiveness which, from the perspective of the construction of an ideal system of laws, is the condition of possibility of the very concept of an empirical law of nature. This argument, however, has also been challenged. What seems particularly problematic is Kant's insistence that the transcendental principle of purposiveness, while being necessary to the logical principles of homogeneity and specification orienting the study of the particular laws of nature, is also contingent.[5]

Although plausible, these rebuttals focus mostly on Kant's theory of reflective judgment, and on the form of purposiveness on which the principle of reflective judgment relies to articulate the transition from the domain of application of the principles of the understanding to that of reason. The trouble is that the introduction of a third concept, that of reflective

[4] Kitcher, 'Projecting the Order of Nature', cit. 262.

[5] Ginsborg, Hannah, *The Normativity of Nature: Essays on Kant's Critique of Judgment* (Oxford: Oxford University Press, 2015).

judgment, makes the relation between logical and transcendental claims intelligible only from the point of view of Kant's later work. This leaves us ill-equipped to articulate the problem from within Kant's concern with unity in the context of his theory of systematic unity in the first *Critique*. It also forecloses a more productive interpretation of the *Architectonic of Pure Reason* in the context of a more ambitious statement of the method of philosophy as a whole and the relation to the problem of the unity of reason which is at the heart of this work.

This chapter and the next explore Kant's argument about the systematic unity of knowledge in connection with his analysis of philosophical method and of reason as the faculty at the basis of our unifying efforts. They show how Kant's argument about systematic unity in science is not limited to the analysis of the empirical laws of nature and their interconnectedness in a system of scientific generalization and specification. The previous chapter highlighted how Kant's contribution to discussions around scientific method is only a narrow application of a wider effort to put the very activity of systematizing in the context of an analysis of both cognitive and practical attitudes rooted in an organic, unitary theory of reason. Discussion of organic beings, however, raised the problem of how to understand the principle of purposiveness with the help of which we explain their development. While Kant's theory of reason has often been analysed in connection with contemporary methodological debates in the philosophy of science,[6] focusing on the role of ideas with regard to the problem of systematicity from a theoretical perspective enables us to grasp a different, but important strand of his reflections on philosophical method and on the unity of reason in the first *Critique*.

2. The Ambiguous Status of Transcendental Ideas in the Dialectic of Pure Reason

In the *Architectonic of Pure Reason*, Kant claims that to understand the relation between the essential ends of reason and the complex of its cognitions we need to reflect on reason as a systematic whole. As we saw in the previous pages, this requires the presupposition of a principle of purposiveness

[6] See for a discussion along these lines Massimi, Michela, *Kant and Philosophy of Science Today*. Royal Institute of Philosophy Supplement 63. (Cambridge: Cambridge University Press, 2008).

through which we can relate the idea of the whole (required for systematic unity) to the different cognitions available to us as both something that is presupposed, but also to which the combination of the different parts tends. Yet even though the architectonic principle of purposiveness is a necessary systematic and methodological presupposition to understand the unity of reason, in the *Architectonic* we find no mention of the legitimacy of its use or a deduction of its validity. The only discussion we find here is that which refers to Kant's organic theory of reason, and his remarks on how we must understand the idea of the whole in a mediated way, i.e. with the help of a schema that reason sketches in accordance with its chief end (*KrV*, A 833, B 861; 692).

Yet as already observed in Chapter 2, in the *Architectonic* there is no deduction of the pure concepts of reason preceding the use of schematism, not even an attempt at a deduction. Therefore, to explain the relation between the idea of the whole and the concept of purposiveness, it is important to return to Kant's more general analysis of ideas, as the pure concepts of reason. This helps clarify, first, some potential ambiguities contained in the analysis of transcendental ideas; second, their distinctiveness when compared to the pure concepts of the understanding; and third, the role of the hypothetical use of ideas in the process of enabling a coherent account of experience in its complexity.

The *Appendix to the Transcendental Dialectic* is crucial to understand the specific relation between ideas and ends and to explain the positive role of ideas when compared, for example, to the analysis of the *Transcendental Dialectic*. In analysing these pages, it is crucial to focus on what Kant says with regard to the role of ideas in the process of logical unification of the rules of the understanding and providing a guiding thread to the exploration of the empirical laws of nature. This role, as we shall shortly see, requires, first, grounding the logical use of the ideas of reason on a transcendental purposive principle; second, providing a deduction of the link between the pure concepts of reason and the ideal of pure reason that Kant suggests as their schema; and, finally, understanding how the justification of a transcendental principle of systematic unity connects to the assumption of nature as a system of purposes.

Let me start with the first problem: the role of the pure concepts of reason in Kant's *Dialectic of Pure Reason*. While in the case of the categories, Kant invokes the authority of Aristotle to explain their use in the process of organizing experience, in the case of ideas he appeals to Plato. The choice is determined by the necessity to introduce a concept which is linked to

principles that, as he puts it, are very different in 'type, origin and use' compared to the concepts of the understanding (*Prol*., 328; 120). The explanation of their distinctive function and use compared to the categories of the understanding, however, raises some peculiar difficulties in outlining their status in the process of transcendental construction of experience.

There are two different ways of understanding the Kantian definition of ideas, and they are not always compatible. Indeed, their apparent incompatibility is the main source of ambiguity when it comes to clarifying their transcendental status. The first interpretation has to do with a characterization of ideas as a pure product of rational activity, far removed from the experience of phenomena overall. Kant refers to this interpretation in the paragraphs of the first *Critique* dedicated to ideas in general as well as in the *Transcendental Dialectic*, especially the *Antinomies of Pure Reason*. He introduces this interpretation while emphasizing how Plato used the expression 'idea' to indicate something that 'not only could never be borrowed from the senses, but that even goes far beyond the concepts of the understanding (with which Aristotle occupied himself), since nothing encountered in experience could ever be congruent to it' (*KrV*, A 313, B 370; 395). Similar definitions appear also in other works, for example in the *Prolegomena* or in the various lectures on logic, metaphysics or in the philosophy of religion. Here too, Kant explains how by 'idea' we mean a necessary concept of reason to which 'no possible experience could be adequate' (*PR*, 28: 1059; 395), the rational concept of an object that we could never encounter in experience (*LJ*, 92; 590) and that brings with it an 'unavoidable illusion' (*Prol*., 328; 120).

It is easy to see how, in all these cases, the Kantian analysis of ideas follows a different route from the one pursued in the empirical tradition, culminating with Locke.[7] The pure concepts of reason, far from helping the organization of material provided by the senses, are distinguished from the concepts of the understanding by the absence of reference to any object of experience (*KrV*, A 320, B 377; 399). This attempt to refer directly to sensible objects leads to overstepping the boundaries of the understanding, and is precisely what gives rise to the antinomies of pure reason.

But although Kant, on the one hand, emphasizes that ideas overstep the boundaries of experience, on the other hand, he also explains that these concepts 'are not arbitrarily invented' but given 'as problems by the nature

[7] See Locke, John, *An Essay Concerning Human Understanding* (Indianapolis, IN: Hackett Publishing, 1996 [1689]), especially the introduction and first two chapters.

of reason itself' (*KrV*, A 327, B 384; 402). This is because, as we shall shortly see, the pure concepts of reason have a use that is very different from that of application of the pure concepts of the understanding. Kant emphasizes repeatedly that the separation of the pure concepts of reason from those of the understanding is crucial not only to prevent the dialectical illusions generated by the reification of ideas but also to explain the positive role that they play in the organization of experience.

The positive role of the pure concepts of reason in the organization of coherent experience is crucial to introduce the second interpretation of ideas mentioned above. Kant emphasizes how even though the pure concepts of reason do not refer to their own independent reality (at least not in the same way in which the pure concepts of the understanding do), it is also true that they do not represent mere 'empty thought-entities' (*KrV*, A 669–670, B 697–698; 605). This interpretation focused on their positive role appears in isolated passages of the *Ideal of Pure Reason*, dominates the *Appendix to the Transcendental Dialectic* and provides the conceptual background against which the *Canon of Pure Reason* is developed. We also find references to it in the lectures on metaphysics and on the philosophy of religion, coupled with references to Plato to explain the origin of ideas and their positive use in experience.

For Plato, Kant argues in the first *Critique*, a 'plant, an animal, the regular arrangement of the world's structure (presumably thus also the whole order of nature)—these show clearly that they are possible only according to ideas' (*KrV*, A 317–318, B 374; 397). Human reason, we also read in *Religion Pölitz*, needs a concept of the highest perfection which can serve as a measure required to 'determine something in accordance with it'. Such a concept, which is necessary to measure the lowest and highest degree without considering reality, is called idea (*PR* 28: 993; 341). And again, in the first *Critique*, Kant explains that ideas are not 'like the categories, merely the key to possible experiences' but, in a way already indicated by Plato, more like 'archetypes of things in themselves', flowing from 'the highest reason, through which human reason partakes in them' (*KrV*, A 313, B 370; 395).

But what exactly does Kant mean by 'idea' in this positive understanding? The paragraph entitled *On ideas and the ideal* in *Metaphysik L2* contains some important and difficult remarks in this regard.[8] In an attempt to

[8] This definition of 'idea' appears in the '*Ontology*' section of L2 in *Lectures on Metaphysics*, which, according to Pölitz, was part of the notes read by Kant around 1788 and again around 1790–91. Recent analyses, however, have disputed this claim, suggesting that it is very difficult

explain how there are a priori cognitions through which objects are possible, Kant argues that although this is a strange idea, all purposeful relations are possible through a cognition. For example, he argues,

> a truth is not possible without a cognition that precedes. The *a priori* cognition through which an object is possible is the *idea*. Plato said: one must study the ideas. He said: with God the ideas are intuitions, with human beings reflections. Ultimately, he spoke of them as though they were things. The idea is unalterable; it is the essential, the ground through which the objects are possible. (LM: 577; 340)

A superficial reading of this passage would seem to support an interpretation that is not only incompatible with the first understanding of ideas but actively undermines it. In the case of human beings, Kant argues, ideas are not intuitions (as in the case of God) but pure acts of thought, a modality of knowledge more than a container of intelligible objects. And yet this reference to pure thought also makes them 'essential' and fundamental (*der Grund*). Precisely because they have no existence other than in thought, ideas can have objectivity through self-creation. The type of self-creation that is at stake here is analogous to that which is involved in the case of organic activity, where the concept of a structured, systematic whole is both at the basis of the order between parts, and that which this order aspires to create and recreate.

The similarities with the Leibnizian concept of monads are clear here. But we ought to be careful not to reduce Kant's understanding of the pure concepts of reason to what classical metaphysicians, from Leibniz to Wolff, meant by ideas. Kant does overlap with that metaphysical tradition but not at this level of analysis. Kant argues that the fact that a cognition could determine an object is 'surprising' and explains that rather than creating objects, ideas establish links between them, creating order and shaping relations conforming to purposes. The analysis of ideas in the *Lectures on Metaphysics* is the same as that which surfaces in the *Critique of Pure Reason*: ideas do not explain the constitution of objects in general but their reciprocal relations and order in accordance with purposes. The modality of this relation and the role that ideas play in the ordering of systematic

to date the manuscript from which the notes were extracted and that the relevant time frame could be much larger, indicatively from 1781 to 1790. See on these issues the *Introduction* by Karl Ameriks in LM: XXX–XXXIV.

experience is explained in the *Appendix to the Transcendental Dialectic* to which we can now turn.

3. Ideas of Reason and Use of the Understanding

The *Appendix to the Transcendental Dialectic of the Critique of Pure Reason* has been subject to the most disparate interpretations. For some authors, these pages are among the 'most controversial' in Kant's entire first *Critique*.[9] For others, they are crucial to understanding the relevance of Kant's work to contemporary philosophy of science[10] or to see how Kant's epistemology paves the way to an understanding of scientific practice that has close affinities with pragmatic accounts of scientific method.[11] For others still, the best way to read them is as forming a self-standing philosophical treatise.[12] Traditionally, Kantian scholarship has focused on highlighting the continuity between the themes addressed here and those that Kant raises in the introduction to the third *Critique*. More recently, however, the pages of the *Appendix* have also attracted attention as part of an attempt to shed light on the systematic role of these pages for the project of the unity of reason in the first *Critique*. To understand their contribution to this project, it is crucial to assess the role of ideas in the *Appendix* in light of Kant's analysis of the pure concepts of reason and their architectonic role in facilitating the realization of the 'highest speculative end of reason' and its role as the source of principles necessary for the systematic unity of the understanding (*Prol*., 350; 139). For it is here that the 'positive', 'immanent' use of ideas begins to emerge (*KrV*, A 643, B 671; 590–510), a use oriented to the understanding in the attempt to contribute to the complete theoretical unity of knowledge.

[9] See N.K. Smith, cit. 547.

[10] See Kitcher, 'The Unity of Science and the Unity of Nature', cit., Krausser, Peter 'On the Antinomies and the Appendix to the Dialectic in Kant's Critique and the Philosophy and Science', *Synthese*, vol. 77 (3) (1988), 375–401; Gracyk, T.A., 'Kant's Doctrine of Heuristics: An Interpretation of the Ideas of Reason', *The Modern Schoolman*, vol. 68 (3) (1990–1991), 191–210.

[11] See on this issue Wartenberg, Thomas E., 'Reason and the Practice of Science', in *The Cambridge Companion to Kant*, edited by Paul Guyer (Cambridge: Cambridge University Press, 1992), 228–248; Friedman, *Dynamics of Reason* (Stanford, CA: CSLI Publications, 2001). Marcucci, Silvestro, 'Aspetti epistemologici e teoretici della deduzione trascendentale delle idee in Kant', *Physis*, vol. 27, 1–2 (1985), and Marcucci, Silvestro, *Studi kantiani* (Lucca: Paccini Fazzi, 1988) vol. 1, *Kant e la conoscenza scientifica*, 43–98 and vol. 2, *Kant e l'estetica*, 9–29, and Marcucci, Silvestro, *Introduzione alla lettura della Critica della ragion pura di Kant* (Rome and Bari: Laterza, 1997), 112–130.

[12] Scaravelli, Luigi, *Scritti kantiani* (Firenze: Nuova Italia, 1968), 387.

Recent scholarship has recognized the positive use of ideas in the *Appendix of the Transcendental Dialectic* but is divided between two interpretations. One, less demanding interpretation, argues that ideas are necessary to systematize particular laws of nature. The other, more demanding, interpretation holds that ideas are required to ground lawlikeliness in general.[13] On the first interpretation, the demand for systematic unity is an independent interest of reason which has transcendental implications but is not necessary to the possibility of experience. On the second, more demanding, interpretation, systematic unity and the contribution of ideas are essential to the operation of the understanding and to our effort to comprehend experience *in general*.[14]

It seems to me that a closer analysis of the positive role of ideas in light of Kant's analysis of the relationship between understanding and reason lends support to the second, more demanding interpretation. Unlike the senses, which are merely receptive, both understanding and reason are superior cognitive faculties characterized by spontaneity. They both seek to order a manifold that is given. In the case of the understanding this is the manifold of intuitions that needs to be brought under rules. In the case of reason, it is the manifold of rules that must be brought under unitary principles. For Kant, the understanding is a faculty of the unity of phenomena through rules; the manifold of intuitions is synthesized in a spontaneous, and discursive manner with the help of the categories.[15] On the other hand, reason is the faculty of principles. Its theoretical function is to confer systematic unity on the manifold cognitions of the understanding. In this, Kant argues, lies the unity conferred by reason but it is a kind of unity that appears very different from 'any unity that can be achieved by the understanding' (*KrV*, A 302, B 359; 389).

The idea of systematic unity, as Kant explains, is at the basis of the logical use of ideas, a use which is exemplified by the syllogism as the logical operation that shows the application of the ideas of reason to the manifold rules of the understanding. Here, as Kant has already illustrated with reference to the relationship between the understanding and judgment, the logical use

[13] The first interpretation is Paul Guyer's, the second one is more prominent in the readings of Michael Friedman, Philip Kitcher, and Gerd Buchdahl.

[14] For a discussion of both positions see Grier, *Kant's Doctrine of Transcendental Illusion*, cit. 281.

[15] The reference to the discursive functioning of the understanding in the synthesis of the categories is present throughout the first introduction to the *Critique of the Power of Judgment* (KU, 203: 9) and (KU 213: 16).

of a specific faculty is based on its logical unity. But logical unity is in turn grounded on transcendental unity. Indeed, just as in the case of the understanding transcendental unity is at the basis of logical unity, also in the case of reason, the ideal of unity cannot be expected to emerge from the process of unification but must be presupposed. Therefore, just as in the case of the understanding we presuppose a transcendental unity that enables the application of categories to the manifold of intuitions, in the case of reason we must presuppose a transcendental unity that is at the basis of the logical process of unification of the rules of the understanding.

But how should we conceive of transcendental unity in the case of ideas? How do the pure concepts of reason relate to the process of unification of the manifold of rules? To understand this point, it is useful to return to the assessment of the logical function of ideas and to the syllogism as the operation that represents it. Every syllogism, Kant argues, is 'a form of derivation of a cognition from a principle' (*KrV*, A 306, B 363; 391). However, unlike the understanding and its categories, a syllogism does not refer to intuitions so as to bring them under rules; it refers to concepts and judgments (*KrV*, A 306, B 363; 391). Reason in its logical use seeks 'the universal condition of its judgment' and the syllogism is 'nothing but a judgment mediated by its subsumption under a universal rule (the major premise)' (*KrV*, A 307, B 364; 391–392). This rule, however, is itself subjected to a new search whereby reason looks for 'the condition of its condition' through a 'prosyllogism' and this in turn reveals how reason's logical use consists in the attempt to 'find the unconditioned for conditioned cognitions of the understanding, with which its unity will be completed' (*KrV*, A 307, B 364; 392).

And yet, Kant argues,

> this logical maxim can never become a principle of pure reason unless we assume that when the conditioned is given, then so is the whole series of conditions subordinated one to the other, which is itself unconditioned, also given (i.e., contained in the object and its connection).
>
> (*KrV*, A 307, B 364; 392)

The syllogism therefore expresses reason's transition from the relation between different judgments separately contained in it to a form of unity contained in the conclusion and which embodies a deductive connection. However, because the conclusion of every particular syllogism acts in itself as a separate judgment, such a conclusion can be also interpreted as a

separate condition for which reason is brought to seek a further general condition that exemplifies their deductive link. Reason aims to identify a more fundamental principle that contains the synthetic relation of all conditions of the understanding, a principle which itself must not be grounded in any further condition. This is none other than the principle of the unconditioned as the foundation of the synthetic totality of all conditions, a principle of the unity of reason which presupposes a distinctive idea, the idea of 'the form of a whole which precedes the determinate cognition of the parts and contains conditions for determining the place of each in relation to the others' (*KrV*, A 645, B 673; 591).

We are now in a position to see how the positive use of ideas relates to the general use of the understanding. The pure concepts of the understanding, Kant explains, serve to cognise (*verstehen*) perceptions (*Wahrnehmungen*). The pure concepts of reason, on the other hand, are necessary to comprehend rules (*KrV*, A 311, B 367; 394). Here we can see how the ideas of reason never refer directly to objects but only to the understanding, and through this to reason's own empirical use. Thus, reason does not create any concepts of objects but only 'orders them and gives them the unity which they can have in greatest possible extension'. This is the unity of the 'totality of the series', a totality that is ignored by the understanding since the latter is only oriented to 'the connection through which series of conditions always come about according to concepts' (*KrV*, A 643, B 671; 591). In the absence of the understanding knowledge would be a mere aggregate of perceptions but in the absence of reason it would be a mere aggregate of cognitions. While the categories can guarantee the conditions of possibility of objects in general, they cannot provide a guarantee for the particular connection amongst them. While in the absence of transcendental apperception the manifold of perceptions could not be united and ordered under rules of the understanding, without presupposing an idea of systematic unity of reason the manifold of rules could not be put to a correct empirical use of the understanding. The different rules of the understanding would therefore remain in a merely aggregative form, lacking organic connection to each other.

4. Systematicity and the Unity of the Rules of the Understanding

To say that the empirical use of the understanding needs a systematic point of convergence for the manifold of rules is not the same as saying that

without the intervention of reason, the rules of the understanding would remain in a chaotic state similar to the state of sensible intuitions prior to the schematic intervention of the imagination. There is a difference between rules and perceptions. While the guarantee of the conditions of possibility of objects in general is no longer in doubt, what is at stake is the idea of coherent cognition, and the role that reason plays in the organic unification of the rules of the understanding and their application to an account of experience as coherent in its complexity. Reason, Kant emphasizes, is only and always oriented to the understanding. Its only possible objects are 'the rules of the understanding and its use in conformity with certain ends' (*KrV*, A 644, B 672; 591).

Yet Kant does not explain here what gives reason this *zweckmäßige Anstellung*, this 'purposive' orientation which then helps direct the understanding. Nor does he clarify at what level of the constitution of experience such an orientation is necessary. Often the demand is presented as internal to the way in which the rules of the understanding contribute to the constitution of coherent experience. And yet the status of the principle of purposiveness, which is indirectly invoked here, is never clarified. Not only does Kant never explain in what way the principle of purposiveness contributes to the analysis of the conditions of possibility of experience in its complexity but the first *Critique* also rarely offers an explicit analysis of the relation between such a principle and human reason. The only possible help for clarifying the link is the reference to the ideas of reason, the only pure concepts that contain a purposive orientation able to explain how reason brings order to the manifold rules of the understanding.

In explaining the speculative use of ideas, Kant argues that 'just as the understanding unites the manifold into an object through concepts, so reason on its side unites the manifold of concepts through ideas by positing a certain collective unity as goal of the understanding's actions, which are otherwise concerned only with distributive unity' (*KrV*, A 644, B 672; 591). Thinking implies not only to 'cognise' (*verstehen*) perceptions but also to 'comprehend (*begreifen*) the rules'. Yet to understand rules it is essential to place the different distributive units produced by the understanding in a unitary perspective, in the totality of a series that culminates in the idea of collective unity necessary to the empirical use of the understanding (*die Vernunft* […] *die eine gewisse collective Einheit zum Ziele der Verstandeshandlungen setzt*) (*KrV*, A 644, B 672; 591).

Knowledge is thus not reducible to the deduction of abstract categories necessary to order the manifold of intuitions. Once the problem of

explaining how synthetic a priori judgments are possible is considered solved, the task of the first *Critique* becomes that of explaining how cognition in general can also be *systematized*. This means that it is necessary to explain not only the conditions of possibility of objects in general, but also the conditions of possibility of the different contingent relations involved in the application of abstract judgments to concrete cases, in the exploration of contingent empirical connections. The ideas of reason are thus necessary to explain the contingent laws that human beings purport to identify when the categories of the understanding are applied to concrete reality.

It is clear here that the role of the *Transcendental Dialectic* is not reducible to the analysis of the negative role of ideas and to the prevention of illusions connected to their erroneous application. Ideas are not contradictory concepts in themselves, the mistake rather consists in extending their application from the attempt to bring order and unity to the rules of the understanding to the creation of objects of experience in general. The entire *Transcendental Dialectic* amounts to nothing other than an effort to remove the necessary illusions that arise when reason shifts from a heuristic use of ideas, necessary to orient the coherent use of the understanding, to a constitutive use that makes them refer to objects of perception.[16] In this case, the principles of reason usurp the domain of application of concepts of the understanding whilst also cancelling the mediating role of the latter in its access to objects of the senses.

Yet reason's help in orienting the understanding is crucial if we think of a more comprehensive analysis of the concept of nature as 'all that exists and is determined by laws' (*TTP* 159; 195). Here the most interesting question is not that which concerns the possibility of experiencing objects in general but how we can think of particular phenomena as occurring with general regularity. Operations such as comparing, distinguishing, establishing analogies and many others can only have scientific validity if we presuppose a unitary systematic order in which the distributive unities of the understanding are thought to converge in a focal point (a *focus immaginarius*) necessary to obtain for the concepts of the understanding 'the greatest unity alongside the greatest extension' (*KrV* A 644; B 672; 591). Yet, such an idea

[16] See on this issue, Hogrebe, Wolfram, *Per una semantica trascendentale*, it. transl (Rome: Officina, 1973), 98–106. When analysing the *Transcendental Dialectic*, the author emphasizes that the illusory content produced by reason is not due to the nature of reason but to the incorrect use made of its principles. Therefore, he argues, the *Transcendental Dialectic*, as a 'critique of dialectic appearance', is 'a critique of the erroneous use of reason, and therefore a *critique of judgment*'.

of unity, Kant argues, is none other than the idea of 'the form of the whole of cognition which precedes the determinate cognition of the parts and contains conditions for determining *a priori* the place of each part and its relation to the others'. Only pure reason can contain such an idea because only pure reason can postulate the complete unity of the cognitions of the understanding as the unconditioned totality of a series of conditions. And only pure reason can provide a basis for unity that is 'not merely a contingent aggregate but a system interconnected in accordance with necessary laws' (*KrV*, A 645, B 673; 591).

It is not difficult to see why even if the laws of the understanding satisfy the criteria of universality and necessity in contributing to the analysis of the conditions of possibility of experience in general, they fail to organize experience beyond a mere aggregate of cognitions. The very term 'conformity to laws' has two different meanings, depending on the context in which it is used.[17] In the context of the activity of the understanding, the term applies to the kind of regularity that the understanding contributes to conceiving objects of possible experience as phenomena that synthesize the manifold of intuitions into discursive categories. In the context of the activity of reason, the conformity to laws is one that must be presupposed for us to be able to postulate the systematic connection between the rules of the understanding.

To better understand this process, it might be useful to explain why the idea of systematic unity is logically necessary and not a mere addition to the synthesis of the understanding as the less demanding interpretations of the speculative role of ideas usually maintain. Concepts and representations are never given to us in order to be subsequently ordered, as if the ordering function of reason were simply piled up on the allegedly truly necessary synthesis of the understanding. To say that ideas of reason are essential to the empirical use of the understanding is also not the same as saying that the whole question can be explained by appealing to the necessity to apply concrete concepts and conditions of possibility to a series of particular determinate cases. What is at stake here is not just the need to presuppose the solution to concrete problems for the sake of the plausible use of the understanding (e.g. for the use of concepts such as causality, substance, dynamic interaction, etc.). What is at stake is an analysis of experience as a unitary and coherent whole which is organized in such a way as to include

[17] See for a discussion of this problem, Buchdahl, *Kant and the Dynamics of Reason*, esp. 169–241 and 317–363.

both the application of conditions to series of cases *and* their purposive application to specific ends of research.[18]

This is also why Kant emphasizes that the systematic unity of cognitions of the understanding that is sought by reason in its speculative use, is 'the touchstone of truth for its rules' (*der Probierstein der Wahrheit der Regeln*) (*KrV*, A 647, B 675; 593). Such an idea of systematic unity is embedded in the first *Critique* in the notion of 'the maximum of division and unification of the understanding's cognition in one principle' (*KrV*, A 665, B 693; 602). Such an idea of the maximum can be made more determinate by abstracting from all the sensible conditions that would limit its use. Although it is impossible for this idea to match any sensible intuition, its role in guiding the empirical use of the understanding gives it a mediated validity also when dealing with the objects of experience to which the understanding is directed.

A world in which we are presented only with discrete sets of particular cognitions without any guarantee of their mutual harmony and possible cohesion would be a world in which we could not guarantee lawlike connections between phenomena. The positive use of ideas brings therefore both an advantage to reason and an advantage to the understanding. As far as understanding is concerned, we are able to move beyond an aggregate of knowledge in its application to the empirical laws of nature in the direction of a scientific system. As far as reason is concerned, the orientation it gives to the understanding discharges its theoretical function. By giving systematic unity to the rules of the understanding, reason not only promotes their extension but also guarantees their correctness (*KrV*, A 680, B 708; 610), showing how ideas can have a legitimate use.

Yet Kant often also insists that despite the usefulness of the function of ideas in the organization of the whole of experience, we should think of them as concepts that are merely 'subjective' and acceptable in a problematic fashion. Why? To explain Kant's hesitation, we need to return to the link between transcendental and logical principles that is at the heart of this particular use of ideas, what Kant calls their hypothetical use.

[18] See on this theme also Garroni, Emilio, *Senso e paradosso. L'estetica, filosofia non speciale* (Bari: Laterza, 1986), 211–214. The author rightly emphasizes that the issue of the application of concepts of the understanding to specific cases, which is at the heart of the *Critique of the Power of Judgment*, already emerges in *the Critique of Pure Reason*, and the problem of a system of specific laws of nature, which appears in the *Appendix to the Transcendental Dialectic*, is only a corollary of that broader question.

5. The Idea of Systematic Unity: The Hypothetical and Apodictic Uses of Reason

As many interpreters have already noted, the *Appendix to the Transcendental Dialectic* anticipates crucial themes from the *Introduction* to *the Critique of Judgment*, especially the paragraphs on the critique of purposive judgment. The third 'manifold' discussed in the third *Critique* is already present in the pages of the *Appendix*. In the third *Critique* too, Kant discusses the 'particular laws of nature' and the 'empirical use of the understanding'. Here too, he is after a kind of universal that cannot be reduced to the universal of the categories but refers to the 'complete unity of knowledge'. And here too the central problem seems to be the correct use of reason in conceptualizing the systematic unity of experience in its entirety. The central theme is in both cases the inevitable need for a kind of concept required to guide the understanding in the contingency of experience and to conceptualize the latter as a meaningful systematic whole. Observation, Kant emphasizes in the essay on the use of teleological principles in philosophy, amounts to nothing else than 'methodically conducted experience'. But 'through mere empirical groping and without a guiding principle (*leitendes Princip*) of what to search for', he insists, 'nothing of a purposive nature could ever be found' (*TP*, 161; 197).

The process of exploration of particular empirical laws of nature relies on an assumption of systematic unity necessary to the understanding in its articulation of coherent experience. But while in the third *Critique* such a heuristic principle for guiding the empirical use of the understanding is provided by the faculty of reflexive judgment, in the *Critique of Pure Reason* that systematic principle is provided by reason itself. 'If we survey the cognitions of our understanding in their entire range', Kant argues in the *Appendix*, then we find that what reason seeks to develop in them is 'the systematic in cognition' (*das Systematische der Erkenntniß*), i.e., its interconnection based on one principle (*der Zusammenhang derselben aus einem Princip*) (*KrV*, A 645, B 673; 591). Such a principle, as we already noted, operates at a distinctive level compared to the concepts of the understanding in the organization of experience. Kant however does not specify its source or its features, limiting the analysis to the generic observation that we are dealing with a principle of a 'regulative' rather than 'constitutive' kind. This implies that what follows from such a principle is 'the truth of the universal rule assumed as a hypothesis' but rather one in which the rule to

universality is always approximated so as 'to bring unity into particular cognitions as far as possible' (*KrV*, A 647, B 675; 592).

The reference to the hypothetical use of reason in the systematic organization of experience is crucial to understand the nature of the systematic principle necessary to the organic connection of the particular aggregate of cognitions of the understanding and the role of ideas in bringing unity to the third 'manifold' in which Kant is interested. To explain better this link, it is necessary to return to the distinction between apodictic and hypothetical use of ideas. Kant argues as follows:

> If reason is the faculty of deriving the particular from the universal, then: Either the universal is in itself certain and given, and only judgment is required for subsuming, and the particular is necessarily determined through it. This I call the 'apodictic' use of reason. Or the universal is assumed only problematically, and it is a mere idea, the particular being certain while the universality of the rule for this consequent is still a problem; then several particular cases, which are all certain, are tested by the rule, to see if they flow from it, and in the case in which it seems that all the particular cases cited follow from it, then the universality of the rule is inferred, including all subsequent cases, even those that are not given in themselves. This I will call the hypothetical use of reason.
>
> (*KrV*, A 646–647, B 674–675; 592)

The interpretive difficulties raised by this paragraph have attracted the attention of several scholars.[19] First of all, it is impossible to analyse these pages without noticing the similarity between these definitions and the distinctions that Kant makes in the *Critique of Judgment* to explain the nature of the transcendental principle of purposiveness required for a systematic conception of experience. Second, the definition of reason as the faculty of

[19] One of the first authors to signal the importance of this paragraph was August Stadler who in explaining the link between the hypothetical use of reason and the formal purposiveness that is at the centre of the *Critique of the Power of Judgment* , argued that it leads to a theory of experience understood as a 'pure theory of science'. See Stadler, August, *Kants Teleologie und ihre Erkenntnistheoretische Bedeutung* (Berlin: Dümmler, 1874) and Stadler, August, *Die Grundsätze der reinen Erkenntnisstheorie in der kantischen Philosophie* (Leipzig: Hirzel, 1876), esp. 1–6. His study deserves credit for being the first to stress the role of the *Transcendental Dialectic* for Kant's general theory of knowledge. However, the focus only on the epistemological interest of the *Dialectic* has paved the way to subsequent neglect of how *both* theoretical and practical elements contribute to understanding the development of the principle of purposiveness.

deriving the particular from the universal clearly indicates that Kant's thoughts here are the basis for the analysis of the faculty of judgment as a capacity characterized by its own principles and systematic presuppositions. Third, the distinction between 'hypothetical' and 'apodictic' use of reason clearly foreshadows the distinction that the third *Critique* makes between capacity for determining and reflecting judgment. As Kant puts it in the third *Critique*, after defining judgment as the 'faculty of thinking the particular as contained in the universal', if the universal is given, then 'the power of judgment, which subsumes the particular under it is determining'. But if 'only the particular is given, for which the universal is to be found, then the power of judgment is merely reflecting' (KU, 179; 67).

However, as many interpreters have also already noted, the distinction between hypothetical and apodictic use of reason is problematic. If Kant really meant to say that reason can have an apodictic use, the entire critical apparatus would be significantly weakened and Kant would end up conceding that it is possible to know the objects of traditional metaphysics (God, the soul, the world) that the *Transcendental Dialectic* declared inaccessible to the human mind.[20] Some interpreters have tried to circumvent the problem by suggesting that what Kant really has in mind are not two different uses of the same faculty (reason) but two different faculties (reason and the understanding). This however helps us clarify the theoretical status of ideas only in part. The distinction between reason and understanding is of course crucial to avoid an account of the apodictic use of reason that grants ideas objective validity. And yet the definition of the status of ideas as merely 'regulative' does not prevent Kant from establishing a link between logical and transcendental principles of systematic unity. Explaining the nature of this link is the greatest challenge of the *Appendix to the Transcendental Dialectic*.

To see why the link is problematic, we need to return to the paragraph distinguishing the apodictic from the regulative use of reason mentioned above. After defining reason as the faculty of deriving the particular from the universal, Kant argues that when we have to subsume the particular under a universal given by the categories, all we need is the capacity of judgment to make the transition. This assertion is not problematic if we think about the role of judgment in mediating between concepts and judgments as explained in the *Transcendental Analytic*. On the other hand, unlike in

[20] See Marcucci, *Kant e la conoscenza scientifica*, cit. 48.

the third *Critique*, Kant excludes the role of judgment in the attempt to infer the universal from the evidence of particular cases. Indeed, in the case of the hypothetical use of reason, Kant argues that if enough particular cases follow from a rule that we only accept hypothetically, 'then the universality of the rule is inferred, including all subsequent cases' (*KrV*, A 646–647, B 674– 675; 592).

Kant does not immediately explain on the basis of what principle it is possible to establish the universal validity of a particular law even for a series of cases that is not given, and whose connection with the general principle has never been (and might also never in the future will be) tested. And yet without such a principle there would be no guarantee that the method of proceeding is correct. Clearly the faculty of the understanding is unable to provide this principle, indeed it must rely on it being given to orient its empirical use. Moreover, the distinction between hypothetical and apodictic use of reason suggests that in the case of the hypothetical use of reason we are dealing with a kind of manifold that is left entirely indeterminate by the laws of the understanding. Although a priori laws are essential to the experience of phenomena in general, they are not adequate to help the conformity to rules of experience in its contingent manifestation.

6. Logical and Transcendental Principles

What kind of principle then grounds the hypothetical use of reason? It is interesting to note how Kant barely mentions it explicitly, with the exception of the concluding paragraphs of the *Doctrine of Elements*, when he introduces the idea of a *Final end of the natural dialectic of human reason*. Kant's caution here reveals the complexity of the problem he is trying to solve: an issue that looms in the background of the systematic task of the *Architectonic* and of the unity of theoretical and practical reason. The basis for the systematic principle of the hypothetical use of reason is a universal that is problematically accepted, a 'projected' unity which helps to find 'a principle (*Principium*) for the manifold and particular uses of the understanding thereby guiding it even in those cases that are not given and making it coherently connected' (*KrV*, A 647, 675; 593).

Kant explains here that the hypothetical use of reason has no constitutive validity; it is not such that the truth of the universal rule assumed as hypothesis necessarily follows (*KrV*, A 647, B 675; 592). In this sense, the principle of systematic unity required is merely a logical principle necessary to help

ideas proceed where the understanding is stuck, i.e., when systematically connecting the manifold of its rules 'under one principle'. The logical idea of complete unity of cognitions is necessary because the categories of the understanding leave entirely indeterminate how to think coherently about the unity of its rules, and because the latter are essential to think coherently about experience in its complexity, including its contingent complexity.

Kant also explains that such a logical principle of the systematic unity of experience should not be confused with a transcendental principle. The former is subjective and methodological, the latter is objective and ontological. Indeed, as Kant argues, if we say that 'the constitution of objects or the nature of the understanding that cognizes them as such are in themselves determined to systematic unity' and if we say that one could 'postulate this *a priori* without taking into account such an interest of reason, and therefore say possible cognitions of the understanding (including empirical ones) have the unity of reason, and stand under common principles from which they could be derived despite their variety', this would entail 'a transcendental principle of reason'. A transcendental principle, unlike a logical one, would make systematic unity 'not merely something subjectively and logically necessary, as method, but objectively necessary' (*KrV*, A 648; B 676; 593).

On a superficial reading, Kant's distinction between subjective and objective necessity for systematicity suggests a rather dismissive take on the value and plausibility of transcendental principles for the systematic unity of experience. However, Kant's position here is more nuanced. Interpreters who read these pages as either anticipating the third *Critique* or adding very little to the methodological discussion of the role of ideas based on logical principles both miss the mark. As is well known, in the *Critique of Judgment* a transcendental principle of purposiveness is at the heart of the search for systematic unity also from a logical point of view. But, in the first *Critique*, Kant distinguishes the status of logical principles from those of transcendental principles in terms of subjective versus objective necessity and, at first, seems to avoid explaining the relation between the two.[21] Yet here too the status of the logical principle of systematic unity of experience, on which the hypothetical use of ideas relies, remains doubtful unless it is rooted on a transcendental principle of purposiveness.

[21] This is probably why some interpreters also think that Kant avoids discussing the transcendental status of ideas altogether in the first *Critique*, see Horstmann, 'Why must there be a Transcendental Deduction in Kant's Critique of Judgment', cit. 168.

Kant's analysis in the *Appendix* reveals as much when it summarizes some key features of the eighteenth-century debate on the scientific study of nature.[22] The examples Kant gives in this regard are three logical principles that assist the observation of natural phenomena: the principle of homogeneity; the principle of specification; and the principle of continuity of natural forms. In the case of the first one, Kant notes how it would be impossible to have a general classification of natural elements in the absence of the hypothesis of homogeneity of these. Without presupposing the systematic unity of this kind, there 'could be no use of reason, because we can infer from the universal to the particular only on the ground of the universal properties of things under which the particular properties stand' (*KrV*, A 652, B 680; 595). The famous rule of scholastic philosophy whereby we ought not to multiply beginnings (principles) without necessity (*entia praeter necessitatem non esse multiplicanda*) is largely inspired by this principle (*KrV*, A 652, B 680; 595). If the multiplicity of phenomena observed were to offer such a great variety that it would be impossible to find similarities between them despite all attempts at comparison, 'then the logical law of genera would not obtain at all, no concept of a genus, nor any other universal concept, indeed no understanding at all would obtain, since it is the understanding that has to do with such concepts' (*KrV*, A 653–654, B 681–682; 596).[23]

The same applies to the logical principle that requires us to never consider any species as the lowest. Here too, the principle of specification requires us to always presuppose a new distinction within every new species, and the logical principle is grounded on a transcendental principle which cannot be borrowed from experience, since experience 'makes no such extensive disclosure'. Indeed, 'empirical specification soon stops in distinguishing the manifold unless through the already preceding transcendental law of specification as a principle of reason it is led to seek disclosures and to keep on assuming them even when they do not immediately reveal themselves to the senses' (*KrV*, A 657, B 685; 598).

[22] See on this, Marcucci, Silvestro, 'Sull'uso dei termini "genere" e "specie" nella filosofia di Kant', *Studi kantiani*, vol. 5 (1992), 11–45.

[23] Note how the same example can be found in the *Critique of the Power of Judgment* in the context of a similar debate on the relation between logic and transcendental principles. In the *First Introduction*, Kant explains that logic teaches us nothing 'about whether for each object nature has many others to put forth as objects of comparison, which have much in common with the first in their form' (*KU*: 212; 15).

Finally, reason concludes its task with still another law of the affinity of all concepts which offers a continuous transition from every species to every other through a 'graduated increase of varieties' (*KrV*, A 657–658, B 685–686; 598). The logical principle *continuum specierum (formarum logicarum)* thus represents a synthesis of the previous principles of homogeneity and specification and prescribes 'even in the case of the highest manifoldness a sameness of kind through the graduated transition from one species to others, which shows a kind of affinity of various branches, insofar as they have all sprouted from one stem' (KrV, A 660, B 688; 598). This logical principle is also grounded on a transcendental law of reason, the law of continuity of the forms (*lex continui in natura*)[24], without which the use of the understanding would only mislead since 'the prescription would perhaps take a path directly opposed to nature' (*KrV*, A 660, B 688; 598).

In all these cases, Kant illustrates how grounding logical principles for the unity of the rules of the understanding on a transcendental principle of the systematic unity of nature is not arbitrary but based on a systematic necessity required for the coherent analysis of experience in its complexity. Such a transcendental principle guarantees the possibility of reflecting about natural connections beyond their contingent association. A logical principle of rational unity among rules, Kant argues, would not be possible 'unless a transcendental principle is presupposed, through which such a systematic unity as pertaining to the object itself, is assumed *a priori* as necessary'. For how could reason in its logical use claim to find the systematic unity of the laws of nature unless 'when reason is free to admit that it is just as possible that all powers are different in kind, and that its derivation of them is not in conformity to nature'? Reason, Kant argues, 'would proceed contrary to its vocation, since it would set as its goal an idea that entirely contradicts the arrangement of nature' (*KrV*, A 651, B 679; 595; 595).

Kant's argument here is very strong and, at the same time, problematic. If reason were to seek a logical principle for the systematic unity of the manifold of cognitions without grounding its activity on a further transcendental

[24] The law of continuity presented by Leibniz in the *Monadology* and perfected, as Kant explains, by Charles Bonnet in his *La Palingènèsis philosophique*, goes back to Plato. It was later adapted by medieval scholastic philosophers (and then again in the seventeenth and eighteenth centuries) to refer to a great chain of being, which presupposes a progressive linear and hierarchic development from the world of inanimate objects, through plants, to inferior and superior animals to human beings, and ideally, through the angels to God. The idea fascinated French and German Enlightenment thinkers, possibly because of how it contributed to support the thesis of an enlightened progress towards perfection in which the themes of natural and historical purposiveness intersected.

principle, then reason would contradict itself and its own natural vocation. It is because of this vocation that reason is able to reflect on the unconditional, harmony and the unity of the system. But if reason were to operate in an environment characterized by the absence of rules and where it would be impossible to find the kind of regularity that reason naturally presupposes, it would fail in its attempt to construct lawlike connections. This last point reveals also the hidden premise on which Kant's entire analysis relies: reason's vocation cannot be to look for something that cannot be given to it.

Kant therefore is not simply arguing that thinking about the systematicity of the laws of nature requires a postulate of order in nature: this is also the point where logical principles come to a halt. He goes one step further, and this step appears much more problematic. He argues that: 1) reason's vocation is to presuppose systematic unity and to postulate that nature is ordered in accordance with it; 2) if the world failed to conform to this systematic unity it would imply that reason bases its scientific enquiry on wrong premises and is an internally contradictory faculty; and 3) in this case even the logical principles would be insufficient to ground the unity of the manifold cognitions of the understanding in a reliable way.

To see how the interpretation of these passages is appropriate, it is important to emphasize the way Kant grounds the need for transcendental systematicity in the principle of logical unity of the rules of the understanding. After arguing that the systematic unity of the particular cognitions of the understanding is necessary and cannot be derived a posteriori from the contingent constitution of nature, Kant explains that reason's demand for unity is necessary because without it 'we would have no reason, and without that, no *coherent* use of the understanding, and lacking that no sufficient mark of empirical truth'. Therefore, Kant concludes, in regard to the latter 'we simply have to presuppose the systematic unity of nature as objectively valid and necessary' (*KrV*, A 651, B 679; 595).

It is puzzling to see that after so much insisting on the fallacious character and illusory tendencies of the ideas of reason in the theoretical domain, Kant does not question the systematic unity of nature but begins to ponder whether the regulative status of ideas is in fact only regulative. To explain this puzzle and in the absence of further clarification about the nature of transcendental principles, we need to turn to Kant's insistence on the 'vocation' of human reason and the necessity of the principle with the help of which reason concludes that the systematic unity of nature is 'objectively valid and necessary'. This demand for objectivity and necessity speaks to a different use of the ideas of reason, and is of a different, perhaps practical,

kind. But what would it mean for the practical necessity of reason to ground the postulate of a systematic unity of nature? The *practical* interpretation of the demand for systematic unity *in general* is supported if we turn to the strange and unique character of the 'transcendental deduction of ideas with reference to the final end of the natural dialectic of human reason'. The next chapter explores Kant's arguments with regard to the deduction, to both highlight the relevance of the practical use of ideas with regard to that task, and the difficulties when it comes to integrating that practical and theoretical use of ideas in an effort to understand Kant's argument about the unity of reason overall.

5
The Deduction of Transcendental Ideas

1. Ideas in the Appendix to the Transcendental Dialectic

One of the most perplexing features of Kant's defence of the unity of reason in the first *Critique* concerns Kant's treatment of the role of ideas in the *Appendix to the Transcendental Dialectic*. Often read as anticipating the analysis of the role of reflective judgment in the *Critique of Judgment*, the pages of the *Appendix* have given rise to several interpretive controversies.[1] First, there is the controversy about what kind of experience the ideas of reason help systematize. On a weaker reading, their role is to support reason in the activity of ordering the empirical laws of nature. On a stronger reading they are essential to the very conception of a law, as opposed to a contingent generalization. Second, there is the controversy about the presupposition of the systematic unity of nature on which this kind of enquiry relies, and about the status of ideas in supporting such presupposition. On a weaker reading, the role of ideas is purely methodological. The pure concepts of reason are simply useful as heuristic devices required to project a hypothetical unity necessary to the heuristics of research. On a stronger reading, the kind of unity they project is not purely methodological but has a quasi-ontological status: it presupposes a purposive arrangement of nature itself. Third, there is the issue of the kind of principles on which the hypothetical use of ideas relies. On the weaker reading, this use rests on logical principles of homogeneity, specification and continuity. On the stronger reading, such principles are themselves grounded on a further, transcendental, principle. Finally, there is the controversy about what kind of necessity is at stake in this last statement, the statement that logical principles must *necessarily* rest on transcendental grounds. For some, the necessity in question is of a theoretical nature. For others, it is eminently practical.

[1] What follows is a rough outline of debates to which I will give detailed references in the following pages.

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This chapter addresses these questions by examining the role of ideas in light of yet another, less familiar, controversy in the *Appendix*: the problem of their transcendental deduction. I begin the chapter by explaining what the problem of deduction consists of, then revisit some of the responses found in the literature and illustrate why they miss the mark. I then turn to an alternative interpretation of the problem of deduction, one that explains Kant's difficulties in light of a tension between two notions of purposiveness: purposiveness as design and purposiveness as normativity.[2] As already anticipated in the third chapter, while the latter is shaped by the practical demand of reason, the former needs to rely on an argument about the purposive structure of nature. As I hope to show, although the *Critique of Pure Reason* tries to ground the unity of reason in a notion of purposiveness as normativity, able to accommodate the demands of both the theoretical and practical use of reason, it lacks the resources to do so. The result is a unifying attempt which collapses the demand for unity of reason in a demand for the unity of nature and which grounds the unity of nature on a notion of purposiveness as design. This outcome challenges not only Kant's unifying project, but the success of the entire critical enterprise. Explaining how it unfolds by considering Kant's analysis in the first *Critique* and in minor writings of the same period provides the most textually accurate account of the rationale for Kant's oscillations in the *Appendix*, whilst also doing justice to its future development.

2. The Deduction of Transcendental Ideas

'One cannot avail oneself of a concept *a priori*', Kant argues, without having completed a 'transcendental deduction of it' (*KrV*, A 669–670, B 697–698; 605). Of course, he continues, the kind of deduction worthy of the pure concepts of reason is not going to be the same as that of the categories of the understanding. However, if ideas 'are to have the least objective validity, even if it is only an indeterminate one, and are not to represent merely empty thought-entities *(entia rationis ratiocinantis)*, a deduction of them must definitely be possible' (*KrV*, A 669–670, B 697–698; 605).

[2] See for the use of the term purposiveness as normativity, Ginsborg, Hannah, *The Normativity of Nature: Essays on Kant's Critique of Judgment* (Oxford: Oxford University Press, 2015). Ginsborg, Hannah, 'Why Must We Presuppose the Normativity of Nature?', in *Kant and the Laws of Nature*, edited by Massimi and Breitenbach, cit. 71–88.

Taken by themselves, such remarks are not at all puzzling. Kant's appeal to the concept of deduction, here as elsewhere, has to do less with the application of inferential reasoning from known valid premises to a necessarily valid conclusion, than with the demonstration of the legitimacy of a kind of entitlement, the entitlement of reason to deploy its pure concepts in a particular way.[3] As many commentators have noted, Kant's concept of deduction is indebted to the eighteenth-century legal literature and the tradition of 'deduction writings', a body of work whose purpose was to prove the legitimacy of certain, contested, territorial acquisition within the borders of the Holy Roman Empire. Such lengthy texts were prepared by jurists in the event of interrogation by imperial courts and faced the task to prove that certain *de facto* rulers of contested land and resources also had a rightful (*de jure*) claim to them.[4] Inspired by this idea, Kant provides the enterprise of the philosopher with a similar justificatory spin. Like the jurist, the philosopher must provide a detailed factual statement of the territorial claims of reason within the boundaries of experience. He must illustrate their function and justify their validity. And like the jurist, the philosopher knows that only after such a procedure has been completed, can the rulers' acquisitions in their respective domains be considered secure from any possible future incursions by their adversaries.

Kant's use of territorial metaphors to explain the critical activity of pure reason, and to discredit rival claims is aligned to this interpretation of deduction. The advocate of reason must prove to both sceptical and dogmatic critics that the pure concepts of reason rule over the field of experience. But they rule legitimately only if they can survive scrutiny of their origin, function, and validity. Only then will the sceptic and the dogmatic discover the 'impossibility of having a title for their assertions', while the critique compels pure reason to 'renounce its exaggerated pretensions' and 'draw back within the boundaries of its proper territory' (*KrV*, A 794; B 822; 671).

[3] For an excellent analysis of the background against which we should understand the term deduction in Kant's writings, see Henrich, Dieter 'Kant's Notion of a Deduction and the Methodological Background of the First Critique', in *Kant's Transcendental Deductions: The Three Critiques and the Opus Postumum*, edited by Eckart Forster (Stanford, CA: Stanford University Press, 1989), 29–46. For a longer discussion of the role of legal metaphors in Kant's work see Møller, *Kant's Tribunal of Reason*, cit.

[4] See for a longer discussion of the practice Henrich, 'Kant's Notion of a Deduction' and Proops, Ian, 'Kant's Legal Metaphor and the Nature of a Deduction', *Journal of the History of Philosophy*, vol. 41 (2), 209–229 (2003).

The attempt to justify by means of a deduction the positive use of the pure concepts of reason should be understood in this light. Having illustrated in the first part of the *Appendix* the function of the ideas of reason in the systematic orientation of the empirical use of the understanding, Kant's goal in the second part is to show how that use could be justified. The deduction, he argues, ensures 'the completion of the critical business of pure reason' (*KrV*, A 669–670, B 697–698; 605).

But the issue is not as straightforward. The division between a first, more descriptive account of the positive function of ideas, and a second part, where their claim to validity is further scrutinized and validated within the territory of experience, does not follow neatly the deduction writings' model that I have just sketched. In the first part of the *Appendix*, when discussing the hypothetical use of the ideas of reason and their heuristic role in guiding the empirical investigation of nature, Kant rules out a possible deduction of the principles to which a similar way of proceeding leads. This kind of deduction, he insists, 'is always impossible in regard to ideas' (*KrV*, A 663; B 692; 602).

Why does Kant first rule out a deduction of ideas, and then proceed to provide it? And what exactly does the deduction add to the analysis of the role of ideas in the systematic organization of experience that Kant has previously examined? The scholarship here is extremely divided. Until recently, the standard interpretation was to treat Kant's oscillations as symptomatic of the generally confused, even contradictory, character of the treatment of ideas in this part of the *Critique*.[5] Some authors ignore the problem of deduction altogether, and proceed as if only the declarations of its impossibility in the first part of the *Appendix* were authoritative.[6] Among the more charitable readings, we can distinguish between a weaker and a stronger version. On the weaker version, the appearance of a deduction of ideas of reason in the second half of the *Appendix* poses no great interpretative

[5] The most well-known interpretation is here that of Norman Kemp Smith (see e.g. Kemp Smith, *A Commentary to Kant's Critique of Pure Reason*, 547) who famously condemned the 'extremely self-contradictory' character of these pages. Remarks along similar lines, echoing Smith's commentary or stressing the 'extremely unstable' nature of the ideas discussed in the *Appendix* are also made from Jonathan Bennet (see Bennet, *Kant's Dialectic*, cit. 275) and from Ralph Peter Horstmann in Horstmann, 'Why must there be a transcendental deduction in Kant's Critique of Judgment', cit. 166. See also England, F.E., *Kant's Conception of God* (New York: Humanities Press, 1968), 196–199 and Walsh, W.H., *Kant's Criticism of Metaphysics* (Edinburgh: Edinburgh University Press, 1975), 244–249.

[6] See, for example, Wartenberg, Thomas E., 'Reason and Practice of Science', in *The Cambridge Companion to Kant*, edited by Paul Guyer (Cambridge: Cambridge University Press, 1992), 228–248, 245.

challenges once we understand correctly the role of the postulate of nature's systematicity in orienting the taxonomical tasks connected to the scientific interpretation of natural phenomena. The reason why, on this weaker explanation, the deduction is not particularly important, is that the idea of systematicity of nature only has a heuristic/methodological status with no bearing on the way in which the categories of the understanding are applied to create empirical concepts.[7] The trouble with this interpretation is that it solves the problem of deduction only by denying that there was a problem in the first place. If the deduction of ideas posed no special difficulties given Kant's consistent methodological commitment to regulativity, why was he initially so concerned to deny that a deduction might ever be possible? Presumably, so the answer goes, because there is a stronger reading of what Kant was up to when in the second part of the *Appendix*, he insisted that, upon further scrutiny, reason's heuristic/subjective use had to be grounded on a transcendental principle presupposing the conformity to ends of nature itself.

Proponents of this second, stronger interpretation, have recently tried to link these claims to a larger debate about Kant's defence of the unity of reason and an assertion of the supremacy of practical reason.[8] Kant's demand for systematicity in nature, so the argument goes, is grounded on reason's practical demand for systematicity. In the most widespread interpretation, the claim made is one about reason's own dynamic: theoretical reason, just like practical reason, is guided by maxims which presuppose that the content of their prescriptions must also be ontologically grounded. The demand for systematicity in nature stems from the nature of our reason and is expressive of its unity. But since the demand also takes the form of a prescription to follow (or a maxim, in the practical sense), reason ought to presuppose the systematicity of nature, if it is to act consistently with itself.[9] As one author puts it, the necessity of the link between the systematicity of reason and the systematicity in nature is due to reason's own dynamic,

[7] See for a discussion, Guyer, Paul, *Kant's System of Nature and Freedom* (Oxford: Oxford University Press, 2005), 28.

[8] See Neiman, Susan, *The Unity of Reason: Re-Reading Kant* (New York: Oxford University Press, 1994), 89–90; Grier, Michelle, *Kant's Doctrine of Transcendental Illusion*, cit. ch. 8; Mudd, Sasha, 'Rethinking the Priority of Practical Reason in Kant', *European Journal of Philosophy*, vol. 24 (1) 78–102 (2016).

[9] See Grier, *Kant's Doctrine of Transcendental Illusion*, 286, and Zuckert, Rachel. E. 'Empirical Scientific Investigation and the Ideas of Reason', in *Kant and the Laws of Nature*, edited by Massimi and Breitenbach, cit. 89–107.

which demands 'both the idea (*the totum realitatis*) and the supposition of its object (*the ens realissimum*), for its own practical purposes'.[10]

Such a reading, linking the demand for systematicity to the unity of reason, seems to have the advantage of explaining the apparently contradictory nature of Kant's oscillations between a subjective reading of the role of ideas (limited to the assertion of their heuristic methodological properties) and an objective reading (which demands that the logical use of reason be grounded on a necessarily transcendental principle of purposiveness in nature). Therefore, it has been suggested, just as Kant argues that we must assume a morally purposive unity for the sake of our moral ends, we must also assume natural purposiveness for the sake of advancing the imperative to seek cognitive unity.[11]

Although resorting to reason's practical function to solve the problem of the transcendental deduction of ideas seems like a promising strategy, the strategy suffers from several shortcomings. The main one is perhaps that the concept of a categorical imperative or of practical necessity grounded in transcendental freedom is nowhere present in the first *Critique*. There is of course much talk of practical demands, or needs, or even essential ends, of reason, and there are references to the interests of reason for the sake of which some kind of systematicity of nature must be presupposed. But if practical reason has no autonomous domain of its own and makes no practical laws that it imposes on the world, appealing to the later doctrine of the categorical imperative or transcendental freedom to solve the tensions present in these pages is unlikely to help clear the ambiguous status of ideas. The interpretation presents precisely the kind of artificial/teleological reading that, in another context, Kant would have rejected for placing the conclusion at the start of a process of enquiry, instead of showing how it follows. Therefore, although proponents of the practical reading of the problem of the deduction of ideas have a point in emphasizing that the practical needs of reason are key to understanding the demand for systematicity, a point which is often neglected by those who approach the *Appendix* out of interest for Kant's contribution to the methodology of scientific research, the remedy they offer to explain Kant's apparent oscillations is perhaps too easy. First, like the weaker readings of the role of ideas mentioned above, the stronger interpretations only solve the problem of the inconsistency

[10] Longuenesse, Béatrice, *Kant on the Human Standpoint* (Cambridge: Cambridge University Press, 2005), 234.

[11] Mudd, 'Rethinking the Priority of Practical Reason'.

concerning the deduction of transcendental ideas by pretending that there is none. But if Kant intended to resort to reason's practical use to justify the deduction of transcendental ideas, why did he simply not say so? Why did he insist first that a deduction was impossible? The key to the answer, I believe, lies in the ambiguous status that the notion of purposiveness in nature retains throughout the first *Critique*, a question that, for all of Kant's best efforts, this work is unable to solve. Or so I would now like to show.

3. Purposiveness and the Schema of Reason

To see why both the weaker and the stronger reading of the deduction of transcendental ideas miss the mark in seeking to settle Kant's oscillations in the *Appendix*, it is important to return to the problem of the deduction as a development of the analysis of the hypothetical use of reason.[12] Reason's hypothetical use, as we now know, illustrates the necessity of subsuming under a unitary idea of reason the manifold of empirical cognitions. Such a unitary idea reflects a problematic universal which cannot be given through experience but must be necessarily presupposed if reason is to conform to its natural destination of seeking the maximal unity of cognitions. Starting from the logical application of the pure concepts of reason to the empirical laws of nature, Kant arrives at the question of the possible foundation of such logical function on a transcendental principle—a principle whose characteristics remain unspecified but which, we are told, is inherently linked to the postulate of systematic unity in nature.

Proponents of the weaker reading of the *Appendix* tend to brush off the question of the justification of this transcendental principle by arguing that it merely complements the coherent use of the understanding in the discovery of the empirical laws of nature but has nothing to do with helping the understanding contribute to the production of coherent knowledge in general.[13] But this interpretation misses what is at stake in the claim that a

[12] For efforts to show that there is a deduction of ideas after all, see Caimi, Mario, 'Concerning a Neglected Deduction of Regulative Ideas—Kant Transcendental Dialectics', *Kant-Studien*, vol. 86 (3) (1995), 308–320; Kinnaman, Ted, 'Kant's Transcendental Deduction of the Ideas of Pure Reason', *Proceedings of the Eighth International Kant Congress* vol. 2 (1) (1995), 303–309 and Marcucci, Silvestro, 'La Deduzione "Trascendentale" Delle Idee in Kant', *Studi Kantiani*, vol. 18 (2005), 61–74.

[13] Some fail to see the presence of a transcendental principle in the *Appendix* altogether; see Horstmann, 'Why must there be a transcendental deduction in Kant's Critique of Judgment' and for a critique Brandt, Reinhard, 'The Deductions in the Critique of Judgement', in *Kant's*

deduction of transcendental ideas must, after all, be necessary. The target, here, is precisely the transition from a merely hypothetical/regulative function of the ideas to their transcendental foundation as pre-requisites of the systematicity of experience. In the latter case, the systematic unity of nature must be considered 'objectively necessary' and we are already beyond the merely problematic status conferred on the idea of systematic unity in the more cautious parts of the *Appendix*. Granted, the demand for systematicity that characterizes the application of the pure concepts of reason, is very different from the idea of systematic unity that is required for concepts of the understanding. But if we take seriously Kant's argument about the role of ideas in systematizing the knowledge of the understanding, it would seem that the universality and necessity of the categories is insufficient once we move beyond the forms of knowledge in general, and examine also the content of the empirical laws of nature. As Kant argues, what is at stake in the transition from a logical principle of systematic unity to a transcendental one, is that in the second case we turn to the idea that 'all possible cognitions of the understanding (including the empirical ones) have the unity of reason, and stand under common principles from which they could be derived despite their variety' (*KrV*, A 648/B 676; 593). But if the idea of systematic unity of nature is grounded on a transcendental principle of reason which also appears to be objectively necessary, the role of ideas goes far beyond that of orienting the empirical use of the understanding towards an ideal of greater unity. Ideas in this case have their own distinctive form of universality and necessity, a form of universality of course different from the universal of the understanding and nevertheless indispensable to the very application of its categories to empirical phenomena.

As many commentators have noted, the function that ideas perform in this case is very similar to the role that the transcendental principle of purposiveness performs in the *Critique of Judgment*, seeking to unify the empirical laws of the understanding for the sake of greater coherence and consistency in our analysis of experience in its complexity. But the difference between the two texts is equally revealing.[14] As is well known, in the

Transcendental Deductions, edited by E. Förster, 177–191. For others, like Paul Guyer, this is precisely what distinguishes the perspective of the *Appendix* from that of the third *Critique*.

[14] The difference between the role of ideas in the *Appendix* and the principle of purposiveness in the third *Critique* is often mentioned but rarely discussed by interpreters. For those who approach this section with an interest primarily in Kant's methodology of scientific research, the continuity between the texts is more important. Philip Kitcher, for example, argues that 'a fundamental part of Kant's ideas about the methodology of science […] his conception of empirical laws, is unaffected by these architectonic adjustments', Kitcher, Philip, 'The

Critique of Judgment, the transcendental principle of purposiveness is at the basis of the capacity for reflective judgment and enables the systematization of the empirical laws of nature 'in terms of the sort of unity they would have if an understanding (even if not ours) had likewise given them for the sake of our faculty of cognition, in order to make possible a system of experience in accordance with particular laws of nature' (KU 180; 67–68). Indeed, in the third *Critique*, 'the concept of an object insofar as it at the same time contains the ground of the reality of this object is called an end, and the correspondence of a thing with that constitution of things that is possible only in accordance with ends is called the purposiveness of its form'. Therefore, 'the principle of the power of judgment in regard to the form of things in nature under empirical laws in general is the purposiveness of nature in its multiplicity' (KU 180, 68).

Notice, however, that the notion of purposiveness deployed in the *Critique of Judgment* is an idea of purposiveness as normativity. In the third *Critique*, Kant is far from assigning to the idea of a systematic unity of nature a status that might be considered objectively valid and necessary. Indeed, Kant often warns us that 'we cannot ascribe to the products of nature anything like a relation of nature in them to ends, but we can only use this concept in order to reflect on the connection of appearances in nature that are given in accordance with empirical laws' (KU 180, 68). This is a kind of principle that the capacity of judgment adopts as a law for regulating its own use and for reflecting on a particular kind of causality, inspired by the kind of causality reflected in the practical use of reason, a causality in conformity with ends. This notion of purposiveness as normativity is what we invoke when we ask what it would be like to judge objects in a certain way. The transcendental standpoint is here grounded on an analogy with the way in which our reason operates in the practical domain. To judge objects as purposive on this account is tantamount to asking what they would be if they had to conform to a certain number of normative properties; to ask how the object is meant to be if we, as human beings endowed with practical reason, were in charge of their planning.[15] Notice

Unity of Science and the Unity of Nature', in *Kant and Contemporary Epistemology*, edited by Paolo Parrini (Dordrecht: Springer, 1994), 253–272, 255. Paul Guyer, on the other hand, focuses on the disanalogies in an attempt to highlight the turn to a different analysis of the functioning of the understanding in connection to reflective judgment in the third *Critique*, Guyer, Paul, *Kant's System of Nature and Freedom* (Oxford: Oxford University Press, 2005), ch. 1.

[15] See for discussion, Ginsborg, *The Normativity of Nature*, chs 10 and 15.

that on this account, purposiveness is entirely separate from the idea of design: we do not need the latter to be able to think about the former.

The question appears very differently when we compare this account with the analysis of the same problem in the *Appendix to the Transcendental Dialectic*. The notion of purposiveness deployed in that case is a notion of purposiveness as design, not normativity. Although here too Kant invokes an idea of purposiveness to explain systematic unity, he never mentions this principle explicitly. He also does not provide a separate deduction of the use of such a principle as one necessary to reflect on the relation between particular objects of experience. Rather, his analysis is limited to an account of the role of the unitary idea of the system at the basis of the hypothetical use of reason. Although ideas also refer to a notion of causality in conformity to ends, in their case, unlike the case of judgment, the relation to the concept of design is not mediated by our reflection on moral causality grounded in freedom. Given the material available in the first *Critique*, Kant finds it difficult to fully explain how ideas could relate to purposiveness in nature without creating just the sort of metaphysical confusion that Kant has sought to clear up to that point.

Let me explain this further. To understand the oscillation concerning the transcendental deduction of ideas in the first *Critique*, it is useful to compare the analysis of systematic unity that we find in the pages of the *Appendix* with that offered by Kant in the third *Critique*. In the *Critique of Judgment* Kant argues that it is easy for us to understand the idea of systematic unity of particular cognitions, if we reflect on a hypothetical understanding that has ordered the ends of nature in conformity with our cognitive faculties and in accordance with ideals of maximal harmony and maximal unity. In the first *Critique*, we find a similar argument. Kant here explains how we can grasp the idea of systematic unity only by attributing an object to this idea, an object that we conceive of as 'being of reason (*ens rationis ratiocinatae*)' so as to 'regard all the connection of things in the world of sense' and 'with the intention of grounding on it the systematic unity that is indispensable to reason and conducive in every way to empirical cognition of the understanding but can never be obstructive to it' (*KrV*, A 681, B 709; 611). The task of the transcendental deduction of ideas is precisely to illustrate the necessity of the thought of this object, without which we would be unable to understand rational systematic unity, the related hypothetical use of ideas and the possibility of a coherent use of the particular rules of the understanding.

But how should we conceive of such an object? It is clearly not an object in the strict meaning of the term, Kant rather introduces it as a 'schema' useful to represent the systematic relation to objects with such an idea and to 'represent objects indirectly'. Thus, the concept of a supreme intelligence is nothing other than a schema 'ordered in accordance with the conditions of the greatest unity of reason, for the concept of a thing in general, which serves only to preserve the greatest systematic unity in the empirical use of our reason, in that one derives the object of experience, as it were, from the imagined object of this idea as its ground or cause' (*KrV*, A 670, B 698; 605–606).

The reference to the concept of schema is crucial here to understand the metaphysical implications of the principle of purposiveness on which the idea of systematic unity relies.[16] Schematism, as we saw in earlier chapters, reappears later in the section on the *Architectonic of Pure Reason*, while investigating the relation between the architectonic idea of the whole of a system and certain chief ends of reason through which this idea is schematized. As Kant argues in the *Architectonic*, for its execution the idea of architectonic unity requires a schema, that is 'an essential manifoldness and order of parts determined a priori from the principle of the end' (KrV 833/B861; 691–692). We are also told that a schema needs to be outlined in accordance with an idea and given 'from the chief end of reason' and not empirically, 'in accordance with ends occurring contingently' (KrV 833/B861; 691–692). But both in the *Appendix* and in the *Architectonic*, it is very difficult to understand how schemas are supposed to work and what kind of uniformity between heterogeneous elements they enable.[17] Kant introduces the concept of a 'schema' to explain how even if the pure concepts of reason have no constitutive validity, they are crucial in orienting the empirical use of the understanding in its attempt to reflect on the manifoldness of empirical laws. Thus, the schematism of reason is similar to that of the understanding but performs an inverted role. While the schematism of the

[16] For an interpretation of the role of schematism in the *Appendix* but which differs from my emphasis on the relation to the idea of God and insists more on ideas as empty placeholders, see Zuckert, 'Empirical Scientific Investigation and the Ideas of Reason'.

[17] This function of mediation of heterogeneous elements is precisely what schemas are supposed to offer, see for example the discussion on the schematism of the understanding where schemas serve to unify the heterogeneous elements of sensibility and the understanding through the application of the imagination. See also for a longer discussion Bazil,Vazrik, *Ideal und Schema: zu* 'Anhang zur transzendentalen Dialektik' *der Kritik der reinen Vernunft* (Munich: University of Munich, 1995).

categories is supposed to *restrict* the use of concepts to the conditions of sensibility, the schematism of reason *expands* them in an effort to determine precisely that which cannot be determined, the indeterminate. This is also why the problem posed by the schematism of ideas is extremely complicated. On the one hand, such schematism must perform a function of unification in light of the idea of systematic unity imposed by the architectonic standards of reason. On the other hand, systematic unity is only effective if it can also be determined in conformity with the requirements of a transcendental deduction.

Kant elaborates further on this argument when he claims that since the idea of systematic unity is 'necessary for approximating to the highest possible degree of empirical unity, then I am not only warranted but even compelled to realize this idea'. But when we ask further what realization means in this case, we discover that it demands positing for the idea 'an actual object', an object which we posit 'only as a Something in general with which I am not acquainted at all and to which, as a ground of that systematic unity and in relation to that, I give such properties as are analogous to the concepts of the understanding in their empirical use' (*KrV*, A 677, B 705–706; 609). The necessity of a deduction is connected to the very constitution of reason, whose ideas require realization and whose realization leads to a right to postulate that which reason needs in order to reflect on experience from a systematic perspective. But what is the nature of this demand? And what kind of needs does Kant have in mind here? Why do such needs require a transcendental principle of natural systematicity in order to be satisfied?

4. The Rights and Needs of Reason

Discussing the necessity of systematic unity, it might be useful to read these passages in connection to Kant's remarks on the rights and needs of reason in his shorter essay on *What is orientation in thinking* written in 1786. There is, Kant writes here, something like '*the right* of reason's *need*, as a subjective ground for presupposing and assuming something which reason may not presume to know through objective grounds; and consequently for *orienting* itself in thinking' (*WhDO*, 137; 10). Such a curious right, warrants reason's advancement in the 'immeasurable space of the supersensible which for us is filled with dark night' and is grounded on a need 'not only to pose the *concept* of the unlimited as the ground of the concepts of all limited

beings' but also 'goes as far as the presupposition of its *existence*' (*WhDO* 137–138; 11). Without this, reason would not be able provide satisfactory ground 'for the contingency of the existence of things in the world, let alone for the purposiveness and order which is encountered everywhere in such a wondrous degree' (*WhDO* 138; 11).

It is important to reflect on several elements of this account. Reason's right to postulate the concept of the unlimited as the ground of all concepts of limited beings is based on its unavoidable tendency to reflect on the first causes of things, including all that which is contingent. In particular, the order of ends 'which is actually present in the world' leads us to postulate the existence of such a purposive world, on the basis of a theoretical need to judge about the causes of everything contingent (*WhDO* 139; 12).

Interestingly, Kant's argument here is very similar to the one that is presented in the first *Critique*. In the pages of the *Appendix*, Kant argues that we must abstract from all limiting conditions of the idea of the whole so as to make possible the systematic unity of the manifold. It is only through this idea of unity that the greatest possible empirical use of reason is guaranteed and all combinations are seen 'as if they were ordained by a highest reason of which our reason is only a weak copy' (*KrV*, A 678, B 706; 609). When we refer to such a being, Kant clarifies, we refer to nothing else but 'the rational concept of God' (*KrV*, A 685, B 713; 613). Thus ideas open up to us 'entirely new prospects for connecting up things in the world in accordance with teleological laws and thereby attaining to the greatest systematic unity among them' (*KrV*, A 687, B 715; 614).

It is again worth noting that here too Kant's theoretical effort is very different from that which we find in the third *Critique*. Instead of explaining how reason can reflect on purposive connections in nature given its own standard of how things ought to be (purposiveness as normativity), Kant helps himself to the transcendental deduction of ideas to strengthen the link between conformity to ends and the idea of a highest reason that is at their basis (purposiveness as design). Indeed, Kant argues in the *Appendix*, if 'one cannot presuppose purposiveness in nature *a priori*, i.e., as belonging to the essence of nature (*zum Wesen derselben gehörig*), then how can one be assigned to seek it out following the ladder of purposiveness, to approach the highest perfection of an author of nature as a perfection which is absolutely necessary, hence cognizable *a priori*'? The principle of conformity to ends demands here that the 'systematic unity be presupposed absolutely as a unity of nature' that is recognized 'as following from the essence of things'

(*als aus dem Wesen der Dinge folgend*) (*KrV*, A 693, B 721; 617 but also A699/B727; 620).

This passage illustrates a clear difference between the perspectives of the first and the third *Critique*—one that is rarely noted by scholars interested in the overlaps between the two works. When the *Critique of Judgment* turns to the topic of the unity of reason and its demand for systematicity, it provides an argument that is radically different from the one we have just analysed. Kant argues that we cannot 'ascribe to the products of nature anything like a relation of nature in them to ends'; we can only 'use this concept in order to reflect on the connection of appearances in accordance with empirical laws' (*KU*, 181; 68). That link is established with the help of an analogy with reason's autonomous capacity to pursue moral ends in the world. It is only this capacity for freely choosing a moral course of action and creating a world that can conform to human reason's demands that can lead, as a next step, to the analogy with a supreme intelligence as the ground and cause of the universe. And yet, Kant cautions us that 'even if we were capable of having an empirical overview of the whole system as long as it concerns mere nature', this could never 'elevate us beyond nature to the end of its existence itself, and thereby to the determinate concept of that higher intelligence' (*KU*, 438; 305).

On the other hand, in the *Critique of Pure Reason*, the concept of purposiveness does not precede but rather follows the postulate of an idea of reason as the fundamental ground of the purposiveness of nature. The deduction of its validity is therefore completely inverted. Here too Kant argues that 'the greatest systematic unity' and therefore also 'purposive unity' is 'the school and even the ground of the possibility of the greatest use of human reason'. And here too he suggests that since this idea of systematic unity is 'inseparably bound up with the essence of our reason' it is also 'legislative for us', and thus 'it is very natural to assume a corresponding legislative reason (*intellectus archetypus*) from which all systematic unity of nature, as the object of our reason, is to be derived' (*KrV*, A 695, B 723; 618). But what is the evidence for these claims? One would be tempted to argue on the basis of the practical legislation of reason where the moral will sets the ends that we ought to pursue. But how would that be further justified? In the first *Critique*, there is nothing to suggest that practical reason has a distinctive causality based on freedom, a causality of the kind required to come up with a concept of purposiveness as normativity distinguished by purposiveness and design. And it is precisely the absence of such a concept which opens a gap in Kant's reasoning, a gap that can only be fully exposed

if we continue to explore the discontinuities between the perspective of the first and the third *Critique* when it comes to the assumption of purposive unity in nature and its relation to the idea of God.

In the third *Critique*, the apparent purposiveness of all things natural, however far we seek to extend it, can never establish a link between the assumption of order in nature and the idea of a wise entity responsible for that order. In other words, there is no passage from the theoretical postulate of teleology in nature to any kind of proof on the reality of intelligent design. As Kant puts is: 'we will seek in vain to find anything that justifies us in the principles of the theoretical use of reason, which always demands that no properties be assumed in the explanation of an object of experience that are not to be found among the empirical data for its possibility' (KU 438; 305). What we find rather is that 'there actually lies in us *a priori* an idea of a highest being, resting on a very different use of reason (its practical use), which drives us to amplify physical teleology's defective representation of the original ground of the ends of nature into the concept of a deity' (*KU* 438; 305). In the first *Critique*, instead, Kant argues that if we ask 'whether there is anything different from the world which contains the ground of the world order and its connection according to universal laws, then the answer is: Without a doubt' (*KrV*, A 696, B 724; 619). Of course, here too Kant insists that the concept of this being cannot be given by applying categories of the understanding to given intuitions but can only be arrived at 'in accordance with the analogy with an intelligence', in a way similar to Aquinas and Leibniz.[18] The concept of an *analogia entis* enables reason to conceive of God as an object in the idea and therefore as 'a substratum, unknown to us, of the systematic and purposiveness of the world's arrangement, which reason has to make into a regulative principle of its investigation of nature' (*KrV*, A 696–697, B 724–725; 619).

Kant of course offers several warnings of how to understand all this. The idea of the highest intelligence, he argues, does not refer to 'a being different from the world' but rather to the 'regulative principle of the world's systematic unity, but only by means of a schema of that unity, namely of a supreme intelligence that is its author through wise intentions'. But if we wonder whether we can nevertheless 'assume a unique wise and all-powerful world author' the answer is: 'Without any doubt'. Not just that 'but we must

[18] For a discussion of the analogies and differences between Kant's and Leibniz's arguments on the relation between purposiveness and physico-theology, see Chignell, Andrew, 'Kant, Real Possibility, and the Threat of Spinoza', *Mind*, vol. 121, 483 (2012), 635–675.

presuppose such a being'. 'But wouldn't this bring us to expand our cognitions beyond possible experience?' The answer is: 'By no means' (*KrV*, A 697, B 725; 619).

It is not difficult to see how these pages are fraught with tension; a tension that makes Kant oscillate between the imperative to avoid departing from the strictures of transcendental idealism in the *Analytic* and the other, equally strong imperative, to recognize the validity of reason's ideas, without which all systematic presupposition would collapse. Kant is very concerned by the tension between the necessity to accept the idea of a higher intelligence as manifest in the order of nature, and the limits to our possibility of cognising it. He knows that the order and harmony of thought must reflect the order and harmony of the universe: every possibility must rely on the givenness of a certain content.[19] Not only does he maintain a principle of the real ground of possibility, but he continues to link this principle to the idea of God. How else could we explain the possibility of structures that display natural purposiveness if there was no ontological foundation for that possibility? The coherence of reason demands a coherent structure of the universe and we can only make sense of this coherent structure with reference to the idea of an intelligent being at the source of it. As Kant puts it, all this can only ultimately be explained with reference to the idea of a being as 'self-sufficient reason which is the cause of the world-whole through ideas of the greatest harmony and unity' (*KrV*, A 678, B 706; 609).

At points, Kant seeks to resolve the tension by distinguishing between having satisfactory reason for assuming something relatively (*suppositio relativa*) and being warranted in assuming it absolutely (*suppositio absoluta*), arguing that the former does not necessarily lead to the latter (*KrV*, A 676, B 704; 608). But such a solution makes him collapse into each other two separate arguments. One is an argument that nature as such has a purpose. The other is an argument that an intelligent and wise entity has ordered nature in a purposeful way. The conclusion then is that it must be the same whether someone argues that 'the divine has ordered everything to its supreme ends, or the idea of the highest wisdom is a regulative one in the investigation of nature and a principle of the systematic and purposive unity thereof in accordance with universal laws, even where we are not aware of it'. Relatedly,

[19] See the discussion in Fisher, Mark, and Eric Watkins, 'Kant on the Material Ground of Possibility: From "the Only Possible Argument" to the "Critique of Pure Reason"', *The Review of Metaphysics*, vol. 52 (2), 369–395, at 389. As Fisher and Watkins also explain, there is nothing in Kant's defence of transcendental idealism that prevents this argument from going through, as some authors maintain.

it must be the same to argue, in the face of apparent purposive unity, that 'God has wisely willed it so' or 'Nature has wisely so ordered it' (*KrV*, A 699, B 727; 620).

Therefore, even with these cautious statements, *the Appendix to the Transcendental Dialectic* does little more than embed the assumption of systematicity in a notion of purposiveness as design. The greatest systematic and purposive unity, on which all investigation of nature rests, Kant argues, is grounded on 'the idea of a highest intelligence' as 'a schema of the regulative principle' and 'however much purposiveness you encounter in the world in accordance with that principle, so much confirmation do you have for the rightness of your idea' (*KrV*, A 699, B 727; 620). To put it differently, accepting the validity of a transcendental principle of purposiveness necessary to conceive of systematic unity seems to commit us to a particular way of thinking about the presence of a higher intelligence which contains the ground of that possibility. This is inference from the order of nature to the idea of a wise and benevolent creator of it, known in the previous metaphysical tradition as the physical theological proof of the existence of God.[20]

5. The Benefits and Limits of Physico-Theology

Kant does not explain in great detail why the transition from physical teleology to physico-theology is necessary. His understanding of the link between the purposiveness of nature and the idea of God is shaped by the views of his philosophical predecessors: Leibniz, Baumgarten, Wolff, all of whom endorsed some version of the physical theological proof of divine intelligence. Kant's position with regard to that tradition becomes clearer if we compare the arguments of the first *Critique* and those contained in the *Lectures on the Philosophy of Religio*n. The relevant passages here are those that seek to defend the physical-theological argument in favour of the existence of God against Hume's objections in the *Dialogues on Natural Religion*. There Hume had claimed that even if we could grant the presence of a supreme intelligence as a cause of the order and purposiveness of nature, it was not clear how such a being could contain all the perfections necessary

[20] For excellent discussions of physico-theology beyond the claims made in the first *Critique* see DiCenso, James, *Kant, Religion, and Politics* (Cambridge: Cambridge University Press, 2011), 153–161 and Guyer, Paul, 'The Revised Method of Physico-Theology', in *Teleology*, edited by Jeffrey K. McDonough (Oxford: Oxford University Press, 2020), 186–218.

to uphold an idea of harmony any more than we could explain the origin and possibility of that very harmony.[21] In addressing that critique Kant argues that even though Hume's objection is at first sight strong, it is nevertheless mistaken (*PR*, 1063; 398–399).[22] To illustrate why, he argues, we should compare two different hypotheses. The first is the hypothesis that a supremely perfect being is the author of the world through its understanding. The second is the hypothesis that an eternal nature that operates blindly is the cause of all purposiveness and order in the world. Now, Kant asks, can we think without contradiction that the purposiveness, beauty and harmony of the world have arisen from a *natura bruta*? […] So how could nature, simply of itself, arrange the various things in harmony with its determinate final aims, using so many united means? Everywhere in the world we find a chain of effects and causes, of ends and means, of regularity in the coming to be and perishing of things. How could this whole, just of itself come to be in its present state? Or how could a blind all-powerful nature be the cause of it? (*PR*, 28: 1064; 399).

Thus, Kant concludes that if for Hume 'a mere fecundity' (*Fruchtbarkeit*) is in a position to 'produce harmony in its effects', it is even more plausible for us to assume that 'a highest understanding and will have planned and carried out all the purposive arrangements in the world' (*PR*, 28:1064; 399). A nature that operates without presupposing at its basis the design of a highest understanding, would be a nature that operates blindly. But what 'cooperation of blind accidents could produce a moth, with its purposive structure'? Thus, Kant's objection to Hume points out not only that purposiveness is an intrinsic, objective characteristic of organic, living beings but, most importantly, that 'purposiveness in the effects always presupposes understanding in the cause' (*Zweckmäßigkeit in den Wirkungen setzet ja allemal Verstand in der Ursache voraus*) (*PR*, 28: 1064; 399).

In the *Dialectic* of the first *Critique*, we find several passages in which Kant analyses issues that are similar to the ones that we find in these lectures. However, Kant's assertions with regard to physical-theology remain always vague. It is clearly difficult to affirm a positive link between purposiveness in nature and physico-theology but it seems even harder in the light of the arguments we have just examined to deny the possibility of this

[21] See Hume, David, *Dialogues Concerning Natural Religion and Other Writings* [1779], edited by Dorothy Coleman (Cambridge: Cambridge University Press, 2007), part II, 17–28 and part IV, 35–40.

[22] This translation is from *Lectures on Philosophical Theology* by Allen W. Wood and Gertrude M. Clark (Ithaca, NY: Cornell University Press, 1978).

transition. Kant struggles to find a stable vantage point from which to develop a coherent answer to this problem. The reasons for this difficulty are several. First, there is the problem of the obscure dual status of ideas, a status that is not merely theoretical but not yet connected to an autonomous domain of practical reason. Second, there is the problem of having failed to develop a proper deduction of an autonomous transcendental principle of purposiveness, anchoring its justification to the transcendental deduction of ideas. Finally, there is the problem of the demand for architectonic unity which requires a schema of the idea of God but the workings of which Kant has never properly clarified.

The difficulty appears even greater if we reflect about what the deduction of ideas in the *Appendix* tries to accomplish but in the light of dialectic of human reason. As Kant explains in the first *Critique*, the final aim of the natural dialectic of human reason consists in directing all of its cognitions toward a systematic unitary point, conceived of as a unity that is oriented to ends and for whose understanding it is crucial to make reference to a supreme intelligent being understood as the author of order and systematic coherence in the world. Kant ascribes to the idea of this being, or the rational concept of God, a necessarily regulative status, required to ground the hypothetical use of reason (which is in turn necessary to the heuristic role of ideas, and the process of systematically unifying the rules of the understanding).[23] Reason, however, is not authorized to infer from the subjective presupposition of this concept, an objective proof of its existence. And yet, this is precisely what the physico-theological proof of God's existence seeks to accomplish. Its champions want to ascertain 'whether a determinate experience, of the things in the present world, their constitution and order, yields a ground of proof that would help us to acquire a certain conviction of the existence of the highest being' (*KrV*, A 620, B 648; 578).[24]

Kant never concealed his preference for this argument compared to the other arguments in favour of the existence of God. According to him, the argument is accessible even to the most common human reason, it rests on empirical grounds and has the virtue of being 'popular and appealing' where the ontological and cosmological proof are 'dry and abstract'. (*PR*, 28: 1007; 352). Moving from the experience of the sensible world, from its order and

[23] For more on the relevance of the idea of God in Kant's theoretical philosophy, see Andersen, Svend, *Ideal und Singularität. Über die Funktion des Gottesbegriffes in Kants theoretischer Philosophie* (Berlin: De Gruyter, 1983).

[24] For similar definitions of physico-theology see also *Bew* 118; 161–162, *PR*, 13; 109, *PM*, 287, *KU* 436; 559.

regularity, the proof is able to provide a concept of the 'absolute idea made concrete' without being obscured by empty abstractions and pedantries, and without getting lost in a labyrinth outside human experience (*PR*, 28: 1004; 350). The physico-theological proof is, as Kant puts it, 'adequate for the entire human species'; it can provide 'intuitive clarity to illuminate our concept of God' and, moreover, 'it has the virtue of introducing the supreme being as a being of supreme intelligence and as the author of purposiveness, order and beauty' (*PR*, 28: 1004; 350). Similarly, in the *Critique of Pure Reason*, Kant argues that 'the world discloses to us such an immeasurable showplace of manifoldness, order, purposiveness, and beauty', a chain of 'effects and causes, of ends and means, regularity in coming to be and in perishing' that 'the entire whole would have to sink into abyss if one did not assume something subsisting for itself and independently outside this infinite contingency, which supports it and at the same time, as the cause of its existence, secures its continuation' (*KrV*, A 622, B 650; 579). Therefore, it would be not only 'discomfiting but also quite pointless to try to remove anything from reputation of this proof'. The proof 'enlivens the study of nature' by drawing our attention to ends and aims where we might neglect them, and 'extends our information about nature through the guiding thread of a particular unity whose principle is outside nature' (*KrV*, A 623, B 651; 580).

Yet, even though Kant emphatically argues that the physico-theological proof always 'deserves to be named with respect' (*KrV*, A 623, B 651, 395), when the *Critique* turns to the question of whether the argument is also a valid one, his respect seems to falter. This is because even if the proof follows the path of experience for most of the argumentative process, it then tends to abandon it in favour of the notion of a necessary being. Recall that the analysis starts by assuming the existence of such a being only hypothetically, and as a way of strengthening our analysis of experience as coherent in its complexity. And yet the proof eventually claims to achieve more than that, it seeks to justify the concept of absolute necessity of a first cause. In this way, the physical-theological proof ends up providing a definition of the predicates of what was supposed to remain abstract and indeterminate from a theoretical perspective. Reason ventures itself into the field of what cannot be exhibited and seeks to overcome the limits of experience. The physical-theological proof, Kant explains, could at most prove the existence of a 'highest architect of the world' but hardly that of its 'creator' (*KrV*, A 627/B 655; 581).[25] If we try to extend the predicates of the highest being to

[25] An argument similar to this one, claiming that the physico-theological proof is incomplete in its effort to demonstrate the existence of God as the author of matter, is already present

the whole of creation and we seek to determine the supreme cause of the world, then we would also need to invoke the cosmological and ontological proofs, thereby appealing to what we initially sought to avoid.[26]

There is also another explanation for why Kant warns us of the danger of taking as constitutive the principle grounding the systematic unity of nature; one that contrasts with the ones already mentioned and that is linked to the way in which reason seeks to achieve its 'destination' from a theoretical perspective. On the one hand, the idea of reason that reflects the maximal unity of natural phenomena, as a unity arranged according to highest ends, has a certain objective, although indeterminate value. The idea of this unity is an absolutely necessary heuristic concept, needed to guide the understanding in the field of contingent experience and to explore the constitution and connection of objects in it (*KrV*, A 671, B 699; 606). On the other hand, if reason neglects the regulative value of this principle and gives it content independently from experience, reason not only derives no benefits for its enquiry but violates the limits it has set itself. In other words, reason presupposes as a cause that which it must establish as a result of its empirical investigations and only by way of approximation. The rational concept of God takes the form of a highest intelligence which is determined 'anthropomorphically'. In so doing reason 'imposes ends on

in the essay *The only possible argument for the demonstration of the existence of God*. The danger, Kant emphasizes here, is that of interpreting God as a director and organizer of the laws of matter but not as a creator of it. This in turn seems to limit the power of God because it indirectly shows that God is incapable of authentic production. See *Bew*, 22–23; 166–167 and for the same problem *PR*: 1010; 355. For a discussion of the continuities between this text and Kant's position in the first *Critique*, see Fisher, Mark, and Eric Watkins, 'Kant on the Material Ground of Possibility: From "the Only Possible Argument" to the "Critique of Pure Reason"', *The Review of Metaphysics*, vol. 52 (2) (1998), 369–395.

[26] In the *Critique of Pure Reason*, Kant only makes scattered remarks on the links between the physical-theological, ontological, and cosmological proof of God's existence, emphasizing how it is impossible to derive the theological predicates of God (omnipotence, omniscience, etc.) from an analysis of the order, greatness and purposiveness of the sensible world. This passage from the *Lectures on the Philosophy of Religion*, however, allows us to understand better what Kant means when he draws attention to the influence of the ontological and cosmological argument on the physical theological one. 'Our experience of the world is too limited to permit us to infer a highest reality from it. Before we could argue that the present world is the most perfect of all possible ones and prove from this that its author is of the highest perfection, we would first have to know the whole totality of the world, every means and every end reached by it. The natural theologians have certainly seen this. So they follow their proof only to the point where they believe it has been thoroughly established that there exists *a prima causa mundi* (first cause of the world), and then by a leap they fall into transcendental theology and prove from it that the *prima causa mundi* (the *ens originarium*) would have to be absolutely necessary, and hence an *ens realissimum* as well. From this we see that physicotheology rests wholly on transcendental theology' (*RP*, 28: 1009; 354).

nature forcibly and dictatorially, instead of seeking for them reasonably on the path of physical investigation'.

Notice that the problem posed here by anthropomorphism is not so much that such a concept of the highest intelligence is unthinkable. It is rather that what ought to be shown on the basis of empirical evidence is established in advance and limited in its reach. Therefore 'teleology which ought to serve only to supplement the unity of nature in accordance with universal laws, not only works to do away with it, but even deprives reason of its end' (*KrV*, A 693/B 720; 617). If a highest ordering being is made the ground of the systematic unity of nature, the latter is 'done away with'; it becomes 'entirely foreign and contingent in relation to the nature of things and it cannot even be cognized from the universal laws thereof'. Thereby a 'vicious circle' arises, one which 'presupposes what really ought to have been proved' (*KrV*, A 693, B 721; 617). The investigation of nature is then forced to 'take its own course, following only the chain of natural causes according to their universal laws in conformity to the idea of an author'. But this is not done to 'derive from that idea the purposiveness it is seeking everywhere, but rather in order to cognise its existence from this purposiveness which it seeks in the essence of natural things', even 'of all things in general' (*KrV*, A 694, B 722; 617–618).

Does that mean that the deduction of transcendental ideas is ultimately bound to fail? Here, it is worth emphasizing that the problem is not so much that Kant abandons the attempt to reflect on the existence of God in connection with the enquiry on experience as coherent in its complexity. It is rather that a kind of purposiveness understood as external conformity to ends would condemn physico-theology to a complete failure, bringing reason to abuse its own heuristic principles. Instead of explaining the causes of beings that show themselves as ends of nature on the basis of 'universal laws of the mechanism of matter', one appeals here to 'the inscrutable decree of the highest wisdom' regarding the 'toil of wisdom as completed'. Reason is left without a guarantee of its systematic use, 'a use which finds its guiding thread nowhere unless it is provided to us by the order of nature and the series of alterations according to their internal and more general laws' (*KrV*, A 691, B 719; 616).

It is interesting to note how Hegel, in the *Science of Logic*, presents a very similar discussion of external teleology, strengthening even further some of the points Kant already makes. As Hegel notes, the 'closer the teleological principle is associated with the concept of an extra-mundane intelligence […], all the more it has seemed to depart from the true investigation of

nature, which aims at a cognition of the properties of nature not as extraneous, but as immanent determinacies, and accepts only such cognition as a valid conceptual comprehension'.[27] Indeed, Hegel notes, a conformity to ends that presupposes the unity of the end dogmatically and without regard for its particular determinations, leads to a theoretical discrediting of the very concept of end. In the case of external purposiveness, the end is posed as something formal, the content of which is given externally to the concept and to the manifold of the objective world. But then the end, far from appearing as 'concrete totality', is presented as something merely 'contingent', 'finite', and 'insignificant'.[28] This makes it easy to see why purposiveness becomes a target of attack regardless of the ends invoked as examples of intelligent design: the purposive relation between objects, Hegel says, appears as a child's game that only reveals contingency, and no necessity.[29]

This naïve version of purposiveness criticized by Kant (and later Hegel), and which celebrates the ends of nature wherever they appear with some plausibility (regardless of how much), was endorsed by many contemporaries of Kant, inspired by the Wolffian interpretation of Leibniz's theodicy. As Ernst Cassirer has acutely observed, by the time of Kant's writing, the identification of the idea of purposefulness with that of usefulness had reduced the important metaphysical idea of theodicy to a pedantic and trivial academic exercise which tried to identify in every aspect of the cosmic order the benefit to humans and thus the wisdom and goodness of the creator.[30] Although Kant was attracted to the physico-theological proof of the existence of God from early on, unlike many of his German contemporaries, he was acutely aware of its limitations. The early 1763 essay on *The only possible argument in support of a demonstration of the existence of God* already illustrated his unique position on the topic. Here Kant warned against theorists who tried to invoke teleological foundations and intelligent design every time there was a gap in their knowledge. Indeed, he invited his contemporaries to avoid straying into Voltaire's legitimate mockery: 'Why do we have noses?' And his reply: 'No doubt so that we can wear spectacles' (*Bew*, 131; 172).

[27] Hegel, *The Science of Logic*, cit. 12.155, 652.
[28] Hegel, *The Science of Logic*, cit. 12.156, 653. [29] Ibid.
[30] 'The light of day', Cassirer argues mocking Wolff, 'is very useful for us, for with it we can conveniently carry on our duties, which cannot be done in the evening at all, or at least not so handily and without difficulties.' See Cassirer, Ernst, *Kant's Life and Thought* (New Haven, CT: Yale University Press, 1983), 338.

Although in this early text Kant does not distinguish clearly between universal and particular laws of experience,[31] the rules of the method prescribed by physico-theology bear a striking resemblance to some of the solutions outlined in the *Appendix to the Transcendental Dialectic* of the first *Critique*. In *The only possible argument* too, Kant suggests that it is more prudent to abstain from considering every benefit that nature offers as the product of a wise architect of the world, prioritizing instead the study of its mechanical laws. He further argues that although attention to the benefits and harmony of nature may contain the spirit of true philosophy, it should not hinder the search for universal and necessary laws, it should pay special attention to preserving their unity and it should avoid multiplying their causes unnecessarily (*Bew*., 2: 136–137; 176–177). Thus, although the physico-theological method should be commended for linking the idea of a benevolent legislator to the observation of purposiveness in nature, it is not immune from problems. Of course, many arrangements of nature remain contingent from the point of view of the universal laws of nature, and 'as such, they have no other foundation than the wise intention of Him who willed that they should be connected thus and not otherwise'. However, Kant argues, 'the converse conclusion cannot be drawn'. Therefore, even if natural causes harmonize with a wise choice, it does not follow that 'it has been especially instituted by an artificial provision' (*Bew*, 121–122; 163).

[31] One of the important differences remains the Newtonian perspective that Kant resolutely embraces in the first *Critique*, and which leads him to refuse the possible extension of physico-theology to issues covered in the *Transcendental Aesthetic* and in the *Analytic*. Indeed, one of the most important implications of the Copernican revolution is that the presupposition of universal harmony with regard to the conformity between objects of possible experience and categories of the understanding is entirely unnecessary. The understanding in its pure use has no reason to invoke the idea of pre-established harmony to explain the correspondence between *res cogitans* and *res extensa*. The principle of a universally and necessary compatibility between subject and object replaces the idea of a teleology mediating the relationship between them. Here there is no need for purposiveness since the categories are not 'subjective predispositions for thinking implanted in us along with our existence by our author in such a way that their use would agree exactly with the laws of nature along which experience runs'. If that were truly the case, 'the categories would lack the necessity that is essential to that concept'. But this would further mean that purposiveness understood in this way would end up fuelling scepticism (just like dogmatic rationalism had ended up doing). This is because universal and necessary concepts, such as that of cause, would end up depending 'on a subjective necessity arbitrarily implanted in us' and all our presumed objectivity would end up being just an illusion depending on how we were constituted (*KrV*, B 167–168; 265). This is remarkably different from Kant's claim in *The only possible argument* that there is a systematic unity higher than that given to us by nature even when it comes to the 'grounds for the harmoniousness which exists between that which is necessary, either mechanically or geometrically, and the supreme good of the whole'. And it will also extend to 'the properties of space itself' and 'elucidate our fundamental thesis by appealing to the unity of the vast manifold of space' (*Bew*., 2: 127; 168).

The harm done to the proof is in this case greater than the benefits that are brought to it. This is because every harmony that was once considered contingent and is subsequently linked to the universal laws of experience exposes physico-theology to dangerous objections, rendering its validity ever more restricted. Therefore, if we infer a supreme cause of nature from the mere observation of harmony in it:

> Humiliated reason distances itself from any further investigation, for it regards such investigation here as prying curiosity. And the prejudice is all the more dangerous for furnishing the lazy with the advantage over the tireless enquirer; it does so under the pretext of piety and of just subjection to the great Author, in knowledge of whom all wisdom must be united. (*Bew*, 119; 161)

The question raised here is the same as that emphasized in the *Critique of Pure Reason* in relation to the idea of ascribing constitutive validity to the idea of a supreme being at the basis of the architectonic unity of the system of reason. It is the problem of what Cicero used to refer to by the term of *ignava ratio* and which, as Kant emphasizes, brings reason to neglect all ends internal to life, considering its search already concluded when traces of such intelligent design claim to have been identified.[32] Lazy reason, Kant argues also in the lectures on metaphysics, is when one goes at once 'from the proximate ground <ratione proxima> to the most remote <ad remotissimam> without touching the intermediate grounds <rationes intermedias>' (*MM*, 932; 230).

Notice, however, that in the *Critique of Pure Reason* this very mistake is avoided by suggesting to consider from the point of view of purposes not merely a few parts of nature but the universal link between the systematic unity of nature and the idea of a highest intelligence (*KrV*, A 691, B 719; 616). This means that purposiveness in accordance with the universal laws of nature can become 'the ground, from which no particular arrangement is excepted, but arrangements are designated only in a way that is more or less discernible by us'. Then, Kant argues, we will have 'a regulative principle of the systematic unity of a teleological connection (*teleologischen Verknüpfung*)'.

[32] Leibniz also already mentioned the problem of *ignava ratio* in his theodicy by way of a reference to Bayle, who endorsed this argument in his criticism of teleology. See G.W. Leibniz, *Theodicy: Essays on the Goodness of God, the Freedom of Man and the Origin of Evil* [1710] ed. by Farrer, Austin (London: Routledge 1952), 153ff. Available online at Project Gutenberg: https://www.gutenberg.org/files/17147/17147-h/17147-h.htm (accessed on 7 April 2021).

But it is a principle which we do not determine beforehand, but 'may only expect while pursuing the physical-mechanical connection according to universal laws' (*KrV*, A 691–692, B 719–720; 616). From the regulative use of the ideas of reason we are taken to the transcendental principle of systematicity in nature, and from the transcendental principle of systematicity in nature to nothing less than critical theodicy.

6. Conclusion

Kant's oscillations concerning the transcendental deduction of ideas reflect the complex relation between the logical and transcendental principle for the systematic unity of nature—a problem that the *Appendix to the Transcendental Dialectic* constantly thematizes without ever being able to solve. The difficulty remains the relation between purposiveness and physico-theology, between natural purposiveness and intelligent design, and the role of the ideas of reason in articulating the link. Although Kant's thoughts on this matter significantly evolved from the time of his pre-critical writings, the evolution is not as stark as one might be initially inclined to think. The reasons for the tension lie in the ambiguous status of transcendental ideas; a status which seems to continue oscillating between the mere hypothetical acceptance of their validity, that requires some kind of faith in an unspecified supreme being schematized through the ideas of reason, and the necessity of such faith coupled with the need to recognize its presence as a postulate of reason. This, as we saw in the previous pages, is what reason demands and needs. The nature of the need is grounded in an interest of reason which is difficult to reduce to an interest of a speculative-theoretical nature, and has also an important practical dimension. Later on, in the *Critique of Practical Reason*, the existence of this practical dimension is not merely acknowledged alongside reason's theoretical dimension but has 'primacy' over it (*KpV*, 5: 120; 236). This priority of the practical is essentially understood as 'the prerogative' to be 'the first determining ground of the connection with all the rest' (*KpV*, 5: 119; 236), and established, as Kant clarifies, by 'the consciousness of the moral law' (*KpV*, 5: 121; 237).[33]

[33] For excellent discussions of the primacy of practical reason, see Gardner, Sebastian, 'The Primacy of Practical Reason', in *A Companion to Kant*, edited by Graham Bird (Oxford: Blackwell, 2006), 259–274 and Willaschek, Marcus, 'The Primacy of Practical Reason and the Idea of a Practical Postulate', in *Kant's Critique of Practical Reason: A Critical Guide*, edited by

But no explicit analysis of the foundations of the 'moral law' is to be found in the first *Critique*. What we find, instead, are frequent references to a practical perspective through which we can extend the use of reason in its theoretical perspective, and which turns out to be beneficial to the overall ambition to achieve systematic unity.

As already explained, the *Architectonic of Pure Reason* is not the only place of the *Critique* where Kant emphasizes the centrality of the practical use of ideas to conceptualize the relation between purposiveness, ideas, and the systematic unity of experience. The *Appendix to the Transcendental Dialectic* does not mention explicitly the practical dimension of the pure concepts of reason, yet Kant's hesitations with the deduction of ideas is a sign of the difficulties in the analysis of the systematic status of the principle of purposiveness when divorced from such a practical perspective. Kant declares in the *Appendix* that the unity of things in accordance with purposes is the highest formal unity and such a unity rests on concepts of reason. But which concepts? And what kind of use of reason is at stake in appealing to them? The *Appendix* is silent on this issue. However, since Kant is clearly not discussing here the use of ideas from the point of view of theoretical reason, and since reason has only two kinds of use for its principles, it is possible to infer that he must be referring to their practical use.[34] The interesting implication is that the justification of a guiding thread (*Leitfaden*) able to give unity to experience in its complexity and the ability to identify what that guiding thread looks like depend on the validity of a possible link between the two uses of reason, the theoretical and the practical one. Indeed, any account of the use of purposive principles in the *Appendix* that does not seek to understand the link between purposiveness and the practical use of the ideas of reason runs the risk of being severely truncated. The concept of purposiveness is then left here in the background as a problematic idea of reason with a slightly different standing compared to the cosmological and psychological ideas of the whole that the *Appendix* also examines.[35]

The interesting question behind the *Appendix* is not how Kant raised in it a set of questions very similar to the ones that the third *Critique* would return to with renewed conceptual tools. The novelty of the third *Critique*

Andrews Reath and Jens Timmermann (Cambridge: Cambridge University Press, 2010), 168–198.

[34] See Scaravelli, *Scritti kantiani*, 386.

[35] See S. Marcucci, *Introduzione a Kant*, cit., 123–124 and Scaravelli, *Scritti kantiani*, cit. 43–98.

does not lie merely in the rigour with which the concept of purposiveness is discussed, and in its connection to the reflexive use of judgment. It also does not lie in the question of how to think about nature and reason as incorporated in one unitary system—the *Architectonic of Pure Reason*, as we have already seen, already sought to address this problem. The novelty of the third *Critique* lies in the attempt to reflect on the principle of purposiveness as a reflexive principle while detaching purposiveness as normativity from the idea of purposiveness as design. In the third *Critique*, the only possible subject of a natural purposiveness is the human being, and there is no possibility of transition from the purposiveness of nature to physico-theology, since the only condition on which we can postulate nature as a system of ends is that we take seriously human beings' practical autonomy. This is where the real solution to the link between purposiveness and systematic unity lies, and this is why the *Critique of Pure Reason*, still rooted in a concept of purposiveness as design, was unable to solve the problem.

To understand why, it is important to examine the link between the practical use of the ideas of reason and the concept of freedom in its relation to the moral law. This issue is articulated very differently in the first *Critique* compared to Kant's successive writings. Indeed, as we shall see in the following chapter, the absence of an explicit defence of transcendental freedom in the first *Critique*, led Kant to anchor the problem of the unity of the system to a problematic idea of the whole understood as a higher intelligence schematized to confer unity on both the sum of reason's cognitions from a speculative perspective (as the *Appendix* makes clear) and the multiplicity of its ends from a practical standpoint (as we shall go on to see).

I began this chapter with a puzzle about the transcendental deduction of ideas and with an attempt to question some of the most common interpretations of these pages. Without siding completely with those who emphasize the self-contradictory nature of Kant's argument, I also tried to illustrate the weakness of readings which try to explain away the problem by emphasizing either the purely hypothetical character of ideas, or the merely practical nature of the enterprise. My interpretation is grounded on an effort to show the relevance of transcendental theology in Kant's attempts to assert the unity of reason at this point of his work. The demand for unity is both theoretical and practical, but to complete the transition from one domain to the other Kant needs a transcendental principle of purposiveness whose status in the first *Critique* is very difficult to disentangle from an analysis of purposiveness as design. To deliver on his promise of a deduction, Kant needs to link natural purposiveness to physico-theology. But to admit the

fundamental relevance of the latter to the unifying project of reason is to endanger the whole critical enterprise. Although Kant does not mention physico-theology directly in the pages of the *Appendix*, if we connect his remarks here with his lectures on the philosophy of religion and other relevant essays before and after the critical turn, we can easily see how the issue of physico-theology is constantly in the background of the relation between the systematic unity of nature and the idea of a supreme intelligence of the universe.[36] It is here as a reminder that the only conception of purposiveness that is available to Kant at this point of his writings is that of purposiveness as design. This is also one of the most important, and most often neglected elements marking a difference between the concept of purposiveness that we find in the first *Critique* and that which we find in the third.

The third *Critique* has a much clearer conception of purposiveness as normativity because it is clearly rooted in a conception of practical reason where the constitutive and practical nature of ideas is unambiguous, and where the practical use of reason is evident in our consciousness of the moral law. Although the first *Critique* gives some vague indications concerning the practical demands and needs of reason, it does not show us a clear path on how to respond to such needs. The failed attempt to provide a persuasive transcendental deduction of ideas deserves much more scrutiny than we have been prepared to give it. It is one of the most interesting angles from which to explore the paths not taken in the first *Critique*, and to shed light on what needs to be there for the unifying project of reason to succeed. But it is far from being an unproblematic attempt, or one that we can dismiss by prematurely invoking Kant's practical turn. This is because, as we shall see in the next chapter, in so far as Kant's *Critique of Pure Reason* has room for a practical use of reason, the systematic unity of practical reason is at odds with the conception of freedom advanced in these pages. It is to that conception that I now want to turn.

[36] It is interesting to see how even those few authors who are aware of the centrality of the idea of God in the *Appendix* miss the connection with the problem of physical-theology. For one example, see McLaughlin, Peter, 'Transcendental Presuppositions and Ideas of Reason', *Kant-Studien*, vol. 105 (4) (2014), 554–557.

6
The Role of Ideas from a Practical Perspective

1. The Geography of the Critical Project

To understand the status of the principle required to unify the practical and theoretical demands of reason, we must return to the geographical and construction metaphors that Kant deploys in the first *Critique* to defend its architectonic ambitions. Reason, Kant argues in the *Transcendental Doctrine of Method*, can only advance its claims in a well-defined territory, in the 'island of truth' (KrV, A 235, B 295; 338) where the construction of a unitary system ought to be executed in accordance with 'an idea that we have in us' (*KrV*, A 707, B 735; 627). Both the shape of the project and its limitations are clear at this point of the work. As Kant puts it in the essay on the progress of metaphysics, while 'the building materials and specifications are to hand', the structure itself must be 'constantly occupied and kept in structural repair, if spiders and satyrs, who will never be backward in seeking accommodation here, are not to settle in and make it uninhabitable' (*FM*, 310; 396–397). Yet, Kant does not explain what it means for the construction of reason to be inspired by an 'idea', nor does he clarify further what kind of idea he has in mind, and what is required to guarantee the solidity of reason's structure. But it is possible to interpret these passages by considering the use of geographical metaphors in the *Transcendental Doctrine of Elements*, where we find important references to the *Wohnhaus*, the building fit for human needs in the construction of which reason's systematic ambitions are satisfied.

The discussion in the initial pages of the *Doctrine of Method* develops further the analysis started in the introductory pages of the first *Critique* where Kant argues, in contrast to the dogmatic metaphysical tradition, that constructive activities only make sense once there has been an analysis of the cognitions and principles of reason, their status and foundation, and the 'domain, validity, and value they might have' (KrV, A 3, B 7; 128). I shall return to the technical use of the term *domain* in the following pages. For

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now, it is important to observe more generally that the geographical metaphors to which Kant appeals in reflecting on the architectonic of reason were a familiar resource of the sceptical tradition. Just as Kant warned about the dangers of abandoning the 'land of truth' in order to sail the 'broad and stormy ocean', 'the true seat of illusion' (KrV, A 236, B 295; 339), other authors spoke of the firm land of experience and the troubled waters of metaphysics. Both Hume and Locke compared solid philosophy to *terra firma*, and reflected on the metaphysical ambitions of reason as being thrown in a vast and dangerous ocean where humans could not sail safely without knowledge of their limitations. It was crucial, Locke wrote, for the sailor to 'know the length of his line, though he cannot with it fathom all the depths of the ocean'. Without surveying knowledge, analysing the power of the mind, and the kinds of things to which it would be adapted, we would always 'begin at the wrong end' and in vain seek 'satisfaction in a quiet and sure possession of truths, that most concerned us, whilst we let loose our thoughts into the vast ocean of being'.[1] Hume also exhorted philosophy to abandon a terrain 'so full of obscurity and perplexity' as that of metaphysics, to turn with 'a suitable modesty to her true and proper province', to the study of 'common life', she would find there 'difficulties enough to keep her busy, without launching into such a boundless ocean of doubt, uncertainty, and contradiction!'[2]

Kant's appeal to these same metaphors to refer to the limitations of human reason proceeds with a note of caution on Hume's scepticism. Invoking the image of the ocean of metaphysics in the *Prolegomena*, Kant writes that Hume 'deposited his ship on the beach (of scepticism) for safekeeping, where it could then lie and rot'. For Kant, it was important not to abandon the adventure altogether but to 'give it a pilot, who, provided with complete sea-charts and a compass, might safely navigate the ship wherever seems good to him, following sound principles of the helmsman's art drawn from a knowledge of the globe' (*Prol*., 262; 11–12). Without such guiding principles, metaphysics, he writes, is 'a shoreless sea, in which progress leaves no trace behind, and whose horizon contains no visible goal by which one might perceive how nearly it has been approached' (*FM*, 259; 353).

[1] See Locke, John, *An Essay Concerning Human Understanding* (Indianapolis, IN: Hackett, [1689] 1996), 6.

[2] See Hume, David, *An Enquiry Concerning Human Understanding* (Oxford: Oxford University Press, [1748] 2007), 136.

Compasses, maps, sound preparations for the journey, guiding principles and an anticipation of the perils of voyage were essential to eighteenth-century geographers and explorers, as they set out to discover previously unknown territories uncertain about their fate, concerned about potentially inhospitable conditions of travel, and wary of being lost. For Kant, Hume was also an explorer of sorts, a 'geographer of human reason' as he put it, but his scepticism could only be 'a resting place for human reason', not 'a dwelling place for permanent residence'. Permanent residency, he argued, could only be found in a 'complete certainty', be it certainty of 'the cognition of the objects themselves or of the boundaries within which all of our cognition of objects is enclosed' (*KrV*, A 761, B 789–790; 654).

Kant agreed with Hume on the necessity for philosophy to firmly occupy the 'terrain of experience'. Yet he also saw how the sceptical tradition could not answer the question of the extent to which that experience should also converge and promote the 'essential ends of humanity'.[3] The *Doctrine of Method* is where Kant's project begins to take a different direction. To examine the extent to which theoretical and practical knowledge are compatible and could be unified within the same systematic project, Kant suggests it is necessary to consider again the 'map of the land that we would now leave' so as to ask whether we should 'not be satisfied with what it contains, or even must be satisfied with it out of necessity, if there is no other ground on which we could build [...]' (*KrV*, A 236, B 295; 339).

In the *Transcendental Dialectic* we find a positive reference to the building that reason has the task of constructing with a new important clarification: philosophy has the duty to make the 'territory' 'level and firm enough' for the 'majestic moral edifices' under the ground of which there are 'all sorts of passageways, such as moles might have dug, left over from reason's vain but confident treasure hunting' (*KrV*, A 319, B 375–376; 398). The task of critical philosophy is at this point to find a compass, a guiding principle, on the basis of which such an edifice could be constructed, resting on the labour of previous generations, yet bringing their haphazard and incomplete efforts together under the guise of systematic unity. How does Kant identify the principle required for that unity?

[3] See for a discussion of this problem also Holzhey, Helmut, *Kants Erfahrungsbegriff* (Basel-Stuttgart: Schwabe & Co., 1970).

2. The Destination of Human Reason

In the *Architectonic of Pure Reason* Kant emphasizes how, to understand why the totality of rational cognitions and the chief ends of reason can be part of a unitary system, we require an idea of the whole which, on the one hand, contains 'the unique supreme and internal end' of the entire construction (both from a theoretical and from a practical perspective) and, on the other hand, can be represented only in accordance with a 'schema' of essential ends of reason. Kant, as we already observed, does not explain what the nature of such a schema is in the *Architectonic*. He also does not try to justify the use of a term that, elsewhere in the *Critique*, plays a related but distinct role. Recall how schematism has been previously endorsed in cases where heterogeneous elements ought to be integrated with each other to enable a unified conception of experience. Like the concept of judgment in the third *Critique*, the schematism of reason is required at the end of the first *Critique* to mediate between different uses of its ideas in the service of a claim to systematicity. But what kind of experience is at stake here? What are the elements between which schematism mediates?

To explain these issues, the previous chapters returned to some important definitions of the pure concepts of reason and emphasized the positive use of ideas in our systematic grasp of experience, including experience of a contingent nature. The analysis of the *Appendix to the Transcendental Dialectic* has shown that the pure concepts of the understanding are unable to replace ideas in their systematic unitary role. The previous pages also sought to explain why the appeal to a schematism of reason is essential to represent the idea of the whole, an idea which is in turn necessary for reason's claim to systematic unity. Kant, as we saw, uses the term 'schema' in an attempt to provide a deduction of ideas whilst at the same time conceding that such a deduction has a peculiar nature, one that might occasionally lead us to question its status as deduction altogether. At the same time, Kant insists on the relevance of schemas to mediate between the sum of rational and empirical concepts and the idea of a supreme being characterized by maximal harmony and unity: such an idea is necessary as a rational presupposition of the systematic unity of experience. Without that idea of the whole, we would be unable to represent nature as a system connected according to unitary laws. We would also be unable to see how the assumption of a systematic connection between different laws of nature has its roots in the projection of unity that we obtain by schematizing the idea of a

rational being required for the empirical use of concepts of the understanding. In short, without schematizing the idea of the whole, we would be unable to offer an analysis of experience as coherent in its complexity.

The interpretation advanced so far is that the schematism of reason in the first *Critique* essentially plays an equivalent function to that which the principle of purposiveness plays in the third. The schema relies on the practical ends of reason to represent the idea of the whole that is necessarily assumed each time these ends are posed in the empirical world. And yet, as we also remarked, in the absence of a more detailed analysis of the relation between the purposiveness of reason and the purposiveness of nature, it is difficult to explain why the entire architectonic of reason has this teleological structure. The link Kant establishes between the need for a logical principle for the unity of empirical laws and the need for a transcendental principle at the basis of the unity of experience links the heuristic use of purposive principles to the assumption of natural purposiveness. But what justifies this link?

In the *Appendix*, we only find scattered hints at Kant's answer to the problem. Here, as elsewhere, Kant suggests that the idea of natural purposiveness is linked to the destination of human reason, and that it is in virtue of that destination that reason's practical orientation can usefully enlarge the theoretical use of ideas. But this answer requires further elaboration. If we limit ourselves to arguing that reason is able to schematize the idea of the whole because it is the faculty of the unity of the rules of the understanding, and that it is the faculty of the unity of the rules of the understanding because it can schematize the idea of the whole through its essential ends, we end up with a circular explanation that fails to explain Kant's distinctive focus on reason's 'destination'. This focus requires turning to the specific link between the *practical* use of ideas and the transcendental principle of purposiveness, a problem that the *Critique of Pure Reason* raises throughout the *Doctrine of Method* without properly addressing until the very end.

To properly scrutinize the link between theoretical and practical systematic unity we should return to Kant's emphasis that reason has a natural tendency to be dissatisfied with the mere logical use of ideas. It is in the nature of reason, Kant explains, to look beyond the mere analytical composition and division of different cognitions in light of the theoretical unity of the system. The highest unity to which philosophy aspires is not only theoretical and does not belong to the *domain* of understanding: it is not reducible to the transcendental unity of self-consciousness. There is an inevitable, if slightly mysterious, tendency of reason to ask questions not

only about the possibility of knowledge but also the value of that knowledge, to wonder not just how objects are possible in general but also for whom and with what use. It is this drive, this quest for value, that explains reason's constant tendency to overstep its epistemic limitations, to require the construction of a system in which the theoretical and practical uses of reason are systematically unified.

In the *Appendix to the Transcendental Dialectic*, Kant develops this analysis by focusing on the hypothetical use of reason, emphasizing the idea of the unconditional that shapes the systematic horizon within which architectonic unity is conceivable. He clarifies that in the absence of a principle that legislates on behalf of the understanding in the phenomenal sphere, nature in general (*natura formaliter spectata*) would be unthinkable.[4] However, in the absence of the ideas of reason and of the concept of the unconditional, the ends of nature would contradict the ends of reason.

Considered only from the point of view of the speculative use of ideas, this reflection leads to a series of aporetic conclusions (prime among them that which concerns the status of physico-theology) which are at the centre of the *Dialectic*. Yet, the *Dialectic* is not the only section in which the systematic contribution of the role of ideas is explored. The analysis takes a much more concrete and clear direction in the *Architectonic of Pure Reason*, a section which develops further insights from the *Appendix*, but combines them with the more explicit discussion of the practical use of ideas in the *Canon of Pure Reason*. While the *Appendix for the Transcendental Dialectic* ends with the conclusion that at the basis of the schema for the systematic unity of cognitions we find the idea of the unconditioned as a concept of the complete unity of conditions, the *Architectonic of Pure Reason* develops this conclusion by specifying how we ought to understand it. Kant here returns to the function of schematism as a concept that enables the idea of totality to be represented. He also emphasizes that it is only by invoking this idea that we can explain the relation between the essential ends of reason and the supreme and internal end of the system. In short, the practical role of ideas for the architectonic unity of the system is clarified through an analysis of how the different ends of reason are systematically integrated with each other in a teleological system.

[4] '[…] all possible perceptions, hence everything that can ever reach empirical consciousness, i.e., all appearances of nature, as far as their combination is concerned, stand under the categories, on which nature (considered merely as nature in general) depends, as the original ground of its necessary lawfulness (as *natura formaliter spectata*)' (KrV, B165; 263).

The interest of the *Architectonic* in systematic unity has, to repeat, two different sources, ultimately unified through the notion of purposiveness. First, there is the theoretical interest in a systematic conception of knowledge, required to emphasize the difference between a system and an aggregate of cognitions. That theoretical unity is essential to direct critical philosophy to the idea of a complete unity of experience. Yet Kant's attempt to justify systematic unity in the *Appendix of the Transcendental Dialectic* from the point of view of the theoretical interest of reason is only one part of the Kantian project. Kant adds that the interest in the systematicity of reason is also linked to a different, practical use of the principles of pure reason, and is required to satisfy the destination of human reason from a moral perspective. But where does this practical use of the ideas of reason come from? How does the purposive structure of reason connect to freedom, and indirectly to the idea of natural purposiveness? To answer this question, we need to examine Kant's reflections on the practical use of ideas in the section of the first *Critique* devoted to the *Canon of Pure Reason*.

3. The Problem of Freedom in the Use of Practical Principles

Kant begins his analysis of the *Canon of Pure Reason* by making the following claims:

> In its speculative use reason led us through the field of experiences, and, since it could never find complete satisfaction for itself there, it led us on from there to speculative ideas, which in the end, however, led us back again to experience, and thus fulfilled its aim in a way that is quite useful but not quite in accord with our expectation. Now yet another experiment remains open to us: namely, whether pure reason is also to be found in practical use, whether in that use it leads us to the ideas that attain the highest ends of pure reason which we have just adduced, and thus whether from the point of view of its practical interest reason may not be able to guarantee that which in regard to its interest it entirely refuses to us.
>
> (*KrV*, A 804, B 832; 676–677)

The title of the opening paragraph of the *Canon of Pure Reason* is *On the ideal of the highest good as a determining ground of the ultimate end of pure reason* and provides a perfect synthesis of Kant's project in this section. The task is to explain how reason in its practical use can satisfy the needs that

reason in its theoretical use had to leave ambiguous in *The Appendix to the Transcendental Dialectic*. Pure reason in its practical use, according to Kant, contains principles that are importantly different from those involved in its speculative use. Such principles, he argues, are principles of the possibility of experience, but the kind of experience at stake is different from the theoretical one. More specifically, what counts as experience in the *Canon* is a particular subset of human actions, those that take place in conformity with 'moral precepts', and that 'could be encountered in the history of mankind'. 'Since they command that these actions ought to happen', Kant clarifies, they must also be able to happen, and there must therefore be possible a special kind of systematic unity, namely the moral, whereas the systematic unity of nature in accordance with speculative principles of reason could not be proved, since reason has causality with regard to freedom in general but not with regard to the whole of nature, and moral principles of reason can produce free actions but not laws of nature (*KrV*, A 807–808, B 835–836; 678).

The *Canon of Pure Reason* contributes to the analysis of the problem of systematic unity by integrating the perspective on purposiveness that the *Appendix* left open with an analysis of the rational requisites of moral action. In the *Appendix*, recall, Kant declared that the idea of the unconditional and its relation to nature as a system of purposes is necessary but remains problematic from a speculative perspective. He argued that we cannot make a case in favour of systematic natural unity with reference *only* to speculative principles, but that the possibility of systematic unity might be inferred from a different use of ideas: their practical use. Reason's purposive structure is intrinsic to the moral ends it promotes. In the *Canon*, we begin to see how the argument works.

Pure reason in its practical-moral use has its own causality, a kind of causality that can be exercised regardless of all empirical conditions and that renders legitimate a use of ideas beyond the purely regulative one. The principles of pure reason, Kant emphasizes, have 'objective reality in their practical use', which is here identified with 'moral'. Such principles of the possibility of experience are 'imperatives' or 'objective laws of freedom' which specify what 'ought to happen', separate from 'that which does happen'. That which necessarily happens in nature is captured by the laws of nature, yet that which could happen in history is determined by moral ends. The end of reason in its practical use is given purely *a priori*: ideas command independently from empirical conditions, contain the correct use of reason, and reveal how actions in conformity with moral principles

constitute experience of a particular, historical, sort. Therefore, only in the practical realm, where we find the correct use of such principles, can there be a canon of reason.

The question is apparently clear in its general outlines but, on closer scrutiny, opens up a number of complicated issues. In the paragraph cited, Kant asserts that practical principles are principles of the 'possibility of experience'. But how are we to understand what experience means here given Kant's analysis in previous parts of the *Critique of Pure Reason*? Kant seems to equate moral experience with 'actions in conformity with moral precepts which could be encountered in the history of humankind'. Human history is the dimension of experience in which practical ideas exercise their legislation constitutively: 'if reason commands that these actions ought to happen, they must also be able to happen'. How does this understanding of experience contribute to complete the critical task, and help reason achieve from a practical perspective that which it could not achieve from a speculative one?

Kant's contribution in the *Canon* to the analysis of the relation between systematic unity and the practical use of ideas verges crucially on the difference between the kind of regularity we find in nature, and the kind of regularity we can expect in history given the moral character of reason's demands on the world of human relations. Just as theoretical principles give rise to natural laws, he argues here, practical principles *could* give rise to historical events in conformity with moral ends. The justification for the expectation that events might be shaped in conformity with the demands of reason rests on reason's peculiar causality in the practical sphere: a causality based on the ability of humans to create a world that reflects reason's moral capacity.

It is certain, Kant argues, that practical principles can contribute to the justification of systematic moral unity, and it is possible that they might also contribute to the justification of systematic natural unity *via* systematic moral unity. But what is the basis for the assertion? Kant thinks that the justification of the objective reality of practical principles can be grounded on the causality that reason exercises with regard to freedom in general. The possibility of systematic moral unity is in turn grounded on two further assumptions: 1) that rational moral principles can produce free actions (even if not natural laws); and 2) that if reason commands that certain moral actions ought to happen, it should also be possible for them to happen. In the first case, freedom is a cause and opens up to the realm of the possible. In the second case, it can also make a difference to the real world and presupposes certain determinate effects. But if we emphasize the fact that human actions are both rational and take place in a world determined

by natural laws, it is important to try and understand how (if at all) freedom plays a role in this process, and, relatedly, why this particular account of the practical use of ideas entitles us to assume the plausibility of systematic moral unity.

4. Practical and Transcendental Freedom

On closer scrutiny, the mere definition of the *practical* as 'all that is possible through freedom' (*KrV*, A 800, B 828; 674) is not enough to explain both how the practical use of ideas can be the foundation of moral experience, and to clarify why the assumption of systematic moral unity is intrinsic to that argument. In the *Canon of Pure Reason*, the relation between the capacity of reason to be guided by practical ideas and the role of freedom in elaborating that capacity is highly controversial. Kant seems to take for granted that it is only through freedom that human reason can be the determining ground of practical action. But what kind of freedom? How does freedom relate to the purposive character of reason? On the one hand, Kant warns his readers that we are now about to cast our attention to 'an object that is foreign to transcendental philosophy'. On the other hand, he adds that keeping 'as close as possible to the transcendental' is necessary 'so as not to injure the unity of the same system' and 'in order not to say too little about the new material' (*KrV*, A 801, B 829; 675). A transcendental perspective is necessary to affirm the unity of the system, but it seems also, in some way, disruptive. Kant is keen to distinguish between the reality of practical and transcendental freedom because without that distinction, he would need to explain how a supra-sensible cause (only admitted as in principle possible or as non-contradictory) can be the ground for determining empirical phenomena. Yet this is something that the first *Critique* has explicitly ruled out. On the one hand, moral philosophy cannot avoid assuming the reality of transcendental freedom if it must establish how practical norms are *necessarily* binding. On the other hand, we must avoid committing to transcendental freedom if the analysis of moral actions must in some way refer to their empirical reality.[5]

In the *Canon*, Kant's analysis of morality is limited to practical freedom, where practical freedom is identified with free choice (*arbitrium liberum*).

[5] For a discussion of this problem, see Gonnelli, Filippo, *Guida alla lettura della Critica della ragion pratica di Kant* (Rome and Bari: Laterza, 1999), 17.

As Kant explains, everything that is connected to freedom understood in this way, whether as ground or consequence, is called practical (*KrV*, A 802, B 830; 675). Practical capacity, he seems to think, can be proved 'through experience', in the ability that we have to overcome 'impressions on our sensory faculty of desire by representations of which is useful or injurious even in a more remote way' (*KrV*, A 802, B 830; 675). But the transcendental ground of this capacity, and whether there is anything distinctive to *moral* imperatives, as opposed to rule-guided behaviour more generally, is of little concern to Kant at this stage. Indeed, as he clarifies, when we ask if 'in these actions, through which it prescribes laws, reason is not itself determined by further influences, and whether that which with respect to sensory impulses is called freedom might not in turn with regard to higher and more remote efficient causes be nature—in the practical sphere this does not concern us' (*KrV*, A 803, B 831; 676).

The relation between transcendental and practical freedom in the *Critique of Pure Reason* has divided generations of Kant scholars. At stake is, from an exegetical perspective, the continuity between Kant's remarks in the *Dialectic* and in the *Canon*. From a philosophical perspective, the dispute is about the foundations of morality in transcendental philosophy. For some interpreters, the analyses of freedom in the *Dialectic* and in the *Canon* are simply incompatible.[6] For others they can be reconciled.[7] The first, so-called 'patchwork' interpretations, argue that the account of freedom contained in the *Canon* offers an empiricist or psychological understanding of freedom which bears traces of Kant's pre-critical work, while the *Dialectic*, composed later, has a more sophisticated analysis of the relation between

[6] For some discussions, see Carnois, Bernard, *The Coherence of Kant's Doctrine of Freedom* (Chicago, IL: Chicago University Press, 1987); Gueroult, 'Canon de la raison pure et critique de la raison pratique', cit. 357; Kemp Smith, *A Commentary to Kant's Critique of Pure Reason*, cit. 569–570. For a comprehensive review of the problem, sympathetic to the patchwork thesis, see Schönecker, Dieter, *Kants Begriff transzendentaler und praktischer Freiheit* (Berlin: De Gruyter, 2005).

[7] For one early statement of the possibility of reconciliation, see Beck, Lewis White, *A Commentary on Kant's Critique of Practical Reason* (Chicago, IL: University of Chicago Press, 1960, 190, note 40) and Beck, Lewis White, *Studies in the Philosophy of Kant* (Indianapolis and New York: Bobbs-Merrill, 1965), 32, note 43, and 189, note 33. For more recent discussions, see Allison, Henry, 'Practical and Transcendental Freedom in the Critique of Pure Reason', *Kant-Studien*, vol. 73 (1–4), 271–290 (2009); Esteves, Julio, 'The Alleged Incompatibility Between the Concepts of Practical Freedom in the Dialectic and in the Canon of the Critique of Pure Reason', *Kant-Studien*, vol. 105 (3) (2014), 336–371; Kohl, Markus, 'Transcendental and Practical Freedom in the Critique of Pure Reason', *Kant-Studien*, vol. 105 (3) (2014), 313–335; Josifović, Saša, 'Das "Kanon-Problem" in Kants Kritik der Reinen Vernunft', *Kant-Studien*, vol. 106 (3) (2015), 487–506.

transcendental and practical freedom, anticipating insights of Kant's later writings. The second body of interpretations, what we may call the continuity reading, concedes that Kant's theory of freedom undergoes important developments in subsequent *Critiques* but emphasizes that there is no contradiction between the account of transcendental freedom provided in the *Dialectic* and the practical account of freedom that is central to the *Canon*.

While agreeing with the recent scholarship that the contrast between the *Dialectic* and the *Canon* as set out in the 'patchwork' thesis may be too stark, I also think it is important to emphasize why Kant later came to regard the theory of freedom presented in the first *Critique* as inadequate.[8] As some authors have explained, the *concept* of practical freedom promoted in the *Canon* is compatible with the *idea* of transcendental freedom articulated in the *Dialectic*. Yet this does not mean that the fact of practical freedom is grounded on the fact of transcendental freedom.[9] Kant's conception of practical freedom in the first *Critique* is intuitively plausible but very little is distinctively *Kantian* about it, at least if we link the core of Kant's moral philosophy with the *Groundwork* or the *Critique of Practical Reason*. Kant's remarks in the *Canon* are limited to emphasizing that, for human beings, to act practically is not to act on the basis of immediate inclinations (*arbitrium brutum*) but rationally, on the basis of general rules and principles, guided by ought-type statements. This is what Kant takes to be the essence of the *arbitrium liberum*.

The view has its attractions but it is rooted in a moral theory that could easily make space for prudential or conventionalist accounts of morality. In later works, however, Kant highlights the inadequacy of these interpretations, and emphasizes that to act rationally is not enough, that there are important differences between prudential and moral rules, and that human beings act morally only in so far as they act in accordance with a free will. Transcendental freedom is not simply one of the ideas of reason, tolerated by practical freedom but by no means necessary to it. Transcendental freedom is the foundation of morality.

One of the implications of the attempt to defend practical freedom while remaining agnostic on the reality of transcendental freedom in the first

[8] Here I agree with Henry Allison's objections to Lewis White Beck's reading. For a longer discussion, see Allison, 'Practical and Transcendental Freedom in the Critique of Pure Reason', 272, note 8.

[9] This is, again, Allison's reading; see his 'Practical and Transcendental Freedom in the Critique of Pure Reason', 279.

Critique is Kant's shift in the *Canon* from the analysis of how practical freedom can be a cause of moral events to the implications of his argument and the presuppositions on which it is grounded. Practical freedom, Kant explains, can be a cause in three different ways: by abstracting from inclinations and following moral rules, by producing a distinctive kind of experience, moral experience, which shapes events that we can observe in human history, and by being the condition of an order that can be realized thanks to its intervention (the order built on the basis of the pursuit of practical purposes).[10] I shall return to all these features in the following chapter. What matters for now is to notice how Kant's analysis of moral actions here is ambiguous between two different understandings: one that focuses on the source of moral laws and the necessity that this confers on particular kinds of actions, and the other on the implications of compliance with such laws.[11] In the *Critique of Pure Reason*, as in the first part of the *Metaphysics of Morals*, Kant does not concern himself with providing an explanation for the origin of practical obligations. On the contrary, he emphasizes that to understand the necessity of moral norms, it is sufficient to call upon the moral judgment of each human being. This does not require a commitment to transcendental freedom. It is enough to insist on free will defined as the power we have to 'overcome impressions on our sensory faculty of desire by representations of that which is useful or injurious even in a more remote way' (*KrV*, A 802, B 830; 675). Ideas in their practical use constitute moral experience but reason has no distinctive *domain* in which its practical legislation is exercised in accordance with transcendental freedom.

Given Kant's agnosticism on transcendental freedom, his strategy of defending practical freedom from our experience of moral actions seems eminently plausible. In the *Canon*, Kant does not deny that moral action can be empirically motivated; on the contrary it is precisely our empirical experience of morality that enables us to show how human beings can be moral. Although the distinction between prudential and categorical norms is occasionally invoked, it plays no *systematic* role in the justification of moral norms. This is why Kant's commitment to the reality of practical freedom and belief in free will can remain compatible with his agnosticism on transcendental freedom. It is also why Kant ends up being 'quite indifferent' to the question of the relation between practical and transcendental

[10] See M. Gueroult, *Canon de la raison pure et critique de la raison pratique*, cit. 331–357.

[11] For a discussion of this ambiguity see also Kohl 'Transcendental and Practical Freedom in the Critique of Pure Reason', cit. 332–334.

freedom which he dismisses as 'merely speculative'. As he explains, what we ought to be more interested in, is exploring whether we can grant to reason in its practical interest that which we deny from a theoretical perspective, namely an answer to the two metaphysical questions *par excellence*: 'Is there a God? Is there a future life?' (*KrV*, A 803, B 831; 676).

As we shall see in the following chapter, these questions are at the heart of Kant's analysis of why practical purposiveness is justified on the basis of the practical use of ideas of reason, and how that justification in turn triggers an analysis of nature as an overall purposive system. What I am interested in here, however, is highlighting the implications of the *Canon*'s account of the relation between transcendental and practical freedom for the execution of the *Critique*'s architectonic ambitions. The distinction between practical and transcendental freedom, while plausible in its own right, has important repercussions for how the *Critique of Pure Reason* reconciles the theoretical and practical interests of reason in one unitary system, and for how it articulates the role of the systematic principle of purposiveness in charge of that reconciliation. It is to this aspect of the problem, which has been relatively neglected by interpreters focusing on the evolution of the distinction between transcendental and practical freedom in Kant's moral writings, that I would now like to return.

5. The Field, Territory, and Domain of Experience

To answer the question of the principle orienting the construction of systematic unity in the first *Critique*, and to see how the answers suggested in this work differ significantly from those offered in subsequent writings, it may be worth returning to Kant's construction metaphors with which we started. More particularly, it may be worth reflecting on the use of the term 'Boden', *territory*, as an indication of the space in which the moral edifice of reason ought to be constructed. As we have already emphasized, spatial metaphors are far from unusual to reflect on philosophy's architectonic task in the eighteenth century. What is distinctive about Kant's appeal to such metaphors is his effort to reconcile different traditions in the demand to make the 'territory' on which reason must build its 'majestic moral edifices' both solid enough to respond to practical needs *and* aware of reason's theoretical limitations (*KrV*, A 319, B 375–376; 398).

Now, the same term, *territory*, that Kant invokes in the *Doctrine of Method* to reflect on the construction of the system appears in a crucial

passage of the third *Critique* in the context of a crucial explanation of how to understand experience in its complexity, taking into account both the theoretical and the practical uses of reason. Concepts, Kant explains in the *Critique of the Power of Judgment*, have their field (*Feld*) 'insofar as they are related to objects, regardless of whether a cognition of the latter is possible or not […] The part of this field within which cognition is possible for us is territory (*Boden*) (*territorium*) for these concepts and the requisite faculty of cognition.' Furthermore, 'the part of the territory in which these are legislative is the domain (*ditio*) of these concepts and of the corresponding faculty of cognition' (*KU*, 5: 174; 62).

In the *Critique of Judgment*, the technical definitions of *field*, *territory*, and *domain*, serve to explain the systematic role of the transcendental principle of judgment, a principle which mediates between a way of conceiving experience as determined by laws of nature but also subject to free human action. The *territory* of experience, Kant argues, is 'always only the set of objects of all possible experience, insofar as they are taken as nothing more than mere appearances', otherwise 'no legislation of the understanding with regard to them could be conceived' (*KU*, 5: 174; 62). The analysis of 'territory' is extremely relevant in the third *Critique* to explain why even though an immediate passage from the *domain* of the concepts of nature to the *domain* of the concept of freedom is impossible, the ability to conceive experience as systematic in its complexity is achieved by mediating between these domains with the help of the capacity of judgment.

Yet, in the third *Critique*, the possibility of mediating between the theoretical and practical use of reason through the capacity of judgment is grounded in a conception of purposiveness understood as normativity, and connected to reason's ability to pose practical moral ends in the phenomenal domain. Practical reason has its own legislative *domain* in the territory of experience, and the capacity of judgment anchors the assumption of purposiveness on the human capacity to set moral ends. The demand for systematicity is therefore rooted on a notion of purposiveness grounded on the relation between the moral law, understood as *Faktum der Vernunft*, and transcendental freedom which constitutes its *ratio essendi*. The *Critique of Judgment* assumes that the practical legislation of reason through concepts of freedom has its own *domain* in experience; its own space where concepts of reason legislate practically. Only the autonomy of the practical grounded on transcendental freedom can lend authority to reason's overall claim to systematicity.

In the *Critique of Pure Reason* both the justification of the practical orientation of reason and the related analysis on systematicity take a different form. There is no discussion of separate domains here, only a generic mention of the 'territory' of experience with reference to which reason's claims to systematicity must be advanced. This is because, as the distinction between transcendental and practical freedom makes clear, there is no domain in which the will *legislates* autonomously; reason's claim to systematicity is established by relying on how it provides direction to the activity of the understanding, a reflection on how the theoretical and practical function of ideas come together, and the schematization of the idea of the whole in the service of a unitary conception of the critical system. The implications of this analysis are far reaching for the conception of systematicity that Kant advances in the *Architectonic*, and for the relation between ideas of reason and the overall conception of purposiveness that shapes Kant's first critical work.

In the *Critique of Pure Reason*, Kant relies on the analysis of the *Canon of Pure Reason* to explain both the source of moral obligations and its applications in the empirical world. But the *Canon of Pure Reason* does not explain how it might be possible for reason to command unconditionally, trigger moral actions and justify a kind of systematic unity that is independent from the systematic unity of nature and yet does not commit us to transcending the realm of sensible causes. Clearly, the *practical* concept of freedom, a concept that we can prove through experience, cannot be enough to provide reason with an unconditional, valid moral end; this can only be completed if we accept the reality of transcendental freedom exhibited in our consciousness of the categorical imperative. Yet, the reference to the transcendental idea of freedom would require granting objective validity to the independence of reason from all sensible causes determining the laws of nature. This would amount to conceding the validity of a constitutive realm for the use of the pure concepts of reason, a finding which is in turn very problematic in light of Kant's conception of freedom as articulated in the *Dialectic*.

The question of systematic unity from the point of view of the practical use of the ideas therefore runs into serious difficulties. As the analysis offered here has tried to suggest, in the first *Critique*, reason does not have a *territory* in which its concepts are legislative, despite Kant's attempts to define practical obligation as an act through which reason gives laws (*KrV*, A 803, B 831; 676). This is due, on the one hand, to the fact that the source

of categorical imperatives and their distinction from hypothetical ones has not yet been properly scrutinized, and, on the other hand, to the fact that freedom itself is identified with free will instead of transcendental freedom.

Kant does not pay attention to the implications of this analysis for the assumption of systematic purposiveness anywhere in the first *Critique*. Of course, by assigning to philosophy the duty of 'making the terrain level and firm enough', 'for a majestic moral edifice', the 'territory of experience', the first *Critique* insists on the practical interests of reason for the construction of the entire system. Crucially, however, the analysis is framed in terms of practical 'interest' rather than practical 'domain', i.e. in terms of consequences rather than sources of moral obligations. What one does notice, however, even where Kant emphasizes that theoretical systematicity benefits from the practical use of reason, is a certain downplaying of the achievement; the construction, Kant emphasizes, is 'less spectacular', but 'not unrewarding' (*KrV*, A 319 B 376; 398). Contrast the weakness of these lines in the first *Critique* with the enthusiasm of the second: 'The concept of freedom, insofar as its reality is proved by an apodictic law of practical reason, constitutes *the keystone of the whole structure of a system of pure reason, even of speculative reason* […]' (*KpV*, 5: 4; 139; my italics). What has changed? And what are the implications of this change for the concept of purposiveness on which architectonic unity rests?

Unlike in the first *Critique*, in the second *Critique* transcendental freedom is no longer a problematic concept in relation to practical freedom (KrV, A 803, B 831; 676). Ideas do not have merely practical *use*, rather reason has its own practical *legislation* which authorizes it to have a proper 'domain' with its own principles and objects. Practical obligations are not made possible by the representation of the idea of 'free will' but by transcendental freedom. This new direction not only radically changes the constitution of the territory of experience (comprehensive of objects of nature and objects of freedom) but also sheds new light on the construction of the building of reason. It is on these achievements that Kant's analysis of the faculty of judgment and the reflective principle of purposiveness will build further to explain the unity of the system, and how it is possible to find a passage from nature to freedom. In the first *Critique*, the unity of reason is a task that can be completed by invoking the regulative use of ideas yet their status remains ambiguous and continues to be anchored to the territory of theoretical reason. In the *Critique of Judgment*, Kant reconfigures the composition of that territory in light of the reality of transcendental freedom asserted in the *Critique of Practical Reason*. The different analysis of the link

between transcendental and practical freedom has important implications for the status of the concept of purposiveness on which Kant relies to defend the systematic unity of reason.

6. Conclusion

The *Canon of Pure Reason* offers very little, in fact nothing, by way of connecting practical freedom to transcendental freedom; indeed, it explicitly rules out a deduction of transcendental freedom at the basis of practical ends. If we only rely on the analysis of the sources of moral obligation that Kant offers in this section of the first *Critique*, we find it difficult to understand how reason can have its own causality in the practical domain, how it can ground a distinctive kind of experience, and why the practical use of ideas is fundamental to the idea of systematic unity that Kant mentions throughout this work.

Yet Kant often also writes as if the practical causality of reason in grounding its own kind of experience, moral experience, were uncontroversial. As we have seen, he insists that the idea of systematic moral unity has objective validity and that its validity enables us to productively expand the use of the pure concepts of reason to the schematization of the idea of the whole of the system. From the very first pages of the *Doctrine of Method*, where ideas in general are discussed, the positive, practical use of ideas, is mentioned as the solution to the problems with systematicity which, as the analysis of the *Appendix* made clear, reason could not address from a theoretical point of view. From a theoretical point of view, as Kant puts it, we think of an idea as the 'absolute whole of appearances' but 'we can never project it in an image'. Yet, he explains, when it comes to the practical use of the reason, and since this is 'only a matter of execution according to rules, an idea of practical reason can always be actually given *in concreto*'. This idea of the whole is, indeed, 'the indispensable condition of every practical use of reason' (*KrV*, A 328, B 385; 402). What explains the link?

By following the analysis of ideas in the *Appendix to the transcendental dialectic*, we were led to a principle of purposiveness as the foundation of systematic unity, but we also saw how the justification of that principle has an ambiguous status. Kant explained that from the point of view of the speculative use of reason, we can never fully grasp how sensible experience can offer a representation of the idea of the whole although he also insisted that this idea can be schematized through practical ends. Kant's references

to practical experience hint at the possibility of the ideas of reason in grounding a different kind of experience, accessible to us with tools that go beyond those of theoretical use of ideas. From a practical perspective, reason can conceive of objects in a way that is different from how they are conceived in its theoretical use yet beneficial to systematic cognition. But what kind of objects are at stake here? How do they relate to the practical activity of reason?

To answer this problem, the *Canon* turns to two important questions: first, specifying the kind of experience that practical principles make possible; and second, explaining the relation between the idea of the whole and the concept of an end in relation to moral experience. With regard to the first of these elements, the results of the analysis are slightly disappointing. As this chapter tried to clarify, the role of the idea of purposiveness in the project of systematic unification is problematic because of the uncertainties attached to the status of transcendental freedom. The foundations of a transcendental-practical dimension of reason in the first *Critique* is never clearly articulated because such an idea presupposes as its condition of possibility a transcendental idea of freedom grounding categorical moral imperatives. This is a topic that the *Canon of Pure Reason* never discusses explicitly, and, as we have seen, for good reason. Kant only really addresses the issue in the *Groundwork for the Metaphysic of Morals* and in the *Critique of Practical Reason*, and the analysis of purposiveness as normativity that we find in the *Critique of Judgment* is a result of these achievements.

Viewed from the point of view of the grounds of moral obligation, Kant's treatment of the problem of systematic moral unity in the *Canon* leaves open more questions than it answers. This is not to say that the practical use of ideas and the analysis of freedom in the *Canon of Pure Reason* have no insights to offer on the question of systematic unity. Once we abandon the search for the grounds of moral obligations, we still have reason to be interested in their consequences. This, as we clarified, is after all part of the Kantian understanding of what constitutes moral action in the *Canon*. Kant remains committed to the idea that the practical use of ideas can deliver on the promise of systematic unity from a practical perspective, in a way that also benefits theoretical unity, and completes the architectonic project of the first *Critique*. How does he think the problem can be solved? While the appeal to transcendental freedom—the key to Kant's later analysis of purposiveness—is of no use at this stage, another route to the extension of theoretical reason through the practical use of ideas is pursued. To see why Kant ventures in that direction and with what implications, it is important

to reflect on what the *Canon* has to say on the relation between moral principles and their effects in the sensible world. It is crucial therefore to consider the relation between the end contained in the moral laws that reason prescribes unconditionally, and the practical use of ideas in enabling systematic moral unity from the point of view of the consequences of moral action. As the next chapter tries to clarify, it is here that we find Kant's most elaborate account of how the practical use of ideas is linked to the principle of natural purposiveness, completing the architectonic unity of reason.

7
The Kingdom of Ends

1. The Unity of Reason in Light of its Moral Requirements

The previous chapter began to explore the question of the relation between the practical use of ideas and the notion of purposiveness required for the architectonic unity of Kant's system. The task of the *Canon of Pure Reason* is, as we already emphasized, to explain how the practical use of ideas relates to the idea of the whole, orienting the plan on the basis of which a 'building' of reason can be erected, a building that both acknowledges reason's limitations but also that responds to its needs. As we have seen, references to the 'productivity' and 'fruitfulness' of the practical use of reason appear frequently throughout the first *Critique*. They are part of an effort to justify the workings of a *critical metaphysics*, one that can explain how the discipline of reason is in its practical interest, and how this practical interest can in turn ground systematic unity. The demand for architectonic unity or, to put it slightly differently, for a systematic integration of the discipline and interests of reason, is essential to ensure that the manifold of cognitions that reason accumulates in the course of the critique of its own activities can be harmoniously integrated with the practical ends it pursues in the moral domain.

The relationship between ideas and ends that is central to the *Canon of Pure Reason* is clarified in the context of an important, if slightly mysterious, assertion of the first *Critique* where Kant recalls the Platonic definition of ideas, to emphasize their relation to the order of ends. The philosopher's spiritual flight, which considers the physical copies in the world order, and then ascends to their architectonic connection according to ends, i.e. according to ideas, Kant argues 'is an endeavour that deserves respect and imitation'. In the case of theoretical reason, ideas as we have seen in the previous pages, project unity to the order of nature. Yet in the practical realm, Kant emphasizes that ideas perform a 'wholly unique service' in all that relates to 'principles of morality, legislation and religion'. Here ideas do not only *project* conformity to purposes, they *are* themselves purposes, or,

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as Kant puts it, they 'make the experience (of the good) itself possible' (KrV A 318; B 375: 398). This is also why, as Kant suggests further, ideas in their practical use 'perform a unique service', a service which 'goes unrecognized' because it is judged 'according to empirical rules, whose validity as principles should be cancelled by those very ideas' (KrV A 318, B 375; 398).

This way of examining the relation between ideas and purposes is central to understanding the demand for systematic unity both in connection to what Kant calls the kingdom of nature (the order and purposes in the natural world) and the kingdom of ends (the realm of moral purposes). The demand for architectonic unity that the passage expresses has both a theoretical and a practical side to it. From a theoretical perspective, as we have explained in previous chapters, the assumption of purposiveness in the natural world is crucial for reason's ability to bring under unitary principles the multiplicity of the laws of nature, an activity which is in turn central to the process of taxonomic arrangement of the cognitions of the understanding. Without postulating a purposive arrangement of nature, such a unity could not be established. But while the unity of nature is grounded on a hypothetical principle of reason which postulates that the laws of nature are indeed arranged compatibly with an idea of purposiveness, it is only from the point of view of moral experience that we have evidence of reason's activity as a faculty oriented towards ends immanently and constitutively. This, as we shall see, is the crucial, if slightly problematic, cornerstone on which the unity of reason rests in the first *Critique*.

The distinctive character of practical demands reveals itself when Kant argues that practical ideas have 'the causality actually to bring forth what their concept contains' and such a purposive orientation of reason is 'fruitful in the highest degree and necessary in respect of actual actions' (*KrV*, A 328, B 385; 402–403). As we emphasized in the previous chapters, the kind of systematic unity at the basis of the speculative use of the understanding could be approximated and presupposed only indeterminately (hence the problematic nature of the relation between teleology and physico-theology). By contrast, practical ideas refer to the pursuit of moral ends which have important implications in the empirical world. The kind of practical actions that are produced according to ideas necessarily refer to an idea of a systematic whole, an idea that is both presupposed in the activity of reason and created with reference to that activity. That idea, as we shall further explain in this chapter, is the idea of the 'good'.

2. The Centrality of the 'Good' to Reason's Purposive Activity

To better grasp the relevance of the concept of the 'good' to reason's purposive activity, it is important to understand why Kant says that in all that concerns the principles of morality, law and religion 'ideas' make possible the very 'experience of the good'. Clearly, what is at stake here is not simply the organization of external cognitions according to an idea of unity necessary to the heuristic of systematic research. It is rather the external projection in the sensible world of the kind of internal unity that characterizes practical ideas, a unity presupposed in the way the ideas of reason operate as purposes, while at the same time providing a unifying focus for their purposive activity.

The concept of the good, to which the practical activity of reason is directed, is crucial to understand the relationship between ideas and purposiveness that Kant singles out as Plato's most distinctive and significant contribution to philosophy. In the experience of the good, a purpose is not appropriated from the outside but posited from within reason: the effort is to shape the world in accordance with that idea, rather than the other way round.[1] This is precisely what Kant means when he argues that the Platonic republic, far from representing a utopian flight away from reality, represents a necessary idea which should be at the basis not only of 'a state's constitution but of all the laws too' (*KrV*, A 315–316, B 372–373; 397). Indeed, as Kant argues, nothing hurts moral philosophy more than appealing to 'allegedly contrary experience'. For such a negative experience, he explains, would not have existed at all if 'institutions had been established at the right time according to ideas, instead of frustrating all good intentions by using crude concepts in place of ideas, just because these concepts were drawn from experience' (*KrV*, A 316, B 373; 397). The model of an idea of constitution 'providing for the greatest human freedom according to laws that permit the freedom of each to exist together with that of others', is a crucial example of the purposive character of practical ideas, an example necessary

[1] See for a useful clarification of this distinction, Hegel, Georg Wilhelm Friedrich, *The Science of Logic*, edited by George di Giovanni (Cambridge: Cambridge University Press, 2010), 729–730. As Hegel puts it, in the experience of the good 'the activity of purpose, therefore, is not directed at itself, is not a matter of letting in a given determination and making it its own, but of positing rather its own determination and, by means of sublating the determinations of the external world, giving itself reality in the form of external actuality'.

to underline, on the one hand, their objectivity and, on the other hand, the way they constitute rational presuppositions of real actions.

Kant returns to the relation between ideas and purposes at various stages of his work. A ruler, he explains in the *Lectures on the Philosophy of Religion*, has the capacity to arrange his state in accordance with the idea of a perfect republic, so as to bring it closer and closer to perfection (*PR*, 28: 993; 341, see also *Ped*, 9: 444; 438). In the *Lectures on Logic*, this very same idea is equated to the architectonic idea according to which we must model ourselves so as to avoid proceeding following our instincts or out of blind compliance with authority (*LJ*, 93; 590–591). In later political writings, as well as in the *Religion within the limits of reason alone*, the argument is presented in an even more rigorous form. The harmony between nature and reason presupposed as the guarantee of cosmopolitan right, Kant argues in *Perpetual Peace*, is an 'idea' which is 'indeed transcendent for *theoretical* purposes' but, 'with respect to the concept of the duty *of perpetual peace*' and 'for practical purposes' it is 'well-founded as to its reality' (*ZeF* 8: 363; 323).[2]

The idea of architectonic unity, an idea grounded in the practical use of reason, is essential to the assertion of a systematic order where natural and rational purposes are harmonically integrated with each other. Here the normative character of reason is presented by Kant not merely as a set of abstract obligations but as a concrete synthesis that needs to be realized in time through practices like the ones mentioned in the first *Critique*: law, religion, and morality. This is also why, as Kant explains referring to Rousseau in the *Danziger Rationaltheologie*, the moralist represents virtue in an idea, the historian represents it in the way in which human beings effectively exercised it (*DR*, 28: 1274). Practical ideas are normative demands that reveal the self-correcting, self-developing and morally purposive nature of reason: denying this purposiveness would imply denying its very normative character. But what exactly is the relationship between reason's normative character and the idea of the good? Why does Kant argue that the concept of the good is essential to the relationship between the idea of purposiveness necessary to the architectonic unity of the system and the practical use of reason?

To answer this question, it pays to start with why Kant believes that the practical use of ideas has an inherent purposive structure. To explain that purposive structure, we have no need to draw on a notion of purposiveness

[2] See also *Rel* 6: 62; 105.

that is external to objects of experience (as is the case with the theoretical use of ideas). We need no higher anchor to confirm the authority of our norms and their self-correcting character. From a moral point of view, architectonic unity is expressed dynamically in the very process of using reason as practical reason, in the expression of its demands as conditions of possibility for actions in the world. To put it differently, as Kant argues in the *Canon*, normativity reveals itself through history, and indeed not just individual history but the history of human beings as they collectively engage with each other in the process of developing institutions that reflect the demands of the practical use of reason.

Yet the analysis of practical reason's purposive structure is not enough to answer the other question raised in the *Canon* in connection with the requirements of systematic unity: what guarantees that the moral demands that reason makes on us are also binding for human beings who are both subject to the demands of morality *and* vulnerable to natural (non-moral) limitations? What guarantees that the self-correcting nature of reason will continue to assert itself and that the process of generating moral norms will go on as appropriate?

These further questions take us back again to the problem of the relation between the order of nature and the order of ends, the link between systematic moral unity and the systematic unity of nature. Without explaining how the realm of nature and the realm of ends are systematically integrated with each other, we cannot explain how moral norms can bind human beings whose moral motives are always mixed with non-moral ones. What is even more important for our purposes, without a guarantee that moral norms can bind human beings in a coordinated and continuous way, the learning processes on which reason relies to develop its self-correcting character would lack development in the direction required to defeat scepticism. And without all that, the architectonic requirements of reason as a whole would remain unsatisfied.

In addition to the *Canon of Pure Reason*, Kant refers to the need for systematic unity of natural and moral purposes in his essay on *What it means to orient oneself in thinking*. In the case of the theoretical use of reason, Kant argues, the demand for systematicity is crucial if we want to articulate judgments on the reasons for the existence of contingent objects in the world, and to justify the transcendental principle of purposiveness that is at the basis of the logical requirement of a systematic unity of nature. However, the need for systematicity in the practical use of reason is much more

important because the use of reason in the moral case is unconditional, not just regulative but constitutive of the experience of morality. Reason demands unconditionally that its practical duties be realized. As Kant puts it, we need to presuppose harmony between natural and moral purposes not merely 'if we want to judge' in a certain way but because 'we have to judge' in that way (*WhDO*, 139; 12).

The necessity of the postulate of systematic unity in the moral case has to do with the kind of experience that ideas in their practical use make possible. Moral purposes are set in a world that is both created by moral norms but also ruled by the laws of nature. The member of the kingdom of ends is in fact not a sovereign: the success of her moral actions depends not just on what she does to comply with the demands of practical reason but also on what other people do, on the kinds of empirical contingencies and limitations they encounter in the process of making practical demands on the world. This means that it is, in principle, conceivable that the world might not be compatible with the moral use of reason, or even that it might obstruct it. However, the constitutive nature of practical ideas, the requirement to realize what they prescribe regardless of all empirical phenomena triggers the need to reconcile this dualism. An empirical world in which the laws of nature obstruct the practical use of reason would render absurd all human attempts to promote their moral ends in it.

This is where the idea of systematic moral unity, to which the kingdom of ends is connected, becomes important. The kingdom of ends is a realm where moral actions are coordinated, where the practical ends of each individual human being form part of a purposeful whole, and where establishing the conditions under which the morality of each can flourish is a task for the entire human species. The kingdom of ends is not merely a realm that every human being can expect to be a member of, instead it presents all individuals with a collective historical task to do their share in promoting the interests of reason while progressively overcoming its constraints. As we have seen, for Kant the kingdom of ends is understood as a moral imperative with historical repercussions, and its realization requires conscious human actions that seek to progressively realize the coordination and continuation of moral efforts. This means that the actions of human beings, actions that taken separately can only form an aggregate of empirical manifestations of moral willing, have to transcend the limits of individual morality and organically integrate in a systematic whole through which they are coordinated and preserved.

3. The Highest Good as Virtue and Happiness

The necessary character of the demand to judge the world as harmonious with the practical use of reason connects, on the one hand, to the way in which morality is justified in the *Canon*, and, on the other hand, to how reason's moral actions are informed by what Kant defines as its 'final end': the highest good in the world. To properly understand the role of the concept of highest good for systematic moral unity, it is important to focus on the Kantian analysis of how virtue and happiness are combined in the understanding of the highest good, and how the concept of happiness forms an essential component of moral action. Kant's analysis of moral obligation in the *Canon*, as we have seen, is conducted with reference to both the sources *and* consequences of moral actions. The practical use of reason, Kant argues, is different from the mere pursuit of desire satisfaction. That difference is related to the role that the concept of happiness, defined in the *Canon* as 'a condition of satisfaction of all our inclinations', plays with regard to the analysis of moral action. Desire satisfaction seeks to make us partake in happiness; moral principles have at their centre an attempt to become worthy of it. The first are grounded on empirical principles because 'except by means of experience I can know neither which inclinations there are that would be satisfied nor what the natural causes are that could satisfy them'. The moral law, on the other hand, abstracts from both natural inclinations and from the means to satisfy them and 'considers only the freedom of a rational being in general and the necessary conditions under which alone it is in agreement with the distribution of happiness in accordance with principles' (*KrV*, A 806, B 834; 678).

As we saw in the previous chapter, Kant appeals to both the tradition of moral philosophy and the common-sense judgment of all human beings to establish that there really are moral principles, which determine 'the use of freedom of a rational being in general'. And yet, as the previous section tried to emphasize, these moral principles (the ones in accordance with which reason seeks to become worthy of happiness) are posed by reason in the sensible world, a world that we can conceive as a unified order but that we do not create. This means that it is in principle conceivable that nature is not compatible with the moral use of reason or that it might even obstruct it. And yet, the unconditional duty to realize what practical ideas prescribe regardless of all empirical phenomena requires us to reconcile this dualism. Rational and sentient beings like us pursue their purposes in the empirical

world and therefore cannot avoid being interested in the consequences of their actions, and in what they can hope for in association with their promotion of moral imperatives. A world in which the laws of nature obstruct the practical use of reason would render absurd all human attempts to promote moral ends in the sensible world. Thus, Kant argues, reason approves of happiness only in so far as this is conceptualized as the 'worthiness to be happy'.

But even then, morality alone and happiness so understood are 'far from being the complete good'. As Kant argues, 'in order to complete the latter, he who has not conducted himself so as to be unworthy of happiness must be able to hope to partake in it' (*KrV*, A 813, 841; 681). This means that both elements, virtue and happiness, must essentially be combined in such a way that 'the moral disposition, as a condition, first makes partaking in happiness possible, rather than the prospect of happiness first making the moral disposition'. It follows that 'happiness in exact proportion with the morality of rational beings, through which they are worthy of it, alone constitutes the highest good of a world into which we must without exception transpose ourselves in accordance with the precepts of pure but practical reason' (*KrV*, A 813, B 841; 681).

Therefore, the highest good is not merely a condition that every human being can expect to achieve but a moral duty. For Kant, the ideas of reason shape the history of human beings and the realization of the highest good requires conscious human efforts that seek to progressively achieve a synthesis of virtue and happiness, a synthesis that is in turn necessary to ideas in their practical use. Therefore, the highest good is directly linked to the idea of a moral world understood as 'a *corpus mysticum* of the rational beings in it, and in so far as their free choice under moral laws has thoroughgoing systematic unity in itself as well as with the freedom of everyone else' (*KrV*, A808, B836: 679). In such an intelligible world, we abstract from all hindrances to morality (including all human inclinations) and we reflect on the idea of an order where individuals pursue moral laws in hope that their happiness will be distributed in accordance with their moral worth and that their individual efforts will be integrated in an order that is conducive to the realization of the highest good. Such an intelligible world is articulated in analogy with Leibniz's realm of grace, where morality and happiness form a unitary system grounded in the idea of a wise and regent author for the world. As Kant argues, while it is a duty to act in such a way as to make our lives guided by moral actions, it would be impossible for this to be the case if reason did not connect with the idea of 'an efficient cause

which determines for the conduct in accordance with this law an outcome precisely corresponding to our highest ends, in this or in another life' (*KrV*, A 812/B840; 680). Without such a wise and regent author of the world and the idea of a kingdom of ends, 'the majestic ideas of morality are, to be sure, objects of approbation and admiration but not resolves, because they would not fulfil the whole end that is natural for every rational being and determined *a priori* and necessarily through the very same pure reason' (A 813/B 841; 681).

But why should we believe the latter? What is the modality of that belief? The answer comes from one of the earlier passages of the *Critique*, where Kant argues that the ideas of reason 'make possible a transition from the concepts of nature to the practical, and themselves generate support for the moral ideas and connection with the speculative cognitions of reason' (*KrV*, A 329, B 386; 403). What does the transition entail? The answer to this question enables us to finally confront the issue of how the theoretical and practical use of ideas come together in solving the problem of architectonic unity.

4. The Practical Necessity of Moral Purposiveness

The analysis of the architectonic requirement of reason in the process of constructing authoritative moral norms led us to the crucial idea of purposiveness in making sense of that requirement. Focusing on the concept of purposiveness, however, opens up new questions concerning how exactly we should understand that concept, and the link between the order of nature and the order of moral ends. That there should be a link between the two is clear: if reason ought to realize its imperatives in the empirical world, where natural inclinations are as much present as moral demands, it must be possible for such ends to be realizable in the way reason prescribes. The coordination and continuity of moral purposes, their systematic integration in a way that protects the interests of reason and preserves its learning processes ought to be guaranteed.

In discussing the reasons behind Kant's arguments for the necessity of systematic moral unity from the point of view of the practical use of ideas, we can distinguish between three different interpretations. These correspond, roughly, to concerns of moral motivation, psychological necessity, and rational consistency. On the first, moral motivation reading, the assumption of systematic moral unity is justified by the need for moral

agents to refer to the idea of a wise author of the world without which, as Kant puts it in the *Canon*, ideas of morality would be objects of admiration but not 'incentives for resolve and realization' (*KrV*, A 813/B 841; 681).[3] In the second, psychological reading, the assumption of systematic moral unity is warranted because finite agents would be demoralized or despair at the prospect of a sharp divide between their well-intentioned moral efforts and the outcomes they seek to bring about.[4] Finally, on the rational consistency argument, systematic moral unity is grounded on the assumption that an agent is rational in pursuing a particular moral purpose, if and only if they also believe that the purpose is attainable.[5]

In what follows I shall suggest that arguments clustering around rational consistency offer the most adequate interpretation of why Kant is committed to the idea of systematic moral unity as morally obligatory and therefore also rationally required. One benefit of such arguments is that we can hold on to them while bracketing from the psychological and motivational objections that afflict Kant's framework in the first *Critique*. If we focus on the demands of rational consistency, we can understand better why belief in the highest good is for Kant practically necessary: it would be irrational to pursue an end, the realization of which is impossible.

To better understand the question behind the necessity of moral systematicity it is important to single out two features of moral agency in the first *Critique*: the unconditional nature of the demands of reason in its practical use, and the limitations that human beings encounter in the natural world. In a purely intelligible world, there would be no obstacles to the duties prescribed by reason in its practical use. A mere representation of rational purposes would be enough to guarantee not only the successful pursuit of single moral acts but also the spontaneous coordination of all individual actions to guarantee the realization of ends for the entire human species. And yet, Kant explains, such an intelligible world, a world ordered in accordance with all moral laws as 'it can be in accordance with the freedom

[3] This argument is made by Allison, Henry, *Kant's Groundwork for the Metaphysics of Morals: A Commentary* (Oxford and New York: Oxford University Press, 2011), 16.

[4] For one example of such an argument, see Chignell, Andrew, 'Rational Hope, Moral Order, and the Revolution of the Will', in *Divine Order, Human Order, and the Order of Nature*, edited by Eric Watkins (Oxford: Oxford University Press, 2013), 197–218.

[5] See for an analysis of this requirement, Willaschek, Marcus, 'The Primacy of Practical Reason and the Idea of a Practical Postulate' cit. and Willaschek, Marcus, 'Must We Believe in the Realizability of Our Ends? On a Premise of Kant's Argument for the Postulates of Pure Practical Reason', in *The Highest Good in Kant's Philosophy*, edited by Thomas Höwing (Berlin: De Gruyter, 2016), 223–244.

of rational beings and should be in accordance with the necessary laws of morality' (*KrV*, A 808, B 836; 678) is never given to human beings in their empirical existence. But the idea is also a necessary one 'which can and should have its influence on the sensible world, in order to make it agree as far as possible with this idea' (*KrV*, A 808, B 836; 678). The duty to promote the kingdom of ends is not restricted to the cultivation of individual virtue but concerns the promotion of an entire moral world; it represents the authentic destination of human reason and the culmination of its architectonic requirements. Only in the ideal of this moral community can we represent the essential ends of reason and think about the process of generating moral norms as self-correcting and self-validating in the appropriate way.[6]

It is important to emphasize that the imperative to realize the kingdom of ends presents us not just with a demand to guarantee individuals' negative capacity to avoid being determined by external motives. It is also not a demand to guarantee the positive capacity to produce specific moral actions in the phenomenal world. The question, rather, has to do with the *collective* and *systematic* capacity to transform the world compatibly with moral ends in a coordinated and continuous way. On the one hand, a moral duty to transform the natural world in accordance with the essential demands of reason involves all rational beings taken as members of the kingdom of ends and the totality of their efforts: their collective duty to realize the kingdom

[6] John R. Silber has been one of the most important authors to highlight the centrality of the concept of highest good for the completion of the architectonic unity of the first *Critique*. Silber, J.R, 'The Metaphysical Importance of the Highest Good as the Canon of Pure Reason in Kant's Philosophy', *Texas Studies in Literature and Language*, vol. 1 (2) (1959), 233–244. The author is also one of the few to focus on the link between the *Architectonic of Pure Reason* and the postulates of practical reason, including their development in Kant's successive works. See Silber, J.R., 'The Importance of the Highest Good in Kant's Ethic', *Ethics*, vol. 73 (3), 1963, 179–197. His interpretation differs from Lewis White Beck's and triggered the so-called Beck/Silber controversy, for informative discussions see Murphy, J.G. 'The Highest Good as Content for Kant's Ethical Formalism', *Kant Studien*, vol. 56 (1), 1965, 102–110 and Auxter, Thomas, 'The Unimportance of Kant's Highest Good', *Journal of the History of Philosophy*, vol. 17 (2) (1979), 121–134. Both authors argue that Silber dedicates too much attention to a concept that, in their view, is marginal to Kant's practical philosophy. For a different interpretation that highlights the relevance of the highest good and its relation to the architectonic unity of the system but which does not focus on the difference between the Critiques, see Krämling, Gerhard, 'Das Höchste Gut als mögliche Welt. Zum Zusammenhang von Kulturphilosophie und systematischer Architektonik bei I. Kant', *Kant-Studien*, vol. 77 (1–4) (1986), 273–288. For comprehensive recent analysis of the problem of the highest good in Kant's philosophy, see the essays in *The Highest Good in Kant's Philosophy*, edited by Thomas Höwing (Berlin: De Gruyter, 2016).

of ends should be understood as 'a regulative idea of history'.[7] On the other hand, the capacity to subject nature to such a transformation requires a strong guarantee that the environment and conditions in which their ends intervene are amenable to demands of reason, assuring human beings of the absence of obstacles to their projects and of the preservation of their efforts through future generations.

The problem of the guarantee of the highest good is at the heart of the concluding pages of the first *Critique*. If moral principles are necessary to the practical use of reason, it is equally necessary to assume that 'everyone has cause to hope for happiness in the same measure as he has made himself worthy of it in his conduct, and that the system of morality is therefore inseparably combined with the system of happiness, though only in the idea of pure reason' (*KrV*, A 809, B 837; 679).

But how does this claim fit with Kant's complicated analysis of the relation between transcendental and practical freedom examined in the previous chapter? The last pages of the *Canon* do not answer the question explicitly. Kant limits himself to emphasizing that if the ends of rational beings were not set in the sensible world but in an intelligible one, a system of happiness in proportion with moral worth would have been a transcendental given. Here freedom itself would have been 'the cause of the general happiness' and 'rational beings, under the guidance of such principles would themselves be the authors of their own enduring welfare and at the same time that of others' (*KrV*, A 809, B 837; 679). But in the sensible world every human being is obliged to comply with moral imperatives regardless of what nature and other humans do to encourage or undermine their moral efforts. Therefore neither 'the nature of things in the world', nor 'the causality of their actions' can determine how the consequences of such actions will relate to happiness (*KrV*, A 809, B 837; 679). Reason cannot know how the hope of being happy will connect to the effort of becoming worthy of happiness based on mere evidence from nature. However, practical belief in the union of virtue and happiness if it is grounded in 'a highest reason, which commands in accordance with moral laws, as at the same time the cause of nature' is at the same time necessary (*KrV*, A 810, B 838; 680). This in turn corresponds to the idea of the highest original good, the idea of a being which combines 'the morally most

[7] The expression appears in Yovel, Yirminiahu, *Kant and the Philosophy of History*, (Princeton, NJ: Princeton University Press, 1980), 7.

perfect will' and 'the highest blessedness' and is 'the cause of all happiness in the world insofar as it stands in exact relation with morality' (*KrV*, A 810, B 838; 680).

5. Purposiveness and Physico-Theology

The constitutive character of the practical use of ideas presents us with two options. We can either endorse the realizability of the idea of the highest good, and with it the postulate of a wise author and regent of the world, or we can 'regard the moral laws as empty figments of the brain, since without that presupposition their necessary success, which the same reason connects with them, would have to disappear' (*KrV*, A 811, B 839; 680). Notice how the question here is not one of psychological motivation: it is not about being unable to bring ourselves to do the right thing without the promise of success. The question is one of rational consistency: it is about whether we can be required to do the right thing, if the world turns out to be ordered in such a way as to persistently undermine that requirement. But the latter alternative is rationally absurd. As the *Lectures in the Philosophy of Religion* also explain, in no science can we have a more certain representation than that of our moral actions; if reason denied these obligations, it would cease to be (*PR*, 28: 1011; 356). It is only by setting their rational ends in the world that the essence of human beings as beings with an agency that is independent from nature is revealed; when they fail to do so, Kant says, human beings are like animals or monsters (*PR*, 28: 1011; 356).

And yet the human being is also an empirical being and when he tries to act in accordance with the duties that his rational nature prescribes, the senses often 'present the opposite to him with a blinding bedazzlement'. In this case reason demands, in its own interest, and so as not to act against its own powers that humans conceive of 'a being whose will is those very commands which he recognizes to be given by themselves *a priori* with apodictic certainty' (*PR*, 28: 1012; 356). Without the postulate of a being that is omniscient, omnipotent, holy and just, reason would contradict itself, promising through its laws a moral condition that it would not be able to deliver. Without the idea that 'God's government of the world in accordance with moral principles', Kant also argues, 'all morality would have to break down'. Indeed, if morality could offer no prospect of satisfying one's needs then 'it cannot command anything of me either' (*PR* 28: 1116; 442).

Obviously, the postulate of God bears no relation to the conditions of possibility of morality but only on its consequences. Yet without such presuppositions 'all subjectively necessary duties which I as a rational being am responsible for performing will lose later their objective reality' (*PR*, 28: 1072, 407). Without hoping for a condition in which those who act morally and become worthy of happiness can also effectively partake in this happiness, 'there would be a contradiction between morality and the course of nature' (*PR*, 28: 1072; 406). The advantage of this moral theology over that of a speculative kind is that it guides us unfailingly to the belief in the existence of a being that is 'unique, omniperfect and reasonable'. This is the concept of a being that reason in its theoretical use could only articulate hypothetically, but without ever knowing either its ontological predicates or its universality and necessity. Morality shows us not only that we have need of God but also 'teaches us that he is already present in the nature of things and that the order of things leads us to him' (*PR*, 28: 1072; 407).

We find in these passages a statement that goes beyond that of non-contradiction between systematic moral unity and practical freedom. Kant emphasizes the necessarily positive determination of a principle of purposiveness that guarantees the integration of sensible and rational nature and that acts as a criterion for cognising nature as purposefully oriented. The idea of an intelligible world in which morality can be found in exact proportion to happiness is a practically necessary idea of reason, one that brings systematic unity to all its ends. The ultimate guarantee of this unity lies in the presupposition of an original highest good understood as 'a supreme cause' which 'in accordance with the most perfect purposiveness, grounds, conserves and completes the order of things that is universal though well hidden from us in the sensible world' (*KrV*, A 814, B 842; 682).

But the implications of this statement go beyond the interest in the practical realization of the ideas of reason. The issue of the highest good, the analysis of practical theology in connection to reason's essential interests, the problem of a system of purposes through which moral desert is compatible with the natural course of the world shed new light on the problem of a purposive constitution of nature even from a theoretical perspective. What is at stake here is the need for conceptual tools able to mediate between spheres entirely heterogeneous and yet necessarily interdependent: nature and freedom, phenomenal and noumenal, possibility of morality and reality of nature. In the *Lectures on the Philosophy of Religion*, Kant emphasizes that the idea of systematic moral unity and the necessity of realizing the moral

ends in the empirical world gives weight to the idea that 'the entire world can be seen as a universal system of ends both from the point of view of nature and from that of freedom'. A similar doctrine of ends, Kant argues, 'is called teleology'. But 'just as there is a physical system of ends in which everything in nature has a relation as a means to some end found in rational creatures, so there is also a practical system of ends, that is, a system in accordance with the laws of free volition. In this system every rational creature stands in connection with every other as reciprocal end and means' (*PR*, 28: 1102; 430–431).

Therefore, physical theology and moral theology are integrated in a unique systematic project in which the practical use of ideas fills in the gaps left open by theoretical reason. We are now finally in a position to understand the meaning of Kant's assertion in the *Architectonic* that the idea of the whole, necessary to the organic unity of the system, is schematized through the essential ends of reason. In physical theology, Kant emphasizes in his Lectures on the Philosophy of Religion, all rational beings are considered as 'possible means to the attainment of ends of rational creatures'. The world is not merely represented as a set of efficient causes (*nexu effectivu*) but as 'a system of all ends' (*nexu finali*) (*RP*, 1103; 431). In the case of practical theology, rational beings are at the '*centre* of creation'. Not only does everything in the world relate to them but they also are related to each other as 'mutual means'. Indeed, Kant argues, 'however disordered and purposeless as history may describe human conduct, yet we should not let this drive us crazy, but should rather believe nevertheless that the human race is grounded on *a universal plan* according to which it will in the end *attain to its highest possible perfection*. For up to now we have surveyed the plan *only in its individual parts and fragments*' (PR 28: 1103; 431). The order of nature and the order of ends are therefore linked in a purposive system which integrates the concepts of nature and freedom with reference to the idea of God. It is this idea of purposiveness as design which makes history intelligible not as a blind unfolding of random facts, events, and characters but as a sequence of events which have a purpose—the purpose of facilitating the coordinated and continuous integration of moral ends.

The idea of the universal plan that is presented here as an obvious implication of the general teleological analysis of nature understood as a system of ends is the same idea that we find in the essay on universal history.[8] There

[8] Note the parallel between the remarks made here and those we find in Kant's essay on the idea for universal history, on which we focused in the earlier chapters. For further discussion see also Yovel, *Kant and the Philosophy of History*, and Despland, Michel, *Kant on History and*

the concept of a universal plan of nature was a necessary theoretical hypothesis to explain the development of human dispositions towards moral ends. Without such an idea, Kant argued, we would have to think of natural dispositions as largely vain and without a purpose, an outcome which in turn would 'remove all practical principles' from the observation of how reason applies its purposes to the world (*IaG*, 8: 19, 110). Indeed, without such an idea, Kant argues, 'nature whose wisdom in the judgments of all remaining arrangements must otherwise serve as a principle' would be similar to a 'childish play' in the case of human beings alone (*IaG*, 19; 110). Without the hypothesis that nature 'does not proceed without a plan or final aim even in the play of human freedom', it would be impossible to find 'a guiding thread for exhibiting an otherwise planless *aggregate* of human actions, at least in the large, as a *system*' (*IaG*, 29; 118).

Later on, in the essay on the *Use of teleological principles in philosophy*, Kant makes the same connection between the architectonic demands of reason and the idea of natural purposiveness. In analysing the conditions under which nature can be conceived as a system of ends where the moral actions of human beings are harmonically integrated with events beyond their control, Kant explains that 'since a pure practical teleology is destined to realize its ends in the world, it may not neglect their possibility' (*GtP*, 8: 183; 217). In answering the question of how to incorporate the moral ends of human beings into a purposive doctrine of nature that serves the interests of practical reason, Kant argues that if moral teleology were to sacrifice either natural teleology or transcendental philosophy, it would fail to secure the 'objective reality to the doctrine of practically pure ends with respect to the possibility of the object in the exercise', i.e. 'the objective reality of the end that this doctrine prescribes as to be effectuated in the world' (*GtP* 8, 183: 217).

Notice how in the essay on the use of teleological principles in philosophy, the question of the relation between natural and moral teleology, theoretical and practical systematic unity, nature and freedom is presented as a reflexive task. At the same time transcendental freedom is assumed to be the condition of possibility of moral obligation. In the *Critique of Pure Reason*, on the other hand, the relation between moral and transcendental freedom is, as we saw in the previous chapter, put to one side as undeserving of systematic scrutiny. This in turn explains why the critical perspective

Religion (Montreal: McGill University Press, 1973 and Galston, William A., *Kant and the Problem of History* (Chicago, IL: University of Chicago Press, 1975).

ends up being marginalized: the principle of purposiveness necessary to the idea of architectonic unity and identified with the practical use of ideas becomes the key for cognising nature as a system of purposes. In the *Critique of Pure Reason*, Kant argues without hesitating that the idea of a systematic unity of ends in a world of intelligences, the kingdom of ends, 'leads inexorably to the purposive unity of all things that constitute this great whole, in accordance with universal laws of nature' and 'unifies practical with speculative reason' (*KrV*, A 815, B 843; 682).

6. The Kingdom of Ends and the Unity of the System

Kant's remarks on the unity of reason emphasized at the end of the previous section offer the key to finally understand why the principle of purposiveness is both the solution and the riddle of architectonic unity in the first *Critique*: why the system both culminates with this principle, and requires a new start in Kant's successive works. Recall how in motivating the mission of his *Doctrine of Method*, Kant suggested, rather tentatively, that it would be worth investigating if the ideas of reason could still 'in a fundamental and unnoticed way, serve the understanding as a canon for its extended and self-consistent use', and in doing so enable it to 'be guided better and further' (KrV A 329, B 386; 403). Recall also how he promised that the analysis of ideas might 'make possible a transition from concepts of nature to the practical', and therefore also generate 'support' for moral ideas and 'connection with the speculative cognitions of reason' (*KrV*, A 329, B 386; 403). The end of the section entitled 'On the ideal of the highest good as a determining ground of the ultimate end of pure reason' provides some important clarifications to answer the question of the status of the principle that makes possible the completion of the systematic unity of reason. To defend systematic unity in an architectonic way, Kant argues, the world should be represented 'as if having arisen out of an idea if it is to be in agreement with that use of reason without which we would hold ourselves unworthy of reason, namely the moral use, which depends throughout on the idea of the highest good' (*KrV*, A 815–816, B 843–844; 682). This is an important statement to understand both the centrality of the concept of the highest good for the effective realization of the architectonic project, and the necessity of an idea compatible with the ultimate end of reason. Ultimately, the key to the architectonic unity of Kant's system is a transcendental theology grounded on the principle of purposiveness. But what is the price paid for that unity?

Kant's argument on the conditions under which the highest good could be considered as the ultimate end of reason leads to problematic conclusions with regard to the relation between nature and history. The purposive principle that is supposed to mediate between the use of ideas in the theoretical and practical spheres, the 'purposive unity of all things that constitutes this great whole' belongs to the same teleological doctrine that also contains the concept of physico-theology. Indeed, it is to this concept that Kant refers to explain how the idea of the kingdom of ends that we infer from reason in its practical use opens up new avenues for also understanding ideas in their theoretical use: 'All research into nature is thereby directed toward the form of a system of ends, and becomes in its fullest extension, physico-theology', Kant concludes (*KrV*, A 816, B 844; 682). This idea of a systematic moral order, which is 'grounded in the essence of freedom and not contingently through external commands, brings the purposiveness of nature down to grounds that must be inseparably connected *a priori* to the inner possibility of things'. This, Kant argues in the *Lectures on the Philosophy of Religion*, is also one of the greatest advantages that the doctrine of God provides: 'it *brings the realm of nature into exact harmony with the realm of ends*'. It is thanks to that connection that we 'infer that the whole order of nature is arranged in accordance with God's ends and agrees with them'. And it is 'due to this doctrine', Kant emphasizes, that 'the kingdom of nature is brought to a tighter connection with the kingdom of ends (*PR*, 1116; 442).

To conclude, the idea that is at the basis of the systematic unity of the theoretical with the practical use of reason is ultimately grounded on a 'transcendental theology' in which the 'ideal of the highest ontological perfection as principle of systematic unity' links 'things in accordance with universal and necessary laws of nature, since all have their origin in the absolute necessity of a single original being' (*KrV*, A 816, B 844; 683). These statements are of crucial importance to understand the successive development of Kant's philosophy, and to explain why the principle of purposiveness is both the solution and the riddle of the architectonic of Kant's system. Moral purposiveness finds itself filling the void left by reason in the theoretical use of ideas at the price of establishing a destructive equilibrium, one that turns the system of ends into physico-theology, and critical metaphysics into a distinctive species of theodicy. Even if more cautious, Kant's conclusions are continuous with the metaphysical efforts of Leibniz and Wolff. The idea of God emerges as a fundamental concept for providing direction to the entire critical system: it is embedded in the postulate necessary to

give meaning to practical action but also crucial to organizing theoretical knowledge; it helps us orient reflection on the conditions of possibility for the multiplicity of empirical laws of nature, but also explains how this system of laws can have moral value.

The necessary validity of the practical use of reason and the unconditional nature of the duty to realize the highest good in the world require a transcendental philosophy that is able to bring into one coherent system the totality of human experience, in both its phenomenal and noumenal manifestations. But in the first *Critique* transcendental freedom remains a problematic assumption. In the absence of a *fact of reason* that can reveal the transcendental source of moral imperatives, the inability to realize such imperatives in the empirical world condemns to failure all attempts to realize the ends of reason. But where transcendental freedom is absent, transcendental theology comes to the rescue. 'What sort of use can we make of our understanding, even in regard to experience, if we do not set ends before ourselves?', Kant asks. But the 'highest ends are those of morality and only pure reason can grant us cognition of these' (*KrV*, A 817/B 845; 683). Only pure reason, in so far as it can set ends in the practical world, can be the subject of a moral teleology. But under what conditions can we set such purposes? Kant has no answer to this question in the first *Critique*. To fill the gap, he turns to consequences. He argues that to make sense of the demands of practical reason in the world, the apparent meaninglessness of nature has to be ruled out. This is what the idea of God entails, that is its function within the architectonic of the system. Yet once the idea of God, which is at the heart of purposiveness as design, becomes the ground for warranted practical belief, we are entitled to consider nature as a system of ends from the moral perspective. And once moral teleology is justified, speculative teleology can no longer be ruled out.

This explains finally the meaning of the necessity of moral purposiveness and its reference to the architectonic idea of a complete system as schematized by the essential ends of reason. Kant has given us a justification for the unity of the system, but at the cost of asserting the objectivity of natural purposiveness as it connects to moral purposiveness. Without the guidance of moral ends, we could not make sense of the natural world. And yet how could we postulate systematic unity, 'unless nature itself has introduced purposive unity', Kant asks. Without this overarching purposive unity, 'we would not even have any reason, since we would have no school for it and no culture through objects that would offer material for such concepts' (*KrV*, A 816–817; B 845–846; 683). It is necessary therefore to presuppose

in nature a final unity of all purposes not, to be sure, as a cause but as 'the effect of the practical purposiveness which pure reason imposes on us' (*KrV*, A817, B 846; 683).

But how can reason satisfy its systematic needs simply by postulating the idea of purposiveness that integrates its practical and theoretical uses? What justifies the passage from moral purposiveness to the purposive order of nature and from there to the physico-theological proof of the existence of God? Physico-theology can never go beyond a statement of belief in the existence of a wise and good author of the world—the postulate that everything in nature will work to the benefit of the practical use of the ideas of reason.[9] Belief in the existence of God might well be enough to persuade single individuals that their good deeds will be rewarded in an indeterminate future, but is it really sufficient to show that nature is, as such, purposively oriented? How can physico-theology address reason's need for systematic unity without blurring the boundary between critique and metaphysics? And how does this new metaphysics serve to support the effective fulfilment of the 'cosmopolitan' vocation of philosophy which is so important at the end of the first *Critique*?

7. Conclusion

It is not difficult to see here how Kant's argument, albeit necessary to the architectonic requirements of reason, is fraught with difficulties. If the execution of our moral ends has to rely on a postulate of moral order guaranteed by the wise intervention of nature (and any related authority) to establish how moral norms can be binding in a coordinated and continuous way, it collapses into a dogmatic credo like the one it initially tried to escape from. The postulate of systematic unity of moral ends must be grounded on something other than the assumption of a nature (or a wise author of the world) that progressively benefits the development of moral purposes. For a start, both of these ideas can be easily ridiculed by the sceptic. There is very little evidence of nature promoting our ends; there is much more evidence of it standing in our way by obstructing morality rather than encouraging it.

[9] For a discussion of the modality of belief and the epistemic questions it raises, including how it is distinct from knowledge, see Chignell, Andrew, 'Belief in Kant', *Philosophical Review*, vol. 116 (3) (2007), 323–360. For a historical discussion, see Pasternack, Lawrence, 'The Development and Scope of Kantian Belief: The Highest Good, the Practical Postulates and the Fact of Reason', *Kant-Studien*, vol. 102 (3) (2011), 290–315.

Nature, Kant emphasizes in a different work, has not taken man for her special favourite; 'it has rather spared him just as little as every other animal in her destructive effects, whether pestilence, hunger, danger of flood, cold, attacks by other animals great and small, etc' (KU 298, 430).

One could, of course, argue that all this will in the end serve higher purposes and somehow develop the demands of morality. This is the path that Kant takes in his earlier essays on the idea of a cunning of nature which promotes the kingdom of ends, and on which the *Critique* relies for the execution of the idea of architectonic unity. But one could also take an alternative, much more plausible route, one that begins by unambiguously affirming transcendental freedom as the ground of moral norms, and use it as the basis for reflecting on the purposiveness required for systematic unity, when nature is viewed in analogy with human agency. This is the path that Kant charts in his successive body of work. That path requires commitment to a transcendental idea of freedom, a commitment Kant has been reluctant to articulate in the *Critique of Pure Reason*. In the absence of that idea, the only conception of purposiveness on the basis of which the first *Critique* operates is a conception of purposiveness as design. But purposiveness as design is a much less cautious formulation of the status of the architectonic principle necessary to the unity of the system than purposiveness as normativity. In the first case (purposiveness as design) we ask how nature ought to be for human beings so that they can realize their moral ends. In the second case (purposiveness as normativity), we ask what human beings can do with nature so as to create institutions that enable them to realize the cosmopolitan purpose of philosophy. In the first case, the outcome is a more favourable approach to physico-theology; in the second it is a reformulation of metaphysics in the direction of a philosophy of history. With purposiveness as design, all careful efforts to distinguish critique from metaphysics end up with a more refined version of the God of traditional metaphysics. With purposiveness as normativity, we end up with a concept of judgment that holds the key to a critical analysis of systematic unity understood as a historical and philosophical cumulative enterprise.

Conclusion

Beyond the *Critique of Pure Reason*

This book started by asking whether existing interpretations of the *Critique of Pure Reason* are right to interpret Kant's architectonic project as a vindication of the unity of reason vis-à-vis the shortcomings of scepticism and dogmatism. These readings, I emphasized, typically focus on the cumulative, even fallibilist, nature of the critical enterprise. They suggest that the process of constructing a unitary system can be justified reflexively, by showing how the critical method becomes plausible if we look forward rather than backward, comparing the method of construction to a plan rather than a finished product.[1] I tried to sketch the contours of that plan, to explore how Kant brings it to completion, and to illustrate where its weaknesses lie.

The architectonic plan of reason, as we have seen throughout these pages, requires, first, discipline in the selection of the tools deployed in the process of construction; second, an orientation by the practical interest in the realization of reason's essential ends; and third, the combination of the discipline and interest of reason in a complete unitary system. These methodological provisions are contained in the *Doctrine of Method* of the first Critique and are labelled the *Discipline*, *Canon*, and *Architectonic* of reason. The first task is negative: the *Discipline* of reason suggests that we can learn to avoid arbitrary, unilateral or unproductive uses of reason and to build on those findings that survive critical scrutiny so as to consolidate the rigour of its method. The second task is positive: we are guided by principles that promote our rational nature as reflected in the ability to set and pursue practical purposes, and by a rational interest to promote such purposes in the empirical world. Finally, the negative and positive constraints lead to a third one, a demand for coherent integration of the discipline and

[1] See, for example, O'Neill, Onora, *Constructions of Reason* (Cambridge: Cambridge University Press, 1989).

The Architectonic of Reason: Purposiveness and Systematic Unity in Kant's Critique of Pure Reason. Lea Ypi, Oxford University Press. © Lea Ypi 2021. DOI: 10.1093/oso/9780198748526.003.0009

interests of reason in a self-validating system whereby the content of norms and their source reciprocally support each other. Call this the architectonic requirement. This latter, architectonic, requirement is satisfied when the norms constructed fit in a systematic whole which remains the product of human reason (i.e. requires no dogmatic credo) whilst retaining its lawlikeliness (i.e. does not lead to scepticism about their source and validity).

One limitation of several interpretations of systematic unity in the first *Critique* is the scarce attention paid to the idea of purposiveness as the core concept on which Kant draws to complete the project of unification. As I tried to show in this book, the complicated relationship between the principle of purposiveness and the ideas of reason presents insurmountable difficulties for the first *Critique*. More specifically, since the justification of practical freedom is not grounded in transcendental freedom, the integration of the theoretical and practical use of reason leaves us with an analysis of purposiveness as design which ultimately subverts Kant's critical commitments.

Kant soon became aware of the complications produced by this argument. His return to the question of purposiveness in relation to systematic unity in the third *Critique* brought to light a new conception of purposiveness: purposiveness as normativity. At the basis of systematic unity was, this time, not the order of nature but transcendental freedom, the capacity of the will to guide itself by autonomous laws, and to reshape the external world in accordance with moral imperatives. With transcendental freedom came a shift in standpoint. Instead of asking what nature does for human beings, Kant turned the question on its head and asked what human beings do with nature so as to advance the kingdom of ends. Here, the kinds of institutions (political, legal, religious, social) that human beings develop collectively in the course of many generations were seen as contributions to the process of refining the demands of reason in a cumulative and systematic way.

The shift in perspective is clear if we think about the systematic role that, not nature, but culture plays in the *Critique of Judgment*. Culture is the process through which human beings refine the modalities of interaction with each other and seek to understand, interpret, and change the outside world. At that point, the question of how nature can facilitate human endeavours to comprehend and transform it becomes irrelevant: the question is no longer what nature can do *for* humans, but what humans can do *with* nature. Reason vindicates itself reflexively, but the process through which that vindication becomes known to humans is historical through and through: the

practical belief required for systematicity is not a belief that nature can accommodate us, but that we are able to collectively transform nature. The mechanism of self-validation has to rely on the improvement of the collective institutions that human beings jointly establish to discipline themselves and to promote their rational interests and moral vocation.

The concept of culture provides the means through which we can explain how these rational interests are promoted by humans in the course of their historical development. Culture, Kant argues in the *Critique of Judgment*, is the aptitude and skill for which the human being can use nature and promote any ends in general (KU 297; 430). Physico-theology is no longer relevant here, instead it is replaced by ethical-theology, a form of practical faith grounded on transcendental freedom. Culture refers to a subjective attitude to promote individual goals in so far as this is progressively refined and tends to culminate in the achievement of a formal condition under which human beings can accommodate reciprocal claims affecting each other. In the third *Critique*, Kant distinguishes between two ways of thinking about culture: the culture of skill and the culture of discipline. The culture of skill guarantees the coordination of a multiplicity of human ends and prepares the ground for the establishment of political mechanisms through which 'lawful authority in a whole, which we call a *civil community*, is opposed to the abuse of their conflicting freedoms'. Thus, the emergence of various political systems and the consolidation of different forms of rule reflect (in better or worse ways) human beings' training in the culture of skill. The more consciously this process is reflected in particular political institutions (the republican state is one example), the more successful the process of refining moral norms in a coordinated way is likely to be.[2]

A second aspect of culture, what Kant calls the culture of discipline, is also helpful to see how the historical process of realizing the kingdom of ends satisfies the demands of continuity in the promotion of moral purposes. Unlike the culture of skill, which relies on coercive mechanisms, the culture of discipline relies on the formation of habit, social norms, education, progress in the arts and sciences, to consolidate the process through which human beings learn to transform the outside world in accordance with the rule of reason. Thanks to the culture of discipline, the achievements of reason become part of a collective project that can be handed

[2] Notice that morally compliant behaviour is not the same as moral behaviour: the latter can only be expected from the voluntary endorsement of moral norms and could not be imposed via external coercive mechanisms.

down from one generation to the next, making knowledge available to all of humanity and ensuring the availability of means through which moral ends can be preserved continuously.

Kant's views on the role of culture suggest that the development of systematic unity is a historical process, one that is completed over time, and whose achievements must be integrated by philosophy understood as a cumulative and critical enterprise. The modalities of knowledge transmission range from the development of new skills in the human species, to the progressive subjection to coercive political institutions regulating the reciprocal pursuit of moral ends, to processes of emancipation through which specific social norms are embedded in distinctive cultural and scientific artefacts. This account sheds a different light on the way in which we think about the demands of architectonic unity and their role in the integration of the theoretical and practical interests of reason. The cultural development of human beings takes the form of a cross-generational effort to interact with nature in a way that is conducive to the realization of moral purposes. Systematic unity no longer requires the schematization of the idea of God. The actions of human beings in the historical world are expressive of their freedom, as a matter of fact rather than mere opinion or faith. As Kant puts it, freedom is 'the only one among the ideas of reason whose object is a fact', the reality of which can be established 'in real actions and thus in experience' (KU 468: 333).

None of this is to be found in the *Critique of Pure Reason*. As it stands, Kant's *Architectonic* is ultimately unable to account for the consequences of a practical endorsement of transcendental theology on the unity of the system. The principle of purposiveness that is at the heart of the *Architectonic of Pure Reason* produces a tension between critical commitments and systematic aspirations—a tension that Kant is unable to resolve without appealing to the benevolence of nature and its author. This appeal, in the end, runs the risk of weakening some major achievements of the first *Critique*, including the distinction between belief and knowledge, the impossibility of validating the physico-theological proof of the existence of God, and the limitation to the practical domain of Kant's attempt to resurrect metaphysics as a science. Kant's return to these issues in the third *Critique* and in later political writings must be assessed in light of these difficulties, and the threat to render the critical foundation of metaphysics virtually indistinguishable from the old dogmatic tradition.

Yet, even if the *Architectonic of Pure Reason* ultimately provides an unsatisfactory answer to the problem of systematic unity, even if it gives an

unpersuasive account of the transition from nature to freedom, it remains one of the most important sections of the first *Critique*. Analysing its arguments on systematic unity helps us shed light on the relation between natural and moral purposiveness and on the role of rational religion in Kant's overall work. The study of the *Architectonic* opens up a reflection on the best way to conceptualize philosophy as a systematic enterprise beyond its compartmentalization in separate fields of enquiry; it makes it possible to ask not only what counts as reliable knowledge but also what value that knowledge has for the human being in general. Only after examining the limits of Kant's first attempt to think about the theoretical and practical interests of reason from a unified perspective—a concern that we find unchanged in the third *Critique* and in successive political writings—is it possible to properly appreciate the relevance of Kant's analysis of the faculty of judgement. Only then can we properly understand the systematic role that the principle of purposiveness plays in Kant's theory of progress, and in his philosophy of history. Only then do we grasp what is at stake in Kant's effort to separate the concept of purposiveness from the old metaphysical tradition, and why without a categorical imperative grounded in transcendental freedom that effort is doomed to fail. And finally, only then can we begin to ask ourselves, as Hegel and Marx later did, whether we really need God, or whether we would be better off if we dispensed with such an idea altogether.

Bibliography

Allison, Henry, 'The Gulf Between Nature and Freedom and Nature's Guarantee of Perpetual Peace', in Hoke Robinson (ed.), *Proceedings of the Eighth International Kant Congress* (Milwaukee, WI: Marquette University Press, 1995), 37–49.

Allison, Henry 'Practical and Transcendental Freedom in the Critique of Pure Reason', *Kant-Studien*, vol. 73 (1–4), 271–290 (2009).

Allison, Henry, *Kant's Groundwork for the Metaphysics of Morals: A Commentary* (Oxford and New York: Oxford University Press, 2011).

Andersen, Svend, *Ideal und Singularität. Über die Funktion des Gottesbegriffes in Kants theoretischer Philosophie* (Berlin: De Gruyter, 1983).

Auxter, Thomas, 'The Unimportance of Kant's Highest Good', *Journal of the History of Philosophy*, vol. 17 (2) (1979), 121–134.

Baensch, Otto, *Johann Heinrich Lamberts Philosophie und seine Stellung zu Kant* (Tübingen: Mohr, 1902).

Bauch, Bruno, 'Parallelstellen bei Hume und Kant', *Kant-Studien*, vol. 19 (1914), 521–523.

Bauch, Bruno, *Immanuel Kant* (Berlin and Leipzig: De Gruyter, 1923).

Bazil, Vazrik, *Ideal und Schema: zu 'Anhang zur transzendentalen Dialektik' der Kritik der reinen Vernunft* (Munich: Univeristy of Munich, 1995).

Beck, Lewis White, *A Commentary on Kant's Critique of Practical Reason* (Chicago, IL: University of Chicago Press, 1960).

Beck, Lewis White, *Studies in the Philosophy of Kant* (Indianapolis and New York: Bobbs- Merrill, 1965).

Beiser, Frederick C., *The Fate of Reason: German Philosophy from Kant to Fichte* (Cambridge, MA: Harvard University Press, 1987).

Bennett, Jonathan, *Kant's Analytic* (Cambridge: Cambridge University Press, 1966).

Bennett, Jonathan, *Kant's Dialectic* (Cambridge: Cambridge University Press, 1974).

Bird, Graham, *The Revolutionary Kant: A Commentary on the Critique of Pure Reason* (Chicago, IL: Open Court, 2005).

Brandt, Reinhard, 'The Deductions in the Critique of Judgment', in E. Förster (ed.), *Kant's Transcendental Deductions* (Stanford, CA: Stanford University Press, 1989), 177–191.

Brandt, Reinhard, 'L. Kreimendahl, Kant. Der Durchbruch von 1769', *Kant Studien*, vol. 83 (1992), 100–111.

Breitenbach, Angela, *Die Analogie von Vernunft und Natur: Ansatz zu einer Umweltphilosophie nach Kant* (Berlin: De Gruyter, 2009).

Breitenbach, Angela, 'Teleology in Biology: A Kantian Perspective', *Kant Yearbook*, vol. 1 (2009), 31–56.

Buchdahl, Gerd, *Kant and the Dynamics of Reason. Essays on the Structure of Kant's Philosophy* (Oxford: Blackwell, 1992).

Caimi, Mario, 'Concerning a Neglected Deduction of Regulative Ideas—Kant Transcendental Dialectics', *Kant-Studien*, vol. 86 (3) (1995), 308–320.

Carnois, Bernard, *The Coherence of Kant's Doctrine of Freedom* (Chicago, IL: Chicago University Press, 1987).

Cassirer, Ernst, 'Kant und das Problem der Metaphysik', *Kant-Studien*, vol. 36 (1931), 1–26.

Cassirer, Ernst, *Kant's Life and Thought* (New Haven, CT: Yale University Press, 1983).

Cassirer, Ernst, *Cartesio e Leibniz*, trans. by GA De Toni (Rome and Bari: Laterza, 1986).

Cassirer, Ernst, *The Philosophy of the Enlightenment* (Princeton, NJ: Princeton University Press, 1979).

Cassirer, Ernst, and Martin Heiddeger, *Disputa sull'eredità Kantiana. Due documenti (1928 e 1931)*, edited by R. Lazzari (Milan: Unicopli, 1990).

Cassirer, Heinz, *Commentary on Kant's Critique of Judgement* (London: Methuen, 1938).

Chiereghin, Franco, *Finalità e idea della vita. La recezione hegeliana della filosofia di Kant*, *Verifiche*, vol. 19 (1990), 127–229.

Chignell, Andrew, 'Belief in Kant', *Philosophical Review*, vol. 116 (3) (2007), 323–360.

Chignell, Andrew, 'Kant, Real Possibility, and the Threat of Spinoza', *Mind*, vol. 121, (483) (2012), 635–675.

Chignell, Andrew, 'Rational Hope, Moral Order, and the Revolution of the Will', in Eric Watkins (ed.), *Divine Order, Human Order, and the Order of Nature* (Oxford: Oxford University Press, 2013), 197–218.

Conrad, Elfriede, *Kants Logikvorlesungen als neuer Schlüssel zur Architektonik der reinen Vernunft* (Stuttgart-Bad Cannstatt: Frommann Holzboog, 1994).

Correira, Clara Pinto, *The Ovary of Eve. Egg, Sperm, and Preformation* (Chicago, IL: University of Chicago Press, 1997).

Daval, Roger, *La métaphysique de Kant* (Paris: Presses Universitaires de France, 1951).

De Boer, Karin, 'Transformations of Transcendental Philosophy: Wolff, Kant, and Hegel', *Hegel Bulletin*, vol. 32 (1–2) (2011), 50–79.

De Boer, Karin, *Kant's Reform of Metaphysics: The Critique of Pure Reason Reconsidered* (Cambridge: Cambridge University Press, 2020).

Deligiorgi, Katerina 'Universalisability, Publicity, and Communication: Kant's Conception of Reason', *European Journal of Philosophy*, vol. 10 (2) (2002), 143–159.

Descartes, René, 'Discourse on the Method' (1644), in J. Cottingham, R. Stoothof, and D. Murdoch(eds.), *The Philosophical Writings of Descartes*, Volume I (Cambridge: Cambridge University Press, 1984), 111–176.

Despland, Michel, *Kant on History and Religion* (Montreal: McGill University Press, 1973).

DiCenso, James, *Kant, Religion, and Politics* (Cambridge: Cambridge University Press, 2011), 153–161.

Di Donato, Francesca 'Conoscenza e pubblicità del sapere. Le condizioni della repubblica scientifica a partire dall'Architettonica della ragion pura di Kant', *Bollettino telematico di filosofia politica* (online resource 2005), 1–16.

Driesch, Hans, 'Kant und das Ganze', *Kant-Studien*, vol. 29 (1924), 365–376.

Düsing, Klaus, *Die teleologie in Kants Weltbegriff* (Bonn: Bouvier, 1968).

Düsing, Klaus, 'Naturteleologie und Metaphysik bei Kant und Hegel', in H.F. Fulda and R.P. Horstmann (eds.), *Hegel und die 'Kritik der Urteilskraft'* (Stuttgart: Klett-Kotta, 1990), 139–146.

England, F.E., *Kant's Conception of God* (New York: Humanities Press, 1968).

Erdmann, Benno, *Kants Prolegomena herausgegeben und historisch erklärt* (Leipzig: Leopold Voß, 1878).

Esteves, Julio, 'The Alleged Incompatibility Between the Concepts of Practical Freedom in the Dialectic and in the Canon of the Critique of Pure Reason', *Kant-Studien*, vol. 105 (3) (2014), 336–371.

Ferrarin, Alfredo, *The Powers of Pure Reason: Kant and The Idea of Cosmic Philosophy* (Chicago, IL: University of Chicago Press, 2015).

Fischer, Kuno, *Geschichte der neueren Philosophie,* vol IV*, Immanuel Kant und seine Lehre* (Heidelberg: Friedrich Bassermann, 1898).

Fisher, Mark, and Eric Watkins, 'Kant on the Material Ground of Possibility: From "the Only Possible Argument" to the "Critique of Pure Reason"', *The Review of Metaphysics*, vol. 52 (2) (1998), 369–395.

Freudiger, Jürg, 'Kants Schlußstein: Wie die Teleologie die Einheit der Vernunft stiftet', *Kant-Studien*, vol. 87 (4) (1996), 423–435.

Friedman, Michael, *Kant and the Exact Sciences* (Cambridge, MA: Harvard University Press, 1992).

Friedman, Michael, *Dynamics of Reason* (Stanford, CA: CSLI Publications, 2001).

Fugate, Courtney, *The Teleology of Reason: A Study of the Structure of Kant's Critical Philosophy* (Berlin: De Gruyter, 2014).

Fulda, Hans Friedrich, and Jürgen Stolzenberg (eds.), *Architektonik und System in der Philosophie Kants* (Hamburg: Felix Meiner Verlag, 2001).

Galston, William A., *Kant and the Problem of History* (Chicago, IL: University of Chicago Press, 1975).

Gardner, Sebastian, 'The Primacy of Practical Reason', in *A Companion to Kant*, edited by Graham Bird (Oxford: Blackwell, 2006), 259–274.

Garroni, Emilio, *Senso e paradosso. L'estetica, filosofia non speciale* (Roma and Bari: Laterza, 1986).

Gava, Gabriele 'Kant's Definition of Science in the Architectonic of Pure Reason and the Essential Ends of Reason', *Kant-Studien*, vol. 105 (3) (2014), 372–393.

Gava, Gabriele, 'Kant, Wolff and the Method of Philosophy', *Oxford Studies in Early Modern Philosophy*, vol. 8 (2018), 271–303.

Gava, Gabriele 'Kant and Crusius on Belief and Practical Justification', *Kantian Review*, vol. 24 (1) (2019), 53–75.

Gava, Gabriele, and Robert Stern, *Pragmatism, Kant, and Transcendental Philosophy* (New York: Routledge, 2015).

Gava, Gabriele, and Marcus Willaschek, 'The Transcendental Doctrine of Method of the Critique of Pure Reason', in Sorin Baiasu and Mark Timmons (eds.), *The Kantian Mind* (London: Routledge, 2020).

Gawlick, Günter, and Lothar Kreimendahl, *Hume in der deutschen Aufklärung. Umrisse einer Rezeptionsgeschichte* (Stuttgart-Bad Cannstatt: Frommann Holzboog, 1987).

Ginsborg, Hannah, *The Normativity of Nature: Essays on Kant's Critique of Judgement* (Oxford: Oxford University Press, 2015).

Ginsborg, Hannah, 'Why Must We Presuppose the Normativity of Nature?' in Michela Massimi and Angela Breitenbach (eds.), *Kant and the Laws of Nature* (Cambridge: Cambridge University Press, 2017), 71–88.

Gonnelli, Filippo, '*Dalla critica della ragion pratica alla dottrina della virtù, Imperativo categorico e teleologia morale in* Kant', *Studi kantiani*, vol. IV (1991), 59–92.

Gonnelli, Filippo, *La filosofia politica di Kant* (Bari: Laterza, 1996).

Gonnelli, Filippo, *Guida alla lettura della Critica della ragion pratica di Kant* (Bari: Laterza, 1999).

Goy, Ina, *Architektonik oder die Kunst der Systeme* (Paderborn: Mentis, 2007).

Goy, Ina, 'Epigenetische Theorien. Caspar Friedrich Wolff und Immanuel Kant', in Ina Goy and Eric Watkins (eds.), *Kant's Theory of Biology* (Berlin: De Gruyter, 2014), 25–41.

Gracyk, Theodore A., 'Kant's Doctrine of Heuristics: An Interpretation of the Ideas of Reason', *The Modern Schoolman*, vol. 68 (3) (1991), 191–210.

Grier, Michelle, *Kant's Doctrine of Transcendental Illusion* (Cambridge: Cambridge University Press, 2001).

Gueroult, Martial, 'Canon de la raison pure et critique de la raison pratique', *Revue Internationale de Philosophie*, vol. 8 (1954), 331–357.

Guyer, Paul, 'The Unity of Reason: Pure Reason as Practical Reason in Kant's Early Conception of the Transcendental Dialectic', *The Monist*, vol. 72 (1989), 139–167.

Guyer, Paul, 'The Unity of Reason: Rereading Kant' Review of Kant and the Unity of Reason by S. Neiman', *The Philosophical Review*, vol. 106 (2) (1997), 291–295.

Guyer, Paul, *Kant's System of Nature and* Freedom (Oxford: Oxford University Press, 2005).

Guyer, Paul, 'The Revised Method of Physico-Theology', in Jeffrey K. McDonough (ed.), *Teleology* (Oxford: Oxford University Press, 2020), 186–218.

Hegel, Georg Wilhelm Friedrich, *The Science of Logic*, edited by George Di Giovanni (Cambridge: Cambridge University Press, 2010).

Heidegger, Martin, *Kant and the Problem of Metaphysics* (Bloomington, IN: Indiana University Press, 1997 [1929]).

Heimsoeth, Heinz, *Transzendentale Dialektik. Ein Komentar zu Kants Kritik der reinen Vernunft*, *Vierter Teil, Die Methodenlehre* (Berlin: De Gruyter, 1971).

Henrich, Dieter 'Kant's Notion of a Deduction and the Methodological Background of the First Critique', in Eckart Forster (ed.), *Kant's Transcendental Deductions: The Three Critiques and the Opus Postumum* (Stanford, CA: Stanford University Press, 1989), 29–46.

Herman, Barbara, *The Practice of Moral Judgment* (Cambridge, MA: Harvard University Press, 1993).

Hill, Thomas E., *Dignity and Practical Reason in Kant's Moral Theory* (Ithaca, NY: Cornell University Press, 1992).

Höffe, Otfried, 'Architektonik und Geschichte', in Georg Mohr and Marcus Willaschek (eds.), *Immanuel Kant: Kritik der reinen Vernunft* (Berlin: Akademie Verlag, 1998), 616–645.

Hogrebe, Wolfram, *Per una semantica trascendentale* (Rome: Officina, 1973).

Holzhey, Helmut, *Kants Erfahrungsbegriff* (Basel-Stuttgart: Schwabe, 1970).
Horstmann, Ralph Peter, 'Why must there be a Transcendental Deduction in Kant's Critique of Judgement', in E. Förster (ed.), *Kant's Transcendental Deductions* (Stanford, CA: Stanford University Press, 1989), 157–176.
Höwing, Thomas (ed.), *The Highest Good in Kant's Philosophy* (Berlin: De Gruyter, 2016).
Hume, David, *An Enquiry Concerning Human Understanding* (Oxford: Oxford University Press, 2007 [1748]).
Hume, David, *Dialogues Concerning Natural Religion and Other Writings* (Cambridge: Cambridge University Press, 2007 [1779]).
Huneman, Philippe, *Métaphysique et biologie. Kant et la constitution du concept d'organisme* (Kimé: Paris, 2008).
Jaspers, Karl, *Die grossen Philosophen,* vol. I (Munich: R. Piper, 1957).
Johnson, Monte, 'Aristotle's Architectonic Sciences', in David Ebrey (ed.), *Theory and Practice in Aristotle's Natural Science* (Cambridge: Cambridge University Press, 2015), 163–186.
Josifović, Saša, 'Das „Kanon-Problem" in Kants Kritik der Reinen Vernunft', *Kant-Studien* vol. 106 (3), 487–506 (2015).
Kaulbach, Friedrich, 'Architektonik, architektonisch', in J. Ritter (ed.), *Historisches Wörterbuch der Philosophie* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1971), 503–504.
Kemp Smith, Norman, *A Commentary to Kant's Critique of Pure Reason* (New York: Humanities Press), 1962.
Kinnaman, Ted, 'Kant's Transcendental Deduction of the Ideas of Pure Reason', *Proceedings of the Eighth International Kant Congress*, vol. 2 (1) (1995), 303–309.
Kinnaman, Ted, 'Problems in Kant's Vindication of Pure Reason', *Journal of the History of Philosophy*, vol. 39 (4) (2001), 559–580.
Kitcher, Philip, 'Projecting the Order of Nature', in Robert E. Butts (ed.), *Kant's Philosophy of Physical Science: Metaphysische Anfangsgründe der Naturwissenschaft, 1786–1986* (Dordrecht: Reidel Publishing, 1986), 201–238.
Kitcher, Philip 'The Unity of Science and the Unity of Nature', in Paolo Parrini (ed.), *Kant and Contemporary Epistemology* (Dordrecht: Springer, 1994), 253–272.
Kleingeld, Pauline, *Fortschritt und Vernunft: Zur Geschichtsphilosophie Kants*, (Wuerzburg: Königshausen, 1995).
Kleingeld, Pauline, 'Kant on the Unity of Theoretical and Practical Reason', *The Review of Metaphysics*, vol. 52 (2) (1998), 311–339.
Kleingeld, Pauline, 'Kant on Historiography and the Use of Regulative Ideas', *Studies in History and Philosophy of Science Part A*, vol. 39 (4) (2008), 523–528.
Kohl, Markus, 'Transcendental and Practical Freedom in the Critique of Pure Reason', *Kant-Studien*, vol. 105 (3), 313–335 (2014).
Kojève, Alexandre, *Kant* (Paris: Éditions Gallimard, 1973).
Konhardt, Klaus, *Die Einheit der Vernunft. Zum Verhältnis von theoretischer und praktischer Vernunft in der Philosophie Immanuel Kants* (Königstein: Forum Academicum, 1979).
Korsgaard, Christine M., *Creating the Kingdom of Ends* (Cambridge: Cambridge University Press, 1996).

Krausser, Peter, 'On the Antinomies and the Appendix to the Dialectic in Kant's Critique and the Philosophy and Science', *Synthese*, vol. 77 (3) (1988), 375–401.

Krämling, Gerhard, 'Das Höchste Gut als mögliche Welt. Zum Zusammenhang von Kulturphilosophie und systematischer Architektonik bei I. Kant', *Kant-Studien*, vol. 77 (1–4) (1986), 273–288.

Kreimendahl, Lothar, *Kant. Der Durchbruch von 1769* (Köln: Dinter, 1990).

Krohn, Wolfgang, Die natürlichen Ursachen der Zwecke. Kants Ansätze zu einer Theorie der Selbstorganisation, *Jahrbuch für Komplexität in den Natur, Sozial und Geisteswissenschaften*, vol. 3 (1992), 31–50.

Krüger, Gerhard, *Critique et morale chez Kant* (Paris: Beauchesne, 1961).

Lambert, Johann Heinrich, *Anlage zur Architectonic oder Theorie des Einfachen und des Ersten*, vol. I (Riga: Hartnoch, 1771).

Lambert, Johann Heinrich, 'Anlage zur Architektonik', in H.W. Arndt (ed.), *Philosophische Schriften*, vol. III (Hildesheim: Olms, 1965).

Lambert, Johann Heinrich, *Neues Organon* (Leipzig: Wendler, 1764).

Langthaler, Rudolf, '"Praktischer Endzweck" und "Endzweck der Schöpfung". Aspekte einer erweiterten Idee der "moralischen Teleologie" bei Kant', *Prima Philosophia*, vol. 2 (1989), 461–502.

Langthaler, Rudolf, *Kants Ethik als 'System der Zwecke'. Perspektiven einer modifizierten Idee der moralischen Teleologie und Ethikoteologie* (Berlin and New York: De Gruyter, 1991).

Lebrun, Gérard, *Kant et la fin de la métaphysique. Essai sur la 'Critique de la faculté de juger'*, (Paris: Colin, 1970).

Lehmann, Gerhard, 'System und Geschichte in Kants Philosophie', *Il pensiero*, vol. 1 (1958), 14–34.

Lehmann, Gerhard, *Zur Problemanalyse von Kants Nachlasswerk* in *Kants Tugenden: Neue Beiträge zur Geschichte und Interpretation der Philosophie Kants* (Berlin: De Gruyter, 1980), 96–140.

Leibniz, Gottfried Wilhelm, 'Considerations on the Principle of Life and on Plastic Natures; by the Author of the System of Preestablished Harmony', 1705. In *The Philosophical Works of Leibniz* (New Haven, CT: Tuttle, Morehouse, and Taylor, 1890 [1705]).

Leibniz, Gottfried Wilhelm, *Opuscules et fragments inédits de Leibniz. Extraits des manuscripts de la Bibliothèque royale de Hannovre*, edited by L. Coutourat (Paris: Alcane, 1903).

Leibniz, Gottfried Wilhelm, *Theodicy: Essays on the Goodness of God, the Freedom of Man and the Origin of Evil*, ed. by Austin Farrer, (London: Routledge and Kegan Paul [1710] 1952). Available online at Project Guthenberg.: https://www.gutenberg.org/files/17147/17147-h/17147-h.htm (accessed on 7 April 2021).

Locke, John, *An Essay Concerning Human Understanding* (Indianapolis, IN: Hackett, 1996 [1689]).

Longuenesse, Béatrice, *Kant on the Human Standpoint* (Cambridge: Cambridge University Press, 2005).

Lovejoy, Arthur O., *The Great Chain of Being* (Cambridge, MA: Harvard University Press, 1936).

Löwisch, Dieter-Jürgen, 'Kants Kritik der reinen Vernunft und Humes Dialogues concerning natural Religion', *Kant-Studien*, vol. 56 (1965), 170–207.

Lu-Adler, Huaping, *Kant and the Science of Logic: A Historical and Philosophical Reconstruction* (Oxford: Oxford University Press, 2018).

Manchester, Paula. 'Kant's Conception of Architectonic in Its Historical Context', *Journal of the History of Philosophy*, vol. 41 (2) (2003), 187–207.

Manchester, Paula, 'Kant's Conception of Architectonic in its Philosophical Context', *Kant Studien*, vol. 99 (2) (2008), 132–151.

Marcucci, Silvestro, 'Aspetti epistemologici e teoretici della deduzione trascendentale delle idee in Kant', *Physis*, vol. 27 (1–2) (1985), 127–156.

Marcucci, Silvestro, *Studi Kantiani* (Lucca: Pacini Fazzi, 1988).

Marcucci, Silvestro 'Sull'uso dei termini "genere" e "specie" nella filosofia di Kant', *Studi Kantiani*, vol. 5 (1992), 11–45.

Marcucci, Silvestro, *Introduzione alla lettura della Critica della ragion pura di Kant* (Rome and Bari: Laterza, 1997).

Marcucci, Silvestro, 'La Deduzione "Trascendentale" Delle Idee in Kant', *Studi Kantiani*, vol. 18 (2005), 61–74.

Marques, Antonio, *Organismo e sistema em Kant. Ensaio sobre o sistema kantiano* (Lisbon: Editorial Presença, 1987).

Marty, François, *La naissance de la métaphysique chez Kant. Une étude sur la notion kantienne de l'analogie* (Paris: Beauchesne, 1980).

Massimi, Michela, *Kant and Philosophy of Science Today*. Royal Institute of Philosophy Supplement 63. (Cambridge: Cambridge University Press, 2008).

Massimi, Michela, and Angela Breitenbach (eds.), *Kant and the Laws of Nature* (Cambridge: Cambridge University Press, 2017).

Mayr, Ernst, *The Growth of Biological Thought: Diversity, Evolution, and Inheritance* (Cambridge, MA: Belknap Press, 1982).

McLaughlin, Peter, 'Transcendental Presuppositions and Ideas of Reason', *Kant-Studien*, vol. 105 (4) (2014), 554–557.

McRae, Robert, 'Kant's Conception of the Unity of the Sciences', *Philosophy and Phenomenological Research*, vol. 18 (1) (1957), 1–17.

Meier, Georg F., *Auszug aus der Vernunftlehre* (Halle: Gebauer, 1752).

Menegoni, Francesca, *Finalità e scopo finale nelle introduzioni alla kantiana 'Critica del Giudizio'*, *Verifiche*, vol. 17 (1988), 327–351.

Mensch, Jennifer, *Kant's Organicism: Epigenesis and the Development of Critical Philosophy* (Chicago, IL: University of Chicago Press, 2013).

Messina, James, 'Kant's Necessitation Account of Laws and the Nature of Natures', in M. Massimi and A. Breitenbach (eds.), *Kant and the Laws of Nature* (Cambridge: Cambridge University Press, 2017), 131–149.

Møller, Sofie, *Kant's Tribunal of Reason: Legal Metaphor and Normativity in the Critique of Pure Reason* (Cambridge: Cambridge University Press, 2020).

Mudd, Sasha, 'Rethinking the Priority of Practical Reason in Kant', *European Journal of Philosophy*, vol. 24 (2016), 78–102.

Murphy, J.G. 'The Highest Good as Content for Kant's Ethical Formalism', *Kant-Studien*, vol. 56 (1) 1965, 102–110.

Neiman, Susan, *The Unity of Reason: Re-Reading Kant* (New York: Oxford University Press, 1994).

Nuyen, T.A., 'On Interpreting Kant's Architectonic in Terms of the Hermeneutical Model', *Kant-Studien*, vol. 84 (2) (1993), 155–166.

Nuzzo, Angelica, *Kant and the Unity of Reason* (West Lafayette, IN: Purdue University Press, 2004).

O'Neill, Onora, 'The Public Use of Reason', *Political Theory*, vol. 14 (4) (1986), 523–551.

O'Neill, Onora, *Constructions of Reason* (Cambridge: Cambridge University Press, 1989).

O'Neill, Onora, 'Constructivisms in Ethics', *Proceedings of the Aristotelian Society*, vol. 89 (1) (1989), 1–17.

O'Neill, Onora, 'Vindicating Reason', in P. Guyer (ed.), *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press, 1992), 280–308.

Pasternack, Lawrence 'The Development and Scope of Kantian Belief: The Highest Good, the Practical Postulates and the Fact of Reason' *Kant-Studien*, vol. 102 (3) (2011), 290–315.

Paulsen, Friedrich, *Immanuel Kant, Sein Leben und seine Lehre* (Stuttgart: Frommans, 1899).

Philonenko, Alexis, 'L'antinomie du jugement téléologique chez Kant', *Revue de métaphysique et de morale*, vol. 82 (1977), 12–37.

Pozzo, Riccardo, 'Prejudices and Horizons: G.F. Meier's Vernunftlehre and its Relation to Kant', *Journal of the History of Philosophy*, vol. 43 (2) (2005), 185–202.

Proops, Ian 'Kant's Legal Metaphor and the Nature of a Deduction', *Journal of the History of Philosophy*, vol. 41 (2), 209–29 (2003).

Rang, Bernhard, 'Zweckmässigkeit, Zweckursachlichkeit und Ganzheitlichkeit in der organischen Natur. Zum Problem einer teleologischen Naturauffassung in Kants "Kritik der Urteilskraft"', *Philosophisches Jahrbuch der Görresgesellschaft*, vol. 100 (1993), 39–71.

Rawls, John, 'Kantian Constructivism in Moral Theory', *The Journal of Philosophy*, vol. 77 (9) (Sep. 1980), 515–72.

Reath, Andrews, *Agency and Autonomy in Kant's Moral Theory* (Oxford: Clarendon Press, 2006).

Riehl, Alois, *Der philosophische Kritizismus,* vol. 1 (Leipzig: Wilhelm Engelmahn, 1924).

Roe, Shirley A., *Matter, Life, and Generation. Eighteenth-Century Embryology and the Haller-Wolff Debate* (Cambridge: Cambridge University Press, 1981).

Salvucci, Pasquale, *L'uomo di Kant* (Urbino: Argalia, 1975).

Scaravelli, Luigi, *Scritti kantiani* (Florence: Nuova Italia, 1968).

Schönecker, Dieter, *Kants Begriff transzendentaler und praktischer Freiheit* (Berlin: De Gruyter, 2005).

Schopenhauer, Arthur, 'Kritik der kantischen Philosophie. Anhang', in P. Deussen (ed.), *Sämtliche Werke*, vol. 4 (Munich: R. Piper, 1924).

Silber, John R., 'The Metaphysical Importance of the Highest Good as the Canon of Pure Reason in Kant's Philosophy', *Texas Studies in Literature and Language*, vol. 1 (2) (1959), 233–244.

Silber, John R., 'The Importance of the Highest Good in Kant's Ethics', *Ethics*, vol. 73 (3) (1963), 179–197.

Sloan, Phillip R., 'Performing the Categories: Eighteenth-Century Generation Theory and the Biological Roots of Kant's A Priori', *Journal of the History of Philosophy*, vol. 40 (2) (2002), 229–253.

Smith, Norman Kemp, *A Commentary to Kant's Critique of Pure Reason* (New York: Humanities Press, 1962).

Stadler, August, *Kants Teleologie und ihre Erkenntnistheoretische Bedeutung* (Berlin: Dümmler, 1874).

Stadler, August, *Die Grundsätze der reinen Erkenntnisstheorie in der kantischen Philosophie* (Leipzig: Hirzel, 1876).

Strawson, Peter F. , *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason* (London: Routledge, 1966).

Sturm, Thomas, *Kant und die Wissenschaften vom Menschen* (Paderborn: Mentis, 2009).

Switzer, Adrian, 'The Traditional Form of a Complete Science: Baumgarten's Metaphysica in Kant's "Architectonic of Pure Reason"', *Philosophica*, vol. 44 (2014), 149–164.

Timmermann, Jens, 'The Unity of Reason—Kantian Perspectives', in Simon Robertson(ed.), *Spheres of Reason* (Oxford: Oxford University Press, 2009), 183–198.

Tonelli, Giorgio, *Kant's Critique of Pure Reason within the Tradition of Modern Logic*, edited by D.H. Chandler (Zurich: Olms, 1994).

Vaihinger, Hans, *Commentar zu Kants Kritik der reinen Vernuft, I* (Stuttgart: Speman, 1881).

Walsh, William Henry, *Kant's Criticism of Metaphysics* (Edinburgh: Edinburgh University Press, 1975).

Wartenberg, Thomas E., 'Reason and Practice of Science', in Paul Guyer (ed.), *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press, 1992), 228–248.

Weldon, Thomas Dewar, *Kant's Critique of Pure Reason*, 2nd ed. (Oxford: Clarendon Press, 1958).

Weil, Eric, *Problèmes kantiens* (Paris: Vrin, 1970).

Willaschek, Marcus, 'The Primacy of Practical Reason and the Idea of a Practical Postulate', in Andrews Reath and Jens Timmermann (eds.), *Kant's Critique of Practical Reason: A Critical Guide* (Cambridge: Cambridge University Press, 2010), 168–198.

Willaschek, Marcus, 'Must We Believe in the Realizability of Our Ends? On a Premise of Kant's Argument for the Postulates of Pure Practical Reason', in Thomas Höwing (ed.), *The Highest Good in Kant's Philosophy* (Berlin: De Gruyter, 2016), 223–244.

Wilson, H., and G. Zöller (2007), 'Of the Different Races of Human Beings', in I. Kant (author) and R. Louden and G. Zöller (eds.), *Anthropology, History, and Education*. The Cambridge Edition of the Works of Immanuel Kant. (Cambridge: Cambridge University Press, 1775), 82–97. doi:10.1017/CBO9780511791925.007

Wolff, Christian, *Vernünftige Gedanken von Gott, der Welt, und der Seele der Menschen, auch allen Dingen überhaupt, zu besserem Verstande und bequemerem Gebrauch derselben* (Frankfurt am Main: Andrea Verlag, 1724).

Wolff, Robert Paul, *Kant's Mental Activity: A Commentary to the Transcendental Analytic of the Critique of Pure Reason* (Oxford: Oxford University Press, 1963).

Wood, Allen, 'Constructions of Reason: Explorations of Kant's Practical Philosophy', *The Philosophical Review*, vol. 101 (1992), 647–650.

Yovel, Yirminiahu, *Kant and the Philosophy of History* (Princeton, NJ: Princeton University Press, 1980).

Ypi, Lea, 'Commerce and Colonialism in Kant's Philosophy of History', in Katrin Flikschuh and Lea Ypi (eds.), *Kant and Colonialism: Historical and Contemporary Perspectives* (Oxford: Oxford University Press, 2014), 99–126.

Ypi, Lea, 'On Revolution in Kant and Marx', *Political* Theory, vol. 42 (3) (2014), 262–287.

Zammito, John H., '"This Inscrutable Principle of an Original Organization": Epigenesis and "Looseness of Fit" in Kant's Philosophy of Science', *Studies in History and Philosophy of Science*, vol. 34 (2003).

Zammito, John H., 'Kant's Persistent Ambivalence towards Epigenesis, 1764–1790', in Philippe Huneman (ed.), *Understanding Purpose: Kant and the Philosophy of Biology* (New York: University of Rochester Press, 2007), 51–74.

Zammito, John H., 'Epigenesis in Kant: Recent Reconsiderations', *Studies in History and Philosophy of Sciences*, vol. 58 (2016), 85–97.

Zuckert, Rachel. E. 'Empirical Scientific Investigation and the Ideas of Reason', in M. Massimi and A. Breitenbach (eds.), *Kant and the Laws of Nature* (Cambridge: Cambridge University Press, 2017), 89–107.

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