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Formerly "Picture of the Month"

July-August 2014

The Rational, the Moral, and the General: An Exploration

Part 3: Approximating Ideas – Towards Critical Contextualism



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The dilemma with general ideas The situation is paradoxical: never before in the history of mankind have science and professionalism played a more important part, yet we experience what I see as a deeply seated rationality crisis. It has become unclear what rational practice means and how it can be secured. There is a need to bring the normative-ethical dimension back into our conception of "practical reason" (cf. Kant, 1786; reviewed in Ulrich, 2011b), but also to pay more than just lip service to the art of "interconnected thinking" (cf. Vester, 2007; reviewed in Ulrich, 2005).

Faced with this challenge, the present series of explorations is to give us a chance to discuss such fundamental issues. No claim to have "the" solutions is involved – quite the contrary: there are, as I think I made clear in the earlier parts, no solutions that would at the same time be theoretically sufficient *and* practicable. All we can hope to achieve is a somewhat deeper understanding of the role of a few very fundamental ideas such as the moral idea, the systems idea, and the idea of rationality in general, for critical thought and reflective practice. (I prefer to say "deeper" rather than "better" as there is no guarantee of improvement, although I realize "deeper" may equally be too ambitious and may even sound presumptuous; however, no such presumption is intended, on the contrary, a good portion of humility is indicated in the face of the limitations of human reason and that is what I mean by a "deeper" understanding.) What is the role of such general ideas in systematic thought? How can we understand them so that despite their general and abstract nature, they could become guides for practice?

Overview: where we stand In *Part 1* of the series, we considered the basic ties between the rational, the moral, and the general and then drew on this introductory reflection as a basis for better understanding the difficulties of discourse ethics, not to say its failure, in trying to propose a practicable model of discursive moral justification of norms (and thus of the normative content of practical claims). We concluded that its operationalization is

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Note: This is the third part of a series of exploratory essays on the role of general ideas, such as particularly the moral idea, in rational thought and action as seen from different vantage points. The first, introductory part appeared in the *Bimonthly* of September-October 2013, the second in the *Bimonthly* of January-February 2014.

bound to break down in practice, as it offers no way to reconcile the conflicting demands of reason and practice. Or, as I put it in that first part, it does not support professionals and decision-makers in *managing the tension* between the general (a theoretical idea) and the particular (a practical reality) in the moral, in rationally defensible ways. Rational practical discourse is not the same as rational practice. Given that discourse ethics represents the most systematic and sophisticated attempt to date to operationalize the ideas of rationality and morality and to bring them together on the basis of a *communicative (or discursive) turn* of the understanding of these ideas, such a result is rather alarming.

In *Part 2*, we therefore decided to return to Kant and examine the place he gives to general ideas in human cognition. Kant remains one of the most fundamental and thoroughgoing thinkers of all times about reason and morality, so that we may perhaps still learn from him. As earlier, in the second part of the parallel "Reflections on reflective practice" series, I had offered a detailed analysis and discussion of Kant's conception of practical reason, we could in this present series focus on Kant's basic notion of general ideas as indispensable "ideas of reason" (or also, as *a priori* ideas, transcendental ideas, problematic ideas, reflective ideas) and on gaining an overview of his system of theoretical and practical ideas.

Thus equipped, we are now ready in the present *Part 3* to turn towards more application-oriented issues, although my interest is still in the fundamental role of general ideas. In the first half of this third part, we are going to examine the basic dilemma and some related requirements of any attempt to employ general ideas of reason as guides for practice. We will try to understand, still theoretically arguing, what it might mean at least to *approximate* the intent of general ideas in practice; Kant will still be our guide. The second half will then turn to some rather elementary *heuristic* conjectures as to how the thus gained understanding might be translated into practice. By "heuristic" principles I mean guidelines that, although they can be grounded in philosophical considerations of the kind we undertake them in these essays, can only be meaningfully validated in practice and individually, in terms of what difference they make to our "applied" reasoning. What matters for heuristic considerations is not how sophisticated they look but whether they can make a difference in practice; whether this is so, only practice (and their on-going development and refinement *through*

practice) can show, which also implies that their practical relevance remains to be tested and experienced in *individual* practice and to some extent will remain a personal matter or, as Polanyi (1958, 1966) puts it, a matter of partly "tacit knowledge." Accordingly disappointing such considerations are bound to be from a scholarly point of view, as they cannot be argued as rigorously as philosophical ideas can and should. When it comes to heuristics, we have to dare to be imperfect and merely approximate, and even to fail, no less than all practice of reason is bound to be imperfect and may fail at times. The explicitly explorative and tentative character of the present series of essays is meant to also give room to such merely heuristic considerations.

In quest of practical reason Not only philosophical reflection about ultimate speculative questions but also everyday applied argumentation depends for its cogency on providing sufficient reasons. "Sufficient reasons" consider all the conditions on which a claim depends for its meaning and validity, as well as all the consequences it may have if it is used as a basis for practical action. Sufficient reasons are in this double sense complete reasons; they take into account all conceivably relevant circumstances on which the outcome of decisions and actions depends, and all the concerns by which we judge the consequences.⁸⁾ But as we learned from Kant in Part 2 (see Ulrich, 2014a, p. 2), the quest for completeness *on the side of the conditions* – that is, in the context of practical action, all the assumptions (circumstances and concerns) that condition what we see as rational action – is bound to remain an ideal; for the totality of conditions is itself unconditioned (i.e., absolute) and as such exceeds all possible knowledge. A similar difficulty applies *on the side of the consequences*, in that any consequences we consider may entail further long-term consequences and side-effects that we cannot endlessly explore. Moreover, the further such effects reach into the future, the less certain our anticipations will usually be. In short, the requirement of "sufficient reasons" refers us to conditions and consequences beyond the particular real-world aspects that we can consider empirically, which is only a different way to say that they entail reliance on *general* ideas or principles.

We thus face a dilemma: We need ideas because they lead us *beyond the limitations* of our always particular and fragmentary knowledge and appreciation of relevant conditions and consequences. Yet it is precisely because they take us beyond these limitations that we cannot easily say what

they mean in real-world contexts of argumentation and action. Even more difficult is it to justify the validity of whatever meanings we attach to them in a specific context. How, then, can we employ them productively, so that they might help us to bridge the gap between the totality of circumstances that sufficient argumentation would need to consider in principle and the particular contexts of experience and concern that argumentation can actually consider in practice?

To be sure, we can take the easy way out and choose to arbitrarily break off the process of reasoning whenever we find it convenient or necessary to do so. Often enough, *everyday constrains* of time and resources – the needs and opportunities of the day, as it were – prompt us to choose this option. Moreover, we all have a certain egocentric tendency, in that we tend to see and judge things from the perspective of our own past experiences and current concerns. Since the latter are shaped by the former, the contexts that we take to be relevant tend to be determined by *personal or collective boundaries* of current interest and concern. But allowing us to be conditioned by the opportunities and concerns of the day will do little to resolve the dilemma. Arbitrariness and topicality do not go well with rationality. How rational (or reasonable) is it to judge and argue on the basis of conditions and /or consequences that arbitrarily remain unconsidered, unexplained and unjustified or which, inasmuch as they are considered, are judged merely on the basis of one's current concerns and resources? A better approach might try to carefully make ourselves aware of this argumentative gap between experience and reason, and to somehow learn to handle it productively so that we could at least "approximately" do justice to both. This indeed appears to be the solution that Kant has in mind when he describes the use of ideas in these words:

[Ideas of reason] contain a certain completeness to which no possible empirical knowledge ever attains. In them reason aims only at a systematic unity, to which it seeks to *approximate* the unity that is empirically possible, without ever completely reaching it. (Kant, 1787, B596, emphasis added)

***Fourth intermediate reflection:
On "approximating" ideas***

Two initial conjectures We have understood that ideas of reason as Kant understands them are to guide us towards a unity and completeness of thought that reaches beyond what we can consider and appreciate in practice.

It follows that in practice – whether in research practice, professional practice or everyday practice – we can at best hope to "approximate" such a quality of thought as reason would demand it. This situation suggests two immediate conjectures to me.

About "approximate" reasonableness First, abstract and difficult as Kant's demonstration of the role of "transcendental" ideas of reason may appear at times, isn't it encouraging that his notion of reasonableness is not quite as remote from everyday life, or even irrelevant to it, as one might think at first. Indeed, isn't such "*approximate*" *reasonableness* really what we mean in everyday life when we demand "reasonable" thinking and conduct from others, so that we can come to some practical conclusion and move on? Under real-world conditions of imperfect rationality, it certainly appears reasonable to renounce perfection in the form of theoretically sufficient (i.e., complete) reasons in favor of striking a balance between the demands of reason and those of practice, between what rational argument and action would strictly speaking require and what pragmatic decision-making and implementation suggest. Kant would hardly object to such common sense. Rather, he would admonish us that in order to find such *approximate* compromises, and even more so to be able to judge their quality as *reasonable* approximations, we first need to understand what those demands of reason mean in any specific situation. He would insist that we be clear about the ideas that guide us and the way they inform our claims to reasonableness.

There is no "direct" approach As a second immediate reflection, it seems to me what Kant had in mind is similar to what in my work on critical systems thinking (CST) and critical systems heuristics (CSH) I describe in the terms of an unavoidable, but unattainable, *quest for comprehensiveness*. Reason cannot renounce its own insight that sufficient reasons in all matters theoretical and practical depend on knowing and considering all conceivably relevant circumstances. Or, as systems practitioners put it in (I fear) philosophically somewhat sloppy language (I'll nevertheless adopt it here), to judge the quality of any proposition one has to look at the "whole system" (which from a perspective of pragmatic rather than pure practical reason can only mean the whole *relevant* system). But then, reason also cannot ignore the insight that attaining comprehensiveness is not "empirically possible," to use Kant's formulation. It's not that we should not try, or that we may not

actually come close to the ideal sometimes; the point is, rather, that we usually have no "direct" way of coming close to it and knowing how close we have come, as there is no operational measure of comprehensiveness. I say "usually" because there are exceptions; the examples of mathematical induction and other mathematical methods of approximation (e.g., infinitesimal calculus) come to mind. They are "direct" methods of approximation inasmuch as they can proceed according to defined procedures that make sure that each step is indeed an approximation, although the endpoint is never reached.

As an example of an "indirect" though still scientific approach, meteorologists can tell us it is likely to rain tomorrow, but they can't and won't usually claim they know for sure, as they know very well that they don't have sufficient reasons to guarantee their forecast. (Sometimes they try to resolve the problem by indicating probabilities for the forecast such as "there is a 60% probability that it will rain tomorrow," but again, they will not and cannot guarantee such a forecast.) Conversely, the fact that their forecasts often turn out to be accurate does not imply they had theoretically sufficient reasons. (Everyone will occasionally predict rain accurately, but it might be due to chance or rules of thumb rather than sufficient reasons.) For practical purposes, though, the simulation models on which meteorological forecasts are based today can very well be described as an efficient "indirect" approach to (approximately sufficient) comprehensiveness. Although it does not supply theoretically sufficient reasons for any specific forecast, and although there is no operational measure in advance of how far it is from accuracy, statistically speaking it does often achieve useful accuracy and reliability for practical purposes. The snag is that from this rather good statistics of success we cannot infer the accuracy and reliability of tomorrow's forecast, which perhaps matters to us particularly (say, in the case of a gale warning or flood alert, or because our holiday begins). Even so I think it is fair to say that applied meteorology has found ways to "approximate" the quest for comprehensiveness *reasonably* well – literally so, in that the limitations of its "indirect" approach to approximation are well reasoned and clear.

The situation is a bit more difficult in those fields of applied research and professional intervention, say, in political and corporate decision-making, where, if things go wrong, undesired outcomes may affect many people in

morally relevant ways, inasmuch as their personal integrity and their right to fair treatment is at stake and adverse consequences are due to human action or inaction rather than to nature. Think of the evaluation of the safety and social impacts of new technologies, or of public health matters or medical interventions, or even of professional misconduct. To be sure, to some extent meteorologists also face such situations, say, in the case of natural disasters they are expected to foresee; but we do not usually associate failures of meteorological prediction with moral failures. It is true, however, that due to the progress of applied science and technology, the dividing line between "phenomena of nature" and "consequences of human action" is becoming increasingly difficult to draw. It is the latter which I have in mind here.

It is characteristic of such situations that it is less clear – and often controversial – what is to be considered a "reasonable" approximation of rational practice, as the normative side of things gains importance. The point is, in such situations we need to "approximate" not only sufficient reasons for predicting and handling nature but also for identifying and managing the value implications of how we handle the situation. These often manifest themselves in the form of *distributional issues*: Who is to get the benefits and who has to bear the costs and risks or other disadvantages? With regard to such normative questions, too, the quest for "sufficient reasons" remains a meaningful ideal, but what it means and how it can be approximated becomes less clear. The effort we invest in trying to investigate and define all relevant circumstances and concerns will usually be a question of available time and resources as compared to how much the outcome or the risks and costs at stake matter to those involved or concerned, and there is nothing wrong with that. Situation-specific aspects of feasibility may also act as constraints; for example, in the case of issues with long-term implications (e.g., in environmental and energy policy), it is not always feasible to get all those concerned involved – children and those not yet born usually can't get involved. But the more important point is that *no matter how much effort we invest* in approximating the ideal, it is dangerous to assume we actually come close to it. Many poor decision outcomes have their origin in this assumption, rather than in a lack of sufficient effort. In the terms of CSH: "The quest for comprehensiveness is a meaningful *effort* but not a meaningful *claim*." (Ulrich, 2012a, p. 1236; 2012b, p. 1314; similarly 2013a, p. 38)

Three essential ideas Systems thinking is for me the messenger rather than the culprit of the difficulty we face – the fact that for successful and responsible action, comprehensive consideration of all possibly relevant circumstances is both necessary and impossible. The difficulty is not specific to systems thinking, it constitutes an integral part of reasonableness in all fields of systematic thought and action. Rather than causing the difficulty, systems thinking can be used in handling it. It can help us understand the whole-systems implications of our claims and thus can serve a critical purpose *against* insufficiently questioned claims to comprehensiveness and rationality. Thus-understood systems thinking becomes *critical* systems thinking – a tool for dealing carefully with the situation. Once understood in this manner, systems thinking becomes indispensable in a way that differs markedly from the technocratic ring it has to many people. The "no-matter-how-much" point made above then translates into a challenging new imperative for systems thinkers: if systems thinking is to make any sense, that is, to ensure a gain of rationality, we get *no holiday from critical systems thinking*. We do not really need a "systems approach" unless we are willing to take into account the whole-systems implications of our claims.

In the same vein, a scientific approach isn't really needed unless we are willing to consider, within the mentioned constraints, all possible sources of error. Likewise, moral discourse misses the mark unless we are prepared to consider the situation of everyone concerned equally. The basic demand of reason that we have described in terms of the quest for comprehensiveness remains the same. Facing it is a relevant idea regardless of whether we seek to ground rational practice mainly in science or moral discourse or systems thinking, or in some careful combination of them. The language and methods we use may change, but the methodological challenge remains. It amounts to what I call the *critical turn*, that is, a systematic methodological shift of focus from the quest for comprehensiveness to a more practicable – and critically tenable – quest for dealing carefully with the inevitable *lack* of comprehensiveness in all our knowledge, understanding, and rationality (see, e.g., Ulrich, 1983, pp. 21, 224f, 230, 260 and passim; 1996, p. 11f; 2001, p. 23f). This is the basic concern that inspired my work on critical systems heuristics (CSH), but it is an equally relevant concern in the fields of applied science, professional intervention, reflective practice, and moral discourse.

In this discussion of the nature and role of general ideas for rational practice, we may thus add the *systems idea* to our list of general ideas of reason, along with the ideas of rationality and morality on which we have focused so far. Ever since *Critical Heuristics*, these three ideas constitute for me the most fundamental and essential ideas of practical reason (cf. Ulrich, 1983, e.g., pp. 217-225, 260-262, 264). And if you ask me what precisely I mean by each of these three essential ideas, I would invite you to find out and decide for yourself what difference they are to make *to you*, so that they can best orient your thought and action and also so that you can always share your motives and reasons with all others concerned rather than needing to conceal them.⁹⁾

As a starting point for such reflection, it will be quite sufficient to understand each of the three concepts in the most basic and general sense you can think of, for instance (my personal notions, to be read as only one among many meaningful readings of the three ideas):

- the *systems idea*, the notion of a whole of interrelated parts that cannot be understood in isolation, as asking us to always think together that which belongs together;
- the *idea of rationality*, the notion of arguability of claims in terms of logical consistency and pragmatic cogency as essential (though not necessarily the only) sources of accuracy, reliability, and relevance, as asking us to always question the sources of guarantee on which we rely in our thinking; and
- the *moral idea*, the notion of an unconditional good that could orient human thought and action, as asking us to always act so that if others acted the same way, we could still agree and expect that improvement would result.

These three ideas, then, are for me the essential general ideas that I associate with Kant's ideas of reason. They are, as the little exercise above (of reflecting on what they mean to you) is meant to show, capable and in need of interpretation and always remain so. To be sure, whatever personal ideals or visions we may associate with such general ideas, it is equally still clear that in practice we can at best hope to approximate these ideals or visions *more or less*, often enough with the emphasis on less. They can, as I tried to make clear, orient our reflection but not justify our claims. What for practical purposes we take to amount to sufficiently comprehensive, rational, and moral considerations and arguments will in the end always remain a *go-between*, a compromise between the ideal and the actual state of affairs or, as Kant puts it in the quote above, between what reason demands of us

and what is "empirically possible" to us in real-world contexts of argumentation and action.

The pragmatic tradition of thought When Kant writes about general ideas of reason that "in them, reason aims only at a systematic unity, to which it seeks to approximate the unity that is empirically possible" (B596), he gives us an important hint but it is really only a hint. It does not tell us much about *how to do it*, that is, how we might somewhat *systematically* approximate that unity and integrity of our reasoning which is empirically possible. All it tells us is that we *somehow* need to learn to *manage the tension* between the two poles of the unconditional and the empirical, the demands of (pure) reason and those of (imperfect) practice. Interestingly though, to do justice to Kant and also to make it clear that the present effort need not start from scratch but is embedded in a well-developed tradition of thought, one of the earliest mentionings of the philosophical relevance of *pragmatism* of which I am aware in modern "Western" philosophizing can be found in Kant's *Critique of Pure Reason*. It must have inspired the "American Kant," Charles Peirce, to conceive of his work on the logic of inquiry in terms of "pragmatism," although we have no secure knowledge of this assumption apart from the fact that he had studied Kant extensively. In one of the late sections of the *Critique*, Kant beautifully explains his understanding of the *practical interest of reason* as it emerges from the first *Critique*, the critique of theoretical reason, with these words:

Reason is impelled by a tendency of its nature to go out beyond the field of its empirical employment, and to venture in a pure employment, by means of ideas alone, to the utmost limits of all knowledge, and not to be satisfied save through the completion of its course in [the apprehension of] a self-subsistent systematic whole. Is this endeavour the outcome merely of the speculative interests of reason? Must we not rather regard it as having its source exclusively in the practical interests of reason?

[...]

By 'the practical' I mean everything that is possible through freedom. When, however, the conditions of the exercise of our free will are empirical, reason can have no other than a regulative employment in regard to it, and can serve only to effect unity in its empirical laws.... In this field, therefore, reason can supply none but *pragmatic* laws of free action, for the attainment of those ends which are commended to us by the senses; it cannot yield us laws that are pure and determined completely a priori (Kant, 1787, B 828).

That is to say, practical reason is "pragmatic" whenever it includes empirical considerations and thus is not "pure" – the normal case rather than the exception (the latter being Kant's examination of the limiting case toward which practical reason leads us if we relentlessly pursue its intent; on the implications of this recognition for the development of a critical pragmatism,

see Ulrich, 2006b, pp. 58-73). It's only a brief and insufficient hint at the idea of a pragmatic employment of the ideas of reason that Kant offers here, expressed in passing as it were; and moreover it is only one of two mentionings of the term "pragmatic" of which I am aware in Kant's critical writings; but it was to prove influential. The other mentioning is in a later passage of the *Critique* about the "hypothetical" use of reason, where Kant explains his notion of what he calls a *pragmatic belief* as follows:

Once an end is accepted, the conditions of its attainment are hypothetically necessary, This necessity is subjectively, but still only comparatively, sufficient, if I know of no other conditions under which the end can be attained. On the other hand, it is sufficient, absolutely and for everyone, if I know with certainty that no one can have knowledge of any other conditions which lead to the proposed end. In the former case my assumption and the holding of certain conditions to be true is a merely contingent belief; in the latter case it is a necessary belief. [For example:] The physician must do something for a patient in danger, but does not know the nature of his illness. He observes the symptoms, and if he can find no more likely alternative, judges it to be a case of phthisis. Not even in his own estimation his belief is contingent only; another observer might perhaps come to a sounder conclusion. Such contingent belief, which yet forms the ground for the actual employment of means to certain actions, I entitle *pragmatic belief*. (Kant, 1787, B852)

In *The Metaphysical Club*, a careful biographical history of American pragmatism, Menand (2001, p. 227) cites this latter passage. Personally, I prefer to think of the former rather than the latter passage as Peirce's main source of inspiration, or in any case as a source for my ideas on "critical pragmatism," as it locates the emergence of pragmatism closer to Kantian practical philosophy than to the problematic means-end scheme of later positivist thought, a misreading that an isolated quote of the second passage could cause (for my critique of the means-end scheme, see Ulrich, 2011a, pp. 13-18).

I have not seen any references to these two passages in other accounts of American pragmatism. Accordingly unsurprising it is that so little appears to be known about this first appearance of modern pragmatism in Kant, and thus also about the *pragmatic side of Kant's critical reasoning*. Not even the unsurpassed source of information about the history of terms, the complete edition of the *Oxford English Dictionary*, mentions Kant in its detailed accounts of the terms "pragmatic," "pragmatica," "pragmatical," and "pragmatism." Nevertheless, through the work of Peirce and his later colleagues and successors, these two brief hints of Kant were to prove so incredibly influential in the history of modern thought!

Managing the problem of practical reason: learning to manage the tension

between ideas and practice I suspect that the philosophically unresolved *problem of practical reason* – of how reason can become sufficiently practical so as to secure reasonable practice – is indeed usefully understood in pragmatic terms of managing the tension between the demands of reason and those of practice, and that a proper understanding of the role of general ideas is essential to that end. "Managing the tension" means that we do not one-sidedly promote either reason or practice at the expense of the other but rather, try to *bring reason and practice together*. Yet all the solution attempts of which I am aware tend to champion one side only, usually (in moral theory) that of reason. The view preferred here implies that there is and can be no such one-sided solution, and that means: no complete theoretical solution; for that would mean to miss the core of the problem, which is that the two sides have to learn to live together anew in each specific situation.

"Managing the tension," then, may not be an altogether bad idea. Again, though, it's easier said than done: How are we supposed to find reasonable positions in between, that is, viewpoints and proposals for action that would at least partly reconcile the demands of reason and practice? Further, once we think we have found them, how do we know, that is, how can we judge their quality and argue them? Kant, at least at first sight, leaves us rather alone with this sort of application-oriented questions. Understandably so, as he was busy enough to lay the "transcendental" foundations of reason's self-tribunal and to work out the insights it yielded into the nature and limitations of reason. Fortunately though, we do not have to start all over from where Kant left us, thanks to the work of the American pragmatists (Peirce, James, and Dewey) who took up Kant's hint at the option of a "pragmatic" use of the ideas of reason and developed a rich tradition of thought from which we can draw today (compare Kant, 1787, B828 and Ulrich, 2006b, p. 58f; as well as footnote 8; I have also explained the roots of my work in philosophical pragmatism, along with Kantian practical philosophy, in Ulrich, 2001, esp. pp. 8-14). Even so, I propose to start from a somewhat more basic beginning, given that it seems to me that the critical aim of Kant's understanding of a "critique of reason" has been somewhat lost out of sight in the pragmatist tradition of thought. Pragmatism will play a central role in the continuation of the "Reflections on reflective practice" series but in the present exploration of the meaning of ideas, I prefer to venture into somewhat less charted terrain.

To prepare us a bit better – ventures into uncharted or unfamiliar terrain always risk failing –I suggest we briefly consider the moral idea in a bit more detail, as it is the one general idea of reason that has been in the center of many *Bimonthly* essays of the past few years and thus may be familiar to many readers, even more so than the systems idea. It will be useful in the further course of our "approximation" attempt to have in mind this major example. In what way is the moral idea a *mere* idea of reason, and a general one for that; what difficulties and chances are involved in applying it, wherein consists its power?

The moral idea, a powerful heuristic fiction More obviously than the two other essential ideas, the moral idea embodies a normative core. It describes not just a dry methodological requirement of rationality such as the search for systematic unity of thought – a requirement one may like or not but which is simply an indispensable ingredient of cogent argumentation – but also a remarkable, perennially inspiring vision of the human world as it *could* be. The fact that it describes a utopia rather than a normal state of matters does not invalidate it, however. Rather the contrary; it makes it the most fundamental and essential idea of all in the realm of practical reason. We cannot argue rigorously and systematically about practical questions without implying some well-defined ultimate standard of evaluation, a standard that is above all the divergent specific norms and values to which people adhere. The moral idea provides such a standard. Almost by definition it is highly abstract, given that it has to abstract from any specific norms, and that makes it difficult to use in support of specific claims. Even so, if we properly understand it as an indispensable idea of practical reason, we can still learn a lot from it about the quality of our practical reasoning, by examining our arguments and reasons in its light.

In the realm of the practical, the quest for *sufficient reasons* leads us to consider our *moral reasons*. Moral reasons inform not just the norms by which we evaluate things but also the facts we consider empirically relevant. *Norms* challenge that which is taken to be *normal*, including the facts considered relevant for understanding situations, therein lies their power. Norms can change "facts." Or, as I have put it in one earlier essay, moral reasons help us in "drawing the future into the present" (Ulrich, 2008c). Without the moral idea, we cannot think and argue rationally about empirical

contexts of action in the full sense of "rational practice," which includes that which is the case at present (the factual) *and* that which might or ought to be the case in future (the possible and desirable); that is, the theoretical-instrumental *and* the practical-normative dimension of reason.

In Kantian terms, the moral idea stands for the totality of the conditions that together would make possible a moral world (1787, B836f), *if* it were to become real at all. In this sense it is merely a *fiction*, one might say: a *projected* unity (1787, B675), but one we need for consistent and rigorous thinking about practical questions. Methodologically speaking, it serves a *heuristic* purpose in "drawing the future into the present," as I suggested above, by supplying a standard of practical reason towards which we can think, argue, and act, even though we can never fully live up to it. This heuristic fiction includes the notion that morality – or a morally good will – is *universal*, in the double sense that we owe it to all individuals and conversely, we must also demand it from all human agents. A *moral world* would consequently be a world in which all agents would in this sense be agents of good will and would act according to *universalizable* (or generalizable) norms or principles of action. This notion of a moral world is "only an idea" (Kant, 1787, B384f), but what a powerful heuristic fiction it is! As moral agents we are to adopt it as a guide for moral action *as if* it were real, quite regardless of how "realistic" or "unrealistic" it may be. *Moral agents will act as if they lived in a moral world.*

Two basic doubts As a last introductory consideration regarding the role and handling of general ideas, I propose we briefly consider two kinds of doubt that may come up at this stage, although perhaps less so with the moral idea than with the other two essential ideas. The first concerns the success of science in dealing with general ideas (a); the second, the role of domain-specific principles of critical practice (b).

Re (a): Science practice Some readers, especially those with a scientific background, may wonder whether we are not trying to reinvent the wheel here, given that science has long since found successful ways to approximate the quest for comprehensiveness and thus to be in control of its use of essential general ideas such as "causality," "laws" of nature, the "forces of nature" such as gravitation, the inertia of mass, the conservation of energy, the infinity of the universe, and countless others. To some extent this is

indeed so. Through its institutionalized processes of open discourse and critical review, science has found ways to implement the "indirect" approach, along with its recourse to mathematical methods that permit "direct" approximation of ideal endpoints. We can learn from this success. However, there are limits to the transfer of the methods and institutions of scientific criticism to other domains, especially when we compare the requirements of moral discourse to those of scientific discourse. In both domains it is essential that we keep the assumptions that inform people's views and proposals under constant review; but the ways to do this will differ, due to the different nature of scientific and moral judgment.¹⁰⁾

In comparison to moral discourse, the situation in scientific discourse is less complicated, for two main reasons. First, science benefits from the circumstance that for its purposes, an ultimate, impartial and unchanging arbiter is available in the form of *Nature* – nature with a capital N, understood as the sum-total (and ultimate unity) of all the phenomena and underlying "laws" and properties that make up the physical universe. Disputed claims can in principle (although in practice it is often a complicated and controversial matter) be subjected to Nature as the arbiter, as many times as desired, so as to test their accuracy and reliability. Second, there is usually a global community of researchers that is large enough, and in principle is unlimited, so as to ensure independent replication and review of research findings and conclusions (again a complicated matter that in practice remains prone to doubts and misuse). In moral discourse, by contrast, no impartial arbiter such as Nature is available, neither in principle nor in practice, and to the extent some individuals or groups of people claim to be such an arbiter, serious doubts are always indicated. The lack of an objective arbiter may explain why *moral theory* could in principle be an important source of orientation for moral practice, in replacement of Nature as it were. But of course, moral theory has its own difficulties, which have prevented it from being as relevant to practical people as it is to philosophers. In this respect the situation is not unlike that of scientific research practice and its relation to science theory; one can be a competent research practitioner in biochemistry and not know beans about science theory, just as one can still be a responsible moral agent without mastering the complexities and subtleties of moral theory. Even so, at least in principle such theoretical backing is more urgently lacking in moral practice than in research practice, due to the absence of Nature's arbitral role. In practice

though, it has proven more helpful in both domains to refer to the community of those interested as a critical instance – the *scientific community*, defined as the community of competent inquirers, in the case of research practice and the *moral community*, as the community of those concerned, in the case of moral discourse. Unfortunately, in the latter case it is less easy to define the relevant community and to find practical ways of getting it involved (think again of future generations in the case of environmental issues), quite apart from the fact that the moral community rarely amounts to a global audience of rationally motivated and good-willed agents such as the moral idea would require it. These differences explain why the search for theoretically defensible *and practicable* models of justification is not only more urgent but also more difficult in moral reasoning than it is in science.¹¹⁾

Re (b): Domain-specific principles Not only science but also diverse applied disciplines and fields of practice have developed pragmatic guidelines that appear to work well. Two well-known examples are the general principle of *primum non nocere* in medicine, that is, of making sure one doesn't cause harm in the first place, before attempting to do good; and the *precautionary principle* in environmental and developmental policy and other fields of practice, which shifts the burden of proof from those fearing that harm may be done to those claiming no harmful effects have been proven. Readers might wonder whether there is really a need for going into the difficult methodological issues to which our discussion of general ideas or principles points, given that such domain-specific guidelines appear to demonstrate successful cases in which the "direct" approach works. Haven't these principles proven to resolve such uncertainties as we associate them with the quest for comprehensiveness? I would argue that this is not so. Even if a general idea has been formulated and proven useful for a specific field of practice, this does not alter the core difficulty in applying general ideas, namely, that we need to interpret what they mean in the specific situation at hand. No general idea can tell us what we should take to be the relevant empirical and normative context for defining the circumstances ("facts") and concerns ("values") that matter, and how in their light we should decide what difference the idea should make. (For critical purposes, I define a "context" as the set of contextual assumptions, regarding both facts and values, on which a specific claim or argument depends, a topic to which I will turn in a moment.) Different concerned parties will have different views and interests

regarding relevant contexts, and no general idea can tell us what priorities should be assigned to these different perspectives.

Hence, while such guidelines provide valuable orientation, they do not supersede the need for interpreting and assessing the situation in their light. The issue of "sufficient reasons," particularly of sufficient moral reasons, reappears at this point, no less urgently than before. In fact, the more some general principle has proven to be relevant as a domain-specific guideline, the more we have to expect that its situation-specific interpretation and implementation will be controversial; for the way this is done will indeed make a difference. Controversies are a clear symptom that sufficient reasons are lacking; they can't be decided in a clear and sufficiently argued way, thus they tend to go on and impede productive action.

As a further observation, the more reliance on some guideline becomes a matter of course or even a standard procedure of competent professional conduct in a field, the less it will tend to fulfill its original critical function. Routine will creep in, along with references to special expertise and authority not available to all, and will determine how situations have to be seen and handled in its light. In this way the mentioned controversies can be overcome or avoided. But in questions of rational and moral practice, reference to routine and expertise are not good guides. What is rationally and morally defensible in the light of conflicting views and needs must always anew be unfolded in the situation itself, no amount of experience and no theory of rationality or of morality can tell us what the situation is and how it may differ from previously encountered situations. Accordingly important it remains that all those concerned are heard and their concerns are carefully identified and handled, and that the relevance and use of such guidelines in specific situations be kept under constant critical review, also in the light of such testimonies.

There is thus, again, no such thing as a direct and unambiguous application of general ideas or principles, even in their domain-specific variant. We may be very clear in our mind about how we understand the moral idea, but the moment we apply it to some context of application, its meaning becomes ambivalent and in need of interpretation, as it depends on how the situation is seen. One may indeed see its essential practical role in challenging us to clarify our view of the situation and to agree with others concerned about what it means to see the situation from a moral point of view. Inasmuch as

the moral idea is an essential idea that can make a difference, it is again to be expected that there will be different opinions as to what would be a moral handling of the situation. If we were to expect the moral idea itself to give us the answers, these would have to be predefined and so general that they could not do justice to different possible ways of seeing or experiencing a situation. In any case, such answers could not supersede the need for situation-specific clarification and argumentation; it is hard to see why and how such predefined answers should suit or silence everyone.

The same situation applies to all other general ideas. The systems idea, for example, cannot tell us in a predefined way what the relevant system to be considered is. The *primum non nocere* principle cannot tell us what specific forms of harm can occur in a situation and how we should weigh them, much less how we can avoid them. And so on. These are the essential matters that need to be clarified and unfolded in the situation itself. General ideas remind us this is so and they can give us some basic directions, but it is not their task to spare us the effort of careful thought and discourse. It follows that uncertainties and controversies are an intrinsic and meaningful part of the use of all general ideas of reason. Kant has made us understand why this must be so: it is because "the universal is [to be] admitted as problematic only, and is a mere idea." (Kant, 1787, B674). The systematic unity or integrity of thought that general ideas envisage is a hypothetical, anticipated unity only or, as we have put it above with Kant, a "projected unity":

The systematic unity (as a mere idea) is, however, only a *projected* unity, to be regarded not as given in itself, but as a problem only. (Kant, 1787, B675)

General ideas formulate problems, not answers. They tell us where our critical attention is needed, where arguments may deceive us or where critically reflective practice of research or intervention is indispensable. This is what Kant, as I understand him, means by "approximation."

The key concept, then, is *reflective practice*. In line with my understanding of "reflective practice," which is rather different from the mainstream concept of reflective practice as discussed by Schön (1983, 1987),¹²⁾ my basic approach to supporting reflective practice is in terms of *critical heuristics of social practice*, as distinguished from both a "critical theory of society" approach (Habermas, 1984) and a "transcendental" approach to the critique of practical reason. Despite the differences in question, it is obvious that critically-heuristic reflection owes much to these two approaches, as my

frequent references to the writings of Habermas and Kant betray.¹³⁾

*Fifth intermediate reflection:
Some heuristics for "critical contextualism"*

Some elementary heuristic conjectures In what follows, I would like to explore some basic heuristic considerations concerning a productive and critically reflecting use of general ideas of reason, so as to approximate their intent without sacrificing practicability (or conversely, so as to ensure practicability without giving up their intent). Heuristic considerations as I understand them stipulate frameworks or guidelines that, although based in philosophical and methodological reasoning, can prove their value only in practice. They become *critically-heuristic* frameworks or guidelines to the extent we succeed in translating such considerations into well-specified conceptual tools for critical purposes. The "translations" will not provide any specific answers to practical questions, but they should at least challenge us to specify and review our situation-specific views and concerns in the light of general ideas, whether on an individual basis (reflection) or by submitting them to the critique of others (discourse). In one word, they should be apt to support reflective practice. Whether and to what extent they do so cannot be decided theoretically but has to be tried and tested individually, which is to say, they need not prove equally helpful to all people. Within the context of the present discussion, we can thus define critically-heuristic devices as follows.

Definition: *Critically-heuristic devices* are conceptual tools that help us *approximate* an adequate, *situation-specific* use of *general* ideas of reason, such as the systems idea or the moral idea, through *reflective practice*, that is, by supporting processes of systematic reflection and discourse on the unavoidably imperfect understanding and use of the ideas in question.

I use the name "critical heuristics" as a convenient shorthand for such reflective and argumentative devices. In what follows I will focus on two rather elementary heuristic considerations that are not yet sufficiently worked out for operationalization as critically-heuristic guidelines, and accordingly also cannot claim to have proven their critical significance for many people. At this stage, they remain tentative and exploratory, but I associate with them a hope that they lend themselves to development into

critically-heuristic devices properly speaking. They are based in my professional life, in which I often had to deal with the diverging demands of reason and practice, particularly as I encountered them at the interface of science and politics. I tentatively call them the *argument space* approach and the *standpoint spotting* approach. The first focuses on the relationship between general ideas and contextual reflection, the second on critical self-reflection and patterns or movements of thought conducive to it. As I understand them, the two efforts are not independent; if well-conceived, they should support one another. Both are about managing multiple perspectives overtly and critically. Both also share a fundamental methodological core idea of all my work, which in the past ten years or so I have come to understand as "critical contextualism."

Definition: *Critical contextualism* is a reflective epistemological and ethical stance aimed at a critical handling of the standpoint-dependent, contextual assumptions that shape people's notions of what is true, right, and rational. It is useful to apply a critically contextualist stance in connection with general ideas of reason; critical contextualism then means a systematic process of exploring alternatively delimited situations in the light of the ideas in question. Critical contextualism serves a merely critical purpose; it aims not at justifying claims but rather, at avoiding untenable, because insufficiently qualified, claims.

In connection with the moral idea, for instance, a critically contextualist approach moves between the two limiting cases of *moral universalism* (i.e., moral is what holds universally for all rational agents of good will) and *moral contextualism* (i.e., moral is what a specific moral community considers right). Similarly, in connection with the systems idea, a critically contextualist approach moves between the two limiting cases of assessing systems rationality in terms of the immediate *system of interest* (i.e., rational is what serves the needs or interests of "the system" under consideration, e.g., a traffic system, a hospital, or a business company) vs. the *whole-systems implications* of such systems rationality for humanity as a whole (i.e., rational is what lays open, questions, and adequately manages the external effects of claims to rationality, e.g., on the regional economy or the global ecosystem).

It should not surprise us that the moral idea and the systems idea make similar demands on reflective practice, in the critically contextualist sense

just explained. Both confront us with the simultaneous necessity and impracticability of the quest for comprehensiveness; neither tells us how to handle these diverging requirements in ways that would at the same time be theoretically sufficient and practicable. In the terms of the present essay, both only allow for some reasonable *go-between*, a critically considered effort of "managing the tension" between what reason strictly speaking demands and what is empirically possible.

In the terms of CSH, a solution to the problem of practical reason that is not embedded in such a critically contextualist effort threatens to pervert the *critically heuristic purpose of systems thinking and of moral thinking*, respectively – of uncovering sources of suboptimization and of normative conflict – into a mere *heuristics of systems purposes*. It is then no longer *the "system"* (and the contextual assumptions constitutive of it, along with the normative implications these assumptions may have for all those concerned) which is considered *the problem*; instead, the problems *of* the system are now investigated and are taken care of. The point is, of course, that no singular standpoint, not even the most comprehensive systems or moral perspective, is ever sufficient in itself to validate its own implications. It follows that both systems thinking and moral reasoning, or the practical claims grounded in them, are rationally arguable inasmuch as they systematically reflect on their contextual assumptions and make them transparent to everyone concerned.¹⁴⁾

Remember, I define as "context" the set of contextual assumptions that determine what counts as relevant facts and values for judging a situation or changing it. In my published work I have often dealt with the critical handling of contextual assumptions (e.g., in my account of the open systems fallacy just mentioned in note 13, or in my framework for practical boundary critique), but only on a few occasions I have also referred explicitly to the underlying epistemological notion of critical contextualism (e.g., Ulrich, 2006b, pp. 70-74). The core concept of critical contextualism shares this fate with the other *idée fixe* that equally is driving my current work, the development of a framework of "critical pragmatism" for applied research and professional intervention. Although both concepts have been shaping my understanding of critical systems thinking and reflective practice all along, full awareness of their generic and fundamental nature beyond the field of systems thinking has only gradually emerged. I continue to work on the task

of grounding them theoretically (i.e., philosophically), as well as operationalizing them practically (i.e., pragmatically). The current series of exploratory essays on the role of "general ideas" is part of this endeavour, along with the "Reflection on reflective practice" series and many other *Bimonthly* articles. So let us now turn to the two announced heuristic considerations. They are really still quite tentative and certainly insufficient as measured by the methodological importance that I attach to the idea of critical contextualism. They are, indeed, of a merely exploratory nature, with no claim or ambition to amount to more than that.

Heuristic consideration #1: general ideas as "argument places" Earlier we characterized general ideas of reason as "ideal reference points" or "limiting concepts" towards which reason can orient itself (cf. Ulrich, 2014a, p. 7 and note 5). For example, if we follow Kant, the moral idea stands for the ideal of a global moral community in which people treat one another with equal respect for their individual dignity and freedom. Meanwhile we have considered the difficulty that such limiting concepts imply a comprehensiveness and unity of what Kant calls the understanding (= the empirical employment of the human intellect) that goes beyond what is empirically possible. It follows that it is between two limiting cases that a critical handling of general ideas can move and must find reasonable "approximations" of their intent: between taking for granted what is empirically given on the one hand and presuming to achieve what a general idea would imply on the other hand. Neither of these two extremes is acceptable, only *in-between* is the proper argumentative space for giving empirical and normative content to general ideas. The ideas themselves don't tell us much about what that content should be, they function as mere "argument places," blank spaces that need to be filled in with adequate situation-specific considerations and argumentation.

It is indeed difficult in this connection not to think of Wittgenstein's famous characterization, in the *Tractatus Logico-Philosophicus*, of the mathematical idea of a point in space and time:

"A point in space is an argument place." (Wittgenstein, 1922, Statement 2.0131, read as saying "A point in space is a place [or space] for an argument.")

The point is (*sic!*), a "point in space" is an idea that stands not for an empirical object but for a mere argument place, an argument to be worked out. We cannot conceive of a point without thinking of it as being located in

a space, although this space may be empty and ill-defined. Yet as a theoretical limiting concept, a point has no extension and thus does not itself occupy any space – it is the *fiction* of a space without extension. We need this fiction to define an exact location and to "argue" (or calculate mathematically) spatial arrangements such as, for example, the trajectory of a spacecraft or satellite that is to be launched into space and should reach a defined endpoint in orbit, say, an earth-synchronous orbit. Both the point to be reached and the (ideal) trajectory that leads to it remain, in principle, theoretical limiting concepts; however, mathematical (and based on it, physical) approximation may get us closer and closer to them, until it makes no practical difference whether we continue to get any closer or not. The difficulty in practice is to find out what it means in a specific context of application to come "sufficiently" close, so that the chosen approximation can be argumentatively defended. In this precise sense "ideas of reason" refer us to a need for argumentation and, because at the same time they do not tell us on which situation-specific empirical and normative considerations such argumentation is to rely, are usefully understood as "argument places." Conversely, it seems to me that the notion of argument places gains meaning by being related to the notion of ideas of reason. In heuristic terms, the two notions can thus support one another, in that each suggests reflective or argumentative processes that help to understand the other's situational meaning.

I would argue that all ideas of reason, whether mathematical, scientific or philosophical, function as such argument places, that is, as *spaces for situation-specific argumentation* (I'll consequently also speak of "argument spaces"). In addition they serve, as we just recalled above, as limiting concepts that offer us ideal reference points for reflection and argumentation. Combining these two uses, we can now say that ideas of reason stand for *both* a theoretical limiting case or endpoint of consequent reasoning *and* for an empirical argument space within which we have to try and approximate the limiting case, by filling in situation-specific content. As a limiting concept, a general idea is ideal but may be conceptually well-defined; as an argument space, it is real but indefinite and thus ill-defined:

Definition: A *general idea of reason* is a limiting concept that serves as a reference point for systematic reflection and argumentation. It stands not for an empirical object but rather, for an argument space, that is, a space for

argumentation that needs to be specified in terms of contextual assumptions.

Conversely, we can then define the notion of a general idea's argument space – the argument space we associate with an idea of reason – as follows:

Definition: The *argument space* of a general idea of reason is characterized on the one hand by a well-defined limiting concept that serves as an ideal reference point for reflection and, on the other hand, by an ill-defined (because indefinite) space of contextual assumptions that may range from assumptions describing the situation as it currently is perceived to assumptions describing it as it could (or should) be in the light of that ideal.

The notion of an "argument space" belonging to a general idea is similar to the notions of a "context" or "contextual assumptions," but it has the advantage of reminding us of the need for argumentation. So long as there is no argument, an argument space remains empty, whereas a context remains apparently given or taken for granted. In addition, the above definition should also remind us that unlike a "context," an argument space is not adequately determined except in combination with a defined general idea that is to serve as a reference point for critical reflection and discourse. In real-world practice, problems (say, moral questions) arise *in* a context; the context is (apparently) given and the task is to surface and challenge the contextual assumptions that are constitutive of it. An argument space, by contrast, only emerges *out of* a critical effort that is guided by some general idea of reason (such as the moral idea) or a domain-specific principle (such as the precautionary principle) as the reference point for contextual reflection. It's a rather subtle distinction and some readers may find it confusing rather than helpful; but experience shows that at early stages of conceptual development, it is usually better to err on the side of too much rather than too little distinction (it's easier to abandon an unhelpful distinction later on than to heal a lack of precision in underlying assumptions). At this stage I'd like to give the notion of an "argument space," as the critical (or reflected) counterpart of a "context" as it were, a chance to prove itself; time will tell whether it's rather helpful or confusing.

Within the argument space thus opened up, reflection and discourse (for the sake of convenience, I'll simply speak of "argumentation") can then move and unfold multiple options for understanding – or "approximating" – a general idea's intent or implications in the light of alternative sets of

contextual assumptions. Conversely, such argumentation can specify multiple sets of contextual assumptions in the light of what situational meanings they suggest for the idea. Specifying contextual assumptions and unfolding the meaning of ideas is thus an *iterative* process in which both activities, specification and unfolding, can alternately take the lead and can stimulate or challenge the other.

In the case of the moral idea, for example, it is far from easy to specify adequate contextual assumptions that would meet its demands *and* would be practicable. Strictly speaking, the moral idea requires an argument to the effect that the entire community of those effectively or potentially concerned is included in the relevant context and is treated with equal respect for their needs or concerns. It is equally clear though that as a rule, actual moral discourse can hardly ever engage a potentially worldwide moral community, as rarely as even the most responsible action can in practice do full and equal justice to all those concerned. It might, however, be possible at least to engage all those stakeholders who are directly affected or concerned *and* are able to participate. Or, to the extent this is not fully possible, one might call upon witnesses of those not present to represent their concerns, so as to make sure these concerns are taken into account.

This in turn raises the difficult issues of who exactly is to be considered a stakeholder or a witness; what options there are for engaging them so that they have an equal chance to argue their concerns; and what in the end it means to properly take their concerns into account, given their usually conflicting nature. The moral idea does not yield immediate, practical answers to such questions and insofar allows no "direct" implementation; but at least it can serve as a critical idea in terms of which we recognize the ways we *fail* to implement it and thus might try to better approximate its intent. In the terms of the preceding definition, only an imperfect identification and unfolding of the relevant *argument space* (context) is possible, but such unavoidable imperfection does not invalidate the moral idea's role as a *limiting concept* (ideal reference point). Quite the contrary, it makes this role the more important.

Three essential points should have become clearer through this discussion:

- First, the argument spaces belonging to general ideas of reason can only be adequately explored and understood with respect to *specific*

situations, in cooperation with those concerned (or people representing them).

- Second, it is nevertheless important that the general ideas in question remain *reference points of argumentation*, understood as ideals that provide critical distance to the situation.
- And third, *adequate argumentation* will provide sufficient critical distance yet remain practicable and solution-oriented. It will systematically explore the argument space *in-between* the situation and the idea at issue, in the light of changing sets of alternatively "realistic" or "ideal" contextual assumptions.

Merely insisting on either a "realistic" way of proceeding or else on ideally comprehensive assumptions would risk *begging the question* rather than amounting to a particularly reasonable or moral approach. What is a reasonable approximation of a general idea of reason can never be defined solely with reference to what is practically feasible (an opportunist stance) or to what is theoretically defensible (an idealist stance). An opportunist approach avoids the need for managing the tension *on the basis of arguments* rather than of non-argumentative means; whereas an idealist stance avoids the core problem of *how reason can become practical*. General ideas fulfill their heuristic purpose by challenging us to manage the tension so that the ideal of practical reason can be strengthened in practice. This suggests to me that bringing reason and practice together is indeed always an issue that calls for critical contextualism; for, as we have learned, the general is to be considered "only an idea" (Kant, 1787, B384f); or, speaking with Wittgenstein (1922), it is only an *argument place*.

Sources of selectivity The crucial difficulty in such argumentation is that selectivity is unavoidably involved. To say that the intent of general ideas – the ideal reference point towards they are to orient our thinking – can only be approximated partially is the same as saying that selectivity is involved. Whether deliberately or not, any approximation represents a selection of what is to count as relevant circumstances and concerns. In mathematical approximation, this is not really a problem, as it can be defined at a merely syntactic level of argumentation, that is, in purely analytical terms. In the case of non-mathematical ideas, however, the situation is more complex, as the contents to be specified touch upon both empirical and normative questions. We'll need to select and argue the "*facts*" (circumstances) we take to be relevant as well as the "*values*" (concerns) we consider adequate for

assessing and changing the situation. The argument thus moves at a semantic and pragmatic levels of argumentation, which means that substantive rather than just analytical arguments are required.

A new difficulty arises here: the circumstances and the concerns to be considered cannot be identified independently of each other. As a rule, when the relevant "values" change, the relevant "facts" are likely to change, too, and *vice-versa*. So we may find us caught in an indefinite, iterative process of reviewing facts in the light of values, and values in the light of facts. Moreover, both the facts and the values in question may and often will be controversial, as both represent selections from a larger, indefinite, argumentative space. Neither selection can be shown to be objectively right and beyond argumentative challenge, for such a claim would imply either comprehensive reasoning or else an undubitable selection – both unarguable assertions.

Even the apparently modest claim to *merely approximating* the intent of essential ideas will thus not be immune to criticism, not to say it remains highly problematic. If there were a Richter scale of selectivity, it would be open-ended towards above, as is the Richter magnitude scale for earthquakes. The number of possible selections and non-selections, and thus also the space of possible objections, is indefinite, in the sense that there is no objective (unobjectionable) way to delimit it. Any claim to "reasonable" approximation, even where it meets with the agreement of everyone involved, will still imply a very strong presupposition, namely, that the chosen selections of relevant facts and values, as well as the chosen ways to respond to them, are indeed conducive to rational practice and are in some arguable way "better" than alternative approximations. Regardless of how carefully researched and reasoned an approximation may be, the selectivity built into it entails bias of views, partiality of concerns, and ultimately, insufficient rather than sufficient reasons. Reflective practice will need to keep the universe of discourse accordingly open, by supporting *systematic processes of contextual reflection* (see Ulrich, 2012a, b, and 2013b), so that a better understanding can evolve of the sources of selectivity and of the consequences such selectivity may entail.

Returning to the example of the moral idea, we begin to understand why, as we have seen in the case of discourse ethics, it is such a precariously difficult undertaking to justify practical claims with reference to the "moral point of

view." Theoretically sufficient reasons for the choice of some specific approximations of the moral point of view (e.g., in the form of justified "norms of action") would need either to be context-independent (which is possible only for the abstract moral idea as such – one of the reasons why we talk of it as a "general idea") or else to do justice to the whole indefinite space of alternative contextual assumptions (which in turn would amount to abstraction from any specific, and thus selective, context, that is, to decontextualization). The first alternative begs the problem, the second is impractical and in its implication equally begs the problem. Discourse ethics, because it has neglected this conclusion, has found it impossible to justify any specific norms, or at least to demonstrate how it can be done.

In view of this situation, it seems to me that inasmuch as we presuppose that argumentation and discourse can be a source of at least "approximate" moral justification at all – and rational ethics cannot presuppose less – only a critically-heuristic approach has realistic chances to succeed. Yet I am not aware of any approach to rational ethics thus far that would have drawn such a conclusion. Among the major approaches that we have reviewed in the "Reflections on reflective practice" series, all appear to lean toward reason's side by relying on moral universalism, with the remarkable exception of Aristotle, who grounds moral reasoning in the local ethos and custom. A critically contextualist approach, by contrast, would understand and implement the moral idea as an indispensable though problematic reference point of moral argumentation, a limiting concept that only serves to open an argument space and provide a basic orientation in it. Accordingly it would focus on the nature and methodological support of discursive, participative processes or other means by which such moral argument spaces could be reviewed systematically, for example, as in our own critically-heuristic framework, by systematically reviewing specific moral claims (as contained in proposals for action, definitions of improvement, claims to rationality and expertise, etc.) in the light of alternative sets of contextual assumptions so as to identify ways to better approximate the moral idea. Further, I would argue that such an approach, again in marked distinction to all major approaches of which I am aware, would need to give priority to a merely critical over a justificatory intent (the earlier mentioned *critical turn*) and would of course also (as in existing approaches) need to be embedded in *fair procedures*, procedures that would make sure that all those concerned have a "fair" chance to voice their concerns and see them being taken up. Such an

approach, then, could not secure moral *justification* of practical claims, no more than current moral theories can. It is hardly too high a price, however, to renounce a hope for justification that is unachievable.

The institutional challenge The main burden of proof would then be shifted from "justification" (the focus of discourse ethics) to "legitimacy" (an alternative focus of deliberative democracy). A broad field of discussion opens itself up here, concerning the *institutional* side of rational practice. It raises many important issues such as adequate inclusion of those concerned; equal or adequate access to relevant information for all; enabling rationally motivated discourse; civic education of citizens (and of decision-makers, especially managers, I am tempted to add); democratically institutionalized processes of conflict resolution; protection of minority rights; and so many others. This is not the place for such a discussion, but I do find it interesting and relevant to note that if only we take Kant's call to practical reason seriously and try to find at least a critical solution, we cannot help but recognize the importance of the institutional side of rational practice, and in particular of *democratically* institutionalized procedures, as a source of legitimacy. Where complete justification is unavailable, democratic processes of legitimation become the more important, although they in turn require that free and open argumentation (not to be confused with justification) is possible. The important point is, critical argumentation is quite sufficient as a basis for democratic decision-making, no theoretically complete justifications are needed for that ~~and in fact, not only theoretically complete criticism is required~~. What is needed for purposes of democratic legitimation is only that the assumptions and implications of proposals are on the table. Perhaps we should in fact be grateful that sufficient justifications are *not* available; for if they were available, chances are that the experts – those who know better – would have the say and thus the space for participative democratic decision-making would risk to become even smaller than it already is.

Heuristic consideration #2: "standpoint spotting" – a double movement of thought It is easier to see the standpoints of others than one's own. In order to see one's standpoint, one first needs to leave it. Since the contexts we assume to be relevant for any specific issue depend on the view of the world that our current standpoint affords us, an analogous conclusion holds for our contextual assumptions and thus, for any specific argument's *assumed*

context of meaning and validity: we have (at least in our mind) to leave it and see it from outside, as it were, to properly make ourselves and all the parties concerned aware of its limitations, and thus also to realize that there are options for defining it. The image that comes to mind, in analogy to the popular hobbies of cloud spotting, tree spotting, train spotting, and so on, is one of *standpoint spotting* (Fig. 1).

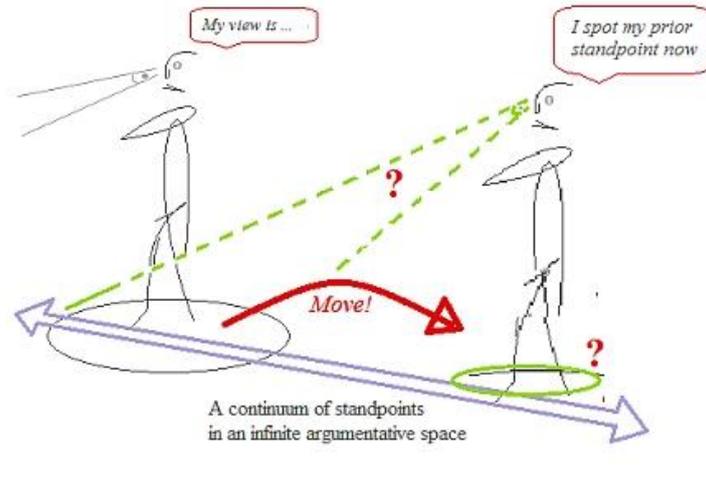


Fig. 1: "Standpoint spotting"

To see one's standpoint, one must first leave it; only then can one duly appreciate differing contexts of thought and argumentation (including one's own ones)

Standpoint spotting is not currently a well-trained art. We don't learn it in school. But perhaps we can learn it on the bus. Or more comfortably, in the TV chair. I suspect we can and should indeed make it a habit, perhaps even a favourite pass-time, to try and spot people's differing standpoints and how they shape their contextual assumptions, or *vice-versa*. As an example for this "vice-versa," the case of nuclear waste storage is instructive. Whether one assumes nuclear waste to be a problem for the next 100 or the next 10,000 years, changes the definition of the relevant context in terms of time and is therefore likely to shape one's standpoint on nuclear energy, with respect to both its economic and its moral justifiability. Conversely, one's standpoint concerning the current generation's responsibility towards future generations is likely to shape the time horizon one deems relevant, as one of the most crucial contextual assumptions that matter for discussing energy policy.

Many topics that people discuss on the bus or in TV shows tend to be of this sort. They are controversial topics precisely because they involve crucial

assumptions of standpoint and context, of which people are not always fully aware. Because they are not fully aware of the role of contextual assumptions, people tend to assume that the others get their facts wrong, or else argue irrationally. In fact, because they assume different contexts to be relevant for assessing the claim in question, it is quite rational (or in any case, to be expected) that they should arrive at different judgments of fact and value. The crucial skill they lack is not that of universalizing their claims but quite the contrary, that of contextualizing them. *Contextualizing claims from different standpoints is key*. The crucial skill to this end is learning to understand different standpoints in terms of different contextual assumptions; and the crucial heuristic support needed consists in frameworks for a systematic identification and critical discussion of such assumptions. This is what I mean by the art of "standpoint spotting." You don't need to read philosophical treatises on moral theory to improve that crucial skill. Because we are dealing with an everyday phenomenon, you might as well start training your standpoint-spotting skills on the bus or in your armchair (or both), by listening to the way people discuss controversial topics and, due to different assumptions of context, talk past one another.

I assure you it is a rewarding habit. It makes you learn so much about people's differing contextual assumptions on controversial topics and how they shape their views and arguments! You will no longer need to ascribe these differences of views and arguments to a lack of information, rationality, or good will, and thus can develop more *tolerance* towards people and better understand them. Moreover, you can check and improve your own patterns of discussion and argumentation, and thus gain a deeper *critical competence* in discussing with others.

To be sure, with a view to systematic practice more is needed than such general hints. Readers familiar with the boundary categories and questions of critical systems heuristics (CSH) can take them as an example of the kind of tools I have in mind, although I trust many other tools are also conceivable for this fundamental task of standpoint spotting and contextual analysis. However, what interests me at present is the *general* nature of such tools. Are there general ideas (or requirements) for dealing productively with contextual assumptions? In what follows, I would like to briefly explore one such basic requirement. It consists in a combination of two opposing movements (or orientations) of critical thought, which together constitute

judge immediately and to think that the left-hand side of the scale is to be judged negatively in that it is arbitrary and easy (anyone can do it, as no effort to meet the concerns of others is involved), whereas the right-hand side would then be judged positively, as an ideal that is laudable although it is difficult to achieve and ultimately (at the right end of the scale) impractical (nobody can do it, as no argument can do equal justice to each and everyone's concerns). But the methodological point here is a different one: the scale is meant to capture the idea of a continuum between two limiting ideas that both are necessary for clear thinking but as such do not constitute possible spaces for substantial argumentation. It is in the entire range *in-between* these two limiting ideas that critically contextualist thought moves. This is its argumentative space or universe of discourse within which critically contextual reflection should move freely.

In the terms of Kant we may understand the scale as a continuum (or spectrum) of standpoints that "approximate" the idea of moral universalization (or any other general idea) to various degrees. The spectrum idea is apt to remind us that there is no such thing as the one best "approximation" that would afford us a proper view of the world. Again, we find that critically contextualist thinkers must keep moving, now along the imaginary scale that depicts a spectrum of different conceivable standpoints for identifying the relevant context.

Earlier we noted that to see our own standpoint, we must first leave it or (in our mind, if not physically) "step back" from it. We might now add the basic methodological hint that "stepping back" can be achieved systematically by conceptually moving in both directions of the continuum, towards the more particular and towards the more universal, and by then looking back and observing where we have been standing before and how different things now look. To the critical contextualist, more important than the specific standpoint she assumes at any given moment is the way everyone involved deals with it, namely, as a tentative spotlight that illuminates other standpoints, so that in the end we ideally can see each identified standpoint in the light of all others.

It seems to me that in this process of identifying and "illuminating" standpoints (or "standpoint spotting," to put it somewhat casually), there are *two basic movements of critical thought* involved (see **Fig. 3**):

- **Critical movement 1:** Critical thought can focus on the fact that any substantial argument (i.e., any argument that has some specific empirical and/or normative content rather than remaining totally abstract, a mere idea) is to some degree unavoidably particular, and thus may be *too particular* in the sense of being overly selective with regard to the facts and values it considers. Such arguments will tend to privilege some individual or group views and concerns over others, thereby "getting it right" for some parties but not for others. The remedy consists in moving towards the "general" end of the spectrum, so as to *de-contextualize* such claims, that is, universalize their contextual assumptions.
- **Critical movement 2:** Alternatively, critical thought can focus on the fact that any substantial argument is unavoidably generalizing, and thus may be *too general*, in the sense of overgeneralizing with regard to the context for which it claims to be meaningful and valid. Such arguments will tend to claim too much, in the sense of portraying particular views or concerns as more general than they are. The remedy consists in moving towards the "particular" end of the spectrum, so as to *re-contextualize* such claims, that is, specify their contextual assumptions.

A double movement of critical thought The two critical movements depend on one another in that each calls for the other as a source for questioning and re-thinking its own assumptions and implications. Together, they combine to a *double movement of thought* as tentatively shown in **Fig. 3**. Its message is that there are two basic efforts involved in handling ideas carefully, that is, in dealing reflectingly with both the empirical and the normative content we associate with them. There is, on the one hand, a need for *enlarging* the thinking space within which we move, by expanding its boundaries and enriching its content; but at the same time, there is also a need for *limiting* the reach of our claims, by specifying their scope of meaningful and valid application and thus qualifying their content. Both movements of thought can *in principle*, though not in practice, continue indefinitely, in that we can always seek to get more comprehensive and/or more specific:

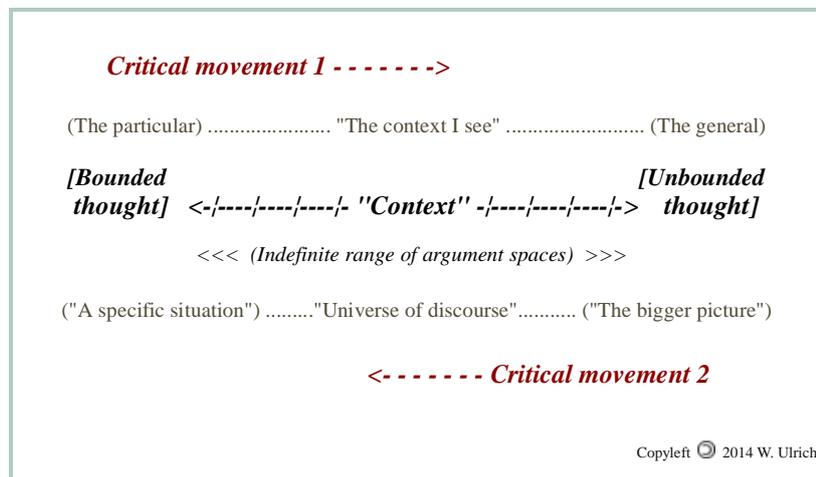


Fig. 3: A double movement of thought

Thinking through contexts of argumentation
in terms of a spectrum of argument spaces

The theoretical endpoints of these two movements of thought are often referred to as "bounded" and "unbounded thought" or "bounded vs. unbounded systems thinking." The distinction goes back to Herbert Simon (1957), who coined the concept of "bounded rationality" as a supposedly more pragmatic (or realistic) alternative to the conventional focus on whole-systems models and optimization in decision theory, operations research, administrative science, the policy sciences, and other fields concerned with the modeling of decision situations. From our present perspective, this proposal looks rather doubtful of course. The two opposites do not stand for a true alternative. We cannot really appreciate how "bounded" or "unbounded" our grasp of a situation is except in the light of the opposing idea. Nor is "bounded rationality" in any serious sense a less problematic idea than the classical concept of a rationality grounded in comprehensive situation models. Any way of framing the "relevant context" is unavoidably limited as measured by the universe of all conceivable ways to frame it. How "realistic" any framing of the relevant context is depends on our conception of the whole of which it represents a part. Furthermore, and as a last comment, it is the *movement* of thought – the effort of iteratively bounding a context more and less widely, so as to be able to gain different perspectives and to appreciate each one in the light of the others – that matters from a critical point of view, rather than identifying any supposed endpoint. There are, strictly speaking, no endpoints that could be fixed empirically and normatively; for the two concepts of bounded and unbounded rationality are to be understood as *ideas of critical reason* only. Any empirical and normative contents we may associate with them represent (speaking with

Kant) mere "approximations" and are thus bound (sic) to remain problematic. This is the critical reading that I propose for Fig. 3.

In sum, we have two complementary, critical movements of thought: the one moves towards a wider, less narrowly bounded, perspective, the other towards a more specific, less generalizing perspective. The one involves a generalizing, the other a specifying direction of analysis. The two fictitious endpoints can be understood in terms of "bounded" and "unbounded" thought, in the way I have just qualified a proper understanding of these two concepts. What matters is to always remember that neither supplies a reference point for justifying any claims to superior rationality, as systems thinkers often appear to assume. It is more useful to conceive of systems thinking, and of all systematic employment of general ideas, in terms of a double movements of thought between them. It's on this movement rather than on the endpoints where it would supposedly come to an end that we should focus. Only thus can we hope to "see through" contextual assumptions. In the end, it is not what our contextual assumptions are but how openly and critically we handle them, which determines the reflective quality of our thought and arguments.

Whatever context we may ultimately allow to inform our claims, the essential points to remember are these:

- first, that any validity claim is conditioned by the context it assumes to be relevant for getting its "facts" and "values" right;
- second, that for any assumed context there are always options; and
- third, that we cannot properly appreciate the selectivity of any assumed context without considering it in the light of alternative contexts.

Accordingly, the aim of such critically contextual reflection and argument is *not* to arrive at some definitive bounding of contexts; that would be to misunderstand the critical turn. (It is a frequent misunderstanding of CSH.) The point is, rather, to gain and maintain awareness of *the big "as if"* involved in any validity claim – in all our empirically and normatively substantial thinking and argumentation – in the form of contextual assumptions and resulting selectivity: whatever universe of discourse emerges as a result, it will always remain a "*universe as if.*" Only temporarily and cautiously, for the specific argument at hand, will it

(perhaps) be adequate, as an unavoidably limited effort to approximate rational practice. The point of rational practice is not to avoid selectivity (an impossible feat) but rather, to make sure the selectivity inherent to any claim is laid open and the claims are qualified accordingly. As soon as this conditional character of claims is forgotten or taken for granted, it risks becoming a source of error and partiality. This is what the "keep moving" imperative of critical thought is all about.

The cycle of critical contextualization Graphically speaking, it may be helpful to imagine the two movements of thought depicted in Fig. 3 as a cycle of critical contextualization. In this cycle, the thrust of Critical Movement 1 consists in *decontextualizing* a claim and that of Critical Movement 2 in *(re-)contextualizing* it. Together they constitute what I suggest to call the *critically contextualist cycle* (Fig. 4):

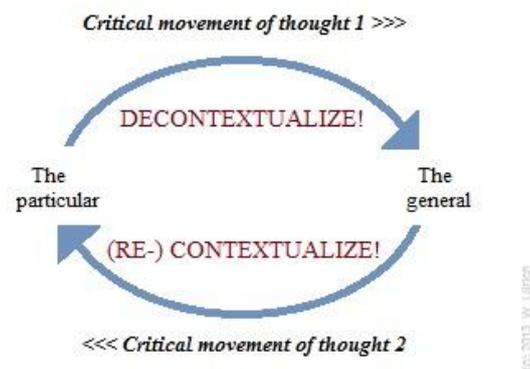


Fig. 4: The critically contextualist cycle

An iterative process of decontextualization and (re-)contextualization of the assumptions and implications of claims

This reflective cycle of decontextualizing and recontextualizing claims – the essence of critical contextualism as I propose to understand it – captures the way I try to understand the meaning and relevance of systems thinking in CSH: as a systematic form of critique, that is, as *critical systems thinking* (see, e.g., Ulrich, 2013b). In addition I now suggest that the same double movement of thought can and should play a similar role in pragmatizing all general ideas of reason, in particular the moral idea. Just like the systems idea, the moral idea and all other general ideas will become tools of practical reason when first we learn to understand and use them as critical ideas of reason only.

Summary and conclusion: "critical contextualism" This essay has explored some basic difficulties and requirements in "approximating" the intent of general ideas of reason. The focus was on the need for approximating such ideas, in particular the moral idea, through processes of situation-specific reflection and argumentation. As a result, the essay argues that a practicable, yet adequately self-reflecting and self-limiting approach to the unsolved problem of practical reason – of how reason can be practical, and practice shown to be reasonable (i.e., rational in a sense that includes the moral) – should be conceived in terms of *critical contextualism*.

Critical contextualism recognizes that all application-oriented thought and argumentation is inevitably contextual, that is, limited by contextual assumptions or by boundaries of concern effective as such, which in turn are conditioned by the standpoint from which the world is seen. General ideas can lead us beyond such contextual limitations. This is why we need them. It is their essential role, but it also makes them impractical. Reference to them cannot justify claims to rational and moral action, or generally speaking, give us "sufficient reasons"; in the case of moral claims, for example, reference to the principle of moral universalization does not supply sufficient reasons for claiming the full moral universalizability of any specific practical propositions. What remains possible, however, is using them for critical purposes, in that reference to them supplies a basic standard for questioning such propositions, although their meaning needs to be specified in the situation at hand.

Applied to general ideas Accordingly a critically contextualist approach will refer to general ideas as a way to encourage and support systematic processes of reflection and argumentation on the standpoints and contexts of concern that condition practical claims, whether consciously or not. A "context" is defined by the set of contextual assumptions on which a claim or argument depends and which therefore is likely to limit its reach of meaningful and valid application. The idea is to reflect on those limitations in the light of alternative standpoints and contexts, so as to uncover their empirical and normative selectivity and then to reconsider and qualify one's claims accordingly. To this end, a systematic, iterative process of decontextualization and (re-)contextualization of claims appears relevant, which the present essay has described as a closely intertwined, iterative,

double movement of critical thought.

Applied to discourse ethics With respect to *discourse ethics*, our current topic in the "Reflection on reflective practice" series (see Ulrich, 2009c, d, and 2013a, with additional loops of reflection in 2010a, b; 2011c; 2013c), a specific conclusion of the present essay is this. It has become more clear why earlier we found discourse ethics struggling with the principle of moral universalization and unable to propose a practicable model of moral justification. Discourse ethics has failed thus far to take the *critical turn*, a methodological reorientation from the quest for comprehensively rational argumentation according to the principle of moral universalization towards a critically contextualist approach. This explains why regardless of how sophisticated discourse ethics may be in theory, it is bound to break down in practice. Universalization is a theoretical idea – that is, at best, a theoretical explication of the moral idea, although in rather thin air – but not a practical concept and goal (an achievable claim). Moral universalization describes a problem, not a solution.

Critical contextualism consequently replaces moral universalism by a systematic effort of thinking through the bounded nature of moral claims, so as to allow us to qualify and limit them accordingly. Thus it avoids the impracticable nature of moral universalism, *without* giving up its critically-heuristic function as a reference point for moral argumentation. This is why I believe that critically contextual reflection might hold the key to a critically tenable pragmatization of the moral idea, and indirectly, of discourse ethics.

Applied to the moral idea in general (outlook) With regard to all general ideas of reason but particularly the moral idea, my conclusion is that it is time to take the critical turn from a justificatory to a critically-reflective focus, and with it to take the fundamental methodological step from "universalizing" to "contextualizing" moral claims. I hope to take up this conclusion in the planned two final essays of the reflective practice series. But before, in the next two essays of the present series, we will complement our exploration of the role of general ideas with the announced excursion into ancient Indian thought, so as to learn about its handling of general ideas. Whether this additional loop will be of any methodological relevance to the emerging framework I cannot tell in advance, nor is it of concern to me. For in the end, I believe that no intellectual effort is ever completely wasted,

whatever one learns will in some ways bear fruit. So, I hope you'll bear with me a little longer and will be back next time when I invite you again to explore the nature and role of general ideas, then from an ancient Indian perspective.

(To be continued)

Notes (numbered consecutively)

8) In order to avoid constant repetition of phrases such as "conditions and consequences" or "circumstances and concerns," I will in the following (except where the distinction matters) refer simply to "conditions" or also to "circumstances," always meaning both conditions *and* consequences (or the circumstances *and* the concerns taken to be relevant). This choice of language is also in line with a basically pragmatic outlook, according to which rational thought and action is to consider all circumstances that might conceivably have "practical bearings," that is, make a difference to what a proposition or claim means and how we judge it (see Peirce, 1878, and James, 1907, as earlier discussed in Ulrich, 2006c).

We may think of conditions and consequences as two complementary though different sides or perspectives of rational argumentation; complementary in that both are needed, but different in that they confront reason with different issues. Kant refers to the two perspectives in terms of "theoretical" and "practical" reason, that is, of reasoning concerned with natural phenomena vs. human action. A related distinction is his reference in the *Groundwork* (1786, B105-109 and 119f) to the "two standpoints" of the "sensible world" (experience, action-relevant knowledge of the phenomenal world) and the "intelligible world" (reason, action-orienting ideas and principles of practical reason).

Distinguishing the two perspectives helps us understand why in the *Critique of Pure Reason*, which deals with the nature and limitations of theoretical reason, Kant writes that "what pure [theoretical] reason alone has in view is the absolute totality of the synthesis *on the side of the conditions* [...]; it is not concerned with absolute completeness *on the side of the conditioned*." (1787, B393) or, as I prefer to say, *on the side of the consequences*, that is, the implications of human action and conduct (including intervention in nature) for all those concerned and ultimately for all of humanity, if not for all living beings. The latter perspective becomes relevant, however, in the realm of practical reason, especially its "pragmatic" employment (Kant, 1787, B828; cf. Ulrich, 2006b, p. 58f), where we deal with human reasons (motives) rather than natural causes, and with the difference human reason can make to our actions and their effects. Practical reason has the "manifest advantage" of being able "to give reality to its own ideas and motives," a capability to which Kant likes to refer in terms of its "exercising causality" (1786, B124; 1787, B385) or also of a "causality of the will" (1788, A115). It is quite sufficient for our present purpose, however, to acknowledge that both perspectives – a focus on causes and conditions of nature as well as a complementary focus on reasons and consequences of human action – belong to the totality of conditions (or circumstances) that everyday applied argumentation needs to consider. Neither perspective can be an object of complete human knowledge, for in the first case we face an infinite regress and in the second, an infinite progress of circumstances to be considered. [\[BACK\]](#)

9) For those readers who would like to have some hints from me, as a way to get started and think about their own understanding of what I call the three essential ideas, here is a very short account of the main difference that each of the (for me) "three essential ideas" makes to the way I look at real-world situations of problem solving and decision-making. In the case of the *systems idea*, I tend to understand that main difference in terms of "boundary critique," the core methodological principle and tool of CSH. In the case of the idea of *rationality*, I tend to understand it in terms of a "quest for certainty" (Dewey, 1930), so that we can avoid bad surprises in the form of unanticipated consequences and side-effects of our actions. And finally, in the case of the *moral idea*, I tend to understand the crucial difference it makes in terms of "moral universalization," the basic principle that underlies the ancient golden rule no less than Kantian ethics and contemporary notions of responsible and accountable practice and which I will translate here, for easier understanding without presupposing any knowledge of Kant, as a quest for reciprocity in human interaction and living together. [\[BACK\]](#)

10) The explanation provided in the preceding and following text should make it clear that I am not advocating any kind of fundamental dualism between science and morality, or

between scientific and moral discourse. Rather, as I emphasize in the present essay as well as in many other of my writings, I find it essential and urgent that more people (scientists, professionals, and decision-makers no less than ordinary people) would begin to fully appreciate the ways in which "*facts*" and "*values*" always depend on one another and inform each other – one of the core methodological assumptions of my work on critical systems thinking and reflective professional practice. This is only another way of saying that the theoretical-instrumental and the practical-normative dimension of reason cannot in practice be kept apart and be treated in isolation (another repeated theme of my publications). Compare also the following note 11, beginning with its second sentence.

As a further consideration, it seems almost unavoidable today that any attempt to examine the partly different methodological implications of scientific and moral questions meets with the standard objection of "dualism." As such, it is an objection that does not appear particularly productive to me, certainly not in the present context where we try to deepen our understanding and critical handling of some essential ideas such as the moral idea and the systems idea. I think it is a more productive idea (and it is one of the underlying conjectures of this series of essays) that with a view to employing such general ideas in critically reflecting ways, it is always helpful, if not indispensable, to consider their assumptions and implications (i.e., the "meaning" we associate with them) in the light of our understanding of other ideas. As I say in the present essay, we can't see our own standpoint without first taking a step back and looking at it from another standpoint. We face, in the terms of the present essay, a *methodological* and "*heuristic*" requirement that has little to do with the kind of unreflecting metaphysical or ontological dualism at which the standard objection aims. [\[BACK\]](#)

11) In scientific research practice, guiding methodological ideas such as empirical testing and statistical significance analysis, independent replication of findings, scientific discourse and peer review within a community of competent inquirers, and so on, have indeed played a useful role in approximating the generalizing thrust of the quest for "truth" (i.e., accurate and reliable knowledge). Note, however, that as soon as we move from theoretically oriented research to practical contexts of application – in "*applied science*" that is – we face the same difficulties as in moral discourse. Theoretical insights and underlying theoretical assumptions may then suddenly have "practical" implications for people who have to live with consequences, costs or risks, about which they had little to say. Even where those concerned are involved and can voice their concerns, difficulties may still arise due to conflicting concerns among the different parties. The underlying justification issues that become central in "applied" contexts concern *normative questions* of the sort we have been dealing with in our "Reflections on reflective practice" series. They represent an essential, intrinsic part of our notion of *rational practice*, including rational research practice.

In the terms that I often use in my work on critical systems thinking and practice, *the "other," practical-normative dimension of reason* then comes into play. Its core difficulty, as we know by now, is the philosophically unresolved problem of practical reason, and the basic solution attempt in dealing with the problem is nowadays (in contemporary practical philosophy) the *discursive turn* of moral theory, that is, the idea that forms of rational practical discourse can help us in settling normative conflicts "with reason" (i.e., in essence, by relying on arguments rather than non-argumentative means such as power, authority, status, deception, or manipulation). Unfortunately, as the example of discourse ethics illustrates, it remains an unresolved question how the universalizing thrust of the moral idea can be translated into pragmatic, operational forms of discourse. Hence, while it is true that science provides an example of a successful pragmatic handling of the role of general ideas, the example carries only thus far; when the focus shifts from theoretical to applied concerns, the problem of practical reason arises and with it the need for new, if only approximate, solutions. [\[BACK\]](#)

12) My notion of reflective practice distinguishes itself from that of Schön (1983 and 1987) by its being grounded in practical philosophy and systems thinking, and by its including a critical-emancipatory dimension. For short introductory accounts, see Ulrich (2008a and 2011a). [\[BACK\]](#)

13) Some readers may be interested to know that support for a critically-heuristic understanding and use of general ideas of reason can indeed be found in Kant. (If this issue is not of importance to you, you can safely ignore the present, rather lengthy note.) As I explained in *Critical Heuristics* (Ulrich, 1983, p. 232), the methodological transition from transcendental to heuristic reasoning involves a smaller step than is generally assumed. Moreover, it is a step that Kant's self-tribunal of reason itself actually implies. See for example his treatment of the idea of God and, in this connection, his detailed analysis of the problem of "transcendental illusions" in all attempts to find a "cosmological" proof for the existence of God (1787, B631ff). Not unlike the way we

started out above, Kant describes the core difficulty in terms of two opposing demands of reason. On the one hand, to give a sufficient argument for the existence of God we would need to regress in the series of conditions for God's existence until we could claim to have arrived at some unconditional first condition. On the other hand, reason tells us that logically this amounts to claiming that we can know the totality of all conditions, for a totality of conditions is itself unconditioned; but reason's integrity depends on its respecting its own limitations and those of human knowledge, and it belongs to these limitations that we cannot empirically prove the existence of any such totality of conditions. Empirically we can, as we cited Kant above, at best "approximate" it. Transcendental reasoning finds its limitations at this point; it has to stop here or it will fall victim to "transcendental illusions." This situation prompts Kant to avow a need for reason to rely on merely "heuristic" ideas or principles, that is, ideas or principles that must remain problematic but without which reason cannot do its job of guiding human experience and what he calls "the understanding" (= the empirical employment of the human intellect) towards some unity of thought. As he describes the transcendental ideas of reason:

They are thought only problematically, in order that upon them (*as heuristic fictions*), we may base *regulative* principles of the systematic employment of the understanding in the field of experience. Save in this connection they are merely thought-entities [read: conceptual constructs], the possibility of which is not demonstrable." (1787, B799, added italics).

As general ideas are not empirically demonstrable, the way we employ them (even for merely critical purposes) is, as I would put it, to be kept under constant critical review. There is no such thing as a definitive critical argument (e.g., in boundary critique, a definitive boundary judgment) but only a demonstration that there are always options for seeing situations and delimiting the universe of relevant circumstances (e.g., in boundary critique, by demonstrating the availability of multiple divergent boundary judgments, each of which may have different implications for what is "rational" and "moral"). As Kant points out on a few rare occasions (e.g., 1787, B644, a passage I'll cite in a moment), the regulative use of general ideas cannot help but work with temporary *as if* assumptions, in that it has to assume that for some limited purpose, they do indeed serve reason well and have a legitimate use; and this limited purpose, to be sure, is a merely critical one (which in essence is what Kant means with "regulative" reasoning). In Kant's terms, this limited purpose consists in "bringing systematic unity into our knowledge" (B644, cf. B673). For example, as I understand Kant, the moral idea serves such a systematic, critical purpose by inviting us to test our claims in the light of their moral universalizability; for this limited purpose, we can rely on it *as if* it had objective validity. Thus Kant, although he does not introduce the concepts of critical heuristics and reflective practice, effectively comes close to saying that at the end of all transcendental theorizing about rationality, when it comes to pragmatic thought and action in both the theoretical and practical dimensions of reason, we still have to rely on a critically-heuristic use of general ideas only. This is what I understand Kant to say when he emphasizes the merely "problematic" and "as if" employment of ideas of reason.

To give you the flavor of his writing, I conclude this note with a somewhat longer extract from Kant's discussion of the failure of all cosmological proofs of God. It begins with a reference to the two mentioned, diverging requirements of reason, that is, its simultaneous needs to search for sufficient reasons on the one hand and to respect its own limitations on the other hand:

The one calls upon us to seek something necessary as a condition of all that is given as existent, that is, to stop nowhere until we have arrived at an explanation which is complete *a priori*; the other forbids us ever to hope for this completion, that is, forbids us to treat anything empirical as unconditioned and to exempt ourselves thereby from the toil of its further derivation. Viewed in this manner, the two principles, as merely *heuristic* and *regulative*, and as concerning only the formal interest of reason, can very well stand side by side. The one prescribes that we are to philosophize about nature *as if* there were a necessary first ground for all that belongs to existence, [although solely] for the purpose of bringing systematic unity into our knowledge, by always pursuing such an idea, as an imagined ultimate ground. The other warns us not to regard any determination whatsoever of existing things as such an ultimate ground, that is, as absolutely necessary, but to keep the way always open for further derivation, and so to treat each and every determination as always conditioned by something else. [...]

As follows from these considerations, the ideal of the supreme being is nothing but a *regulative principle* of reason, which directs us to look upon all

connection in the world *as if* it originated from an all-sufficient necessary cause.
(Kant, 1787, B644f and B647, partly added italics) [\[BACK\]](#)

14) Compare my similar earlier accounts of what I call the *open systems fallacy*, a trap involved in so-called open systems thinking. So long as open systems thinking is not grounded in critically-contextualist thought, it erroneously assumes that "open" (and large) systems models, defined as models that consider as many aspects of a system's environment as possible, are automatically more conducive to rational practice than are "closed" (and local) systems models: This is not so. Not how comprehensive our contextual assumptions are determines the quality of practical reasoning in the first place, but rather the way we deal with its inevitable *lack* of comprehensiveness. Critical contextualism avoids this trap by requiring that the assumptions and implications of claims are unfolded in the light of multiple and changing contextual assumptions. See Ulrich, 1983, p. 299, and 1988, p.156f). [\[BACK\]](#)

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Picture data Digital photograph taken on 16 July 2009, around 12 a.m., in the old town of Bern, Switzerland. ISO 100, exposure mode aperture priority with aperture f/7.1, exposure time 1/400 seconds, exposure bias -0.7, metering mode multi-segment, contrast normal, saturation high, sharpness normal. Focal length 14 mm (equivalent to 28 mm with a conventional 35 mm camera). Original resolution 3648 x 2736 pixels; current resolution 700 x 525 pixels, compressed to 202 KB.

July-August, 2014



"Approximating the unity that is empirically possible": Bern's lower old town

„Reason aims at a systematic unity, to which it seeks to approximate the unity that is empirically possible, without ever completely reaching it.”

(Kant, *Critique of Pure Reason*, 1787, B596 – In medieval times, urban planners and architects managed rather well to "approximate the unity that is empirically possible" to reason's notion of it.)

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* Editorial correction on p. 29 added on 20 Aug 2016