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Reflections on Reflective Practice (6a/7)



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Part 6a: Argumentation theory and communicative rationality: Habermas 1 Our review of Kant's practical philosophy (Ulrich, 2009b) ended with a powerful message: there exists a deep, inextricable link between ethically tenable action and consistent reasoning. Kant was the first philosopher to work out the link between ethics and rationality systematically. With his principle of moral universalization, he found a methodologically rigorous formula for this link: from a moral point of view we reason properly about a proposed action if we put ourselves in the place of all the people concerned and make sure we can then still want to act in the same way, without thereby becoming entangled in argumentative contradictions.

There can be little doubt that the principle of universalization is a fundamental, indeed indispensable, principle of clear thinking about issues of rational practice. Unfortunately though, the universalizing thrust of Kantian ethics appears to have history against it. Both philosophically and sociologically speaking, claims to moral universalization tend to become ever more problematic.

The "jagged profile of modernization" Philosophically speaking, it seems doubtful whether Kant's abstract, "transcendental" argumentation still offers a widely acceptable or even universally convincing means for establishing objective principles of rationality and ethics. The arrival of many new strands of theorizing about rationality and ethics based on hermeneutics, philosophy of language, philosophical pragmatism, critical social theory and social science, and so on, is apt to raise some doubts about the universalizability of the universalization principle. Sociologically speaking, the historical process of rationalization has created increasingly differentiated spheres of rationality (e.g., politics, bureaucracy, the market, the juridical system, science, art, etc.) which employ different concepts of rationality and steering media (e.g., politically legitimated power,

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bureaucratically established rules, money, law, peer review, etc.) and thereby tend to undermine the unity of reason that Kant could still associate with the dawn of modernity.

Modernity meanwhile is no longer modern, as it were. Whether rightly so or wrongly, it has become almost synonymous with a process of rationalization that appears to create as many problems as it solves, for example, by subjecting all domains of life to an increasingly economic and technical kind of rationality; by exploiting natural resources in an ecologically unsustainable way; by creating excessive discrepancies of welfare among people; by intruding into democratic processes of decision-making as well as into the private lives of citizens with an expert-driven logic of "material constraints" (Sachzwänge); and, quite generally, by prioritizing forms of instrumental, managerial, and bureaucratic reasoning that are blind to social, cultural, and spiritual values. This is what led Max Weber (1978, orig. 1922) to describe modernization as a progressing disenchantment of the world, and Horkheimer and Adorno (2002, orig. 1947) to see in it a negative dialectic of enlightenment – an apparently inherent tendency of modernity to undermine its own foundations, by reducing the rationalization of society to a "onedimensional" (Marcuse, 1964) triumph of Zweckrationalität (purposiverationality) and technocracy.

As Habermas (1984, p. 241) puts it, the problem consists in a "jagged profile of modernization" that promotes a *selective pattern of rationalization*, namely, by allowing a growing predominance of one cultural value sphere – the sphere of science and technology, including social technologies (and, I would add, economics) – over other spheres that have equally been differentiated out in the process of modernization, among them particularly the spheres of law and morality on the one hand and of art and eroticism on the other hand. These three spheres have come to form three different "rationalization complexes" or *complexes of rationality* (1984, p. 238f), that is, domains of society that are understood and coordinated according to different notions of rationality – cognitive-instrumental rationality in the sphere of law and morality, and aesthetic-practical rationality in the sphere of art and eroticism (Habermas, 1984, pp. 237-242).

The central aim: strengthening noninstrumental patterns of reasoning and societal rationalization While Habermas basically agrees with Weber, as

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well as with Horkheimer, Adorno, and Marcuse, about this current state of the matter, he is not prepared to accept that such a selective pattern of rationalization is an inevitable consequence of modernization; a situation against which we can do nothing except resign and give in to fashionable neoconservative anti- or postmodernism. Rather, as he sees it, the situation calls for efforts to recreate a new and better balance among the different spheres of value and rationality, by strengthening noninstrumental patterns of reasoning and societal rationalization; strengthening in the double sense of developing noninstrumental patterns of thought and argumentation (a philosophical project) and of also institutionalizing conforming new arenas for public opinion-forming and decision-making (a sociological and political project). Consequently, Habermas approaches what he calls the "unfinished project of modernity" (Habermas, 1996b) both as a philosopher and as a social and political theorist. What do rationality and ethics mean under contemporary societal and political conditions? Is there still a place for practical reason as Kant conceived it? What does enlightenment mean today? On what grounds can we hope to continue the unfinished project of modernity towards a positive vision of global society? What has philosophy to say on this effort of rethinking modernity, and what is the part democracy has to play in it?

This is the sort of questions that motivate the wide-ranging work of Habermas and also explain its intrinsic difficulty. In an effort to adapt Kant's critical philosophy of reason to the challenges of our epoch without abandoning its philosophical level of differentiation or losing sight of the Kantian vision of an enlightened global society of world citizens, Habermas reviews and mobilizes virtually all contemporary strands of philosophy that one might expect to contribute, from phenomenology (W. Dilthey, E. Husserl, A. Schütz), language analysis (L. Wittgenstein, K. Bühler, N. Chomsky, J.L. Austin and J.R. Searle) and hermeneutics (M. Heidegger, H.G. Gadamer) to American philosophical pragmatism (C.S. Peirce, G.H. Mead, C.W. Morris, R. Rorty, K.H. Apel), to the Frankfurt School of critical theory (M. Horkheimer, A. Adorno) and to postmodernism (Foucault, Derrida). Moreover he draws on major authors of social theory (E. Durkheim, M. Weber, T. Parsons, G.H. Mead, N. Luhmann) as well as of cognitive and developmental psychology (G.H. Mead, J. Piaget, L. Kohlberg) and other disciplines of empirical science that he finds relevant to his project. There is thus much to learn from reading Habermas; but Ulrich's Bimonthly Page 4 of 65

unfortunately, his scholarly language and level of differentiation in discussing all these sources provide demanding reading for a majority of readers, who find it difficult to handle such an extraordinary spectrum of specialized language and theoretical considerations. It is indispensable, therefore, that we simplify.

A central notion: "communicative rationality" I propose we focus on a few of Habermas' main ideas that promise to be particularly relevant to our aim of promoting reflective professional practice, and which at the same time are characteristic of the main lines of his theoretical effort. As I understand Habermas, there is indeed a central concern that runs through his work, one that I find equally relevant to theoretical and practical aims, I mean the notion of communicative rationality – the idea that there is a rational core in all attempts to achieve mutual understanding. Table 1 tries to summarize Habermas's thinking on communicative rationality in terms of three levels of theorizing that I find useful for grounding reflective practice.

Table 1: Selected aspects of Habermas' work on communicative rationality

theory of the communicative rationalization of society Argumentation theory: theory of rational discourse and action Language theory: theory of theory of competent speech acts Tational discourse and action Lifeworld vs system public sphere public sphere public sphere going process of rationalization? Theory of rationalization? How can we justify claims to a model of knowledge and rightness? Theory of dispute theory of competent speech acts Talos of mutual understanding speakers communic communication improve the ongoing process of rationalization? How can we justify claims to a model of discursive of dispute of dispute communication in provided improve the ongoing process of rationalization? Total value of the communication improve the ongoing process of rationalization? Total value of the communication improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization? Total value of the communication in provided improve the ongoing process of rationalization?	Theory level	Core concepts	Core issue	Methodological approach
theory: theory of rational discourse and action Language theory: Telos of mutual theory of competent speech acts Validity claims Claims to knowledge and rightness? a model of knowledge and rightness? Telos of mutual what makes speakers communic speech acts Validity claims Claims to knowledge and rightness? Theory of dispute competent speakers communic speakers competent?	theory of the <i>communicative</i> rationalization of	action Lifeworld vs system Public sphere Deliberative	understand and improve the on- going process of	Theory of communicative action: a model of the communicative rationalization of society
theory of competent understanding speakers communic speech acts Validity claims competent? competence	theory: theory of rational discourse	Ideal speech situation Practical discourse	claims to knowledge and	Formal pragmatics: a model of the discursive validation of disputed claims
	theory of competent	understanding Validity claims Communicative	speakers	Theory of communicative competence: a model of the structure of competent speech acts

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Three theory levels A preliminary explanation of how I arrive at the three levels may be useful before we start discussing each of them. My starting point is Habermas' aim of strengthening noninstrumental patterns of reasoning and societal rationalization. With a view to this aim, the Kantian notions of practical reason and of a global society of world citizens (both of which are tied to the principle of moral universalization) are of obvious continuing importance. However, two centuries after Kant we cannot simply return to his project of a self-critique of reason without taking into account

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the "jagged profile of modernization" that Habermas diagnosed. We need to take seriously the social turn of epistemology that Hegel initiated with his critique of the abstract and ahistorical bent of Kant's philosophy of reason and which led not only to Marx' theory of historical materialism but also to the development of philosophical pragmatism, phenomenology, language analysis, and hermeneutics, along with the other previously mentioned strands of contemporary philosophizing. They have all made us more aware of the deeply intersubjective, because language-mediated and socially constructed, nature of all claims to reason, including claims to knowledge and proper action. Reason is essentially communicative. Habermas therefore takes as his basis the *linguistic turn* of twentieth-century philosophy, rather than Kant's assumption of an abstract, "transcendental" consciousness. To understand the nature of "reasonable" claims - reason's validity claims, that is – we consequently need to analyze first of all the basic conditions that make linguistically mediated communication (henceforth simply referred to as *communication*) succeed or fail – the bottom level in Table 1.

But successful communication, while securing mutual understanding about our claims, does not automatically imply that these claims, and the reasons by which we support them, are justified; much less that we agree about what justification means in the specific case. I may understand and even accept your claim yet disagree (i.e., find it unjustified); or we may agree, but other people might still disagree; or everyone may agree, yet be wrong. Consequently, we need to analyze the basic conditions that would allow us to justify or criticize disputed claims "reasonably," whereby "reasonably" (or "rationally") means basically that we rely on *argumentative* means — advancing good "reasons" or grounds — rather than on non-argumentative means such as authority, manipulation, deception, or others. It follows that some kind of generic *argumentation theory* (we might also say: theory of rationality) needs to replace Kant's transcendental concept of reason — the middle level of Table 1.

Finally, we need to analyze the ways rational argumentation would translate into non-selective patterns of societal rationalization – the top level of Table 1. Critical social theory thus becomes at heart an effort of rethinking the ways we successfully use – or fail to use – language and communication, along with other mechanisms of social coordination, to establish claims to reason, with the ultimate aim of gaining some theoretically defendable

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standards for criticizing and improving the historically on-going process of rationalization. A *communicative turn of social theory* is required. Science and expertise alone cannot do the job; for "rationality has less to do with the possession of knowledge than with how speaking and acting subjects *acquire* and use knowledge." (Habermas, 1984, p. 8)

With this aim in mind, Habermas finds it necessary to reconstruct mainstream philosophical concepts at all three levels of theorizing. If the linguistic turn is to supply an adequate framework, we need to extend its original grounding in analytic philosophy so as to bridge the conceptual gap that has opened between the language-analytic mainstream and the Kantian tradition of practical philosophy. To this end, Habermas suggests to conceive of language analysis as a theory of competent speech acts (What makes speakers competent?) rather than just the analysis of well-formed linguistic structures (How do we use language correctly?); and further, of argumentation theory as a theory of rational discourse and action (How can we justify claims to knowledge and rightness?) rather than just a deductive logic of inferences (What makes inferences logically correct?); and finally, of social theory as a theory of the communicative rationalization of society (How can we understand and improve the on-going process of rationalization?) rather than just a description of the mechanisms of social integration and disintegration (How do societies form and perpetuate themselves?).

The idea of a rational core of successful communication matters at all three levels. We can, then, organize our review of Habermas' ideas on communicative rationality according to these three levels of theorizing. Following Table 1, we can focus on these three key concepts:

- 1. The rational core of speech: "mutual understanding"
- 2. The rational core of argumentation: "discourse"
- 3. The rational core of social practice: "communicative action"

In the remainder of the present essay, we want to familiarize ourselves with the first two concepts, that is, the two bottom levels of Table 1; the next essay will then turn to the top level. I will take the liberty, though, to deal with discourse ethics (which methodologically belongs to the middle level) in the next essay, so that in effect the present essay is laying the methodological foundation for the "applied" concepts of the subsequent essay.

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The rational core of speech: "mutual understanding" In an interview about the motives and aims of his work, Habermas (1985, p. 173) once remarked that his attempt to ground critical social theory in a *Theory of Communicative Action* (1984 and 1987) elaborates one central intuition: namely, that all reasonable speech has an intrinsic telos (finality) of mutual understanding. That is, all communication through speech anticipates that those addressed are willing to listen; and those speaking, to substantiate their claims if challenged to do so. Without this anticipation of a mutual will to reach some understanding, communicative rationality is not conceivable and it makes hardly sense to communicate at all. Habermas therefore recognizes in this presupposition an indispensable normative core of all intersubjectivity.

A normative core Similarly to Kant, who found a minimal normative foundation of practical reason in the principle of universalization (see Ulrich, 2009b, pp. 26-28, section "Why a purely formal moral principle?"), Habermas thus finds in the telos of mutual understanding a minimal normative foundation for rational social practice, and thus also for a concept of societal rationalization that would not from the outset succumb to a merely instrumental pattern of societal rationalization. The next question, then, is this: How should we conceive of the essential conditions for achieving such a fuller, not merely instrumental, rationality?

As Table 1 suggests, Habermas' answer is complex in that it touches on the meaning of rationality at three different levels of communicative rationality – the linguistic level of "rational" speech, the discourse-theoretic level of "rational" argumentation, and the sociological level of "rational" social practice. However, the answer he gives at the linguistic level is basically (although not in its details) simple: we must consider as essential for "rationality" those conditions of speech which are required to bring to life its built-in *telos* of achieving mutual understanding.

Mutual understanding: linguistic vs. communicative competence But this leads us into a first difficulty: what exactly does it mean to reach "mutual understanding" with others? In a basic sense it means that as a competent speaker I manage to make myself clear to others, and vice-versa. Whether we mutually agree does not matter for this notion of understanding, only whether we comprehend each other's intentions. In this limited sense the

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term has traditionally been used in language analysis. Accordingly, *linguistic competence* has been defined as a speaker's ideal ability to use the phonetics, morphology, syntax, and semantics of a language correctly, so as to make herself understood. This may not always work perfectly in practice, so that we need to distinguish between linguistic competence and actual *linguistic performance* in a specific situation (Chomsky, 1965).

In a fuller sense, reaching understanding involves not only the idea of mutual comprehension (i.e., clarity of meaning) but also the idea of mutual agreement (i.e., acceptance of validity). Thus understood, a competent speaker knows not only to make herself comprehensible to others but also to motivate them to agree with her intent. Beyond linguistic competence, *communicative competence* then requires a speaker's ability to argumentatively *convince* the hearers that what is said *deserves* to be accepted; which implies that the judgments involved (both judgments of fact and of value) are valid and moreover that the speaker's intent is sincere (cf. Habermas, 1979a, pp. 26-33, and 1984, pp. 115f, 276f, 297, and 307f).

Mutual understanding: meaning vs. validity With this kind of consideration, a pragmatic link between meaning and validity enters the analysis of speech acts: "We understand a speech act when we know what makes it acceptable." (1984, p. 297) This link causes Habermas some difficulties, as it bursts the scope of conventional language analysis yet is constitutive for communicative competence as Habermas understands it. In essence, when it comes to the pragmatics of speech, the crucial concept that we need to understand is the idea of validity claims. As it is fundamental, I would like to introduce it in some detail, although still very much in a summary form as compared to Habermas' (1971a; 1971c; 1973a,b,c; 1979a; 1984; 2009, vols. 1&2) lengthy and complex accounts.

Mutual understanding: the double structure of speech To better understand what it means to reach understanding in view of this link, Habermas turns to the theory of speech acts of John L. Austin (1962) and John R. Searle (1969). The term "speech acts" (Searle, 1969, p. 16) stands for the idea that we use language not only to provide information but also to establish or clarify interpersonal relations. For example, we offer advice, warn others, convince them to do something, and so on. Thus understood, speech embodies a kind of intersubjective action – "by saying something, we do something" (Austin, 1962, p. 94, cf. p. 5). As speakers, we are at the same

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time acting social subjects, or agents. In a well-known formulation, Habermas (1971c, p. 104; 1979a, p. 41f) refers to these two aspects or levels of communication – its propositional content and its relational aspects – as a characteristic *double structure of speech*. Unlike conventional linguistics, speech-act theory therefore does not analyze language abstracting from its use in speech by acting subjects (Habermas, 1979a, p. 6).

Speech-act theory Systematically speaking, speech acts convey a speaker's intent in three respects: they assert some proposition about the world ("the" world of external phenomena and events), and/or about the speaker's expectations towards the hearers ("our" interpersonal relationship), and/or about the speaker her- or himself ("my" inner world). According to this three-world model, ²⁾ Habermas (1979a, pp. 53-68, esp. p. 68; 1984, p. 309) distinguishes three different, though interdependent, "idealized or pure cases" or "basic modes" of speech acts, which I prefer to reformulate slightly here in terms of three basic functions of speech:

- 1. The *constative* function of speech consists in stating the speaker's views about states and events of "the" world of external nature; that is, it *asserts* relevant opinions and knowledge.
- 2. The *regulative* function of speech consists in conveying the speaker's intention with respect to "our" social world of interpersonal relations; it *stipulates* criteria of proper action or evaluation.
- 3. The *expressive* function of speech, finally, consists in disclosing the speaker's subjective world of "my" wishes, attitudes, and emotions; together with actual behavior, it *reveals* the speaker's motives.³⁾

As a simple example, let's imagine a couple's conversation during a mountain hike. "It's clouding over, we are sure to get rain soon." (constative) – "We better hurry." (regulative) – "I hate getting wet!" (expressive). These are three different speech acts, but the first one might very well perform the function of expressing all three intentions in one and the same utterance, especially in a conversation among partners who know each other well. Some of the functions of speech will thus often be implicit (speech-act immanent) rather than explicit (articulated as separate speech acts). Speaking of "speech functions" rather than "speech acts" has the advantage of leaving it open whether we are effectively dealing with separate utterances (explicit "speech acts") or rather with speech-act immanent functions of one and the same utterance. When they remain speech-act immanent rather than being made explicit, it matters the more for a competent speaker to be aware of

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their being at play; for only thus can we grasp the full meaning of an utterance and are able to question its validity in all respects.

The crucial point in distinguishing the three functions of speech is indeed that they are always at play *together* yet appeal to *different* sources of credibility. The husband who tells his wife "we're in for some rain" obviously expects her to find his observation of imminent rain accurate, as she *must* know he is an experienced mountaineer (source of credibility: experience). Given the dangers of mountain hiking in bad weather, he also anticipates his wife *must* agree they had better hurry (source of credibility: a basic principle of precaution in mountaineering). The more as she *must* know he hates getting wet – how often has she experienced his foul mood when bad weather caught them in the mountains! (source of credibility: the husband's record of behavior)

Generally speaking, in uttering a statement we expect others to accept:

- 1. that its propositional content (i.e., what it states about the world) is *true* (factual and accurate);
- 2. that its normative content (i.e., its effect upon others and their relationship with us) is *right* (acceptable and legitimate); and
- 3. that its subjective content (i.e., what we thereby disclose about ourselves and our motives) is *truthful* (i.e., authentic and sincere).

Three kinds of validity claims Whether consciously or not, we thus raise with every speech act three basic kinds of validity claims: claims to truth, rightness, and truthfulness (cf., e.g., Habermas, 1979a, pp. 3 and 63-68; 1984, pp. 23f, 38, 99, 278, 307f, and 329). This multidimensional structure of speech has important consequences for the concepts of "competent" speech and "rational" communication. Unlike what is often assumed popularly as well as in science theory and practice,

The validity claim contained in constative speech acts (truth / falsity) represents only a special case among the validity claims that speakers, in speech acts, raise and offer for vindiation vis-à-vis hearers. (Habermas, 1979a, p. 51)

To be sure, we tend to take most of the claims raised in communicative practice for granted or in any case discuss one or two at a time only, as it is not practical to question them all at once. Nevertheless, the three claims are implicitly raised with every utterance and each may become thematic at all times, if we choose so. As Habermas explains in somewhat different terms:

Of course, individual [read: each kind of] validity claims can be thematically

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stressed, whereby the truth of the propositional content comes to the fore in the cognitive use of language, the rightness (or appropriateness) of the interpersonal relation in the interactive, and the truthfulness of the speaker in the expressive. But in every instance of communicative action [read: search for mutual understanding] the system of all validity claims comes into play; they must always be raised simultaneously, although they cannot all be thematic at the same time. (Habermas, 1979a, p. 66, my italics)

As already suggested, each kind of validity claim requires its specific form of vindication. Claims to truth imply an *obligation to provide evidence of relevant facts;* claims to rightness an *obligation to justify underlying norms* (or principles of action); and claims to truthfulness an *obligation to prove trustworthy.* All three claims need to be redeemed argumentatively; truthfulness, in addition, calls for consistency of the speaker's subsequent behavior. The three claims are to some extent interdependent; I can hardly expect others to accept the truth and rightness of what I say without giving them reason to believe in my sincerity, nor will others be inclined to assume that my value judgments or action proposals are right if I get my facts wrong. Despite this interdependence, however, evidence for one kind of claim cannot replace missing evidence of another kind. It is thus clear that *communicative action* — "the type of action aimed at reaching understanding" (1979a, p. 1) — requires our willingness to supply all three forms of evidence when asked to do so. Table 2 gives an overview.

Table 2: Speech functions and related validity claims (adapted from Habermas, 1979a, pp. 58 and 68; 1984, p. 329; and Ulrich, 1983, p. 136)

Function	Content	Validity claim	Vindication
Constative	Propositional: asserting "facts" about the world	Truth	Supplying evidence of relevant facts
Regulative	Normative: stipulating "norms" for our interpersonal relation	Rightness	Supplying good grounds (or reasons)
Expressive	Subjective: revealing speaker's "motives"	Truthfulness	Consistency of behavior

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The universal validity basis of speech Together, the three kinds of validity claims, and the specific forms of vindication they require, constitute for Habermas (e.g., 1979a, pp. 2 and 5; 1984, pp. 99 and 137f) the universal validity basis of speech. It is universal because whoever engages in genuine communication cannot help but to raise such claims, and thus also to imply that one is willing and able to substantiate them. At the same time, whenever we engage in communication, we cannot help but anticipate that all others

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involved are equally willing to redeem all three kinds of claims. Without this reciprocal assumption of accountability, it would be clear from the outset that mutual understanding cannot be reached, which would mean that the *telos* of speech is missed. In this universal validity basis, Habermas consequently also locates the *rational core* of the "communicative model of action" (1984, p. 101), that is, the idea that we can coordinate our individually goal-directed actions through communication – the effort to reach understanding – rather than through the use of force.

Cooperation and argumentation The relevance of this conception of a rational core in competent speech and cooperative action can hardly be overestimated, for two basic reasons. First, the fact that validity claims entail an obligation of vindication means they are rationally criticizable; consequently there exists, as a matter of principle, a rational basis for securing mutual understanding and peaceful cooperation among people; and the principle in question is the argumentative principle. Second, because not only claims to truth (assertion of facts) and to truthfulness (expression of motives) but also claims to rightness (stipulation of norms) admit of argumentative vindication and challenge, there also exists a rational basis for Habermas' vision of strengthening noninstrumental patterns of reasoning and societal rationalization. Tapping this double rationality potential is what the guiding idea of communicative rationality is all about.

"Formal pragmatics" It is accordingly important to Habermas to clarify the conditions that make communicative rationality possible. If we want to tap the mentioned rationality potential systematically, what is required is a language-analytically informed theory of argumentation that would supply a "rational reconstruction of the double structure of speech" (1979a, p. 44). To this theoretical effort of elucidating the deep structures of rational communication, and of translating them into a framework for rational discourse, he gives the name formal pragmatics.⁴⁾

The rational core of argumentation: "discourse" Let us move to the second level of communicative rationality, the level of discourse. "Discourse" represents a radicalization of communicative action — or of the orientation towards mutual understanding that motivates it — in the following sense. In everyday communicative practice, we do not and cannot usually make all the validity claims involved thematic. Most claims remain implicit

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and we simply suppose we (or those raising them) can support them if asked to do so. What matters in the first place is not that we actually do challenge and examine all validity claims but only, that *as a matter of principle* they are *criticizable*; that is, if for any reason they should become problematic, they *can* be examined in a rational and cooperative way. Therein resides the basic *rationality potential* of a communicative model of action coordination to which we have referred (1984, pp. 99 and 101).

What makes a good argument? To harvest this potential, we must consequently be clear about what it means to rationally assess or examine (defend and criticize) a validity claim that has become problematic. That is, what conditions need to be fulfilled for such an examination to be possible and successful? What kind of "logic" of argumentation can help us in this task? It is the task of the second, argumentation-theoretic level of Habermas' conception of communicative rationality to analyze these rationality conditions. I would like to discuss them along the lines of Table 3.

Table 3: Rationality aspects of discourse, or: What makes a "good" argument?

(abstracted from Habermas, 1984, pp. 8-42, and Wenzel, 1992, pp. 124-136

Perspective	Aim	Key requirement	Crucial step
Rhetoric, or "process" perspective	Effective communication	"Rational motivation" (communicative competence guided by cooperative attitude)	Step from strategic to communicative action
Dialectic, or "procedure" perspective	Critical interchange	"Ideal speech situation" (uncoerced and undistorted discourse)	Step from communicative action to discourse
Logical, or "product" perspective	Sound argumentation	"Cogent argumentation" (pragmatic logic of argumentation)	Step from a deductive to a pragmatic logic of argumentation
(All of the above)	Self-reflecting discourse practice	"Meta-levels of discourse" (radicalization of discourse)	Step from initial to higher levels of reflection
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Three perspectives of argumentation theory Habermas (1984, pp. 25-42, esp. p. 26) finds it useful to discuss the requirements of rational argumentation from three perspectives: we may look at arguments as process, as procedure, and as product. He treats these three perspectives as roughly equivalent to Aristotle's well-known distinction between rhetoric, dialectic, and logic. But in relating the "process," "procedure," and "product" perspectives to the aims of these three classical disciplines of argumentation, he at the same time redefines these aims. The link he establishes between his

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three perspectives and the three classical disciplines of argumentation serves him to highlight what is new and different in his approach to argumentation theory:

- Process: replaces the classical "rhetorical" aim of persuasion with the aim of convincing others by communicative, rather than strategic, means – that is, through communicative competence guided by a cooperative attitude or, as Habermas calls it, by rational motivation;
- Procedure: replaces the classical "dialectical" aim of convincing or challenging others through debate with the aim of achieving rationally motivated, rather than merely factual, agreement – through undistorted discourse; and
- Product: replaces the classical "logical" aim of achieving rationality through syllogistic reasoning with the aim of deciding on disputed validity claims through a pragmatic logic of substantial argumentation that is, through clear rules and models of what it means to criticize and redeem validity claims, or agreements reached in discourse, with a view to securing sound arguments.

I would also like to refer readers to Wenzel's (1992, orig. 1979) somewhat different account of the three perspectives; the way he sums them up has equally helped me in abstracting Table 3 from Habermas' discussion:

Just as the term "argument" may be construed differently, so the question "What is a *good* argument?" may elicit at least three responses.... From the standpoint of rhetoric, a good argument is an *effective* one; from the standpoint of logic, it is a *sound* one; and from the standpoint of dialectic, it is a *candid* and *critical* interchange. (Wenzel, 1992, p. 136)

Argument as *process*, then, is about the effectiveness of communication in achieving the telos of mutual understanding; as *procedure*, about the provisions for securing rationally defendable agreement; and as *product*, about the assessment of the strength of validity claims.

A fourth perspective: radicalization of discourse In addition, Habermas discusses the requirements of discourse from a fourth perspective, at which all three previous aspects come into play. He refers in terms of "radicalization of discourse." Remember we characterized discourse as a radicalization of communicative action in the first place; discourse has as its subject the way we exchange information and "reasons" (grounds, motives, arguments) in ordinary everyday communication. Just as discourse represents a self-reflective level of ordinary communication, we may thus understand this fourth perspective as aiming at a self-reflective level of discourse; that is, by "radicalizing" the idea of discourse, Habermas means in essence that discourse may and should become its own subject, in ways that

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we will discuss later, towards the end of the present essay.

Let us see, then, how Habermas employs these four perspectives to reconstruct the methodological basis of good argumentation. The task is difficult, as it wages war on two fronts: formal pragmatics should overcome the limitations of traditional logic on the one hand, and those of conventional linguistic analysis of "competent" speech and argumentation on the other hand.

"Reconstructing" Habermas' constructive effort It should be clear that this double reconstructive effort is bound to raise many difficult and crucial issues of argumentation theory. With all due attempts on my part to simplify and structure this discussion, it is still likely to demand a considerable effort of study and patience from my readers, whom I mean to address as professionals but not as professional philosophers. In any case, it will at times be difficult to keep a good sense of overview and orientation as to where exactly we stand, at each moment of the discussion, with our quest for developing the idea of communicative rationality. Not only Habermas will be our guide but also two other (as I see it) major argumentation theorists, I mean Aristotle (whom we know from an earlier essay in this series) and Stephen E. Toulmin (whom we have yet to meet). For this much is clear: we are just about to engage with the second, middle level of Table 1, the level of argumentation theory (as distinguished from the previously discussed level of language theory). Our aim at this level is to unfold the idea of discourse, whereas before it was to unfold the basic idea of communication that we described as "mutual understanding." As a further tool of orientation, I propose to structure our effort of unfolding the idea of discourse by aligning the four mentioned perspectives of argumentation theory with these four key requirements that Habermas, throughout his writings, associates with good argumentation: "rational motivation," the "ideal speech situation," "cogent argumentation," and "metalevels of discourse," as suggested in Table 3. Readers may find it helpful later on to return to this table from time to time, to remind them

Unfolding the idea of discourse: four crucial steps Habermas (1984, p. 26) makes it clear that in a proper analysis of the requirements of argumentation, the analytical distinction of these four perspectives and corresponding requirements cannot ultimately be maintained, and I agree. Even so, I find it helpful to associate the four perspectives with four crucial steps that lead us

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from ordinary everyday communication to increasingly reflective discourse practice: I mean the four steps (1) from strategic to communicative action; (2) from communicative action to discourse; (3) from a deductive to a pragmatic logic of argumentation; and finally, (4) from initial to higher levels of reflection. Let us, then, introduce Habermas' understanding of discourse by taking with him these four steps.

1. "Rational motivation": the step from strategic to communicative action

The most basic condition of any search for mutual understanding is that those involved are sincerely interested in securing cooperative action, rather than just pursuing their own ends (i.e., using speech as a form of merely purposive-rational action). In the first case, Habermas speaks of communicative action; in the second, of strategic action. When we act communicatively rather than strategically, we try to coordinate our actions with those of others on the basis of mutual understanding and agreement, rather than achieving our goals through the use of force, deception, or other non-communicative means. This is not to say that the idea of communicative action requires us to renounce the pursuit of individual goals, as little as it means to replace action by communication. Rather, the point is that when we act in pursuit of our individual goals, we try to coordinate our actions communicatively, namely, inasmuch as they are not of a purely private nature but through their consequences may affect or concern others. There are two elementary traps to be avoided, then: we must not equate rational practice with rational communication - communication is a means and constituent of rational practice but cannot replace it - and we must not equate a cooperative stance with altruism. As Habermas (1984, p. 101) makes clear, "communicative action designates a type of interaction that is coordinated through speech acts and does not coincide with them."

Renouncing a merely strategic attitude, but not individual goals To avoid such possible confusions, we may think and speak of communicative vs. strategic action as the alternative of acting either with a communicative or a strategic attitude (or orientation), whereby a "communicative attitude" means that we try to avoid or resolve conflicts of interests based on mutual understanding, whereas a "strategic attitude" means that we pursue our individual advantage without concern for mutual understanding but rather rely on authority and power, or withhold information and use it tactically, do not disclose our true motives, or employ other means suitable to impose our

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goals or at least to give us a competitive advantage (note the managerial and military origin of the concept of "strategic" action).

The cooperative, but not altruistic, core of rational practice But why exactly is a communicative rather than strategic attitude required for rational discourse? It is not because we are expected to act altruistically but rather, to respect the universal validity basis of speech. As long as we communicate with an openly or latently strategic orientation, we do not reciprocally recognize the minimal normative core of rational practice that we have earlier described as the telos of mutual understanding. In Kantian terms, our communication risks being ethically inconsistent: the fact that we do communicate means we expect others to hear and accept what we say, yet at the same time we are not prepared to take seriously what they may have to say on our claims, except when it suits our purposes. In this precise sense, we refuse the cooperative attitude that constitutes the very core of communicative rationality. In the terms of Habermas, when we disregard the telos of mutual understanding that is built into the universal structure of rational speech, we thereby undermine the minimal normative foundation of rational social practice. In one word, a strategic attitude renders the search for genuine mutual understanding inoperative:

In communicative action, the validity basis of speech is presupposed. The universal validity claims (truth, rightness, truthfulness), which participants at least implicitly raise and reciprocally recognize, make possible *the consensus that carries action in common*. In strategic action, this background consensus is lacking. (Habermas, 1979c, p. 118, my italics; cf. similarly 1979a, p. 209n)

Rational motivation, then, means that we are willing to renounce a merely strategic attitude in favor of a genuinely cooperative attitude; or, with the short labels used by Habermas, that whenever we enter into dialogue, we engage in communicative rather than strategic action.

2. "Ideal speech situation": the step from communicative action to discourse

There are basically two grounds on which we may want to see validity claims examined: either because their consequences concern us in ways that we find unacceptable or else, because we want to make sure an understanding we reach is adequate. In the first case, examining the validity claims in question is important because we *disagree*; in the second, because we *agree* and wish to make sure the agreement we have reached represents a rationally defendable rather than just a factual consensus, so that we may

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rightly expect others to agree, too.

Rationality, or the quest for "reasons" The crucial point is the same, though: any understanding we reach must be based in the end on reasons that we are willing and able to defend (cf. Habermas, 1984, p. 17). To put it differently: the option of moving from the tacit consensus that carries communicative action to explicit discourse must remain open. On this option depends the rationality potential of communicative action. The "ideal speech situation" is Habermas' original, though somewhat controversial, attempt to explain the conditions that would make sure the discursive option indeed remains open and can be relied upon.

Before we consider these conditions, let us make sure we understand why the quest for "reasons" - the step from communicative action to discourse which these conditions are to secure – is crucial to Habermas' practical philosophy and its project of a communicative rationalization of practice. Obviously, the tacit consensus that constitutes the validity basis of communicative action is fragile; it holds as long as we are prepared to assume that those with whom we try to reach understanding are willing and able to back their claims with sound reasons. The situation can change swiftly when the validity claims some participants raise, and the way they defend them, become, for whatever reason, doubtful. When "the consensus that carries action in common" (as quoted above from Habermas, 1979c, p. 118) breaks up, communicative action risks breaking down. People may be tempted to switch back to a strategic (i.e., competitive rather than cooperative) mode of thinking and acting. It is then essential that we are able to maintain or regain a basis for communicative action. This is the moment to mobilize the mentioned rationality potential:

The rationality proper to the communicative practice of everyday life points to the practice of argumentation as a court of appeal that makes it possible to continue communicative action with other means when disagreements can no longer be repaired with everyday routines and yet are not to be settled by the direct or strategic use of force. For this reason I believe that the concept of communicative rationality, which refers to an unclarified systematic interconnection of universal validity claims, can be adequately explicated only in terms of a theory of argumentation. (Habermas, 1984, p. 17f, my italics)

The argumentative principle In everyday communicative practice, discourse in the strict sense in which Habermas understands it will usually play a minor role. Even so, the power of a communicative model of the rationalization of society – of everyday problem solving and decision making

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in all domains of society, that is — hinges upon the *principle of argumentation*. The rationality potential that interests us depends on it. If we want to resolve our human differences with reason rather than with force, we need to find ways to employ "argumentation as a court of appeal" (1984, p. 17) whenever communicatively coordinated practice risks breaking down. *Arguments*, says Habermas (1996a, p. 225f), are "reasons proffered in discourse that redeem a validity claim." The trick, as it were, is to take communicative practice a crucial step further — from communicatively secured *coordination* of action, which relies on the mentioned tacit consensus, to communicatively secured *reflection* about what endangers this consensus. This move to a self-reflective metalevel of communicative action is what we mean with the step from communicative action to *discourse*. It offers us an opportunity to maintain a basic cooperative orientation even though the shared validity basis on which it depends has become problematic — a cooperative alternative to taking a merely strategic attitude.

In communicative action it is naively supposed that implicitly raised validity claims can be vindicated (or made immediately plausible by way of question and answer). In discourse, by contrast, the validity claims raised for statements and norms are hypothetically bracketed and thematically examined. As in communicative action, the participants in discourse retain a cooperative attitude. (Habermas, 1979a, p. 209n; similarly 1971c, pp. 115-117, 1973a, p. 18, and 1975, p. 107f)

When we enter into discourse, we switch to a form of communication that focuses on exchanging arguments rather than information, opinions, valuations, and expressions of subjectivity. That is, we "render inoperative all motives except solely that of a cooperative readiness to arrive at an understanding" as to how we want to handle a contested claim (1973a, p. 18f; similarly 1971c, pp. 115-117 and 1973c, p. 214f; 2009, Vol. 2, p. 212). We therefore suspend (or "bracket," as Habermas likes to say with Husserl) all issues other than those tied to the critique and vindication of that claim, with the aim of regaining the unanimity that previously existed but which has become problematic. In this way we can try to recover a shared validity basis for communicative action, whereby that shared validity basis is now located at the metalevel of a shared *procedure* for deciding rationally and cooperatively for or against disputed validity claims, rather than at the level of a "naively supposed" assertability of the claims themselves. "Discourse" is the specific form of communication that embodies this procedure.

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"Ideal speech situation" The suspension of all motives except a cooperative search for the better argument is also what Habermas (1971c, pp. 136-141; 1973c, pp. 252-260; 2009, pp. 259-269) had in mind when he originally associated the discursive procedure with an anticipated ideal speech situation:

I call a speech situation ideal where communications are not only not hindered by external, contingent influences but also not hindered by constraints originating in the structure of communication itself. The ideal speech situation excludes systematic distortion of communication. More precisely, the structure of communication produces no constraints if and only if there is a symmetrical distribution of the chances of all participants in the discourse to select and perform speech acts. From this general requirement of symmetry we can then derive specific requirements [of symmetry] for the different classes of speech acts. (Habermas, 1973c, p. 255, and 2009, Vol. 2, p. 262, my transl.)

As far as I am aware, Habermas has not really outlined these specific requirements systematically; nor is such a specification indispensable to grasp the essential idea of a free and undistorted exchange of arguments. In *The Inclusion of the Other*, I find this helpful characterization of the ideal conditions of such an exchange:

The practice of argumentation sets in motion a *cooperative* competition for the better argument, where the orientation to the goal of a communicatively reached agreement unites the participants from the outset. The assumption that the competition can lead to "rationally acceptable," hence "convincing," results is based on the rational force of arguments. Of course, what counts as a good or a bad argument can itself become a topic for discussion. Thus the rational acceptability of a statement ultimately rests on reasons in conjunction with specific features of the process of argumentation itself. The four most important features are: (i) that nobody who could make a relevant contribution may be excluded; (ii) that all participants are granted an equal opportunity to make contributions; (iii) that all participants must mean what they say; and (iv) that communication must be freed from external and internal coercion so that the "yes" or "no" stances that participants adopt on criticizable validity claims are motivated solely by the rational force of the better reasons. (Habermas, 1998, p. 44)

There can be little doubt that this is an ideal account of argumentation – the intent is not to give a "realistic" description but rather, to provide methodological orientation. The four features that Habermas mentions define the essential intent he associates with the "ideal speech situation." We may sum them up in terms of four key concerns towards which argumentative practice is to work, even if it cannot fully meet them:

- i. open access to everyone concerned,
- ii. equal argumentative chances for everyone participating,
- iii. sincerity of all participants, and
- iv. absence of external and internal coercion or other sources of distortion

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(authority, manipulation, etc.).

Practice can always do better with regard to these four concerns; at least in this sense they are not hopelessly idealistic. And of course, Habermas' point is that when we enter into an argument, we have "always already" accepted the four concerns; for otherwise, argumentation cannot improve mutual understanding and thus is pointless. Still, the question remains: In what way can an exchange of arguments under such anticipated conditions be assumed to produce arguments that are not only "better" (i.e., better acceptable to the participants) but also more "rational" (justified) than others? Isn't "better" a hopelessly normative category? As if to respond to such doubts, Habermas continues:

If everyone who engages in argumentation must make at least these pragmatic presuppositions, then in virtue of the (i) public character of practical discourses and the inclusion of all concerned and (ii) the equal communicative rights of all participants, only reasons that give equal weight to the interests and evaluative orientations of everybody can influence the outcome of practical discourses; and because of the absence of (iii) deception and (iv) coercion, nothing but reasons can tip the balance in favor of the acceptance of a controversial norm." (Habermas, 1998, p. 44)

That is, a proper argumentative process must give "equal weight" to all concerns – be "fair" – and in this procedural sense may be called "rational" (or more precisely, "rationally motivated") whatever the outcome. If such an understanding of the intent of the ideal speech situation is not entirely mistaken, we may define it as follows.

Definition: The *ideal speech situation* stands for the sum-total of all those conditions of discourse which in principle would allow people to meet as equals, so that the only force at work would be the more or less compelling nature of their arguments.

Ideal, yet real To the extent a discourse situation comes close to such conditions, we can have faith in the outcome of a discourse, as we have reasons to assume that the validity basis of speech (as explained earlier) is given and that the participants are indeed rationally motivated (cf. 1971c, pp. 122 and 136f; 1973b, p. 386; 1973c, pp. 252-260; 1984, p. 25f; 2009, Vol. 2, pp. 259-269). However, more important is another implication of the concept, one that does not depend on the extent to which real-world discourse situations are ideal. The point is, as Habermas argues, that discourse participants *cannot help but* anticipate an ideal speech situation – otherwise it would be pointless for them to enter into a discourse, as we have

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said above. However counter-factual the idea may remain, it is nevertheless effective. The conditions of the ideal speech situation are in this sense *ideal* and real at once (cf. 1971c, pp. 120, 122, and 137; 1973c, p. 258; 2009, Vol. 2, p. 266f).

Working towards more symmetry To avoid a one-sidedly ideal reading of his intentions, Habermas now prefers to speak of general or formal (rather than ideal) pragmatic presuppositions of argumentation (e.g., 1984, pp. 25 34; 1998, p. 44) or simply of "the presuppositions of argumentation" (e.g., 2009, Vol. 2, p. 266, a passage that has been slightly reformulated as compared to 1973c, p. 258).⁵⁾ Unfortunately, this newer formulation lacks the clout of the original term and may not be particularly helpful to readers not familiar with Habermas' theoretical framework. It might be more helpful for them to think and speak of general symmetry conditions of rational speech, a formulation that Habermas uses less often (1984, p. 25). It sems to me this latter term nicely sums up the core idea that should matter to us practically with a view to promoting discursive practice, I mean the idea of allowing people to meet as equals, or in other words, enabling them to voice and argue their concerns at eye-level – the core idea of the definition suggested above. To be sure, such symmetry remains no less an ideal than "ideal speech," but again: it nevertheless provides orientation, for we can always do better. It is largely in our power to make such progress; we can actually do quite a lot to create more (though imperfect) symmetry, here and now, wherever and whenever we have a chance to settle our differences discursively. Working towards argumentative symmetry makes sense regardless of how unrealistic an ideal it may be; for the only alternative is to accept that implicitly or explicitly, differences are handled through a strategic rather than communicative mode of interaction.

3. "Cogent argumentation": the step from a deductive logic of inference to a pragmatic logic of argumentation

If we want to settle our differences discursively rather than strategically, the crucial questions becomes: How do we *assess* the validity (conclusiveness) of arguments? This is a crucial issue – perhaps *the* most crucial issue in any conception of communicative rationality – and I will therefore discuss it in some detail, drawing not only on Habermas but on a brief review of the development that leads from Aristotle via modern logic and argumentation theory to Habermas. Unless we clarify this issue, we cannot translate the

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procedural notion of rationality that we have associated with the ideal speech situation thus far into clear rules and criteria of what it means to rely on the force of the "better argument." If arguments are to be the only force that should decide for or against disputed validity claims, we need to be clear about the argumentative logic required – the logic of "good" (i.e. conclusive) argumentation.

Aristotelian logic The traditional approach to this question, of how we can assess the conclusiveness of arguments, goes back to Aristotle's logical writings, the Organon, and particularly to his work on the syllogism in Prior Analytics, an early theory of the logic of inference (Aristotle, 1984a). Logic (or analytics, as he called it) was for him quite simply the science of valid inference. The central concept is that of a deduction, or in Greek: sullogismos (a term that has a somewhat broader meaning to Aristotle than the term "syllogism" has today in formal logic). In Aristotle's words:

A deduction is a discourse in which, certain things being stated, something other than what is stated follows *of necessity* from their being so. I mean by the last phrase that it follows *because of* them, and by this, that no further term is required from without in order to make the consequence necessary. I call *perfect* a deduction which needs nothing other than what has been stated to make the necessity evident. (1984a, I.1, 24b18-24, italics added)

That which is stated at the outset is the *premises*, and that which follows is a *conclusion*. The deductive argument that leads us "of necessity" from the premises to the conclusion is what Aristotle calls a *sullogismos*; and when the deduction is perfect, that is, requires no other backing than what has been stated in the premises, he calls it a *demonstration*. Note that Aristotle's definition allows for logical (analytical) as well as causal (scientific) and principled (rule-based) reasoning, which is to day, it relies on an understanding of the "because of" behind "necessity" which includes both analytic and substantial reasons.

Perfect vs. imperfect deduction Aristotle's particular interest in the *Prior Analytics* is in the question of "what sort of deduction is perfect and what imperfect" (1984a, I.1, 24a13). The distinction allows him to analyze the special case of merely analytic reasoning without losing sight of the general case of conclusive reasoning that he associates with deductive argumentation. Analytic reasoning is "perfect" in the sense that it is self-contained, that is, it does not depend on any evidence beyond what is stated in the argument. All other forms of deductive reasoning are "imperfect" in

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that they may turn out to be not so self-contained, although they still represent forms of conclusive reasoning. As an example of a perfect deduction (or demonstration) we may think of a mathematical equation. If we resolve it properly, that is, according to the rules of mathematics, it yields a result that is correct of necessity (i.e., by definition) and thus requires no further backing of an empirical or other kind. By contrast, we may think of an astronomer's prediction of the next eclipse of the moon as an example of an imperfect deduction.

The next eclipse of the moon: an example of "imperfect" deduction Aristotle himself refers to this example in the *Posterior Analytics* (1994b, I.8, 75b33). He does not detail it in any way though, so let me do it for him. Like any forecast, predicting a lunar eclipse depends on empirical premises in the form of a record of past observations of the phenomenon in question (in this case, the moon's moving through the shade of the earth) and moreover, some insight into the statistical and/or causal patterns that describe or explain this observational record. On this basis, astronomers can calculate the exact time and location of the next lunar eclipse (the conclusion) with a reliability that is virtually beyond doubt. Most scientists will accordingly tend to see the argumentative step from the premises to the conclusion as embodying a rigorously deductive kind of reasoning, quite along the lines of Aristotle's basic concept of deduction. It is quite clear to them, however, as it was to Aristotle, that the deduction is not "perfect" in the same way as the mathematician's, in that it is never a contradiction in itself to assume that such a prediction may turn out to be wrong. However rigorous the argument is, we may not possess sufficient knowledge of all the empirical conditions on which it depends.

Induction, or "after analytics" In the case of astronomical forecasts, the success of past forecasts gives us good grounds for assuming that the astronomers got their records and calculations right. In fact we have so much faith in their calculations that we tend to forget that the validity basis of such astronomical forecasts, just like that of any other forecasts, includes some inductive reasoning — a well-grounded conclusion from particular observations of the past to general propositions that will hold in the future. This logical step is what we call "induction." It is different from deduction in that the conclusion is not merely tautological but adds new information to the premises (past observations). This may be more obviously problematic with

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other forecasts, say meteorological or economic forecasts; but the crucial difficulty remains the same. It consists in the unavoidable assumption that our premises capture all the relevant phenomena, as well as the causal or statistical relations between them, in a way that describes the future as well as the past. On this assumption rests the (imperfectly) "deductive" character of the conclusion as Aristotle understands it. But of course, since the premises and the way we use them contain statements of an experiential (observational and theoretical) nature, we may some day find them to describe "some" rather than "all" of the relevant phenomena, namely, if some previously unknown exceptions or other restrictions emerge. Imperfect deductions may therefore always be challenged on rational grounds, and may then require some additional evidence as to why in the specific case the step from the premises to the conclusion is warranted or else, on what additional conditions not previously stated it depends - the "further terms from without" to which Aristotle refers in his above-quoted definition of a deduction.⁶⁾

This is different from perfect deductions or "demonstrations," which rely on premises that either are logically necessary (namely, by definition, within an axiomatic system such as logic or mathematics) or else have been established beyond any reasonable doubt to represent truly universal propositions (say, laws of nature) or principles (say, basic human rights). While it may be the aim of science to "demonstrate" the nature of things as an expression of the universal laws of nature (1984b, I.2, 71b17-32); and of ethics, to "demonstrate" principles of the virtuous life that hold good usually (though not necessarily universally, 1985, I.3, 1094a22), Aristotle reminds us that the normal methods of science and ethics nevertheless argue towards, not from, universal propositions or first principles. That is, inasmuch as they involve more than inductive reasoning, they embody forms of imperfectly deductive reasoning, in which the premises include some inductive elements. Demonstrations thus remain a special, ideal case of deductive argumentation, and deductive argumentation a special case of logical reasoning. Already for the founder of formal logic it was thus clear that a satisfactory logic of argumentation could not be reduced to a logic of analytic (or "perfect") reasoning, which is what is now generally understood by deductive logic. A broader notion of argumentative conclusiveness is called for. Imperfect rather than perfect deduction – substantial rather than analytical inference – is the daily bread of argumentative practice, in the fields of science and

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ethics no less than in everyday life.

The need for some warranting principles Aristotle's distinction between perfectly and imperfectly deductive argumentation it itself imperfect, in that we cannot maintain it in argumentative practice. Imperfect deduction always raises the issue of how we are to establish universal propositions that can serve as basic warrants (or in Aristotle's terms, "principles") for conclusive argumentation. It thus depends on a complementary logic of induction. This is the topic of Aristotle's (1994b) Posterior Analytics. Its core difficulty is that universal propositions or "appropriate principles" (1984b, I.2, 72a6) cannot be deductively demonstrated, for perfect deductions depend on such principles in the first place: "one cannot demonstrate anything except from its own principles." (1984b, I.9, 75b37, cf. 76a13-17 and II.19, 99b20f) Hence, some alternative, non-deductive (or more exactly: nondemonstrative) forms of argumentation are required, which Aristotle describes in terms of episteme (theory of science) and nous (theory of first principles) and later, in his practical philosophy, also in terms of *phronesis*, the art of deliberation about the "right way" to orient our practice towards eudaimonia (my definition in Ulrich, 2009a, p. 14). These alternative modes of argumentation are all part of Aristotle's concept of reason (logos), the rational faculty or activity of the soul that makes humans aware of the good and the true. In more contemporary terms: although they are fallible rather than "perfect," we can still assess their conclusiveness rationally.

In sum, Aristotle's notion of conclusive argumentation was not merely deductive, and his understanding of deductive argumentation or *sullogismos* was not purely analytic. Instead, he allowed for the possibility that a deductive conclusion might add *new information* to what was stated in the premises; and he gave a complementary role to deductive and inductive reasoning in that each entailed elements of the other. For the founder of deductive logic, the *Prior* and the *Posterior Analytics* formed a whole just like theoretical and practical philosophy, too, formed a whole.

Symbolic logic After Aristotle, argumentation theory did not develop much for a long time, and when it did start to develop again, things went somehow downhill. Aristotle's comprehensive conception of logic was increasingly narrowed down; the discipline of logic was transformed from a theory of argumentation as he had envisioned it – a logic of deductive and inductive inference that could be used as a tool of argumentation in all fields of

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knowledge and practice – to a theory of analytic reasoning *only*. Since the 17th century, through the work of logicians and mathematicians such as W. Leibniz, G. Boole, A. de Morgan, J. Venn, C.S. Peirce, G. Frege, G. Peano, A.N. Whitehead, B. Russell, and many others (for an introduction, see, e.g., Smith, 2009), the study of logic has developed into the highly formalized system of contemporary mathematical or symbolic logic, which may be thought of as a kind of "algebra of logic." Its main branch, propositional calculus (also called propositional logic), tells us how by means of logical operators such as "and," "or," "not," "if," "only if," and "if ... then," we can combine and transform basic sentences or propositions (understood as strings of symbols that are associated with some defined meaning) into more complex propositions without changing their socalled truth value, a proposition's relation to truth (i.e., its being true, false, probable, or conditional). As Aristotle might have commented, had he experienced this development: "perfection" won out over meaningfulness at the expense of relevance.⁷⁾

Toulmin's new beginning When Stephen E. Toulmin's (2003) book The Uses of Argument first appeared in 1958, it offered an entirely new approach to the theory of argumentation. The book does not deal extensively with Aristotle; but by returning to Aristotle's almost forgotten quest for a logic of argumentation that would help us establish conclusions in different fields of science and practice, it managed to challenge the established discipline of formal deductive logic more seriously than any other work did since Aristotle's day. By trying to be relevant rather than "perfect," it made it painfully apparent to logicians how far their field had moved away from any argumentative practice. It was accordingly unpopular with them, they called it "Toulmin's anti-logic book"! Despite such unfriendly early reception, the book has long since become a standard text for anyone studying the theory and practice of argumentation, or what soon became known as "the Toulmin model of argumentation." Meanwhile, due to the efforts of Jurgen Habermas to integrate Toulmin's work with the speech act theory of Austin and Searle and with his own formal pragmatics, it has found even wider recognition as a pioneering outline of a non-analytic – more accurately: not merely analytic – logic of argumentation. Accordingly, it is now often referred to as the Toulmin-Habermas model of argumentation.

The semantic and pragmatic turn of argumentation theory In the light of

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our previous discussions of speech-act theory and of deductive logic, the aim of an "imperfect" but relevant logic of argumentation is clear: rather than operating at a purely syntactic level of securing well-formed propositions or chains of propositions (WWFs, well-formed formulae), it needs to offer us a way of grasping the semantic meaning and pragmatic relevance of arguments in specific and changing contexts of argumentation. It must, in other words, not be blind to issues of hermeneutics (How may we understand the situation?) and practical philosophy (What would in a thus-understood situation constitute rational action?). This becomes obvious as soon as one thinks of the expressive (e.g., emotional) and normative (e.g., moral) content of speech acts: the form and "truth value" (cf. note 6) of utterances and even their propositional content may remain the same, yet the semantic and pragmatic implications we associate with them may change. Hence, to secure argumentative conclusiveness in a sense that considers the relevant contexts of meaning and action at play, we need a richer concept of conclusiveness, one that replaces deductive necessity by pragmatic cogency as the central notion (a term yet to be defined). In addition, a practically useful model of rational argumentation might also need to consider that the nature of the argumentative process is not irrelevant for assessing the rationality of the outcome; that is, we may need to adopt a partly procedural notion of validity; for the argumentative practices by which a conclusion is reached matter as much as its form and content. In the terms that today's logicians use, such an account of argumentation would represent a piece of "informal" logic rather than formal logic; in our own terms of reflective practice and critical pragmatism, it would allow us to measure the strength of arguments against varying contexts and procedures of argumentation rather than just requirements of well-formedness.

Toulmin's jurisprudential analogy As a basic alternative model for informal logic, Toulmin (2003, pp. 7f, 10, 39, 235) boldly proposed a jurisprudential analogy, for two main reasons as I understand him. First, in legal proceedings it is more clear than in formal logic that valid conclusions are always the result of credible argumentative practice. And second, legal practice renders it more obvious than the study of formal logic that the origin and target of argumentation is always a disputed validity claim, the meaning and validity of which depends on the specific circumstances. By contrast, the development of formal logic since Aristotle has led away from such practical and empirical issues; it has therefore also failed to study the differences and

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similarities of conclusive argumentation in applied fields of argumentation such as science, law, or medicine. Toulmin does not claim that judicial practice provides a perfect model for all the other fields; but at least, he argues, it leads us beyond the narrow perspective of modern logic towards a broader, practically oriented framework:

The claim implicit in an assertion is like a claim to a right or to a title. As with a claim to a right, though it may in the event be conceded without argument, its merits depend on the merits of the arguments which could be produced in its support. Whatever the merits of the particular assertion may be — whether it is a meteorologist predicting rain for tomorrow, an injured workman alleging negligence on the part of his employer, a historian defending the character of the Emperor Tiberius, a doctor diagnosing measles, a businessman questioning the honesty of a client, or an art critic commending the paintings of Piero della Francesca — in each case we can challenge the assertion, and demand to have our attention drawn to the grounds (backing, data, facts, evidence, considerations, features) on which the merits of the assertion are to depend. We can, that is, demand an argument; and a claim need be conceded only if the argument that can be produced in its support proves to be up to standard. (Toulmin, 2003, p. 11f)

And hence:

Arguments can be compared with law-suits, and the claims we make and argue for in extra-legal contexts with claims made in the courts, while the cases we present in making good each kind of claim can be compared with each other. A main task of jurisprudence is to characterize the essentials of the legal process: the procedures by which claims-at-law are put forward, disputed and determined, and the categories in terms of which this is done. Our own inquiry is a parallel one: we shall aim, in a similar way, to characterize what may be called "the rational process," the procedures and categories by using which claims-in-general can be argued for and settled. Indeed ... law-suits are just a special kind of rational dispute, for which the procedures and rules of argument have hardened into institutions." (Toulmin, 2003, p. 7)

My personal experience with judicial practice may not exactly suggest as close a "parallel between procedures of rational assessment and legal procedures" as Toulmin (2003, p. 39) proposes; mechanisms of power and institutional selectivity play an all too pronounced role for that. But then, is judicial practice so different from other fields in this respect? As a matter of principle (and indirectly also, as a critique of judicial practice), it is indeed difficult to see why a *sound* argument in support of a disputed legal right or title (say, to a property or a professional qualification) should be fundamentally different in nature (or better, logic) from a sound argument in support of any other disputed assertion or claim, including scientific, moral, and philosophical claims. Toulmin's judicial metaphor is thus not as odd or arbitrary as it may look at first. As the reader may remember from an earlier essay of this series in which we discussed Kant's concept of practical reason and the role of the principle of universalization in it, it was in fact Kant

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(1787, Axif, Bxiii, and B779) who first used the judicial metaphor to describe the aim of his critical philosophy: the three *Critiques* were to subject reason in all its employments to the "court of pure reason" or to "reason's self-tribunal" (see Ulrich, 2009b, pp. 2 and 14; cf. 1983, pp. 199 and 2003). Toulmin does not mention Kant, ⁸⁾ but his intent is similar:

There is one special virtue in the parallel between logic and jurisprudence: it helps to keep in the center of the picture the *critical* function of the reason.... A sound argument, a well-grounded or firmly backed claim, is one which will stand up to criticism, one for which a case can be presented coming up to the standard required if it is to deserve a favorable verdict. How many legal terms find a natural extension here! One may even be tempted to say that our extralegal claims have to be justified, not before Her Majesty's Judges, but before the Court of Reason." (Toulmin, 2003, p. 7f)

Constant and changing elements of argumentative logic Toulmin's "court of reason" differs from Kant's in that it is constituted by practitioners of different fields of professional practice such as law, medicine, science, business, ethics, philosophy, mathematics, cultural criticism, and so on, rather than by "pure reason." Consequently, since argumentative practice takes place in such different fields of argument (2003, p. 14f), we have to expect that it will be couched in different conventions or "canons" (2003, pp. 15f and 34) and thus will employ changing, field-dependent criteria or standards of assessment (2003, pp. 15, 28, and 33-35). That does not imply, however, that the basic procedure by which argumentation reaches well-grounded conclusions needs to be different in each field; Toulmin treats this issue as an open empirical question. We may well be able to uncover some general, basically field-invariant (2003, pp. 15 and 33-37) features, which we may then understand and teach as a skeleton or basic layout of arguments that applies to all fields or uses of argument (2003, pp. 40 and 87-134).

If I understand Toulmin correctly, his core idea, then, is something like this: taking into account the *field-specific* characteristics of an argument will free us to focus on the *field-invariant* logical patterns at play. By paying attention to what changes, we can learn about what remains the same, namely, the ways we combine field-invariant with field-specific features to formulate strong arguments. Although Toulmin does not explicitly say so, it seems to me he applies this core idea to the philosophical task of constructing a general logic of argumentation as well to the practical job we all do every day of assessing specific arguments in real-world situations of problem solving and decision making. With his notion of a "field of arguments,"

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and pragmatic contexts of argumentation that we have found missing in the deductive-logical model of rational argumentation. That is, we need not escape into abstract, formal logic to ensure general applicability and validity! Taken together, then, Toulmin's message is: an argument can be made to the effect that we all may, in our argumentative practice, consider particular argumentative contexts of meaning and relevance and yet apply forms and procedures of argumentation that are universally valid and rigorous. Whether the argumentative contexts are adequately specified in the disciplinary or institutional terms of different fields of professional practice such as those we have mentioned is another matter that need not concern us at this point; I rather doubt it.⁹⁾

A comparative empirical approach The task that Toulmin mapped out for argumentation theory is then clear. The main difficulty in developing a generic model of argumentation consists in the great variety of argumentative circumstances and purposes in different fields. In response to this difficulty, Toulmin sees logic as a philosophical discipline that includes comparative empirical analysis of the actual working logic – the argumentative patterns – used in different fields of argumentation, as distinguished from the idealized logic of logical theorists (2003, pp. 9 and 135-194).

As an example of such empirically generalizing analysis, Toulmin (2003, pp. 17-40) analyzed the use of modal terms such as "possibly," "might," "presumably," "chances are," "certainly," or "necessarily" in different fields of argumentation. How do people use such terms to qualify claims or to criticize and defend arguments? He found that although the *criteria* (standards, grounds, reasons) for asserting or questioning such qualifications vary with the field, the qualifications (or logical modalities) themselves have the same argumentative *force* (i.e., implications of use, p. 28) in all fields. For instance, taking the example of qualifying a suggestion as "possible," Toulmin reports:

In order for a suggestion to be a "possibility" in any context, ... it must "have what it takes" in order to be entitled to genuine consideration *in that context*. To say, in any field, "Such-and-such is a possible answer to our question," is to say that, bearing in mind the nature of the problem concerned, such-and-such answer deserves to be considered. This much of the meaning of the term "possible" is field-invariant. The criteria of possibility, on the other hand, are field-dependent, like the criteria of impossibility and goodness. The things we must point to in showing that something is possible will depend entirely on whether we are concerned with a problem in pure mathematics, a problem of team-selection, a problem of aesthetics, or what; and features which make

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something a possibility from one standpoint will be totally irrelevant from another.... "Can" and "possible" are, accordingly, like "cannot" and "impossible" in having a field-invariant force and field-dependent standards. This result can be generalized: all the *canons* for the criticism and assessment of arguments, I conclude, are in practice field-dependent, while all our terms of assessment are field-invariant in their *force*. (Toulmin, 2003, p. 34f)

The unchanging layout of argumentation Based on this kind of comparative empirical analysis, Toulmin proposes a field-invariant "layout" of argumentative procedure and logic that any sound arguments tends to follow in practice. We can summarize it in a basic and an expanded scheme. Figure 1 shows the basic scheme, Figure 2 the enlarged scheme.

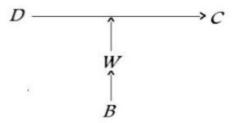


Fig. 1: The layout of arguments (basic scheme) Source: adopted from Toulmin, 2003, pp. 92 and 97

The basic scheme works with four components:

C = **Claim:** a conclusion to be justified. <u>Example</u> of Toulmin (2003, pp. 92-99, slightly adapted here): "Harry is a British citizen."

D = **Data:** an empirical observation or a statement of "fact" that is offered as evidence for C. Also called G = Ground (esp. in Toulmin et al, 1984). Example: "Harry was born in Bermuda, a British overseas territory."

W = **Warrant:** a rule or principle that justifies the step (transition) from D to C. <u>Example:</u> "A person born in a British overseas territory will generally be a British citizen."

B = **Backing:** some evidence or a general reason in support of W, to be supplied if citing W is not sufficiently convincing to all those addressed. There are two logically different kinds of B: If B implies C, the argument is merely analytic, as in syllogistic logic. If however C is not implied in B (the more important case for argumentative practice), then the argument is substantial, that is, it adds information and is not covered by syllogistic logic. <u>Example</u> (of the substantial kind): "This is so on account of the following statutes and legal provisions: ... (e.g., the *British Nationality Act 1981* and the *British Overseas Territories Act 2002*)."

Of these four components, the first three are required and are therefore usually explicit in any sound argument, whereas the fourth is required only if someone challenges the warrant W, and will thus remain implicit in many arguments. But since a challenge is always possible, any argument consisting of the first three components (D, W, so C) implies the availability of the

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fourth (i.e., some B) and may, if doubted, need to make it explicit (D, W, B, so C). But what happens if B is challenged in turn? Then the proponent of C may either offer an alternative, hopefully more convincing backing (B'), or else may argue why the original backing (B) is valid. In the latter case, the "T" layout applies once again, so that B then results as the conclusion of a preliminary argument (D', W', so B), or in a short notation that Toulmin does not use):



Similarly, a preliminary argument is possible if D is challenged (D', W', so D):



The "T" layout is in this sense *recursive*, that is, it may be applied to its own components – an important characteristic that renders its use very flexible and allows to build entire chains of arguments. Some recursive loops recurring "rounds" of argumentation about an argument's components – may indeed be very useful at the outset to prepare the ground, as it were, and must obviously remain possible at all times as the argument unfolds. In a sense, then, such recursiveness constitutes the methodological core of what Habermas terms the step from communicative action to discourse, as well as of the argumentative principle in general. Although neither Habermas nor Toulmin say it in these terms, the recursiveness of the "T" layout seems crucial if discourse (the argumentative process) is indeed to "bracket" (suspend) all issues except that of a disputed claim's validity; for only thus can the assumptions and implications of arguments be freely unfolded. On the other hand, if the participants take this recursive business too seriously and keep challenging each other's Bs and Ds from the outset, then the argument about the original claim (C) never really starts. The good news is that the danger of an infinite regress is only a theoretical risk; practically speaking, if discourse is to play a role, the participants need to share some basic assumptions, otherwise they have no basis for reaching an understanding at all.

There are two more components, which the proponent of an argument may, but need not, employ from the start. They are useful whenever participants Ulrich's Bimonthly Page 34 of 65

question the force of basic arguments (i.e., arguments following the basic scheme of Fig. 1), in that they may help to avoid endless recursive loops or else, a breakdown of the argumentative process altogether:

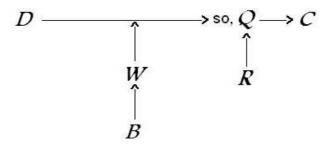


Fig. 2: The layout of arguments (expanded scheme) Source: adapted from Toulmin, 1984, p. 98, and 2003, p. 97

The two additional components are:

Q = **Qualifier:** a modality expressing the force (strength or certainty) with which C is asserted, typically formulated with a term such as "presumably," "surely," "probably," "necessarily," "in general," "chances are," or "as far as the evidence goes." Qualifiers expressing incomplete strength recognize the conditional character of an argument, allowing for the possiility of rebuttals. <u>Example:</u> "*Chances are* Harry is a British citizen, unless ha has become a naturalized American or neither of his parents was a British citizen."

R = **Rebuttal:** a statement of some exceptional circumstances that may limit or undermine the force of an argument (specifically of Q, W and B) and thus the validity of C, typically beginning with "unless," "except that" or "if and only if." <u>Example:</u> "Someone born in a British overseas territory may generally be assumed to be a British citizen, *except* that in this case, neither of Harry's parents was a British citizen, so the *British Overseas Territories Act 2002* does not apply."

Fig. 3 shows an example taken from meteorological practice.

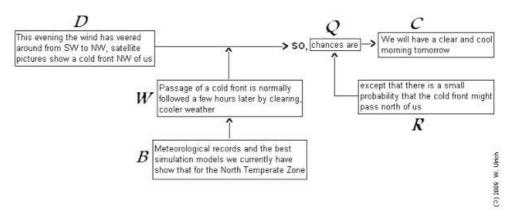


Fig. 3: The layout of arguments: example "weather forecast" Source: adapted from Toulmin, 1984, p. 124

The generic nature of Toulmin's scheme Note that Toulmin's layout of arguments is truly general, in that it allows for a plurality of different types of validity claims. It recognizes that not only assertions of fact and of logical,

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mathematical, or statistical conclusiveness admit of argumentative challenge and substantiation, but also all other kinds of claims, including those concerning questions of morality, legality, political legitimacy, aesthetics, and so on. Toulmin's empirical analysis confirms to Habermas what he has been suggesting all along: there is no reason to assume, as conventional wisdom does, that only scientific questions (i.e., claims to truth) can be decided rationally. We can just as rationally criticize and vindicate practical questions, including claims to rightness, to adequate value judgments, to the sincerity of one's motives, and so on. As Toulmin concludes from his empirical work:

Philosophers have often held that arguments in some fields of inquiry are intrinsically more open to rational assessment than those in others: questions of mathematics and questions about everyday matters of fact, for instance, have been considered by many to have a certain priority in logic over (say) matters of law, morals or aesthetics. The court of reason, it has been suggested, has only a limited jurisdiction, and is not competent to adjudicate on questions of all kinds. In our inquiry, no contrast of this sort has so far turned up: there is, for all that we have seen, a complete parallelism between arguments in all these fields, and no grounds are yet evident for according priority to mathematical and similar matters. (Toulmin, 2003, p. 37)

Such a finding is of obvious interest to Habermas' search for ways to strengthen noninstrumental patterns of reasoning and societal rationalization. Although Toulmin does not formulate his conclusion in the terms of practical philosophy, it touches upon the very core issue of the Kantian question of "how reason can be practical"; or, in terms closer to Habermas' undertaking, it does indeed address the question of whether and how we can effectively extend the scope of rational argumentation from questions of theoretical-instrumental rationality to questions of practical-normative rationality. Yes we can, and the basic pattern of argumentation remains the same! Toulmin's finding certainly suggests that the limitation of rational criticism to the tools of science and deductive logic, as it has been advocated notably in K.R. Popper's (1959, 1962, 1972) "critical rationalism" – a source of orientation for many practicing scientists and professionals – cannot be upheld except on dogmatic grounds (for a detailed critique, cf. Ulrich, 1983, ch. 2; 2006c; 2008).

The reader may think: I hear the good news, but why should I assume that practical matters can indeed be settled "rationally" according to Toumin's model? Isn't the example in Fig. 3 just dealing with a question of theoretical rather than practical reason? To respond to such doubts, I would like to delve a little deeper into Toulmin's analysis and its far-reaching implications for

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epistemology, practical philosophy, and our conception of rationality in general. To begin with, it may be useful simply to add an example that deals with a practical-normative rather than a scientific question and which moreover is taken from everyday argumentative practice as we have all experienced it: When is a promise binding and when not? In practice, this is not always as clear as one might assume (e.g, when the promise was given jokingly rather than seriously). Fig. 4 illustrates a possible layout of arguments.

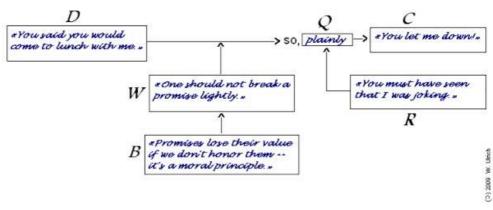


Fig. 4: The layout of arguments: example "promise"
Source: adapted from Toulmin, 1984, p. 118

Recovering argumentative logic It seems to me Toulmin indeed offers us a generic model of argumentation. It is generic in at least two senses: first, it is applicable to practical questions (Fig. 4) as well as to theoretical questions (Fig. 3); and second, it encompasses "logical" issues not only of analytic but also of substantial reasoning. It may thus help us to recover the broader notion of logic as argumentative logic with which Aristotle started out two millennia ago, prior to its subsequent reduction to formal deductive logic. This historical curtailment of argumentative logic (and ultimately, the logic of systematic thinking) still hinders and impoverishes our contemporary notions of what rational conclusions - rational argument and criticism - are all about. To mention just two major examples, it is still prevalent in the "exact" sciences in the form of the so-called Hempel-Oppenheim model of explanation, 10) and even in the "inexact" sciences it has remained prominent in the form of Popper's earlier-discussed deductive concept of "rational criticism." The unspoken ideal of such a deductive notion of "rational" conclusion is to eliminate from systematic thinking all elements that cannot be entrusted to a machine or to a "propositional calculus." To be sure, the advantage of analytic reasoning is that it can do without considering the empirical, normative, and expressive content of conclusions; but the price we pay for measuring the rationality (or conclusiveness) of all thought and

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argumentation against such an ideal is definitely too high – it begs the issue. For as we have learned from both Aristotle and Kant, but also from many other outstanding thinkers about the nature of thinking (e.g., Dewey, 1910, and Bateson, 1972, 1979), the task of rational thinking and argumentation consists precisely in establishing the *connections between things* that experience alone cannot give us; *the pattern which connects* or "metapattern," to use Gregory Bateson's (1979, Ch. 1) famous phrase. Only reason can inform us about the basic *principles* that connect things, both in experience (theoretical reason) and in action (practical reason). Allow me to summon John Dewey as an independent witness who is widely respected for his account of *How We Think:*

There is thus a double movement in all reflection: a movement from the given partial and confused data to a suggested comprehensive (or inclusive) entire situation; and back from this suggested whole ... to the particular facts, so as to connect these with one another and with additional facts to which this suggestion has directed attention.... To think means, in any case, to bridge a gap in experience, to bind together facts or deeds otherwise isolated. (Dewey, 1910, p. 79f, my italics)

Toulmin's scheme teaches us how to bridge the gap rationally. It bursts through the limits of a merely analytic concept of "conclusiveness." Although it superficially resembles Hempel and Oppenheim's (1948) model, it recognizes that the job of substantial reasoning is to add new content to what is previously known or assumed (the premises), and that merely analytic schemes of conclusive argumentation cannot handle this task. We are facing an epistemological rather than just a deductive-logical issue. The crucial question is how we can justify knowledge (or in any case, the new content in question). To reduce this question to a merely analytic issue implies an error of category or in Toulmin's (2003, pp. 150, 153, 155, 212-216) term, a type-jump - an impossible inferential leap from analytic conclusiveness (a tautology) to substantial conclusiveness (new content). Type-jumps are unavoidable, but they involve a non-analytic transition from one type of logic to another, and thus burst the framework of analytic conclusiveness. This does not imply, however, that they are arbitrary, or that the arguments in question cannot be conclusive; all it implies is that they are not analytic, and in this sense non-trivial.

The need for "type-jumps" To require, as formal logicians do, that conclusions must always (i.e., in any rational argument) follow analytically from the data and backing, amounts to an inadequate handling of type-jumps.

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The error, to be sure, is not the attempt to jump from D and B to C, but only the attempt to treat the jump as a purely analytic issue. This attempt is bound to lead us into an *apparent* logical gulf – apparent, that is, because it is merely the consequence of a narrow understanding of what "logic" and "rationality" are all about. The gap is an analytical gap, but not necessarily an argumentative gap. Argumentative logic is about rational argumentation; but rational argumentation is not just about internal consistency, it is also and mainly about the "strength" (relevance, force, cogency) of an argument within specific contexts of meaning and action. Although internal consistency of arguments is always a *necessary* requirement for "strong" argumentation, it is not a *sufficient* criterion, except of course in purely analytic judgments – a special, particularly simple case of conclusiveness that we must not mistake for all there is to argumentative logic. If we do, and consequently try to define rational argumentation in purely analytic terms, we are bound to end up with a bottomless epistemological skepticism.

So much for Toulmin's pioneering analysis. Let us now draw some conclusions for the step from a deductive logic of inference to a pragmatic logic of argumentation (step 3 in Table 3).

Conclusion 1: farewell to "Hume's problem" It is difficult in this connection not to think of David Hume's (1978, Book I) long-standing critique of empiricism and inductive reasoning, which has remained an unresolved problem for epistemology ever since. "Hume's problem" has remained unresolved, as we now begin to understand, because he defined it in a self-defeating way. It was the inevitable consequence of his attempt to reduce the logic of inquiry (i.e., of substantial argumentation) to one of analytic reasoning only. Thus seen, it was indeed "Hume's problem"; an artefact of his assumptions. To do justice to Hume, his attempt pursued a critical purpose; it taught us that any such attempt is futile. Because something like a language-analytical turn of argumentation theory was out of sight then, he had no option but to try and explain substantial argumentation in analytic terms – and had to fail. Understandably, neither Hempel and Oppenheim's (1948) deductive model of scientific explanation nor Popper's (1959) "falsificationist" use of deductive logic could really solve Hume's problem, although, to do justice to Popper, he probably came as close to a solution as a purely analytic framework, without access to hermeneutic and pragmatic reasoning, could get. The difference is, Hume recognized that his Ulrich's Bimonthly Page 39 of 65

experiment had failed!

Popper's Hume, as well as Hempel and Oppenheim's Hume, is definitely not Kant's Hume, the Hume who managed to awake the great critical philosopher from his slumbers! Nor is he Toulmin's Hume, who makes us understand that any attempt to reduce rational argument to a deductive-logical concept of rationality commits a *petitio principii*:

At every step he rejected anything other than analytic criteria and proofs. There is no certainty that a pinch of salt put in water will dissolve. Why? Because, however much evidence I may be able to produce of salt's dissolving in water in the past or present, I may suppose that a pinch dropped in water tomorrow will remain undissolved without contradicting any of this evidence. ... Throughout the *Treatise* Hume appeals repeatedly to considerations of this kind: the understanding is to admit arguments as acceptable, or "conformable to reason," if and only if they come up to analytic standards. But, as he soon discovers, all arguments involving a transition of logical type between data and conclusion *must* fail to satisfy these tests: however grotesque the incongruity produced by conjoining the same data with the contradictory of the conclusion, the very presence of a type-jump will prevent the result from being a flat contradiction. (Toulmin, 2003, p. 152f)

Perhaps a less self-defeating approach can begin with Toulmin's (2003, p. 212) recognition that we should not "talk away" the need for type-jumps, that is, simply eliminate them from our concept of rationality. We better learn to handle them carefully! Handling type-jumps carefully is what Toulmin's layout of argumentation is all about. It teaches us how to take the step from D and B to C in a way that deals explicitly and critically with the warrant W or, in the earlier discussed terms of Aristotle, with the "principles" on which we rely in taking this non-analytic step. We can now formulate two essential guidelines to this end:

- Toulmin's model accurately defines and locates "Hume's problem" as
 the type-jumps involved in all non-trivial (i.e., not just analytic)
 argumentation. It makes us understand that the *argumentative force* or
 cogency of an argument depends essentially on the way we bridge the
 analytical (but not argumentative) gap between B and W, and
 consequently, the resulting gap between D and C.
- 2. Toulmin's model tells us precisely how to handle the two non-analytic transitions ("type-jumps") involved, from B to W and from D to C. It calls for, and regulates, a discursive validation of the "bridge principles" we use, whether we are aware of them or not, for this transition.

To be sure (and here I seem to differ a bit from Habermas' understanding of Toulmin, to which I will turn in a moment), we must never forget that

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"bridge" principles are just that: auxiliary principles that help us in making those non-analytic transitions. They serve us to understand the type-jumps involved, but not necessarily to justify them in any definitive way; they are working hypotheses, as it were. The point is, in substantial reasoning we cannot avoid relying on some bridge principles; hence, from a critical point of view, it is imperative that we make it clear to ourselves and to everyone concerned what these principles are and how they affect the perceived strength of an argument. Although we need them for assessing arguments, they should not stop us from considering, in each case, alternative transitions.

Another basic lesson concerns our understanding of the principle of excluded contradiction, as the core principle of analytic reasoning. Hume, Popper, Hempel, and Oppenheim all appear to have overestimated how far it carries. Counter to them, I suggest we understand it as a criterion of meaningfulness rather than of validity: we cannot argue meaningfully if we contradict ourselves, and that is why we need it. But validity is a different issue. In purely analytic reasoning we may take meaningfulness and validity to be congruent (propositions that are logically true are logically meaningful and those which are logically false are by definition not meaningful), which is to say, we do not need a separate concept of validity at all. In assessing the validity of substantial arguments, however, it is never a contradiction in itself to imagine that the contrary conclusion or claim might be true; sometimes it is a critical necessity to do so! To put it differently: whether a claim is logically implied or contradicted by its premises tells us nothing about what difference it makes in specific contexts of meaning and action. Insisting on analytic criteria for assessing the validity of substantial claims is therefore beside the point (Toulmin, 2003, pp. 156 and 216). The third basic guideline, then, is something like this:

 The principle of excluded contradiction is not an adequate bridge principle to ensure valid transitions from B to W and from D to C. It is a necessary condition of meaningful argumentation but not a sufficient condition of cogent argumentation.

As a forth and last lesson, we may apply Toulmin's analysis to Hume's negative assessment of all inductive reasoning: although deductive-logically correct (by definition!), it is epistemologically *beside the point*. An analogous conclusion obviously holds for issues of practical philosophy. All

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Hume's rejection of inductive reasoning really tells us is that inductive logic is different from deductive logic. That is, it calls for a richer concept of conclusiveness, one that takes into account the specific and changing contexts of argumentation, as well as probably different procedures of – non-trivial – argumentation. Which is what Toulmin's work is all about. Our fourth guideline, therefore, may read:

4. It is time to bid farewell to "Hume's problem": Toulmin's analysis has freed us once and for all to see that "non-analytic arguments also can be conclusive" (2003, p. 216).

Going beyond Toulmin's model, we will want to embed his layout of argumentation in a broader, hermeneutic and pragmatic framework for critical discursive practice such as it has become available through Habermas' work. Let us, then, return to Habermas "formal-pragmatic" reconstruction of argumentation theory.

Conclusion 2: the Habermas-Toulmin model of argumentation What we call the "Toulmin-Habermas model" is simply the way Habermas adopts Toulmin's model but embeds it in his larger framework of formal pragmatics. As is to be expected, he ties it to the "general pragmatic presuppositions" of communicative rationality that we have discussed earlier. The layout of arguments remains the same, only its interpretation and use in discursive practice is partly different from Toulmin's reading. There is no need to repeat our account of the "formal-pragmatic" lens through which Habermas (e.g., 1973c, pp. 238-252; 1984, pp. 22-27 and 31-42; 2009, pp. 243-259) reads Toulmin's layout of argumentation; it is clear that he uses it both to enrich and to operationalize his understanding of "rational" discourse with concepts such as the telos of mutual understanding and the general symmetry conditions of discourse; with his analysis of the different types of validity claims involved in all communication; with the resulting notion of a universal validity basis of speech; and so on. It may be more helpful, instead, to offer a short discussion of those particular aspects of Toulmin's reading that he welcomes and those which he wishes to revise.

Beginning with the "welcoming" part of Habermas' reception, he finds it essential that Toulmin's conception of argumentative logic includes issues of argumentative practice that reach beyond formal logic. He acknowledges that by considering different uses and contexts (or "fields") of argumentation as

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well as the non-trivial transitions these uses of argument may involve, Toulmin opened the discipline of logic up to the wider concerns of a theory of argumentation properly speaking, a theory that can deal with the hermeneutic and pragmatic contexts of argumentation. Already his early writings on communicative competence and on the need for a consensus theory of truth made it clear that Toulmin's analysis helped him in developing an adequate understanding of argumentation theory in the first place, for example, as it relates to his concepts of "rational motivation," of "discourse," and of "rational consensus"; in particular, it made him see more clearly that "the logic of discourse is a pragmatic logic [that] examines the formal properties of contexts of argumentation." (Habermas, 1973c, p. 249). Later, in the *Theory of Communicative Action*, Habermas (1984, p. 31) explicitly designates it as an "advantage of Toulmin's approach" that "he allows for a plurality of validity claims while not denying the critical sense of a validity transcending spatio-temporal and social limitations." He is similarly explicit about the value of Toulmin's empirical finding of the fieldinvariance of both the layout of arguments and the force of modal qualifications.

Despite these many points of agreement, Habermas' finds it necessary to expand Toulmin's perspective. For Habermas, a proper theory of argumentation amounts to nothing less but a theory of rationality in general, and such a theory can for him only be a *social* theory of argumentation, that is, part of a more encompassing social theory as he envisions it with his theory of communicative action. At the other end of the scale, Habermas thinks an adequate argumentation theory requires a further-reaching basis in language theory. In addition to this broader outlook, Habermas has a number of more specific methodological concerns that do not allow him to adopt an empirically generalizing approach such as Toulmin's without further ado; I restrict myself to mentioning three of them.

Bringing back in the "process" and "procedure" perspectives First of all, Habermas finds that Toulmin focuses one-sidedly on the logical (or "product") perspective of argumentation while rather neglecting the rhetorical (or "process") and the dialectical (or "procedure") perspectives (cf. Table 3). Especially the latter is of course essential to Habermas. In his view, therefore,

Toulmin does not push the logic of argument far enough into the domains of dialectic and rhetoric. He doesn't draw the proper lines between accidental

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institutional differentiations of argumentation [read: fields of argument] on the one hand, and the forms of argumentation determined by internal structure [read: types of validity claims and processes required to substantiate them, i.e., to reach rationally motivated agreement], on the other. (Habermas, 1984, p. 35)

For example, much of the argumentation going on in the field of legal practice is oriented towards success, negotiation, and at best compromise, rather than towards reaching genuine agreement (as, say, in the fields of science and moral discourse). However, "negotiating compromises does not at all serve to redeem validity claims in a strictly discursive manner, but rather to harmonize nongeneralizable interests on the basis of balanced positions of power"; and furthermore, "arguments in a court of law ... are distinguished from general practical discourses through being bound to existing law, as well as through the special restrictions of an order of legal proceedings that takes into account the need for an authorized decision and orientation to success of the contesting parties." (1984, p. 35)

Mobilizing the pragmatic presuppositions of discourse A consequent second concern relates to what Habermas sees as wanting clarification of the pragmatic presuppositions of discourse in Toulmin's account. We have just mentioned that there are relevant differences of purpose between argumentation in court (Toulmin's jurisprudential model) and argumentation in rational discourse properly speaking (Habermas' discourse-theoretic model). In particular, argumentation in court is not relieved from external pressures such as the influence of power and the "need for an authorized decision" (Habermas, 1984, p. 35). In legal practice the participants are usually pursuing a strategic rather than communicative orientation, quite apart from arguing under heavy pressures of cost and time as well as asymmetric distribution of decision authority. Toulmin's account remains rather silent on such issues, which for Habermas call for a methodological counterconception (or standard) such as the "ideal speech situation."

Against the suppression of generalizable interests A third and last concern that I want to mention here regards the distinction of nongeneralizable vs. generalizable interests. When we agree or argue about a validity claim, we need to understand what it means for the different parties concerned; to which extent has it a bearing on everyone's interest or only on some particular interests? If such issues are to addressed, an adequate theory of argumentation cannot do without giving a well-defined role to Kant's principle of universalization (or generalization). Toulmin's framework, due

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to its empirically generalizing rather than philosophically constructive approach, appears to offer no systematic place to Kant's principle, or at least remains largely silent on its role. For Habermas (1984, pp. 17 and 35), argumentation and discourse can in the end only lead us to valid conclusions if they address the universal audience of all those concerned, that is, are open to everyone who may have something to contribute or to object. 11) Convincing a universal audience, so as to gain general assent for one's claim, is for Habermas (1984, p. 26) "the fundamental intuition connected with argumentation." As he sees it, Toulmin does not distinguish clearly enough between generalizable and nongeneralizable interests; in fact, Toulmin's focus on the empirical analysis of a number of fields of argument such as law, morality, science, management, and art criticism, with their institutionally and professionally bounded audiences, rather works against a universalist perspective. Habermas sees a danger that with such an empirical and institutional orientation of our notions of sound argumentation, our argumentative practice may inadvertently rely on some preexisting notion of rationality, rather than making rationality its core subject (Habermas, 1984, pp. 33-35)

With Habermas I would argue that an adequate framework for argumentative practice should indeed give a more central place to the universalization principle than it has in Toulmin's work. This seems particularly obvious when it comes to the normative implications that discursively reached agreements may have for third parties. Without the Kantian idea of testing and justifying our claims with a view to the generalizability of underlying norms or principles of action, we risk losing sight of the "critical difference warranted and unwarranted consensually between decisions." (Burleson, 1979, p. 113, quoted in Habermas, 1984, p. 35) But similar conjectures are equally appropriate regarding the procedures used in the sciences for generalizing observational statements to hypotheses and nomological laws. It is the same essential concern which led Peirce (1878, par. 407), in the realm of theoretical discourse, to understand truth as a the ultimate agreement of an indefinite community of competent researchers; and Kant (1786, 1788; cf. Ulrich, 2009b), in the realm of practical discourse, to understand morality in terms of *moral universalization*. ¹²⁾

A definition of pragmatic cogency In consequence of these and other observations, Habermas wishes to give his theory of discourse a more clearly

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pragmatic and discourse-theoretic twist than he finds it in Toulmin's model of substantial argumentation. Successful argumentation, apart from not exhausting itself in deductive-logical inferences, amounts to what Habermas terms cogent argumentation. Cogent argumentation is basically similar to Toulmin's concept of conclusive argumentation in that it involves "typejumps" and for this reason entails argumentatively non-trivial transitions from premises (D and B) to conclusions (C, via W). Beyond that shared understanding, it is essential for Habermas to insist that a discursively reached agreement should count as rational only the extent it is the result of a rationally motivated, undistorted discourse. He therefore maintains that we can adequately conceive of argumentative cogency only in terms of communicative rather than strategic reason; in addition to Toulmin's layout of cogent argumentation, such a concept of cogency entails corresponding requirements of process (communicative competence), procedure (undistorted discourse), and product (rationally motivated agreement). The argumentative process, procedure, and product must all live up to the general (or formal) pragmatic presuppositions of argumentation; we have summarized these conditions, in Tables 1-3, in terms of different core issues and requirements of communicative rationality and types of validity claims concerned. Furthermore, since for Habermas a proper logic of cogent argumentation is a pragmatic logic, we need a clear understanding of how we define argumentative conclusiveness in pragmatic terms. As Habermas explains:

In terms of discursive modalities, an argument is unfitting (or *impossible*) if W cannot be interpreted as a rule of inference that allows the transition from D to C. An argument is compelling (*necessary*) if C can be inferred from B; in this case we have an analytic rather than substantive argument, for W is not adding any information to B. We call an argument cogent if and only if it is *possible* in terms of discursive modalities. This is the case if there is no deductive relation between B and W, but B nonetheless provides sufficient *motivation* for accepting W as plausible. We call such arguments substantive, as they generate plausibility despite a logical discontinuity, that is, a typejump [Typensprung] between B and W. (Habermas, 1973c, p. 243, and 2009, Vol. 2, p. 249, my transl.; *note:* in the second sentence of the German text, both in the 1973 original and in the 2009 edition, 'C' is misspelled as 'D'.)

This summary account of cogent argumentation is precise, but not easy to handle. It may be advisable for later reference, therefore, to translate it into the following definition.

Definition: Within a pragmatic logic of substantial argumentation along the lines of Toulmin and Habermas, we may define *argumentative cogency* as follows. An argument is "cogent" if and only if:

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 the step from D and B together to C is a *substantial* one (i.e., D and B do not entail C analytically, or in other words, C is not logically necessary);

- 2. it is logically and theoretically *possible* (i.e., it contradicts neither logic nor the facts); and
- it is redeemed *discursively*, that is, it effectively meets with rationally motivated consensus (i.e., it convinces everyone concerned to agree, under conditions of basically unconstrained discourse).

In conclusion, then, we may say that in the Toulmin-Habermas model of argumentation, the layout of argument itself (as proposed by Toulmin) does not change, but its understanding and use does.

4. "Metalevels of discourse": the step from initial to higher levels of reflection

If we now return to our starting point - the requirements of rational argumentation as summarized in Table 3 - there remains a fourth and last step we need to take. Its necessity follows from the preceding discussion. A pragmatic concept of argumentative cogency does not alter the fact that in all non-trivial, substantial, argumentation there is an element of inductive reasoning involved. It is thus always possible and meaningful to question the cogency of the step from D (via W and B) to C, or quite simply to argue for an alternative conclusion. Habermas responds to this issue with two strategies. The first strategy builds on the idea of bridge principles that should render the step from D to C plausible, despite its inductive implications (i). We have already encountered two such bridge principles, Peirce's indefinite community of researchers (when C stands for theoretical claims) and Kant's concept of moral universalization (when C stands for practical claims). In addition, Habermas suggests the "principle of discourse" as a third bridge principle (we will discuss this in connection with his discourse ethics). The second strategy builds on the idea that a radicalization of discourse must always be an option, in the sense that discourses may become their own subject (ii). That is, whenever the plausibility of the step from D to C becomes problematic, Habermas suggests a practical need for taking the discourse to metalevels at which the presuppositions of inductive reasoning can be analyzed. Rather than relying on general bridge principles and reconstructive analysis alone, we might say, Habermas puts his faith in the discourse participants themselves, by entrusting them with the task of ensuring to their argumentative efforts a self-reflective dimension.

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In the present context, I am mainly interested in the second strategy, as it completes the idea of a progression of discursive steps by which we try to understand the meaning of a "good" argument, and accordingly the rationality requirements of discourse (cf. Table 3). Habermas does not discuss the role of bridge principles together with his notion of a radicalization of discourse, yet it seems to me that the two strategies are to some extent interdependent, in that the need for radicalization arises partly from the somewhat precarious nature of the "bridge principle" strategy. In other words, I believe the bridge principle strategy cannot stand alone; only together with the "radicalization" strategy is it credible. It makes sense, therefore, to begin with a brief discussion of the first strategy.

Re: (i). To better understand the nature and role of bridge principles, and of methodological "reconstruction" in general, Habermas (1973c, pp. 246-252; 1979a, pp. 14-22; 1979b; pp. 73f and 77-82; 1984, pp. 2f, 67-69, 138-140; 2009, Vol. 2, pp. 252-259) turns to Noam Chomsky's (1965) analysis of linguistic competence, according to which linguistic grammar is not conceivable without a corresponding mental grammar, and to Jean Piaget's (1932, 1970) research on the cognitive (intellectual and moral) development of children. Further important sources are George Herbert Mead's (e.g., 1913, 1925, 1934) work on "symbolic interactionism," with its central question of how we form our sense of identity as members of society, our "social self"; and Lawrence Kohlberg's (1968, 1976, 1981, and 1984) work on the stages of moral development – two sources that we have discussed earlier in this series (Ulrich, 2009b). In all these approaches, "formal explication of the conditions of rationality and empirical analysis of the embodiment and historical development of rationality structures mesh in a peculiar way." (1984, p. 2). The essential idea is that all our cognitive capabilities, and thus also the bridge principles on which we have to rely (and usually do rely intuitively) in inductive reasoning, embody linguistic and cognitive schemata that form in the course of our intellectual and moral development:

If the basic predicates available in the languages we use for argumentation do indeed express such cognitive schemata, induction means something rather trivial: namely, the exemplary repetition of exactly that type of experience which previously formed these cognitive schemata themselves.... *Induction thus loses its mysterious character, although the limits of what it can achieve become equally apparent.* The data [read: D and B] available for inductive confirmation or rejection [of propositions] are unavoidably preselected by our linguistic and conceptual framework [Sprachsystem], so much so that "experience" cannot represent an independent instance of validation.... It is,

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then, an entire framework rather than any particular proposition which is effectively confronted with reality; and this framework is regulated by our cognitive development. (Habermas, 1973c, p. 246f; 2009, Vol. 2, p. 252f, my simplified transl. and my italics)

If this is so, Habermas appears to suggest, we can indeed have some basic faith in the adequacy of the cognitive schemata that we have learned to apply to different domains of experience and argumentation; for these object-domains shaped our cognitive schemata in the first place. They act in this sense as "guarantors" (1973c, p. 246; 2009, Vol. 2, p. 252) for the adequacy of our argumentative languages, although not of course for the validity of our claims; the latter can only be redeemed discursively, and such redemption must now include the dimension of the larger cognitive frameworks at work.

The argument looks rather similar to Kant's (1787, B193-197; cf. Ulrich, 1983, p. 208) famous "highest principle of all synthetic judgments," according to which we ultimately cannot help but presuppose that there exists a fundamental convergence between the (cognitive) conditions of possible experience and the (ontological) conditions of the objects of experience. But there is an important difference: we can no longer unproblematically assume today that the conditions of objective experience are at the same time sufficient conditions for truth, as Kant could still assume. "Objectivity" and "truth" have fallen apart, or as Habermas (1973b, pp. 382-293, cf. Ulrich, 1983, pp. 113-115) explained in his famous "Postscript" to Knowledge and Human Interest, Kant's transcendental a priori has dissolved into an empirical a priori of experience and a discursive a priori of argumentation. This is why Habermas, in addition to acknowledging the (unavoidable) assumption of a basic adequacy of our cognitive apparatus, needed to introduce all his "formal-pragmatic" provisions for argumentative cogency. Ever since the "Postscript," he has therefore focused mainly (and as I have always felt, all too one-sidedly; see the discussion in Ulrich, 1983, pp. 153-166, esp. pp. 158 and 163) on the a priori of argumentation. Only with Truth and Justification, he has recently (2004) turned back the wheel a bit.

In fact, it is because the two sets of conditions – concerning the constitution of experience and the validation of claims – are interrelated and must come together, that induction may lose some of its mysterious character, as Habermas writes in the above-quoted passage. Inasmuch as our cognitive schemata are conditioned by our social and intellectual development (both as

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a species and as individual), inductive reasoning is perhaps, as Habermas seems to suggest, more trivial than we tend to think, namely, in that it need not start from scratch with each argument but has a history of maturation, a past record of probation as it were. I may not be thoroughly convinced, nor do I assume the reader is; the important point for me is, rather, that *in any case* we should not take our cognitive schemata (including bridge principles) for granted. We better watch carefully how they influence both the meaning and the validity we attribute to an argument – which leads us to the second strategy.

Re: (ii). The cognitive schemata in question express themselves and become effective through the specific linguistic and conceptual frameworks that we use in argumentation. Consequently, communication and discourse take on an additional role: they are not only means to exchange information and arguments but also means to make us aware of, and "enlarge," our linguistic and conceptual frameworks. The substantial critique of validity claims unfolds into a substantial critique of language. That is, adequate argumentative procedures must allow for a revision of the conceptual framework of a discourse, so that facts (D), backings (B), norms or principles (W), and conclusions (C) can all be reinterpreted and questioned in a different light. In the field of theoretical questions, this may also mean that the theoretical framework used is questioned; in practical questions, that the assumed *ethical or political framework* is questioned. For example, in environmental discourses (say, about an environmental impact assessment), participants may want to question whether the wide-spread practice of measuring the value of natural resources, as well as people's concern for nature, in financial terms, is adequate; this may lead to a critique of the dominating framework of cost-benefit analysis (CBA) and its theoretical, ethical, and political implications as to what counts as "rational" environmental policy. A satisfactory logic of substantial argumentation depends on this possibility of a metalinguistic, metatheoretical, and metaethical or metapolitical radicalization of discourse (1973c, p. 253f, 2009, Vol. 2, p. 260f).

This ultimately unfolds into a *critique of knowledge*, in which the normative foundation of knowledge becomes problematic. At this highest level of reflection, the boundaries between theoretical and practical questions become blurred, in that it is no longer possible to distinguish sharply

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between them; we encounter, in a famous formulation of Habermas (1971b, p. 61), a "dialectic of potential and will," that is, an ultimate, unavoidable interdependence of what we *can* know and do on the one hand, and what we may *want* to do and *ought* to do on the other hand. In the example of environmental discourses, what counts as "rational" environmental action depends on a complex interplay between our conceptions of environmental expertise (how do we identify and assess risks and what do we know about the efficacy of alternative environmental protection policies) and environmental ethics (what place do we give to market values, aesthetic and spiritual values, the options of future generations, and so on). Counter to what advocates of "green" politics sometimes appear to assume, there is no such thing as a straightforward conception of "right" environmental action and "true" environmental expertise.

The possibility of a progressive radicalization of discourse to increasingly reflected levels is therefore indispensable. Together, these levels constitute the self-reflective dimension of the Toulmin-Habermas model of argumentation (Table 4).

Table 4: The self-reflective dimension of the Toulmin-Habermas model of argumentation: levels of progressive radicalization of discourse (adapted from Habermas, 1973c, p. 254; 2009, Vol. 2, p. 262; and Ulrich, 1983, p. 141)

Level of argumentation (self-reflection)	Theoretical discourse	Practical discourse	
1. Entry into discourse (speech acts)	Claims to truth (assertions of fact, predictions, nomological propositions, etc.)	Claims to rightness (action proposals, evaluations, commands, prohibitions, etc.)	
2. Substantial critique of validity claims (argumentation)	Cogency of theoretical discourse D———C	Cogency of D———C practical discourse W D	
3. Substantial critique of language (metalinguistic discourse)	Metatheoretical revision of language	Metaethical /metapolitical revision of language	
4. Critique of knowledge and will (reflection on the interdependency of theoretical and practical discourse)	Critique of knowledge (reflection on what <i>ought</i> to count as knowledge)	Critique of will (reflection on what <i>ought</i> to count as right interest or action)	
	In view of the dialectic of potential and will		

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This brief analysis of the *step from discourse to metadiscourse* concludes our discussion of the rational structure of discourse according to Table 3. Four crucial steps have led us from everyday practice to communicative action and on to discourse, to a pragmatic concept of argumentative cogency,

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and to the option of metalevel discourses. Each step embodies a selfreflective turn of the previous conception of communicative rationality. It is time to turn from the theory of communicative rationality to its practice.

Application: practical discourse, discourse ethics, deliberative democracy, and social theory So what? What is all this detailed analysis of the formal-pragmatic conditions of competent speech, meaningful communication, and cogent argumentation good for? It is obviously not an end in itself but is to supply a theoretical and methodological foundation for Habermas' larger project. We have characterized this project at the outset as a quest for overcoming "the jagged profile of modernization" – the selective patterns of rationalization that historically have developed in the course of an increasing differentiation of competing "complexes of rationality" and which threaten to undermine the project of modernity, that is, the vision of an open and enlightened society.

Apart from this initial characterization, we have not considered the social theory of Habermas strictly speaking. I have preferred in this introductory discussion to focus on the *methodological* foundation on which Habermas aims to base his social theory as well as his political vision, that is, formal pragmatics and what I consider to be its methodological core, the Toulmin-Habermas model of argumentation. On it rest our hopes, if we are to follow Habermas, for strengthening noninstrumental patterns of reasoning and societal rationalization, as against the current prevalence of one-dimensionally instrumental patterns of rationality in many domains of society.

The importance of the Toulmin-Habermas model of argumentation derives from the fact that it extends the range of rational discourse from questions of analytical, theoretical, and instrumental reason to questions of practical (ethical, moral, and political) reason. This is so, we have understood through Habermas' analysis of the universal validity basis of speech, because not only claims to truth (assertion of facts) and to truthfulness (expression of motives) but also claims to rightness (stipulation of norms) admit of argumentative vindication and challenge. Accordingly, the basic vehicle for extending the reach of communicative rationality becomes what Habermas calls *practical discourse*.

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"Practical discourse" While cogent argumentation is a generic concept that applies to theoretical discourses as well, it is in the domain of practical questions that we most urgently need new conceptions of rational practice. Science has long since found ways to implement theoretical discourses successfully and in this way to ensure (imperfectly) rational research practices. But when it comes to applying such rationality to applied science and expertise, as well as to everyday problem solving and decision making, we seem to be at our wits' end. The core questions we then face have such a strongly normative side (What should we do?) that they do not lend themselves to the same "rational" treatment. That something has gone awry with this conception of rational practice becomes clear, however, once one considers that theoretical and practical discourse are ideal types that cannot be practiced in pure form, except perhaps in some limiting cases of "pure" science for which no application is on the horizon. More usually, we cannot answer questions of "fact" and "value" separately. Within a context of application, what we consider a relevant "fact" is not independent from what we think ought to count as relevant fact; and what we consider an adequate "value" is not independent from what we know or believe to know. There is not only a close parallel but an inextricable interdependency between theoretical and practical discourse (Table 5).

Table 5: Theoretical and practical discourse (adapted from Habermas, 1973c, p. 243 and 2009, Vol. 2, 248, cf. Ulrich, 1983, p. 139)

Theoretical discourse	Practical discourse	
Assertions (the propositional content of statements)	Recommendations /evaluations (the normative content of statements)	
Truth or instrumental efficacy	Rightness or appropriateness	
Explanations	Justifications	
Recourse to "facts": causes of events, motives of actions	Recourse to "norms" or "reasons": principles of action, standards of evaluation	
Reference to nomological hypotheses or statistical regularities	Reference to moral principles, human rights, or other basic standards of evaluation	
Basic observations regarding cause-effect relations	Basic observations regarding needs /values of people, and consequences /side-effects of actions	
	Assertions (the propositional content of statements) Truth or instrumental efficacy Explanations Recourse to "facts": causes of events, motives of actions Reference to nomological hypotheses or statistical regularities Basic observations regarding cause-effect	

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All further seminal contributions of Habermas, in particular his *discourse ethics*, his *political philosophy* with its core ideas of the "public sphere" and

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of "deliberative democracy," and his *critical social theory* centered around the core concepts of "social action," "life-world" and "system," depend on this concept of practical discourse.

Outlook In continuing our review of Habermas, I will concentrate mainly on the topic of discourse ethics, along with brief considerations of this concepts of deliberative democracy and "system vs. lifeworld." This way of proceeding is analogous to the way we earlier discussed the contributions of Aristotle and Kant, namely, with a clear focus on their contribution to ethics.

Summary and appreciation To some readers who are used to associate Habermas with Marxism and "grand" social theory, it may have come as a surprise that in this first half of an introduction to Habermas' practical philosophy, we have focused so much on his theory of argumentation. Such a focus is obviously a matter of personal judgment and to some extent arbitrary; but more importantly, it corresponds to the aim of this series of reflections on reflective practice. I believe that a theory of substantial argumentation is indeed key to a practical philosophy that is to help us promote reflective professional practice. It is equally important to Habermas theoretical aim, of developing the "communicative turn" that he has pioneered, along with a few other key contributors, in contemporary philosophy and in the humanities.¹³⁾

Summary Is there a way to summarize, in three or four sentences, the core ideas of the new methodological foundation that Habermas proposes for practical philosophy? I am not sure – it may mean oversimplification – but it seems to me the central concern of the "communicative turn" of practical philosophy is as simple to understand as it is powerful:

- It is only as social beings, through communication and cooperation with others, that we can deal reasonably with the inevitable limitations of our *human condition*, and with the way these limitations shape our individual experiences and frameworks.
- 2. Hence, with a view to improving the human condition, the place to look for untapped rationality potentials as well as for sources of deception to be avoided lies in the *communicative conditions* that we create in this world of ours, our social world, rather than (as previous generations of philosophers assumed) in the ontological constitution of the natural world, including our own biological constitution (naturalism), or in the psychological constitution of the human mind (mentalism), or in a transcendental-logical conception of reason

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(transcendentalism).

3. Consequently, practical philosophy needs to be grounded in an effort to elucidate the communicative conditions that are conducive to "rational" practice; basic to this task are, in particular, a grounding in *language theory* and, building on it, *argumentation theory*.

4. To live up to the task, language theory needs to be developed into a pragmatic theory of communicative competence, and argumentation theory into a pragmatic theory of argumentative cogency. Formal pragmatics is the framework that Habermas proposes to this end; in it he sees the methodological foundation not only for an overarching social theory but also for the practical vision of promoting discursive practices in all domains of society, and thus for the communicative rationalization of society.

Personal appreciation (1): "the argumentative turn" Habermas has recently celebrated his 80th birthday. Still, it is probably too early to assess what will ultimately remain of his work. I would not be surprised though, if posterity will remember him in the first place as one of the great argumentation theorists of our epoch, along with or even prior to some of his many other outstanding contributions, among which I would certainly count his contribution to the revival of ethics as a subject of academic discussion; his relentless defense of enlightenment ideas against their postmodern "destruction"; or the model he has provided through his work as to how we may overcome the gap between the "two cultures" of the empirical sciences and the humanities, just to mention a few examples.

But the implications of his work that interest me most at present concern its methodological potential for the pursuit of rational professional practice. I suspect it centers around what I am tempted to call the *argumentative turn* of our notion of "sound" professional practice, towards a more open and participatory, less elitist and expertise-driven, concept of professional competence. Our concept of what constitutes cogent argumentation, we have learned through the work of Habermas, is the crux of all matters communicative, scientific, moral, and political. To put it differently: without a clear understanding of what *mutual understanding* means and how we achieve it, we cannot hope to be competent speakers, to communicate successfully, and to discourse and act rationally. *Argumentation under fair conditions* is the concept that replaces Kant's abstract notion of the "court of reason," and which unfolds into the participatory motto: *Let arguments decide, not authority!*

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Personal appreciation (2): "enlarging" our thinking A critical appreciation of Habermas' work must wait for the end of the second half of this discussion. At this point, I have only one major concern that I would like to share, concerning the important but (I feel) still somewhat unclear role of "bridge principles" in the Toulmin-Habermas model of argumentation. My impression is that Habermas burdens such bridge principles – in particular, the Kantian principle of universalization – with a methodological role that is still too weighty. Whether we like it or not, universalization is an ideal; and ideals have this nasty tendency of resisting reality. The attempt to relieve the burden with the option of metalevel discourse looks rather theoretical to me, in the sense that it risks putting ordinary discourse participants in a situation of incomprehension and incompetence. After all, discourse (particularly practical discourse) is to provide an argumentative opportunity to all of us, not just to philosophers and academics. And finally, my work on critical heuristics and boundary critique suggests to me that an essential selfreflective dimension of discourse is not well captured with Habermas' major focus on "metalinguistic," along with "metatheoretical" and "metaethical" reflection. I believe there are other, equally meaningful yet much more down-to-earth ways to mobilize the idea of self-reflection. Without meaning to question the need for metalinguistic discourse as such, I think we need to enlarge our notion of what self-reflective discursive practice is all about ... in practice!

I suggest it is about the *self-limitation* of the validity claim of discourse itself! To explain what I mean, we can go back once again to what we have learned from Toulmin and Habermas, namely, that the *unity of argumentative logic* (the field-invariant "layout" of arguments, cf. Figures 1 and 2) goes hand in hand with *varying contexts of meaning and action* that shape the propositional, normative, and subjective contents of our arguments (cf. Table 2). What the bridge principles in question need to achieve, then, is (in Kantian terms rather than those of Habermas or Toulmin) that they should guide us in "enlarging" our thought beyond the subjective contexts of meaning and action in which we always find ourselves, even in the most rationally motivated discourse, towards perspectives that are less narrowly dependent on our current individual views and needs. Earlier in this series we have encountered Kant's beautiful formulation of much the same idea in his *Critique of Judgment:*

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Under the *sensus communis* [i.e., well-understood common sense] we must include the idea of a sense *common to all*, that is, an ability of reflection that considers the ways all other humans may think, in an effort to compare one's own judgment to the collective reason of humanity, as it were, and thus to avoid the trap [orig.: illusion] of allowing one's private conditions of thought, which one might easily mistake for objective, to inform [orig.: affect in a harmful way] one's judgment....

The following maxims of common human reasoning ... may serve to elucidate the basic propositions [that I associate with well-understood common sense]. They are: (1) to think for oneself; (2) to think [as if one found oneself] in the place of everyone else; and (3) to always think consistently with oneself. The first is the maxim of *unprejudiced* thought; the second of *enlarged* thought; the third of *consequent* thought. (Kant 1793, B157f, my simplified transl.; similar formulations can be found in Kant, 1798, § 43, and 1800, end of Sec. VII)

For Kant, then, "enlarging" our thinking properly means to unfold *common sense* into *community sense* (cf. Kant 1793, B157f; discussed in Ulrich, 2009b, p. 10). If we apply this thought to our understanding of bridge principles, we find that adequate bridge principles will help us to "enlarge" the contexts that shape our notions of relevant facts and norms, so that we may recognize their limitations and can reconsider them systematically in exchange with others. Since in substantial argumentation we cannot avoid relying on *some* bridge principles to take the inductive steps from D to C; and since, at the same time, we cannot assume that such principles ever represent indubitable guides to universalization, it seems to me we need another, *self-limiting* kind of metadiscourse, the focus of which would lie on the limitations of *any* principle of "enlargement" assumed in an argument, rather than on an attempt at universalization strictly speaking.¹⁴)

In this way, it seems to me, we might ease the burden that our bridge principles (whatever they are) need to carry, namely, by taking what I call the *critical turn* of our concept of rationality, or simply put: by a deliberate self-limitation of what we expect from rational discourse, and a consequent focus on the idea of reflective practice. Thus understood, discourse will be a valuable means of reflective practice, rather than superseding it with yet another version of supposedly superior rationality. We must never allow the motto: *let arguments decide, not authority!* to put people once again in a situation of incompetence. A theoretically satisfactory conception of rational discourse is at risk of doing just that. But at the end of the day, it is still ordinary people, rather than any reference to the methodological ideas of philosophers, which have to carry the burden of responsibility for their actions. Rational discourse and Socratic self-limitation must somehow go hand in hand. It is with this final reflection that I will try to continue the

discussion of Habermas in a coming *Bimonthly*, then with a particular focus on the idea of discourse ethics. See you later!

Notes

- As Habermas explains: "In filling out the double structure of speech participants in dialogue communicate on two levels simultaneously. They combine communication of a content with communication about the role in which the communicated content is used.

 Thus the peculiar reflexivity of natural language rests in the first instance on the combination of a communication of content effected in an objectivating attitude with a communication concerning the relational aspect in which the content is to be understood effected in a performative attitude." (1979a, p. 42f) [BACK]
- 2) The three viewpoints from which we can relate to the world and communicate about it Habermas' (1984, p. 100) "three worlds" are not really parallel to Popper's (1968; 1972, pp. 106-152) well-known "three-world model," with which they are often associated; in Popper's model, the interactive or social dimension of "our" world has no place. I find it more helpful to associate Habermas' three viewpoints with the earlier-mentioned "rationalization complexes" worked out in the *Theory of Communicative Action* through a discussion of the work of Max Weber (Habermas, 1984, pp. 234-240, esp. 238f). [BACK]
- 3) The descriptions after the semicolons do not follow Habermas' terms; the descriptions before the semicolons use his more recent among several terminologies he has used. With Austin (1962) and Searle (1969), Habermas occasionally (e.g., 1973, p. 220; 1979a, pp. 29, 33f; 1984, p. 288f) also refers to the constative function as the "propositional" or "locutionary" use of language and then distinguishes from it the "performative" or the "illocutionary" and "perlocutionary" uses. With Austin, the illocutionary function of speech consists in what one does in saying something, whereas the perlocutionary function consists in the effect this may have on the hearer; for example, in saying to my wife "I'll help you to do the shopping tomorrow" (locutionary act) I offer a promise to her (illocutionary act) that may catch her by surprise and make her happy (perlocutionary act). Further, particularly in his early writings on the subject, Habermas (1971c, p. 111f; 1973, p. 228; 1979a, p. 53-58) sometimes aligns constative speech acts with a "cognitive" attitude (or use of language, or mode of communication) while aligning regulative speech acts with an "interactive," and expressive speech acts with a "representative," mode. As these different terminologies are not entirely stable and congruent, I have taken the liberty of employing a selection of Habermas' more recent terminology along with my own formulations. [BACK]
- 4) With reference to the universal nature of the validity claims, Habermas (e.g., 1979a, pp. 1, 5, 21, 25f, and 44; 1984, pp. 95 and 277) originally suggested the name "universal pragmatics" for the discipline concerned with the analysis of the validity basis of speech. He now (e.g., 1984, pp. 95, 138f, 276f) prefers to speak of "formal pragmatics," so as to make it clear that the pragmatic aspects of speech in question do not merely call for, and allow of, empirical analysis, as conventional linguistics holds. Rather, Habermas argues and also proves by his work, they are as accessible to formal-reconstructive analysis (i.e., to methodological elaboration)) as are the phonetic, morphological, syntactic, and semantic aspects of language. [BACK]
- 5) Even where Habermas does not employ qualifications such as "general," "general pragmatic" or "formal-pragmatic" explicitly, it should be clear that he is referring to formal (i.e. structural) properties of communication which are built into the pragmatics of all competent speech (its universal validity basis, that is). This is why the conditions in question can and need to be "reconstructed" through general linguistic (or more accurately, "language-pragmatic") analysis rather than merely empirically, as linguists conventionally assumed (compare note 4). [BACK]
- 6) It may help readers not familiar with Aristotle's understanding of deductive logic to briefly hint at the way it is tied to his distinction of "universal" and "particular" propositions or assertions. As we have noted, an argument for Aristotle is deductive if its conclusion results of necessity from its premises, that is, there can be no question about it inasmuch as contesting it would lead us into an immediate contradiction. This is the case whenever an argument can be shown to move from some universal proposition (such as "all men are mortal") to a particular one (such as "Socrates is a man, hence he is

mortal"). This yields the classical syllogistic model of deductive-logical inference (X is an A; all A's are B's; so X is a B). Hence, Aristotle explains, "the propositions on which the deduction depends are universal"; for "one cannot demonstrate anything except from its own principles" (1984b, I.8, 75b21f and I.9, 75b37). By contrast, when the conclusion results not necessarily but only possibly, Aristotle speaks of a dialectic argument. Such an argument leads to questions and debate about the right kind of conclusion, or differently put, about the right principles to be applied. It is of an inductive rather than deductive kind, in that it works the other way round; it attempts to infer universal from particular propositions (e.g., scientific theories, or basic principles of science and ethics). This latter form of argumentation was already used by Socrates and is central to Aristotle in the Posterior Analytics, an early kind of "theory of science" (Aristotle, 1994b), as well as in the Nicomachean Ethics, his theory of the good and virtuous life (Aristotle, 1985). As we will see, it is essential for establishing the "warrants" (scientific or ethical principles) that make conclusive argumentation possible beyond the reach of merely analytic reasoning or, with Aristotle, "perfect" deduction (deductive-logical demonstration in the narrower of Aristotle's two understandings of deduction). [BACK]

- 7) To give a simple example, if the two propositions "p" (it rains) and "q" (the road is wet) are both true, then the proposition "p implies q" is equally true whereas "p rules out q" is false. Note that whether the new proposition is true or not depends solely on the truth values of the original sentences along with the logical operation applied to them; it does not depend on the content (meaning) of the original sentences. For example, if the meaning of "q" changes to "carbon dioxide is heavier than air" (true), "p implies q" is still true and "p rules out q" is still false (example taken from Bochenski and Menne, 1965, p. 28; I.M. Bochenski was in the late 1960s my logic teacher at the University of Fribourg). Clearly, then, syntactic well-formedness does not secure semantic meaningfulness, much less pragmatic validity, without further ado. That is, a meaningful and practically relevant logic of argumentation cannot be reduced to a logic of syllogistic inference. As I am tempted to say, using Aristotle's term: "perfection" does not supersede relevance, in logic as little as elsewhere. As trivial as it may look, this insight had been all but lost in the development of the theory of argumentation from Aristotle's original conception of logic to the modern propositional calculus - until Stephen E. Toulmin (2003, orig. 1958) published his seminal book on The Uses of Argument. [BACK]
- 8) Perhaps a reason why Toulmin does not mention Kant is that the judicial metaphor has long since become part of our everyday vocabulary of argumentation, no less than the propriety or building metaphor: when we argue, we not only "claim" to have "solid" reasons and "grounds" and then try to "support" these with firm "backings"; we also talk about the sort of "case" we "present" in defense of our claims and about the "procedures" by which we try to convince the "parties." Even so, I find it useful to associate the judicial analogy with Kant's critical philosophy. Doing so reminds us that any relevant logic of argumentation ultimately "ties up with the business of rational criticism." Toulmin (2003, p. 6) [BACK]
- 9) The issue is essential, though, when it comes to promoting reflective practice. As a preliminary reflection on this issue, my work on critical systems heuristics (CSH) and critical pragmatism (cf., e.g., Ulrich, 1983, 1987, 1996, 2000, 2002, 2006a, b) suggests to me it is upon the discourse participants themselves, whoever they are, rather than any prior "field-dependent" (i.e., disciplinary or institutional) conventions, to reach some mutual understanding as to what in a specific situation are the relevant contexts of argumentation to be considered. This is so because, in the terms of CSH, the definition of relevant contexts is a normative-practical issue of *boundary critique* by all those affected or concerned, rather than one of theoretical-empirical justification by the "experts" (professionals) and decision-makers involved in a situation. The role of boundary critique will be in the center of the final essay of this series. [BACK]
- 10) The reader may have observed that Toulmin's basic scheme is superficially similar to Hempel and Oppenheim's (1948) scheme of syllogistic *explanation* in science, where C = explanandum (description of the empirical phenomenon to be explained), D = initial or antecedent conditions (minor premise), W = general laws or nomological hypotheses (major premise), and B = empirical basis for W or basic statements; W and D together are also called the explanans. But of course, the essential difference consists in the fact that in Toulmin's scheme, the step from B to W is no longer a merely analytic one; which is to say, from the perspective of the Hempel-Oppenheim scheme, it raises Hume's problem of induction a problem we'll discuss in a moment. Note that if the Hempel-Oppenheim scheme is indeed to serve as a model of scientific explanation, then the

problem of induction is bound to come up again; symptomatically, with its reference to "general laws," the model glosses over the fact that it does indeed presuppose the validity of some prior inductive inference from particular observations to nomological hypotheses or "laws." That is to say, the Hempel-Oppenheim model does not solve but merely avoid the problem of a logic of substantial (or "inductive"), rather than merely analytic (or "deductive"), argumentation. - Similarly, Popper's (1959) attempt to avoid the need for substantial argument by using deductive logic merely as the "organon of criticism," is bound to avoid rather than solve the problem. Popper's model is logically based on the modus tollens (modus tollendo tollens) of classical logic, according to which "the falsification of a conclusion entails the falsification of the system from which it is derived" (Popper, 1959, par. 18). Thus, if a statement p says that A ("it rains") implies B ("the street is wet") and we have $\neg B$ [not B, the street is dry], then $\neg A$ [not A, it doesn't rain] should hold true. If A still holds, p is "falsified." In Popper's famous example: A=swan and B=white. While unproblematic as a tool of analytic reasoning, Popper's attempt to use this scheme for substantial reasoning - more accurately, as the only rational form of critical substantial argumentation - amounts to a narrowing down of the concept of rational criticism to the uncovering of logical inconsistencies, at the price of excluding from the realm of rational criticism any considerations of substantial inadequacy, e.g., regarding a claim's semantic context of meaning and its pragmatic context of relevance. For more detailed discussions of Popper's narrow concept of criticism with a view to reflective research and professional practice, see Ulrich, 2006c and 2008). [BACK]

- 11) The concept of the "universal audience" (or "ideal audience") was coined by the Polish-Belgian philosopher of law Chaim Perelman, who in cooperation with Lucie Olbrechts-Tyteca attempted to extend classical rhetoric to an (informal) logic of value judgments. The *auditoire universel* comprises "all men who are rational and competent with respect to the issues that are being debated" (Perelman, 1968, p. 21, quoted in Alexy, 1978, p. 206). That is, it is the largest possible audience which has an interest to hear and to agree. Consequently, the value of an argument is to be measured by the audience that it convinces, or in other words, by the extent to which it convinces a particular rather than a universal audience. A convincing, as distinguished from a merely persuading, argument is "one whose premises are unversalizable, that is, acceptable in principle to all members of the universal audience" (Perelman and Olbrechts-Tyteca, 1969, p. 35). [BACK]
- 12) We may understand the fundamental importance of the universalization principle in even more basic terms, without presupposing (with Habermas) the language-pragmatic and discourse-theoretical turn in the first place; namely, by relating it to Kant's *general principle of reason* (which, as its name suggests, applies to both theoretical as well as practical reason). According to this principle, it is reason's intrinsic necessity to always look for the general, that is, for completeness on the side of the conditions on which its conclusions depend (cf. Ulrich, 1983, p. 219f; Kant, 1787, B364). In simpler, less Kantian and more pragmatic terms, a "reasonable" argument must consider all the circumstances that may have a bearing on the conclusion in question, now and in future. This explains why the Kantian principle of generalization (or universalization) is indeed fundamental to theoretical-empirical as well as practical-normative reasoning, before and beyond the language-pragmatic and discursive turn. (BACK)
- 13) Among these other key contributors I should mention his long-time colleague and friend Karl Heinz Apel (e.g., 1967-70, 1972, 1981), to whose influence and importance I have not even tried to do justice in this article. I have been similarly selective with regard to some key concepts of Habermas that have played an important role in the development of his thought but are no longer so central to him today. This concerns, for example, his "consensus theory of truth," his work on "technology and science as ideology" (1971b); and his abandoned early focus on "knowledge-constitutive interests" (Habermas, 1972). As explained, I have preferred instead to concentrate on a few ideas that I find of fundamental methodological interest not only for Habermas' work but equally for our own current undertaking. [BACK]
- 14) Although empirical and contextual considerations have recently gained more weight in Habermas' conception of discursive rationality (see particularly Habermas, 2004), as far as I can see his reading of bridge principles still tends to be more strictly universal than what I consider feasible for practical purposes. It seems to me that any conception of "enlarged" thought (whatever bridge principles it may imply) entails a quest for comprehensiveness in our knowledge of relevant circumstances and understanding of

normative issues that is epistemologically as unfeasible as it is unavoidable. The philosophical dilemma we encounter here is the unresolved problem of holism. An alarm bell is ringing: we must not allow the talk of "bridge principles" to deflect our attention away from the precarious nature of any holistic claims. There is, symptomatically, no natural end to "universalization," "discourse," and so on; or in more technical terms: any stopping rule that might end the quest for comprehensiveness is arbitrary. In my work on critical heuristics, I have therefore found it necessary to limit the burden that any conceivable bridge principle can carry. I try to achieve this by employing bridge principles - or as I prefer to say, methodological guidelines or principles for "enlarged" thought, including Kant's universalization principle but also, for example, Peirce's pragmatic maxim and Singer's (1959) and Churchman's (1982) "sweep-in" principle – in systematic combination with a counterprinciple that I call the principle of boundary critique (for an introductory discussion, see Ulrich, 2001, pp. 11-15 and 23f). It will be in the center of my attempt, in the final essay of this series, to sketch the outlines of a "philosophy in practice" rather than of practice, that is, a practical philosophy properly speaking. [BACK]

References

- Adorno, T. W., Albert, H., Dahrendorf, R., Habermas, J., Pilot, H., & Popper, K. R. (eds.) (1976). The Positivist Dispute in German Sociology. London: Heinemann, and New York: Harper.
- Alexy, R. (1978). Theorie der juristischen Argumentation: Die Theorie des rationalen Diskurses als Theorie der juristischen Begründung. Frankfurt am Main, Germany: Suhrkamp (English transl.: A Theory of Legal Argumentation: The Theory of Rational Discourse as Theory of Legal Justification, Oxford, UK: Clarendon Press, 1989).
- Apel, K.O. (1967-70). Introductions to the German translation of C.S. Peirce's writings on pragmatism, in K.O. Apel: *Charles S. Peirce, Schriften*, 2 vols., Frankfurt am Main, Germany: Suhrkamp, Vol. 1, 1967, and Vol. 2, 1970. Subsequently published together as Apel (1981).
- Apel, K.O. (1972). The a priori of communication and the foundation of the humanities. Man and World, 5, pp. 3-37. Partly reprinted in F.R. Dallmayr and T.A. McCarthy, eds., Understanding and Social Inquiry, University of Notre Dame Press, Notre Dame, Indianapolis, and London, UK, pp. 292-315.
- Apel, K.O. (1981). Charles S. Peirce: From Pragmatism to Pragmaticism. Amherst, MA: University of Massachusetts Press (German orig.: Der Denkweg von Charles S. Peirce, Eine Einführung in den amerikanischen Pragmatismus, Frankfurt am Main, Germany: Suhrkamp, 1975).
- Aristotle (1984a). Prior Analytics. In *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. by J. Barnes, Vol. 1, Princeton, NJ: Princeton University Press, pp. 39-113. (References are to the Book and Chapter according to Aristotle's numbering [e.g., I.1 = Book 1, Chapter 1], followed by the standard form of references to the classic ed. of the Greek text by I. Bekker, *Aristotelis Opera*, Berlin, 1831 [e.g., 24a13f = page 24, column a, lines 3-4].)
- Aristotle (1984b). Posterior Analytics. In *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. by J. Barnes, Vol. 1, Princeton, NJ: Princeton University Press, pp. 114-166. (References are to the classic Bekker edition of the Greek text, as explained for Aristotle, 1984a.)
- Aristotle (1985). *Nicomachean Ethics*. Translated, with Introduction, Notes, and Glossary, by Terence Irwin. Indianapolis, IN: Hackett. (References are to the Book and Chapter according to Aristotle's numbering [e.g., I.1 = Book 1, Chapter 1], followed by the standard form of references to the classic ed. of the Greek text by I. Bekker, *Aristotelis Opera*, Berlin, 1831 [e.g., 1094a1-3 = page 1094, column a, lines 1-3].)
- Austin, J.L. (1962). How To Do Things With Words. The William James Lectures, delivered in Harvard University in 1955. Oxford, UK: Clarendon Press/ Oxford University Press. (2nd ed. 1976).
- Bateson, G. (1972). Steps to an Ecology of Mind. Nasville, TN: Chandler. Pb. ed, New York: Ballantine Books, 1972. (New ed. Chicago, IL: University of Chicago Press, 2000.)
- Bateson, G. (1979). *Mind and Nature: A Necessary Unity*. New York: E.P. Dutton. Reprint ed., Cresskill, NJ.: Hampton Press, 2002.
- Bochenski, I.M. and Menne, A. (1965). *Grundriss der Logistik*, 3rd ed. Paderborn, Germany: Ferdinand Schöningh (French orig. 1949, 1st German ed. 1954).
- Burleson, B.R. (1979). On the foundations of rationality: Toulmin, Habermas, and the *a priori* of reason. *Journal of the American Forensic Association*, 16, Fall Issue, pp.

- 112-126
- Chomsky, N. (1965). Aspects of the Theory of Syntax. Cambridge, MA: MIT Press.
- Churchman, C.W. (1982). An appreciation of Edgar Arthur Singer, Jr. In C.W. Churchman, Thought and Wisdom, Seaside, CA: Intersystems Publications, pp. 116-135.
- Dew, P. (ed.) (1992). Autonomy & Solidarity: Interviews with Jurgen Habermas. London: Verso.
- Dewey, J. (1910). *How We Think*. Boston, MA: D.C. Heath & Co. Facsimile ed., Champaign, IL: Standard Publications, 2007.
- Habermas, J. (1971a). Knowledge and Human Interests. Boston, MA: Beacon Press.
- Habermas, J. (1971b). Toward a Rational Society: Student Protest, Science, and Politics. Boston, MA: Beacon Press.
- Habermas, J. (1971c). Vorbereitende Bemerkungen zu einer Theorie der kommunikativen Kompetenz. In J. Habermas and N. Luhmann, Theorie der Gesellschaft oder Sozialtechnologie – Was leistet die Systemforschung? Frankfurt am Main, Germany: Suhrkamp, pp. 101-141.
- Habermas, J. (1972). Knowledge and Human Interests. Boston, MA: Beacon Press.
- Habermas, J. (1973a). Theory and Practice. Boston, MA: Beacon Press.
- Habermas, J. (1973b). "Nachwort (1973)," in J. Habermas, Erkenntnis und Interesse, 2nd. ed., Frankfurt am Main, Germany: Suhrkamp, pp. 367-416 (Postscript to Habermas, 1972, not contained in that earlier English edition but published as "A postscript to Knowledge and Human Interests" in Philosophy of the Social Sciences, 3, No. 1, 1973, pp. 175-189).
- Habermas, J. (1973c). Wahrheitstheorien. In H. Fahrenbach (ed.), Wirklichkeit und Reflexion, Walter Schulz zum 60. Geburtstag, Pfullingen, Germany: Neske, pp. 211-265. Reprinted, with additional footnotes, in J. Habermas, Vorstudien und Ergänzungen zur Theorie des kommunikativen Handelns, Frankfurt am Main: Suhrkamp, 1984, pp. 127-183; and in J. Habermas, Philosophische Texte, Vol. 2, Frankfurt am Main: Suhrkamp, 2009, pp. 208-269.
- Habermas, J. (1975). Legitimation Crisis. Boston, MA: Beacon Press.
- Habermas, J. (1979a). What is universal pragmatics? In J. Habermas, Communication and the Evolution of Society, Boston, MA: Beacon Press, pp. 1-68 (text) and 208-219 (notes).
- Habermas, J. (1979b). Moral development and ego identity. In J. Habermas, Communication and the Evolution of Society, Boston, MA: Beacon Press, pp. 69-94 (text) and 219-222 (notes).
- Habermas, J. (1979c). Historical materialism and the development of normative structures. In J. Habermas, *Communication and the Evolution of Society*, Boston, MA: Beacon Press, pp. 95-129 (text) and 225-230 (notes).
- Habermas, J. (1984). The Theory of Communicative Action. Vol. 1: Reason and the Rationalization of Society. Cambridge, UK: Polity Press.
- Habermas, J. (1985) Dialektik der Rationalisierung, in J. Habermas, *Die Neue Unübersichtlichkeit*, Frankfurt am Main, Germany: Suhrkamp, pp. 167-212. Orig. published as "Dialektik der Rationalisierung: Jürgen Habermas im Gespräch mit Axel Honneth, Eberhard Knödler-Bonte und Arno Widmann" in *Aesthetik und Kommunikation*, No. 45/46, 1981. Engl. transl.: The dialectics of rationalization: an interview with Jurgen Habermas, *Telos*, 49, Fall Issue, 1981; reprinted in Dew (1992), pp. 95-130.
- Habermas, J. (1984). The Theory of Communicative Action. Vol. 1: Reason and the Rationalization of Society. Cambridge, UK: Polity Press.
- Habermas, J. (1987). The Theory of Communicative Action. Vol. 2: The Critique of Functionalist Reason. Cambridge, UK: Polity Press.
- Habermas, J. (1993). Justification and Application: Remarks on Discourse Ethics.
- Habermas, J. (1996a). Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy. Cambridge, UK: Polity Press.
- Habermas, J. (1996b). Modernity: an unfinished project. In M. Passerin d'Entrèves and S. Benhabib (eds.), Habermas and the Unfinished Project of Modernity: Critical Essays on the "The Philosophical Discourse of Modernity." MA: MIT Press, pp. 38-58.
- Habermas, J. (1998). The Inclusion of the Other: Studies in Political Theory. Cambridge, MA: MIT Press.
- Habermas, J. (2004). Wahrheit und Rechtfertigung: Philosophische Aufsätze. Frankfurt am Main, Germany: Suhrkamp; enlarged paperback ed. (orig. 1999). (Note: the English translation Truth and Justification [Boston, MA: MIT Press, 2003], due to its being

- based on the original 1999 ed., does not contain the two important chapters 2 and 5 of the enlarged German ed., which is why I use the newer German ed.).
- Habermas, J. (2009). *Philosophische Texte*. 5 vols. Frankfurt am Main, Germany: Suhrkamp.
- Hempel, C.G., and Oppenheim, P. (1948). Studies in the logic of explanation. *Philosophy of Science*, 15, No. 2, pp. 135-175.
- Horkheimer, M., and Adorno, T. (2002). Dialectic of Enlightenment: Philosophical Fragments. New transl. by E. Jephcott. Stanford: Stanford UP, 2002. German orig.: Dialketik der Aufklärung, Amsterdam: Querido, 1947.
- Hume, D. (1978). A Treatise of Human Nature. Second ed., with text revised and variant readings by P.H. Nidditch, ed. by L.A. Selby-Bigge. Oxford, UK: Oxford University Press (1st Oxford ed. 1888; orig. 1739-40).
- Kant, I. (1786). Groundwork of the Metaphysic of Morals. 2nd ed. [B] (1st ed. [A] 1785).
 Transl. by H.J. Paton. New York: Harper Torchbooks, 1964. German orig.:
 Grundlegung zur Metaphysik der Sitten, 1st ed. [A] and 2nd ed. [B] in: W. Weischedel (ed.), Werkausgabe Vol. VII, Kritik der praktischen Vernunft, Grundlegung zur Metaphysik der Sitten, Frankfurt am Main, Germany: Suhrkamp, 1977 (orig. 1968), pp. 9-102.
- Kant, I. (1787). Critique of Pure Reason. 2nd ed. [B] (1st ed. [A] 1781). Transl. by N.K.
 Smith. New York: St. Martin's Press, 1965 (orig. Macmillan, New York, 1929).
 German orig.: Kritik der reinen Vernunft, 1st ed. [A] 1781, 2nd ed. [B] 1787, in:
 W. Weischedel (ed.), Werkausgabe Vols. III and IV, Frankfurt am Main, Germany:
 Suhrkamp 1977 (orig. 1968).
- Kant, I. (1788). Critique of Practical Reason and Other Writings in Moral Philosophy,.
 Transl. by L.W. Beck. Chicago, IL: University of Chicago Press, 1949. German orig.:
 Kritik der praktischen Vernunft, 1st ed. [A] in: W. Weischedel (ed.), Werkausgabe Vol. VII, Kritik der praktischen Vernunft, Grundlegung zur Metaphysik der Sitten,
 Frankfurt am Main, Germany: Suhrkamp, 1977, pp. 105-320.
- Kant I. (1793). Critique of Judgment. 2nd ed. [B] (1st ed. [A] 1790). Transl. by T.H.
 Bernard. New York: Hafner, 1951. German orig.: Kritik der Urteilskraft, in:
 W. Weischedel (ed.), Werkausgabe Vol. X, Kritik der Urteilskraft, Frankfurt am Main, Germany: Suhrkamp, 1977.
- Kohlberg, L. (1968). Moral development. In D.L. Sills (ed.), International Encyclopedia of the Social Sciences, Vol. 10, New York: Macmillan and Free Press, pp. 483-494.
- Kohlberg, L. (1976). Moral stages and moralization: the cognitive-developmental approach. In T. Lickona (ed.), Moral Development and Behavior; Theory, Research, and Social Issues, New York: Holt, Rinehart & Winston, pp. 31-53.
- Kohlberg, L. (1981). Essays on Moral Development, Vol. 1: The Philosophy of Moral Development Moral Stages and the Idea of Justice. San Francisco: Harper & Row.
- Kohlberg, L. (1984). Essays on Moral Development, Vol. 2: The Psychology of Moral Development The Nature and Validity of Moral Stages. San Francisco: Harper & Row.
- Marcuse, H. (1964). One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society. Boston, MA: Beacon Press.
- Mead, G.H. (1913). The social self. *Journal of Philosophy, Psychology and Scientific Methods*, 10, No. 14, pp. 374-380.
- Mead, G.H. (1925). The genesis of the self and social control. *International Journal of Ethics*, 35, No. 3, pp. 251-277.
- Mead, G.H. (1934). *Mind, Self, and Society from the Standpoint of a Social Behaviorist*. Ed. by C.W. Morris. Chicago, IL: University of Chicago Press.
- Peirce, C.S. (1878). How to make our ideas clear. Popular Science Monthly, 12, January, pp. 286-302. Reprinted in C. Hartshorneand P. Weiss (eds.), Collected Papers of Charles Sanders Peirce, Vol. V: Pragmatism and Pragmaticism, Cambridge, MA: Harvard University Press, 1934, para. 5.388-5.410.
- Piaget, J. (1932). *The Moral Judgment of the Child.* London: Routledge & Kegan Paul (also New York: Free Press, 1965).
- Piaget, J. (1970). Genetic Epistemology. New York: Columbia University Press, 1970.
- Perelman, C. (1968). Rhetoric and philosophy. *Philosophy and Rhetoric*, 1, No. 1, pp. 15-24
- Perelman. C., and Olbrechts-Tyteca, L. (1969). The New Rhetoric: A Treatise on Argumentation. Notre Dame, IN: University of Notre Dame Press (French orig.: La nouvelle rhétorique: Traité de l'argumentation, 2 vols., Paris, 1958).

- Piaget, J. (1932). *The Moral Judgment of the Child.* London: Routledge & Kegan Paul (also New York: Free Press, 1965).
- Piaget, J. (1970). Genetic Epistemology. New York: Columbia University Press, 1970.
- Popper, K.R. (1959). The Logic of Scientific Discovery. London: Hutchinson. New ed. London: Routledge 2002 (German orig. 1935).
- Popper, K. R. (1962). Die Logik der Sozialwissenschaften. Kölner Zeitschrift für Soziologie und Sozialpsychologie, 14, No. 2, pp. 233-248. Reprinted in T. W. Adorno, R. Dahrendorf, H. Pilot, A. Albert, J. Habermas, & K. R. Popper (eds.), Der Positivismusstreit in der deutschen Soziologie, Darmstadt, Germany: Luchterhand, 1969, pp. 103-123. Engl. transl. in Adorno et al. (1976), pp. 87-104.
- Popper, K.R. (1968). Epistemology without a knowing subject. In B. van Rootselaar and J.F. Staal (eds.), Proceedings of the Third International Congress for Logic, Methodology and Philosophy of Science, 25 Aug. to 2 Sept. 1967, Amsterdam, pp. 333–373: reprinted in Popper (1972), pp. 106-152.
- Popper, K.R. (1972). Objective Knowledge: An Evolutionary Approach. Oxford, UK: Clarendon Press.
- Searle, J.R. (1969). Speech Acts: An Essay in the Philosophy of Language. Cambridge, UK: Cambridge University Press, 1969.
- Singer, E.A. (1959). Experience and Reflection. Ed. by C.W. Churchman. Philadelphia, PA: University of Pennsylvania Press.
- Smith, R. (2009) Aristotle's Logic. In E.N. Zalta (ed.), The Stanford Encyclopedia of Philosophy (Spring 2009 Edition). First published March 18, 2000; last modified Jan. 30, 2009. [HTML] http://plato.stanford.edu/archives/spr2009/entries/aristotle-logic/
- Toulmin, S.E. (1972). *Human Understanding, Vol. 1: The Collective Use and Evolution of Concepts.* Princeton, NJ: Princeton University Press, and Oxford, UK: Clarendon.
- Toulmin, S.E. (2003). The Uses of Argument. Updated edition. Cambridge, UK: Cambridge University Press (orig. 2003).
- Toulmin, S., Rieke, R., and Janik, A. (1984). An Introduction to Reasoning. Second edition. London: Collier, and New York: Macmillan (orig. 1979).
- Ulrich, W. (1983). Critical Heuristics of Social Planning: A New Approach to Practical Philosophy. Bern, Switzerland: Haupt. Pb. reprint ed. New York: Wiley, 1994.
- Ulrich, W. (1987). Critical heuristics of social systems design. *European Journal of Operational Research*, 31, No. 3, pp. 276-283.
- Ulrich, W. (1996). A Primer to Critical Systems Heuristics for Action Researchers. Hull, UK: Centre for Systems Studies, University of Hull, 31 March 1996.
- Ulrich, W. (2000). Reflective practice in the civil society: the contribution of critically systemic thinking. *Reflective Practice*, *1*, No. 2, pp. 247-268.
- Ulrich, W. (2001). The quest for competence in systemic research and practice. *Systems Research and Behavioral Science*, 18, No. 1, pp. 3-28.
- Ulrich, W. (2002). Boundary critique. In H.G. Daellenbach and R.L. Flood (eds.), The Informed Student Guide to Management Science, London: Thomson, 2002, pp. 41-42. Rev, version: A mini-primer of boundary critique, Werner Ulrich's Home Page, Section Critical Systems Heuristics (CSH), 17 Oct. 2005, http://www.geocities.com/csh_home/boundary_critique.html
- Ulrich, W. (2006a). The art of boundary crossing: another introduction to boundary critique. *Ulrich's Bimonthly*, May 2006.
 - [HTML] http://geocities.com/csh_home/picture_may2006.html [PDF] http://geocities.com/csh_home/downloads/picture_may2006.pdf
- Ulrich, W. (2006b). Critical pragmatism: a new approach to professional and business ethics. In L. Zsolnai (ed.), *Interdisciplinary Yearbook of Business Ethics, Vol. I,* Oxford, UK, and Bern, Switzerland: Peter Lang Academic Publishers, 2006, pp. 53-85.
- Ulrich, W. (2006c). Rethinking critically reflective research practice: beyond Popper's critical rationalism. *Journal of Research Practice*, 2, No. 2, article P1. [HTML] http://jrp.icaap.org/index.php/jrp/article/view/64/63) [PDF] http://jrp.icaap.org/index.php/jrp/article/download/64/120
- Ulrich, W. (2008). Reflections on reflective practice (2/7): Applied science and expertise, or the art of testing and contesting practical claims. *Ulrich's Bimonthly*, March-April 2008. [HTML] http://geocities.com/csh_home/bimonthly_may2008.html [PDF] downloads/bimonthly_may2008.pdf
- Ulrich, W. (2009a). Reflections on reflective practice (4/7): Philosophy of practice and Aristotelian virtue ethics. *Ulrich's Bimonthly*, January-February 2009. [HTML] http://geocities.com/csh_home/bimonthly_january2009.html [PDF] http://geocities.com/csh_home/downloads/bimonthly_january2009.pdf

Ulrich's Bimonthly Page 64 of 65

Ulrich, W. (2009b). Reflections on reflective practice (5/7): Practical reason and rational ethics: Kant. *Ulrich's Bimonthly*, March-April 2009.
[HTML] http://geocities.com/csh_home/bimonthly_march2009.html
[PDF] http://geocities.com/csh_home/downloads/bimonthly_march2009.pdf

Weber, M. (1978). *Economy and Society*, ed. by G. Roth and C. Wittich, 2 vols., Berkeley, CA: University of California Press (expanded version of *Wirtschaft und Gesellschaft: Grundriss der verstehenden Soziologie*, 4th ed. Tübingen, Germany: J.C.B. Mohr, 1956, 1st ed. 1922).

Wenzel, J.W. (1992). Perspectives on argument. In W.L. Benoit, D. Hample, and P.J. Benoit (eds.), Readings in Argumentation: Pragmatics and Discourse Analysis, Berlin, Germany, and New York: Foris Publications/Walter de Gruyter, pp. 121-143. Orig. published in J. Rhodes and S. Newell (eds.), Proceedings of the 1979 Summer Conference on Argument, Falls Church, VA: SCA, 1980.

Picture data Digital photograph taken on 26 July 2008, around 20:30 p.m., at Lake Thun, Switzerland. ISO 100, exposure mode aperture priority, exposure time 1/250 seconds, aperture f/5.6, exposure bias -0.30, focal length 40 mm (equivalent to 80 mm with a conventional 35 mm camera). Original resolution 3648 x 2736 pixels; current resolution 700 x 525 pixels, compressed to 104 KB.

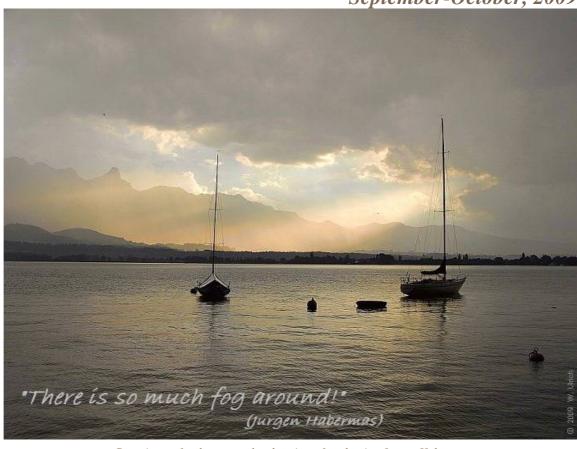
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September-October, 2009



Commitment for the uncompleted project of modernity: Jurgen Habermas

"There is so much fog around today, everywhere. I don't give up the hope it can get thinner."

(Jurgen Habermas, in an interview of 1981)

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Notepad for capturing *Personal notes:*

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