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3. Autonomy, Constitutivity, Exemplars, Paradigms

TIMUR UÇAN

Introduction

This paper proposes an exploration of relationships and exchanges between the philosophies of Cavell and Kuhn by the study of aspects of the philosophy of Wittgenstein.¹ Although the notions of language games and family resemblances used by Kuhn in the Structure of Scientific Revolutions have been elaborated by Wittgenstein, Cavell's reading of Wittgenstein inspired that of Kuhn. I will attempt to show that against this background, Cavell's conception of the relations of arts, works of arts, and artists, can be relevantly compared to Kuhn's conception of the relations of sciences, scientific successes, and scientific practitioners. Three ways of elucidating the mutual exchanges between Cavell and Kuhn may be distinguished: One consists in clarifying the ways in which Cavell and Kuhn explicitly mutually inspired each other. Another one consists in clarifying that Cavell's Wittgenstein inspired Kuhn. And a third one consists in clarifying that Wittgenstein inspired both Kuhn and Cavell and the ways in which he inspired them. This third way is not exclusive of the first two and even contributes to these by rendering explicit their stakes. For at stake is not only the restitution of the truth of an exegetical mediation: that Kuhn's Wittgenstein cannot be truly understood without accounting for Cavell's Wittgenstein. Rather the transitive character of the mediation implied by interpretation does not substitute for the intransitive character of a thoroughly philosophical inheritance. It is not the case that because Kuhn was inspired by Cavell who was inspired by Wittgenstein, that Kuhn could be inspired only by Cavell's

^{1.} I thank the editors and reviewers of this special issue of *Conversations*, and also Donald Cornell, for their helpful remarks, comments and suggestions on earlier versions of this text.

Wittgenstein, and not by Wittgenstein. Further, the question is not only philological but philosophical if we take into account the methods and the philosophy of Wittgenstein. To use an image: that a path was indicated by someone to someone else could not have implied that what was indicated by a person to another was oneself; this much was already known to us with the old fable of the moon, the finger and the sage. With this paper I will thus first seek to establish the relevance of the comparison of Cavell's conception of the relations of arts, works of arts, and artists with Kuhn's conception of the relations of sciences, scientific successes, and scientific practitioners. Then I will attempt to render explicit the unrestrictive limits of this comparison both to account for the mutual exchanges between Cavell and Kuhn and consider or bring out some symmetries and asymmetries concerning the place of paradigms in sciences and arts.

I. The Relevance of the Comparison of the Place of Paradigms in Arts and Sciences

Could someone be interested and become absorbed in a pin, or a crumpled handkerchief? Suppose someone did. Shall we say, "It's a matter of taste"? We might dismiss him as mad (or suppose he is pretending), or, alternatively, ask ourselves what he can possibly be *seeing in* it. That these *are* our alternatives is what I wish to emphasize. The situation demands an explanation, the way watching someone listening intently to Mozart, or working a puzzle, or, for that matter, watching a game of baseball does not. The forced choice between the two responses – "He's mad" (or pretending, or on some drug, etc.) or else "What's in it?" – are the imperative choices we have when confronted with a new development in art. (A revolutionary development in science is different: not because the new move can initially be proved valid – perhaps it can't, in the way we suppose that happens – but because it's easier, for the professional community, to spot cranks and frauds in science than in art; and because if what the innovator does is valid, then it is *eo ipso* valid for the rest of the professional community, *in their own work*, and as it stands, as well.) But objects of art not

merely interest and absorb, they move us; we are not merely involved with them, but concerned with them, and care about them; we treat them in special ways, invest them with a value which normal people otherwise reserve only for other people - and with the same kind of scorn and outrage. They mean something to us, not just the ways statements do but the way people do.²

[T]he act of judgment that leads scientists to reject a previously accepted theory is always based upon more than a comparison of that theory with the world. The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with nature and with each other.³

[...] I have been concerned to emphasize the similarity of the evolutionary lines of the two disciplines [art and science]. In both the historian can discover periods during which practice conforms to a tradition based upon one or another stable constellation of values, techniques, and models. In both he is also able to isolate periods of relatively rapid change in which one tradition and one set of values and models gives way to another. That much, however, can probably be said about the development of any human enterprise. [...] Recognizing that fundamental resemblance can therefore be no more than a first step. Having made it, one must also be prepared to discover a number of revealing differences in developmental fine structure.⁴

That the place of paradigms in arts and sciences can be limitedly but relevantly compared is quite clear both for Cavell and Kuhn in the passages quoted above.⁵ In both disciplines, practices, new moves and innovations do involve the reappraisals of

^{2.} Cavell, "Music Discomposed," in *Must We Mean What We Say?: A Book of Essays* (Cambridge and New York: Cambridge University Press, 1976), 197-98.

^{3.} Thomas Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago, IL: The University of Chicago Press, 1996), 77.

^{4.} Kuhn, *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago, IL: The University of Chicago Press, 1977), 349.

^{5.} These passages ought to be read with passages from Clarence Irving Lewis, "A Pragmatic Conception of the A Priori," *The Journal of Philosophy* 20, no. 7 (1923): 169, https://doi.org/10.2307/2939833 and *Mind and the World Order: Outline of a Theory of Knowledge* (New York: Dover Publications, 1991), 232-33, 256, 304, 306-7, and 385. These works deeply inspired both Kuhn's and Cavell's approaches to periods of transition.

past achievements with new ones and inversely, to evaluate the present of a practice, open to further developments. However, exegetical debates concerning the mutual contributions of Kuhn and Cavell, and especially concerning Kuhn's notion of incommensurability have rendered difficult, if not unintelligible, the achievability, and eventually, the relevance, of this comparison. Jones' formulation of incommensurability as "the idea that possessors of different paradigms could not even be said to possess the same language" could eventually provide us with a condensed expression of this difficulty.6 For, might it be the case that possession of both paradigms and languages would be required for a paradigm change or shift to be conceivable, it would be at best unclear that the conception of a new paradigm and eventually the occurrence of a paradigm change would be conceivable at all. Kuhn does surely consider that relations of possession do hold between paradigms and persons.⁷ However, could this have implied that relations of possession could have held, and could even have been constitutive of relations of persons and languages?8 That this second question could be at best rhetorical is a possibility whose vividity needs to be clarified. Jones' formulation of the notion of incommensurability, as innocuous as it may seem, does also convey several myths about the relations or quasi-relations of persons, paradigms and languages. It involves a myth that Wittgenstein, among other philosophers, relentlessly criticized: that of a private language, of the pseudo-idea of a basic relation of possession (by contrast with appropriation, in an eventually moral yet not moralistic sense) between languages and persons. The mediation by the notion of possession could be ineluctably implied to envisage any relation or quasi-relation between persons, languages and paradigms.

^{6.} Caroline A. Jones, "The Modernist Paradigm: The Artworld and Thomas Kuhn," *Critical Inquiry* 26, no. 3 (2000): 488-528 and 501, https://doi.org/10.1086/448976.

^{7.} Kuhn, The Structure of Scientific Revolutions, xi, 47, and 168.

^{8.} Even when Kuhn considers the case in which the outcome of a shift of paradigm is the appropriation of a different lexicon (Kuhn, "Commensurability, Comparability, Communicability," *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1982, no. 2: 668-88, 683, https://doi.org/10.1086/psaprocbienmeetp.1982.2.192452), Kuhn does not consider the hypothesis of the relevance of the constitutivity of the ownership relation between languages and persons. The derivative and metaphoric character of such passages is clear when considered against the background of the negation of the existence of a language into which paradigm-relative-languages, considered as sets of propositions containing coordinated translations of each of their sub-components, could be translated. Kuhn thereby calls into question the coherence of the idea of an all-comprehensive language conceived in a set-theoretical manner.

^{9.} On this see Timur Uçan, *The Issue of Solipsism in the Early Works of Sartre and Wittgenstein* (2016), 116, https://ueaeprints.uea.ac.uk/id/eprint/62314/1/2016UcanTUPhD %282%29.pdf.

The relation of possession could be the paradigm of the relations between persons and paradigms. ¹⁰ And surely if it is the case that relations of persons and languages could basically be relations of possession, then it could be the case that relations of persons and paradigms could also basically be relations of possession. Practitioners could thus *per se* be confined by the very paradigms of their own practices. However, from the outset, lost would be that the limited comparison between arts and sciences made both by Cavell and Kuhn is not only unproblematic but also relevant, and that making such comparison could not presuppose the holding of a (constitutive) relation of possession between persons, languages, and paradigms. To this extent, the task of the establishment of the relevance of this comparison, or, facing the charge of anachronism, of the reestablishment of the relevance of this comparison, remains to be achieved. It is at best unclear that all we use within our lives, all that we need to live our lives, could need to be all that we possess; and this could especially matter with respect to our consideration of our (quasi-)relations with language.

To begin, I propose two remarks. The first is that no more than according to Kuhn normal science could have existed without paradigms, could arts and genres have existed without paradigms according to Cavell. It might be said that such consideration is not (even) compatible with the diversity of the meanings of the very term "paradigm," according to Kuhn himself. However, that the supposedly irreducible diversity of meanings that the term "paradigm" can contextually come to receive is not compatible with the unity presented by the notion of paradigm, the exemplary paradigm, the successfulness of the success, alluded to by Hacking is also a point explicitly made by Kuhn himself.¹¹ In this apparently rather weak sense, that paradigms are constitutive can be rendered explicit without transcendentalism or metaphysics. For, non-reversible relations hold between *that* which realized paradigms render intelligible and possible, and the practices and communities of persons who understand and realize against the background of the internalization of at least aspects of paradigms. The recourse to the notion of background does not necessarily imply

^{10.} On this see Cavell, *The Claim of Reason: Wittgenstein, Skepticism, Morality, and Tragedy* (Oxford and New York: Oxford University Press, 1979), 125.

^{11.} Ian Hacking, Representing and Intervening: Introductory Topics in the Philosophy of Natural Science (Cambridge and New York: Cambridge University Press, 1983), 10. Kuhn, The Essential Tension, 351.

background syntheses to render possible the thought that paradigms are constitutive the transcendental could not be unavoidable, and it is, in spite of the pretense that goes together with such projects, a mistake to suppose its ineluctability as propaedeutics.¹² The second remark is that the realization of a philosophical study of the relations of the philosophies of Cavell and Kuhn implies to distinguish what we nevertheless need to study relationally, that is to say, exactly in the relations in which we find, discover, live, experiment; and this involves the distinct consideration of two triplets: the first is that of arts, artworks and artists, and the second is that of sciences, discoveries and scientists. The compared artistic or scientific products of the enactments of hexises or dispositions could not be achieved without their distinct considerations. We could not have come to compare these if it was not entirely obvious that the consideration of limit-cases, eventually more complicated cases, are secondary in and to our worldconceptions. That is to say, the consideration of some cases can rightly or wrongly lead us to think that a shift of paradigm (not in the sense of the paradigmatic example, but in the sense of a world-conception, ideological or not) occurred, imposed itself, or should occur, etc. (consider, for example, the recent success of a production realized by Jason Allen with the mediation of an artificial intelligence at an art competition and which gave rise to many questions with respect to the future of art, about the significance of human creativity, and about the excesses of the markets of art). However, considerations of such limit-cases, are secondary within the practices whose evolutions are analyzed by Kuhn and Cavell. Such practices are secondary in the sense that, if we want to use the form-background distinction to render explicit the stakes, it is against backgrounds of regularity, conventionality, conformity, that irregularity, unconventionality, unconformity appear as such. And both philosophers immensely contributed to understand and account for such backgrounds.

Then let us ask: could one be bound to make either the apology of modernism or the post-modernist claim that the swan song of modernism has already occurred?¹³

^{12.} This point matters both to integrate and differentiate Cavell's approach of phenomenology from attempts by classical or traditional phenomenologists to account for worldliness and for relations between perception and action. See on this part II.1 of this text.

^{13.} For, from the outset, if it can (circumstancially and enormously) matter to argue in favor of an earlier or a later paradigm, it is nevertheless rather unclear that arguing in favor or against a paradigm could be *unavoidable* at all. Further, it is the depth of the involvements of our lives with several paradigms that can come to be thereby neglected, an aspect whose explanation is attempted in the second part of this paper.

Let us remark that the consideration of such an alternative goes together with a tension that is characteristic of the transition periods considered by Cavell and Kuhn and that they in fact have shown not to be problematic, a tension between the compatibility of the contingent existences of a plurality of paradigms and the incompatibility and sometimes the inadequacy of some paradigms given some means and ends. The use of the limited comparison of the place of paradigms within arts and sciences eases mutual contributions and exchanges among practices as it contributes to a better distinction of their mutually independent evolutions and achievements.

Yet, the relevance and mutually explicative character of the comparison of the place of paradigms in arts and sciences according to both Kuhn and Cavell is to be unfolded and explained. According to Kuhn's own terms, it is nothing but a first step, a first step inspired from Wittgenstein, towards a better understanding of differences. Hut that it is a first step, came to be lost. To recover its obviousness involves the explicitation of a common philosophical background. I shall argue that the relevance and mutually explicative character of this comparison is dependent upon a threefold point, the contingency, the freedom, and the relationality of paradigms.

1. The Contingency of Paradigms

We shall first start by considering the *contingency of paradigms*, that works of art and scientific successes necessarily contingently are part of nature, a probably non-informative triviality, yet to render explicit, as its place within our world-conceptions is *not* superficial. We furthermore owe to ourselves such explicitation as the affirmation of the contingency of paradigms gave rise to many puzzles some of which were expressed by Kripke in *Naming and Necessity*. For, what could have seemed to override any conception, is that necessary relations (some of which could be a priori, if we recall the treatment proposed by Kripke of mathematical statements; and probably some others a posteriori, if we think the fact of history, rather than historicality or historicity as an essentialized feature of consciousness) may hold

^{14.} Kuhn, The Essential Tension, 349.

^{15.} Saul A. Kripke, Naming and Necessity (Cambridge, MA: Harvard University Press, 2003).

among elements which are not so — whose non-existence could not have been inconceivable. How could constitutive relations — necessary in some sense — (may)hold between paradigmatic exemplars if all the parts of all the elements involved by such relations are contingent? It was one of the major advances made by Wittgenstein with the *Tractatus*, radicalized in the *Investigations*, to dispel the specter, to dissolve the illusion of an incompatibility between the modalities of the existence of elements and relations. Both Cavell and Kuhn, I argue, have fully integrated what could have seemed an unimportant point within their accounts of the place of paradigms within arts and sciences. Both the attention provided by Cavell to the grammatical, with his substitutive account of learning inspired by the philosophy of later Wittgenstein (as our forms of life are achievements realized by substitution of expressions to others), and that of Kuhn to the quasi-internal relations between paradigms and anomalies are two ways that are relatively autonomous, independent and distinct to thoroughly think and account for the contingency of paradigms without thereby calling into question in any sense whatsoever both, the historical character of relations and the necessity of some of them, and, the certainty of the knowledge and of the practices that paradigms render possible or, at least, contribute to render possible.¹⁶ The achievement of this task involves on Kuhn's approach to have established that paradigms are constitutive not only with respect to science but also with respect to nature:

Like the issue of competing standards, that question of values can be answered only in terms of criteria that lie outside of normal science altogether, and it is that recourse to external criteria that most obviously makes paradigm debates revolutionary. Something even more fundamental than standards and values is, however, also at stake. I have so far argued only that paradigms are constitutive of science. Now I wish to display a sense in which they are constitutive of nature as well.¹⁷

Thereby, Kuhn asks us to philosophically acknowledge both the immanence and inherency of paradigms to nature, which is not a triviality inasmuch as at stake is not,

^{16.} Cavell, The Claim of Reason, ch. VII. Kuhn, The Structure of Scientific Revolutions, ch. 5.

^{17.} Ibid., 110.

or at least not only, the successfulness of the inclusion of paradigmatic elements within the set of all, but to account for structuring relations between paradigmatic parts and whole without which there would not be notions of whole, world and nature. For if it is the case that paradigms are constitutive not only of science but also of nature, then this does imply that although contingent, paradigms contribute to shape not only our understanding of reality, but reality throughout, contrary to Platonist assumptions. The intelligibility of the kind of revolutionary and transitory situations considered by Kuhn in the tenth chapter of the Structure, when the question can, at times, even come to seem relevant whether the world prior to a research is commensurable at all with the world after its achievement, precisely implies that the contribution of paradigms to the structuration of reality could not remain confined to contexts that are internal to scientific practices. 18 This much could nowadays seem a void philosophical demand, yet a stake was the realization of the rupture from Platonism which implied to grant the eventuality of the relevance of a radical separation of sense from its conditions, and more generally the criticism of what Cavell came to characterize, after C. I. Lewis and in accordance with T. Clarke, as traditional epistemology.19

Let us now ask: What are we imagining when we think of this as merely "in fact" the case about our world, in the way it is merely in fact the case that the flowers in this garden have not been sufficiently watered, or that there are six white houses with rose gardens on this street? It is my feeling that such things could present themselves to us as just more facts about our world were we to (when we) look upon the whole world as one object, or as one complete set of objects: that is another way of characterizing that experience I have called "seeing ourselves as outside the world as a whole," looking in at it, as we now look at some objects from a position among others. This experience I have found to be fundamental in classical epistemology (and, indeed, moral philosophy). It sometimes presents itself to me as a sense of powerlessness to know the world, or to act upon it; I think it is also working in the existentialist's (or, say,

^{18.} Ibid., 111.

^{19.} Thompson Clarke, "The Legacy of Skepticism," *The Journal of Philosophy* 69, no. 20 (1972): 754-69. See Lewis, *Mind and the World Order*.

Santayana's) sense of the precariousness and arbitrariness of existence, the utter contingency in the fact that things are as they are. (Wittgenstein shares this knowledge of the depth of contingency. His distinction in this matter is to describe it better, to live its details better. I would like to say: to remove its theatricality.)²⁰

Cavell diagnoses the acknowledgment of contingency as a difficulty basic to philosophy. And he does make a liberatory use of a quasi-image to solve it. The would-be image is that of the world as an object, which thereby implies that we can exactly as an object, look at it from the outside. Now, the obvious difficulty is that such would-be representation tends to force two opposite demands on our conception of our worldliness: that of the acknowledgement of the contingency of our situation, for we do conceive the eventuality of its nonexistence, and that of the acknowledgement of the necessity of our situation, for even the nonexistence of our conception would result from its termination. The unfreeing use of the analogy is ultimately deceptive and misled in that it tends to lead us to represent the world as a room, as a place, whose exteriority would thus unquestionably be certain. But given that the sort of exteriority that we should be able to have needed for the analogy to be conclusive is not unquestionable as such, its inconclusiveness leaves us with the acknowledgement and the knowledge of contingency as a task.²¹

2. The Freedom of Paradigms

The consideration of the contingency of paradigms, to this extent, leaves us before that of their *freedom*, both according to Cavell and Kuhn. It is, I argue, the second relevant aspect of the limited comparison of the place of paradigms in arts and sciences: there are no such things as criteria predetermining what could count as a successful work of art or science. Such negation can seem to be peremptory and

^{20.} Cavell, The Claim of Reason, 236.

^{21.} This reading and proposal of mine is not a departure from Cavell's thought, but an attempt to underscore, extend, and radicalize the point he made. Indeed, according to Cavell, but also according to Sartre and Wittgenstein, realization of one's own "finitude" by oneself could not imply that one could be "bounded" or "restricted" by such realization. Such that the difficulty does not prove to be lying in an attempt by a person to represent something to oneself, but in a confusion by a person of imaginary and real relations.

gratuitous, as not only can it come to seem at odds with claims of Cavell and Kuhn, but also perfectly incompatible with these:

To think of a human activity as governed throughout by mere conventions, or as having conventions which may as well be changed as not, depending upon some individual or other's taste or decision, is to think of a set of conventions as tyrannical. It is worth saying that conventions can be changed because it is essential to a convention that it be in service of some project, and you do not know a priori which set of procedures is better than others for that project. That is, it is internal to a convention that it be open to change in convention, in the convening of those subject to it, in whose behavior it lives. [...] The internal tyranny of convention is that only a slave of it can know how it may be changed for the better, or know why it should be eradicated. Only masters of a game, perfect slaves to that project, are in a position to establish conventions which better serve its essence. This is why deep revolutionary changes can result from attempts to conserve a project, to take it back to its idea, keep it in touch with its history. [...] It is because certain human beings crave the conservation of their art that they seek to discover how, under altered circumstances, paintings and pieces of music can still be made, and hence revolutionize their art beyond the reception of many. This is how, in my illiteracy, I read Thomas Kuhn's The Structure of Scientific Revolutions: that only a master of the science can accept a revolutionary change as a natural extension of that science; and that he accepts it, or proposes it, in order to maintain touch with the idea of that science, with its internal canons of comprehensibility and comprehensiveness, as if against the vision that, under altered circumstances, the normal progress of explanation and exception no longer seem to him to be science.²²

To the extent, as significant as it is incomplete, that two scientific schools disagree about what is a problem and what a solution, they will inevitably talk through each other when debating the relative merits of their respective paradigms. In the partially circular arguments that regularly result, each

^{22.} Cavell, The Claim of Reason, 120-21.

paradigm will be shown to satisfy more or less the criteria that it dictates for itself and to fall short of a few of those dictated by its opponent.²³

Recognition of the existence of a uniquely competent professional group and acceptance of its role as the exclusive arbiter of professional achievement has further implications. The group's members, as individuals and by virtue of their shared training and experience must be seen as the sole possessors of the rules of the game or of some equivalent basis for unequivocal judgments.²⁴

Both Cavell and Kuhn acknowledge and philosophically demand from us the acknowledgment of the place and importance of conventions, competences, trainings, educations, rules and games in order to think of innovation and of the evolution of practices with them — these are important to us. That is to say, in accordance with insights of Wittgenstein, and eventually radicalizing these insights, both Cavell and Kuhn brought out that relations between paradigms and language-users are internal: strictly speaking there could not be such a thing as a paradigm without relevant groups of persons whose circumstantiated interactions contribute to constitute the background against which paradigms can count and function as such, so as to enable or contribute to applications, appreciations, evaluations and actions (as we shall see in the next part, although less obvious, the truth of the opposite relation between persons and paradigms is also relevant to our understanding of the places of paradigms in our lives). However, Cavell's characterization of relations between conventions — some of which essentially are dependent upon paradigms — as measurement systems – and practitioners as possibly tyrannical, and Kuhn's characterization of relations between paradigms and criteria as dictatorial, can eventually raise concerns with respect to the freedom both of paradigms and of our dealings with these. For thusly characterized, everything would be as if, necessarily constrained by paradigms, we could be bound to claim the freedom of paradigms only at our expenses, at the expense of our own freedom. To avoid such a counter sense, partly invited by the social and collective images of a lack of freedom (by contrast

^{23.} Kuhn, The Structure of Scientific Revolutions, 109-10.

^{24.} Ibid., 168.

with unproblematic cases of circumstantial absences of determinate freedoms) used to characterize human relations thematically involving paradigms, the utter incompatibility of the thoughts of Cavell and Kuhn with conventionalism and apriorism (two tendencies which often go together) needs to be rendered explicit. The tension can be explained as rising from the rejection (and eventually the denial) of the uninformative character of the absence of conceivable recoil between some paradigms and some actions rendered possible by their internalization or appropriation — among which centrally, linguistic ones (as, for example, expressing one's puzzlement with respect to a scientific or artistic innovation). Because one could have lacked a margin of action during the internalization of at least one aspect of a paradigm, one could not but be bound, constrained, or forced, in one's actions not only by the internalized aspect of a paradigm but also by the consequences of its internalization; conventionalism, and probably apriorism as well, would thus be unavoidable. Not only that a production that would satisfy established criteria and standards of a relevant community could count as an artistic or scientific achievement, but also, could count as a production *only* such a production. Now, this is a (would-be) conception whose relevance is deeply challenged both by Kuhn and Cavell, inasmuch as it either is incompatible with the intelligibility of novelty or prescinds the evaluation of change and novelty from any relevant continuity, thereby rendering difficult or impossible its evaluation and its appreciation as such. To be sure, such criticism does not imply neglecting one legitimate range of concerns that can be had, and to which both Cavell and Kuhn call our attention. For a relevant contestation or revocation of the artistic or scientific character of a production can rightly be grounded by the criteria and standards of a group. The very possibilities of fraudulence, of scam, of counterfeiting hardly could have been without conceivable relations with scientific or artistic practices, and part of the activities of some members of relevant groups is to verify that such possibilities do not actually hold.²⁵ To claim the contrary could amount to depriving ourselves until the idea of a scientific or artistic community, and not because we would have thereby somehow misidentified an entity, but inasmuch as the purposes of activities, notably that of verification would without relevant contrasts remain unavailable to us as such

^{25.} Cavell, Must We Mean What We Say?, ch. VII.

(verificationism could nevertheless not be invited by such remark). Now, such a range of cases, not only can be contrasted with cases of artistic or scientific successes, but also with cases in which our very notions of success are relevantly challenged by artistic or scientific productions. This is, in fact, the range of cases to which Cavell draws our attention when characterizing the achievements of Kuhn with respect to the history and the philosophy of science in the previously quoted passage. In such cases of innovation, of radical and eventually revolutionary novelty, precedent criteria of established relevant groups do not or fail to constitute grounds for rejection or revocation; strictly speaking it is unclear that in such cases criteria should have had to be applied, or have functioned in any such way. Now, as mentioned by Cavell and Kuhn, there are differences, divergences, and also asymmetries between the occurrences of such cases within art and science, and that we shall render explicit in the second part of this paper. Yet, the sense in which the recognition of a fundamental resemblance between the place of paradigms within arts and science, the sense in which the limited comparison of their place is relevant and significant, with respect to our practices, has been recovered. The affirmation of the freedom of paradigms is neither false nor misled if conceived as a reminder of a requirement internal to scientific and artistic practices, that of the necessity of the intelligibility of novelty, of creativity, of openness of art and science as such for any such activity. The consideration of the prospective eventuality of such cases surely does not deliver ways and dimensions in which our criteria, experiences could be overridden, new actions and experiences rendered intelligible and possible by these and their appropriation. But paradigms are both expressive of freedom as products and expanders of freedom as means and ends. How could paradigms have had us deceived in such ways anyway?

3. Paradigms and Community

If a paradigm, with the necessary connexions it constitutes or that it at least helps to institute, implies nothing less but nothing more than *contingent* existence, and that the practices within which it has a place and contribution necessarily are *open-ended*, at which level of generality will we be able to characterize the contribution of paradigms to the structuration of reality? The related notions of community and of

forms of life are pertinent for an answer to such concern, and, it is at this level of generality that Kuhn and Cavell place themselves. The affirmation that paradigms are constitutive, that these are exemplary successes which contribute to shape reality, is, I shall argue, manifest straight from the community or form of life these constitute or at least help to institute. Thereby, I do not mean that the bulk of paradigms is to provide us with occasions to gather, although it can eventually happen that a gathering becomes paradigmatic, especially if we consider that some paradigms, notably some artistic paradigms, as some happenings, are not dissociable from, or distinct of, the gatherings at the occasion of which these happen or are produced. In such cases, there is no such thing as a conceivable abstraction, dissociation or separation of the constitutive element from the circumstances within which an event can come to present itself as paradigmatic: on such occasions, it is the successful realization of the event, rather than the existence of an element or sample that comes to present paradigmatic dimensions. However, such cases are rare, and are not significant of the place of paradigms as such. For our involvements with paradigms do not involve in most cases any encounter whatsoever with the members of a community or communities who nevertheless engage in similar or equivalent activities. And that the basic range of our relations or quasi-relations with paradigms can gain from such encounters but is relatively independent from those — as when we learn a technique of calculus, a grammatical form of a foreign language, or learn to appreciate abstract expressionism — is not secondary. For it is the very possibility of education and of transmission that is grounded upon such possibilities. To this extent, the pertinence of the comparison of the place of paradigms within science and art turns out to be intelligible in practical terms. It is firstly practices that are underdetermined by paradigms. Independently from practices, only "theoretically," it is unclear that we could even have had any idea of a paradigm whatsoever. This leaves us before what I earlier called the *relationality of paradigms*: the successfulness of works of arts and sciences manifests itself by their inherent capacity to make community, that is, to constitute or contribute to conditions that are necessary to the life of a scientific or artistic community. In the previous part, I have argued both that Cavell and Kuhn have brought out after Wittgenstein the internal character of the relations between paradigms and relevant groups. However, if it is quite trivial that

there is no such thing as a paradigm without relevant groups of persons, the opposite, that there is no such thing as relevant groups of persons without a paradigm, might seem less obvious, given that it can seem to be incompatible with the very conceivability of paradigmatization. Nevertheless, this stronger realization is also involved by the thoughts of both Cavell and Kuhn, who engage with this problem in distinct yet compatible ways. Cavell addresses the issue of the constitution of human forms of life as a shared achievement unthinkable without paradigms, notably in the linguistic and grammatical sense:

In speaking of the vision of language underlying ordinary language procedures in philosophy, I had in mind something I have suggested in discussing Wittgenstein's relation of grammar and criteria to "forms of life," and in emphasizing the sense in which human convention is not arbitrary but constitutive of significant speech and activity; in which mutual understanding, and hence language, depends upon nothing more and nothing less than shared forms of life, call it our mutual attunement or agreement in our criteria.²⁶

Instead, then, of saying either that we *tell* beginners what words mean, or that we *teach* them what objects are, I will say: We initiate them, into the relevant forms of life held in language and gathered around the objects and persons of our world. For that to be possible, we must make ourselves exemplary and take responsibility for that assumption of authority; and the initiate must be able to follow us, in however rudimentary a way, *naturally* [...].²⁷

You cannot use words to do what we do with them until you are initiate of the forms of life which give those words the point and shape they have in our lives.²⁸

Kuhn addresses the issue of the collective choice of a paradigm as adequate for the life of a community that is characteristic of periods of transition:

^{26.} Cavell, The Claim of Reason, 169.

^{27.} Ibid., 178.

^{28.} Ibid., 185.

The transition from a paradigm in crises to a new one from which a new tradition of normal science can emerge is far from a cumulative process, one achieved by an articulation or extension of the old paradigm. Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. During the transition period there will be a large but never complete overlap between the problems that can be solved by the old and by the new paradigm. But there will also be a decisive difference in the modes of solution. When the transition is complete, the profession will have changed its view of the fields, its methods, and its goals.²⁹

Like the choice between two competing political institutions, that between competing paradigms proves to be a choice between incompatible modes of community life. Because it has that character, the choice is not and cannot be determined merely by the evaluative procedures characteristic of normal science, for these depend in part upon a particular paradigm, and that paradigm is at issue. When paradigms enter, as they must, into a debate about paradigm choice, their role is necessarily circular. Each group uses its own paradigm to argue in that paradigm's defense.³⁰

Both Cavell and Kuhn draw our attention to relations between *relevance* and *paradigms*, and to their individual and collective significances. In the same way that a paradigmatic use of words can relevantly be made for educative purposes during an initiation and for an individual, such that it can — for an individual — become constitutive of future uses, paradigms can relevantly be presented for institutional purposes during a debate, such that it can — for a community — become constitutive of future research. In both cases, the paradigmatic character of a use, of a usage, of a sample, of a production is rendered manifest by its ability to provide to one or several

^{29.} Kuhn, The Structure of Scientific Revolutions, 85.

^{30.} Ibid., 94.

individuals possibilities, inspirations, resolutions, solutions to earlier problems, and problems of interest. Ways in which individuals can render available to individuals ways in forms of life and communities, and ways in which individuals independently or together can render available to communities and forms of life ways out of difficulties, are mutually compatible. The mutual contributions of such practices is manifest if we consider that most of our criteria of relevance are themselves paradigmatically established, that is to say, established by means of paradigms, an aspect of which at least has been internalized by us. So far, we thusly not only recovered the sense in which the limited comparison between the place of paradigms within art and science is relevant, but the sense in which its significance is vivid. Not only that the places of paradigms in arts and sciences are similar, as in both, paradigms freely at least contribute to the constitution, or even in some cases thoroughly constitute, artistic or scientific communities that are unthinkable without some paradigms, but also, paradigms could not have ceased to have such places in our lives due to their under-determinative places in our practices that are linguistically mediated.

II. The (Unrestrictive) Limits of the Comparison of the Place of Paradigms in Arts and Sciences

That we can affirm that paradigms are constitutive implies, I argue, that their limits necessarily (by contrast with metaphysically, with unavoidably) could not be restrictive. For, that a grammatical paradigm renders possible the forming of a proposition, that an artistic paradigm opens up a new form of life, that a scientific paradigm renders *practically* possible a new form of calculus, forecast, valuation, could not have implied the *equivalence* of *that* which is rendered thinkable and possible by different paradigms. And that one may envisage complicated and secondary cases in which restrictive uses can be made of paradigms to limit *that* which is rendered possible by another one, could not have implied that such cases could have been basic in any sense whatsoever. At stake is nothing less than the limits of the comparison between the place of paradigms in arts and sciences, points at

which analogies do not help anymore and can even become obstacles to understanding. So far, we made this comparison to affirm that paradigms are *contingent*, *free*, and *relational*, that paradigms cannot really informatively be abstracted from their places within our communities and forms of life, as — I argued — has been rendered clear and distinct in related ways both by Cavell and Kuhn, after Wittgenstein. Now, we owe to ourselves to bring out the limits of this comparison in order not to render inoperative and unintelligible its helpfulness. As remarked by Kuhn, ultimately it does only amount to a first step, eventually a first step inspired from Wittgenstein towards a better understanding of differences.³¹ I shall argue that the unrestrictive limits of the comparison of the place of paradigms in arts and sciences, the intersections from which their understanding does contribute to the explicitation of both scientific and artistic practices, are threefold. These limits lie in the autonomies, the asymmetries, and the diversities of the paradigms of arts and sciences.

1. The Autonomies of Arts and Sciences

Universalism, conjunctivist universalism or universalistic conjunctivism — as criticized by Cavell, Kuhn and Wittgenstein, should not make us forget that to affirm that autonomy is common to arts and sciences does not imply to negate their mutual and relative autonomies.³² Requirements internal to the very practices of arts and sciences, although constitutive, could not be equivalent. That is to say, that paradigms do have constitutive places within sciences and arts could not have implied the equivalence of their constitutivities: bluntly put, the homogeneity of the constraints within fields that they contribute to and shape.

This first limit has to do with the internal character of the relations between paradigms and practices.³³ To speak of requisites, of demands exerted by

^{31.} Kuhn, The Essential Tension, 349.

^{32.} Cavell, *The Claim of Reason*, 109, 180, and 186-92. Kuhn, *The Structure of Scientific Revolutions*, 43-51. Ludwig Wittgenstein, *Philosophical Investigations*, 4th ed., ed. P. M. S. Hacker and Joachim Schulte, trans. G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte (Oxford: Blackwell, 2009). To affirm the autonomies of sciences and arts is first to account for the relative independence of practices (the practice of an art or a science is not necessarily dependent at each occasion on another practice of another art or science) which nevertheless can mutually contribute to each other (some artistic or scientific practices contribute to the realization of other artistic or scientific practices).

^{33.} On this, see Jean-Paul Sartre, *Critique of Dialectical Reason*, vol.2, ed. Arlette Elkaïm-Sartre, trans. Quintin Hoare (London: Verso, 1991), 117-18.

paradigms on practitioners and which are internal to the fields that these render partially or wholly possible could *not* have implied their indistinctness. This affirmation faces at least two opposite objections. The first is that it amounts to an all-too-obvious truism, obvious to the point that it is of no significance to recall it, that it is implicit to practices to the point that it presents no interest to be reminded of it. The second is that it amounts to an all-too-heavy claim about the nature of paradigms to expect from these to be able to be prescriptive of procedures without presenting some sort of undifferentiable commonality. However, that is a major aspect of the philosophical projects of both Cavell and Kuhn, after that of Wittgenstein: not to grant and presuppose that particularities, and with them particularism, could have pierced logical space, the space of possibilities, in a way that only universals, and with them universalism, could have been able to stitch up. That is to say, both the neglect and the overestimation of the problem of the independence of the ways in which relevance comes to be contextually learned, sometimes at its own expense, tends to prevent the intelligibility of differences. The confusion of literality with literalism, most probably, has much to do with this oscillation. Also, such differences came to be less palpable due to attempts at intertwining aspects of arts and sciences (as for example in recent controversies that arose following the success at an art concourse of a work produced by means of artificial intelligence), and considerations concerning the correction, interest, originality and successfulness of such attempts put aside. For example, that the cognitive dimension is not prevalent for artistic practices is not secondary. It is not the case that theorizing necessarily precedes the realization of a new artistic paradigm, and this much is in fact also true of sciences. Feyerabend brought out, as Kuhn, but also as Monod, that hazard, chance, can effectively contribute to the constitution of what shall turn out to be paradigmatic, and which is such even while we do not - yet - think that it is the case. It is no more secondary that, conversely, the artistic dimension is not prevalent in scientific practices.

Even if innovations, contributions to sciences did happen following experiments whose results and consequences have turned out to exceed or differ from what was then attempted and expected, internalized conceptualisations do belong to the background of such practices. And it would not be entirely wrong to affirm that

this is also what happens in the arts, for experimenting in art also can have for background past internalizations of precedent practices. At this level the thoughts of Cavell about the relation of the innovator with one's production completely hold. And to an extent, to think the relations of the innovator and one's innovations does contribute to think both the relations of the artist with one's artworks and that of the scientist with one's discoveries. However, such characterization is not, as it stands, exclusive of or incompatible with the affirmation of the indistinctness of what is delivered in the background. One could wonder whether such expectation, and such way of progressing, does not imply to ring the knell of phenomenology. Yet, when the indistinctness of what is delivered in backgrounds is thematized as such by phenomenologists and their best critics, such as Sartre, in philosophical attempts to express or word perception in its relation to our actions, indistinctness is opposed to (synthetic) unification, and their philosophical concern is first that of accounting for the possible unity of aspects of objects relatively to ends which are thematized as such, or not, by the agent. But when we think with Kuhn and Cavell after Wittgenstein, our approach really is different from any such of the mentioned: the sociological dimension of Kuhn's thought, and the linguistic — in the broad sense dimension of Cavell's thought, does not presuppose such indistinctness, or such type of indistinctness, and this point does matter for thinking ways in which paradigms really contribute to the structuration of reality.³⁴ Neither astonishment nor revulsion before an artistic or scientific production could happen without prior internalization of paradigms. But the possibilities that paradigms shape are not whichever, and could not be such: some actions are rendered possible by a paradigm rather than others. The connexity of logical space does not presuppose the indistinctness of possibilities that are under-determined by paradigms.³⁵

But how is such connexion manifest within the works of Kuhn and Cavell? In Kuhn, this distinction manifests itself with the thought of the internal character of the relations between anomalies and paradigms: anomalies appear as such against the background of the past internalization of a paradigm.³⁶ Strictly speaking, without any

^{34.} Pace the reconstructions of William James, and despite what Kuhn himself writes about these, following C. I. Lewis, *Mind and the World Order*, 320-21.

^{35.} See Wittgenstein, "University of Iowa Tractatus Map," 2.01-2.02, http://tractatus.lib.uiowa.edu/.

^{36.} Kuhn The Structure of Scientific Revolutions, ch. 5.

such prior internalization, there is no such thing as a conceivable anomaly. In Cavell, this distinction manifests itself with the thought of the internal character of the relations of expressions and failures of education: failures of learning happen subsequently to attempts of sharing the practical knowledge of the use of a paradigm.³⁷ Strictly speaking, without any such attempt, there is no such thing as a failure. In both cases, that a situation is apprehended as normal or abnormal presuppose — without the implication by the relation of presupposition of any ontology of the a priori whatsoever — the past interiorization of paradigms: although the connexions of events do involve only contingent elements, such connexions are nevertheless necessary.

2. The Asymmetries of Artistic and Scientific Paradigms

The first limit of the comparison of the place of paradigms in arts and sciences proceeds from the autonomies of the practices within paradigms and with which paradigms can come to have structuring places. Not only do Cavell and Kuhn agree on the fact that paradigms shape or contribute to shape practices and fields in distinct manners, but they also agree on the fact that divergences and incompatibilities among practices within the same or different fields are intelligible as such only if we acknowledge that these manners are not only distinct but mutually autonomous. Practitioners of such practices not only do not follow the same procedures and do not adopt the same means, but they also have aims, goals, objectives that could not be mutually dependent. This practically involves that the relations between paradigms, scientific or artistic, and requisites, obligations, imperatives, consequences, although all internal, are nevertheless different, differently constituted, and differently prescriptive, given the autonomies of the ends which are those of the considered fields, practices and practitioners. This point is manifest in Cavell's analysis of the ways in which some objects can see themselves provided the attention that usually is provided to persons, while in Kuhn, it is manifest in his attention to the obsolete, to obsolete paradigms which yet were not or are not inoperative, both "theoretically" and practically.38 Such inversions may

^{37.} Cavell, The Claim of Reason, 114-15.

^{38.} See Kuhn, "Commensurability, Comparability, Communicability" and *The Structure of Scientific Revolutions*, ch. 5. Cavell, *Must We Mean What We Say?*, 197-98.

surprise us — for the reasons for thinking "the normal" through "the abnormal" and inversely, are not obvious as such, and especially if we were holding on to oversimplifications of art as a space devoid of conceivable rules and of science as a space devoid of conceivable freedom. But such preconceptions are two sides of similar "mental cramps," of science as the neutral unveiling of the preestablished and of art as the engaged rejection of the (pre)established. By contrast, I argue that a pertinent analysis owes to itself to restitute the primacy of considered prevalent dimensions internal to considered practices. To this extent, the symmetry of the relations of the place of paradigms in arts and sciences has a philosophically relevant counterpart. The cognitive dimension that is not prevalent for the artistic practices, is prevalent for scientific practices; while the creative dimension that is not prevalent for scientific practices, is prevalent for artistic ones.³⁹ For, if we want to use the shape-background distinction both to characterize the relations of our practices and to account for the unification of practical fields according to independent means and goals, then we need not only to integrate the distinctness but also the structuredness of the dimensions that are prevalent to the considered practices. At stake is the eventuality of the relevance of a comparison among practices; for, without such eventuality, it is at best unclear that we could think of the space of practices in its relations to possibilities, our possibilities. For example and notably, that we can relevantly consider that a practice is more creative or innovative than its part or than another (for example, drawing a building and buying material to make a drawing) does not imply that such aspect of a practice is essential to its realization. This is a sense in which, I argue, the consideration of the dimensions of our practices does matter, if we are both to think these as instances of practices and as shaped by mutually independent procedures, criteria, samples, examplars, and paradigms. If we are to be able to account for the internal character of relations between paradigms and consequences without thereby granting the eventual relevance of consequentialism, according to which when innovating, we could not but have to start from consequences (by contrast with taking into account consequences). A central asymmetry between artistic and scientific paradigms whose obviousness

^{39.} To be sure, such negations could not imply that practices from different fields cannot have common dimensions. As it shall soon be considered, scientific practice can present creative dimensions, and an artistic practice can present scientific dimensions.

needs to be rendered explicit thus is that strictly speaking artistic innovations do not and are not meant to render obsolete prior forms of arts as do scientific innovations. Kuhn expresses this point as follows: "unlike art, science destroys its past." 40 Artistic innovations strictly speaking do not render and are not meant to render obsolete previous artistic forms of art, even when their productions involve new technologies. A good example of this is that of photography, which, contrary to (past and arguably misled) expectations, neither rendered obsolete painting, nor was rendered obsolete by cinema. Retrospectively, technological innovations contributed to the autonomization of each of these arts, rather than the contrary. By contrast, scientific innovations, new scientific paradigms, do render obsolete prior ones. The inadequacy of the suppositions of the existence of elements, such as that of diaphane to account for light, or that of phlogiston to account for combustion, or that of aether to account for the applicability of Newtonian physics, were proved to be both misleading and misled by subsequent developments in physics: strictly speaking, such elements did not exist. Maintaining the claim of the existence of such elements surely did seem attractive and relevant during periods of transition. For even if a paradigm is obsolete, it can sometimes yet provide good grounds for accurate forecasts, as the Ptolemaic model did even after the Copernican revolution.⁴¹ However such a remark does not imply that successful forecasts made on the basis of obsolete paradigms were successful for relevant reasons. It only stresses that the erroneous character of some assumptions can, for practical purposes, be neglected, as long as the redevelopment of normal science with a new paradigm has not yet provided results that meet with the standards and the expectations of the practitioners of the considered field, results better than the ones which were obtained with the earlier paradigm. The consideration of such asymmetry between artistic and scientific paradigms also renders clear that responsibilities, consequences and paradigms are closely intertwined, that strictly speaking, these cannot be relevantly abstracted from each other. To be sure, fraudulence, counterfeit, scam, could not have been features of arts or sciences. But the morphology of scandals that can cross such mutually independent fields are nevertheless distinct. Involved responsibilities and their

^{40.} Kuhn, The Essential Tension, 345.

^{41.} Kuhn, The Structure of Scientific Revolutions, 75.

consequences also differ relatively to the considered fields and practices. This asymmetry is further rendered manifest by the fact that the claim of authorship is not a necessary condition for artistic production and for the integration of artworks into the markets of art, while on the contrary scientific innovation, or at least, applications of scientific innovations tend to be further controlled. Kuhn considers, in a way that is compatible with Cavell's approach, that such asymmetry is explainable in terms of a difference of the responses and of the relations of the public with arts and science such that "Art is an intrinsically other-directed enterprise in ways and to an extent which science is not."42 Indeed, if, as practices, arts and sciences whose products are shared and present collective significance are both practices that are directed to others, neither the relations of the artistic and scientific practitioners to their works, nor the relations of these works with their public could be equivalent. Peculiarly, the realization of an (artistic) happening does imply the presence of a public in a way in which the realization of a scientific discovery does not. While the success of the first sort of event is not even thinkable without the presence of a public, the same does not hold of the second sort of event.

3. The Diversities of Paradigms

How then can the constitutivity of paradigms yet be thought, now that we have exposed some central limits to the comparison of the place of paradigms within arts and sciences, so as to render manifest that the autonomy of arts and sciences among and between themselves has been much underestimated? The difficulty might seem to be resolvable by means of the consideration that dyadic relations hold between paradigms and members of communities, and can suffice both to account for the occurrences of events whose intelligibility implies the availability of given paradigms, and for the development of hexises on the basis of contextually significant acquaintances. That would hold indivisible or non-breaking relations between paradigms and persons considered in isolation could suffice to account for the constitutivity of paradigms yet without unduly renouncing to any idea of necessity whatsoever. However, such consideration would imply arguing in favor of a monadic

^{42.} Kuhn, The Essential Tension, 344.

conception of necessity whose misleadingness I hope, with and after Kuhn, Cavell and Wittgenstein, to have rendered manifest. For such hypothesis would more be a restatement of the problem rather than its solution: it provides elements of an explanation of the ways in which paradigmatically structured or structuring events can occur within personal lives, but it does so only at the expense of the socially structured character of the ways in which the diversity of paradigms are available to us and of our relations with them. The difficulty is, I suggest, that of accounting for the holding of differently structured and necessary relations between necessarily contingently existing paradigms and the inherently relational character of the existences of members of communities. The problem thus can be conceived as that of the necessity of common mediation to providing an account for the availability of diversities of paradigms to us. Let us then account for the constitutivity of paradigms in a way that is truthful to the irreducibility: of arts and sciences within and among themselves, of practices among themselves, of ways in which paradigms can come to have a place and be expressive of the demands, constraints, consequences, responsibilities these paradigms may exert in mutually independent and autonomous fields. Then we both have to be able to account for the internal character of the relations of these paradigms with practical possibilities that these under-determine, and for the external character of the relations at the occasions of which we can come to be initiated into a practice or provided a way out of practical and theoretical difficulties. Now, it can seem that we almost do contradict ourselves in acknowledging these apparently mutually incompatible demands. For how could relations of paradigms with practices and us both could be internal and external at the same time? But such relations really are not simultaneously external and internal inasmuch as they are external or internal at different occasions, in different situations, in different circumstances. This is, I argue, an aspect that is common to the thoughts of Kuhn and Cavell. Relations between paradigms and us are not simultaneously both internal and external, they rather are sometimes internal sometimes external. The obviousness of this remark appears if we distinguish the contexts of the occasions at which we come to be acquainted with paradigms, and the

paradigmatic dimensions that are prevalent in each one of these.⁴³ The situations in which a beginner comes to be acquainted with a paradigm by a more advanced practitioner, the situations in which a more advanced practitioner presents the insufficiencies of a paradigm to argue in favor of a new one to the experts of a field are situations whose intelligibility do involve a different partitioning and distribution of roles, responsibilities and consequences. Such that our question ultimately amounts to the following: is the mediation by community necessary to us to account for the availability of diversities of paradigms or not? Where are we to situate necessary relations in our lives?

For in an unproblematic sense, the successfulness of the success, the autonomy of the intelligibility that a new paradigm may provide does precede its acknowledgement as such by a relevant community. The answer I want to argue for, is that neither according to Kuhn nor according to Cavell, does it make sense to suppose that the mediation by community is superfluous or secondary in order to account for the availability to us of diversities of paradigms, despite conformism. And such affirmation does not amount to downplay the differences of their approaches or to neglect traditional demands concerning intelligibility. It really does amount to a both philosophical and critical inheritance. For none of us are relations with paradigms restricted to the ways in which traditional philosophy has assumed these could be. Nor could we have had the sort of margin of action that traditional philosophy supposed we could. But this is no call to renounciation and could not be such, for, whenever required, the analyses of ordinary situations do remand to past interiorizations of paradigms so as to render intelligible the circumstantiated limits of intelligibility as such. That one can enjoy the applications of paradigms that one does not understand, while one does contribute to the development of a paradigm that a few or even no one else yet understands, is no impossible situation. The kind of tension that Kuhn called that of dislocated worlds, and that Cavell expressed as the counterpart of the cohabitation of several histories within one single and only breast, situations in which individuals come, so to speak, to have one foot outside and one foot within the unrestrictive circle of the ordinary are parts of natural history as

^{43.} Wittgenstein, Philosophical Investigations, §6.

rendered explicit by Wittgenstein. It really is up to us to acknowledge the unrestrictive character of the ways in which paradigms do contribute to shape reality in mutually independent manners. Our relations, rarely with paradigms, and seldom paradigmatic, nevertheless are unthinkable without paradigms, and this much does not preclude or exclude but rather appeals to further scrutiny, so as to account for the collective significances of the diversities of paradigms.

Conclusion

With this paper I first attempted to recover both the *vividness* and the *relevance* of the limited comparison made by Cavell and Kuhn of the place of paradigms in arts and sciences. This much was required, I argued, both to render clearer the incompatibility of their thoughts with undue acknowledgement of the unmythical character of a private language, and to bring out some fundamental resemblances of the places of paradigms within these practices. For each thinker, it is not only that paradigms are contingent – as their nonexistence is not inconceivable, but paradigms are also free – as they are expressive and constitutive of freedoms, in ways that necessarily imply their relationality — as the ways in which they structurally contribute to our lives cannot be relevantly abstracted from our relations, and from our relations with them within our practices. I then attempted to show that although both Kuhn and Cavell drew our attention in different ways to the unrestrictive limits of the comparison of the place of paradigms within arts and sciences. I attempted to show that these unrestrictive intersections are at least threefold. Successful achievements not only can, but also need to become paradigmatic in mutually independent and autonomous practices which contribute to the availability of *diversities* of paradigms. For, not only the means and ends of these practices differ, but also the dimensions that are prevalent within these are mutually independent and sometimes even asymmetrical in mutually explicative ways. Such consideration thus, I argued, left us before the explicitation of the collective significances of the evolutive availability of diversities of paradigms as a task yet to be achieved.